การศึกษาภาษาในระหว่างของทำนองเสียงภาษาอังกฤษในผู้เรียนคนไทย
กับระดับความสามารถในการเอาความและความยากง่ายในการเข้าใจ
จากการตัดสินของเจ้าของภาษา

นางสาวรัชดา พงศ์ไพรรัตน์

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรดุษฎีบัณฑิต
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A STUDY OF INTERLANGUAGE ENGLISH INTONATION IN THAI LEARNERS, AND THE DEGREE OF INTELLIGIBILITY AND COMPREHENSIBILITY IN NATIVE SPEAKERS' JUDGEMENTS

Miss Rachada Pongprairat

A Dissertation Submitted in Partial Fulfillment of the Requirements
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Thesis Title   A STUDY OF INTERLANGUAGE ENGLISH INTONATION OF THAI LEARNERS, AND THE DEGREE OF INTELLIGIBILITY AND COMPREHENSIBILITY IN NATIVE SPEAKERS' JUDGEMENTS

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รัชดา พงศ์ไพรรัตน์ : การศึกษาภาษาในระหว่างของทำนองเสียงภาษาอังกฤษในผู้เรียนคนไทยกับ
ระดับความสามารถในการเอาความและความยากง่ายในการเข้าใจจากการตัดสินของเจ้าของภาษา
(A STUDY OF INTERLANGUAGE ENGLISH INTONATION IN THAI LEARNERS, AND THE
DEGREE OF INTELLIGIBILITY AND COMPREHENSIBILITY IN NATIVE SPEAKERS'
JUDGEMENTS) อ. ที่ปรึกษาวิทยานิพนธ์หลัก : ผศ.ดร.สุดาพร ลักษณียนาวิน, 307 หน้า.

ทำนองเสียงภาษาอังกฤษเป็นปัจจัยสำคัญในการสื่อสารและมีผลต่อการรับรู้ของผู้ฟังในด้านความ
สามารถในการเอาความและความยากง่ายในการเข้าใจ ทำนองเสียงยังคงเป็นปัญหาสำหรับผู้เรียนภาษาที่สอง
โดยเฉพาะผู้พูดภาษาวรรณยุกต์เป็นภาษาแม่ อย่างไรก็ตาม ทำนองเสียงได้รับสัดส่วนของบทเรียนน้อยมากใน
ชั้นเรียนการออกเสียง งานวิจัยชิ้นนี้ศึกษาการใช้ทำนองเสียงภาษาอังกฤษในผู้เรียนคนไทยและการรับรู้ของ
เจ้าของภาษาอังกฤษในด้านการเอาความและความยากง่ายในการเข้าใจ งานวิจัยประกอบด้วยการทดลอง
สองตอน คือ การศึกษาด้านการใช้และด้านการรับรู้ ข้อมูลที่ใช้วิเคราะห์ด้านการใช้ได้มาจากนักศึกษาไทยสอง
กลุ่มซึ่งคัดเลือกจากแบบสอบถามประสบการณ์ทางภาษา ได้แก่ กลุ่มที่มีประสบการณ์ทางภาษาสูง และกลุ่มที่มี
ประสบการณ์ทางภาษาต่ำ กลุ่มละ 15 คน โดยวิธีการอ่านอนุเฉท อ่านบทสนทนาและเล่าประสบการณ์โดยไม่มี
บทพูด เพื่อใช้เป็นข้อมูลสำหรับวิเคราะห์ระบบการแบ่งความ ระบบการปรากฏหน่วยสำคัญและระบบทำนองสูง
ต่ำ เปรียบเทียบกับเจ้าของภาษาอังกฤษแบบอังกฤษในกลุ่มควบคุม 3 คน ส่วนการทดสอบด้านการเอาความใช้
นักศึกษาไทยในแต่ละกลุ่มๆ ละ 3 คนโดยใช้การสุ่มตัวอย่างแบบชั้นภูมิเพื่ออ่านประโยคจากแบบทดสอบ
จำนวน 9 ประโยค เจ้าของภาษาอังกฤษแบบอังกฤษที่มีประสบการณ์สอนผู้เรียนคนไทยต่างกัน สองกลุ่มๆ ละ
5 คน ถูกคัดเลือกมาเพื่อเป็นผู้ตัดสินในการศึกษาด้านการรับรู้ กลุ่มแรกมีประสบการณ์สอนนักเรียนไทยอย่าง
น้อย 3 ปี กลุ่มที่สองเป็นครูฝึกหัดซึ่งมีประสบการณ์น้อยกว่า ข้อมูลที่ใช้ในการฟังด้านการเอาความคือ การอ่าน
ประโยค และความยากง่ายในการเข้าใจใช้การอ่านอนุเฉท งานวิจัยชิ้นนี้ช่วยทำให้มีความรู้ความเข้าใจถึง
รูปแบบของทำนองเสียงที่เป็นอุปสรรคต่อการเอาความและความยากง่ายในการเข้าใจ ผลการศึกษามีส่วนช่วย
ครูผู้สอนการออกเสียงในการเลือกหัวข้อที่จะสอนทำนองเสียงในหลักสูตรได้

ผลการวิจัยพบว่าผู้เรียนกลุ่มประสบการณ์สูงมีรูปแบบทำนองเสียงภาษาอังกฤษทั้งสามระบบเหมือน
เจ้าของภาษามากกว่า ส่วนกลุ่มประสบการณ์ต่ำมีรูปแบบของทำนองเสียงที่เบี่ยงเบนจากเจ้าของภาษามากกว่า
ผลการวิจัยด้านการรับรู้การเอาความพบว่า เจ้าของภาษาที่มีประสบการณ์การสอนมากสามารถตีความประโยค
จากผู้เรียนทั้งสองกลุ่มได้ถูกต้องมากกว่า ส่วนผู้เรียนกลุ่มประสบการณ์สูงได้คะแนนจากการรับรู้ของเจ้าของ
ภาษามากกว่าจากผู้ตัดสินเจ้าของภาษาทั้งสองกลุ่ม ส่วนด้านความยากง่ายในการเข้าใจจากผู้ตัดสินทั้งสองกลุ่ม
พบว่า ผู้เรียนกลุ่มประสบการณ์สูงได้คะแนนมากกว่าอย่างมีนัยสำคัญ และผู้ตัดสินที่มีประสบการณ์มากพบว่า
การพูดของผู้เรียนกลุ่มนี้เข้าใจง่ายกว่า นอกจากนี้คะแนนทำนองเสียงจากการศึกษาด้านการใช้มีความสัมพันธ์ใน
ทางบวกกับการรับรู้ด้านการเอาความ ($r = .784$) และความยากง่ายในการเข้าใจ ($r = .628$) แต่มีนัยสำคัญทางสถิติ
ที่ระดับ 0.01 ในด้านความยากง่ายในการเข้าใจเท่านั้น

สาขาวิชา<u>ภาษาอังกฤษเป็นภาษานานาชาติ</u>   ลายมือชื่อนิสิต ……………………….…….............
ปีการศึกษา ……………<u>2554</u>……………   ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก……………..........

RACHADA PONGPRAIRAT : A STUDY OF INTERLANGUAGE ENGLISH INTONATION OF THAI LEARNERS, AND THE DEGREE OF INTELLIGIBILITY AND COMPREHENSIBILITY IN NATIVE SPEAKERS' JUDGEMENTS. ADVISOR : ASST. PROF. SUDAPORN LUKSANEEYANAWIN, Ph.D.,307 pp.

English intonation is central to communication and has a great impact on the listener's perception in terms of intelligibility and comprehensibility. Intonation is a problematic area for L2 learners, especially for L1 speakers of tone languages. However, intonation has been receiving attention in a very small proportion of lessons in Thai pronunciation classes. This study investigated the productions of the English intonation of Thai learners and the perceptions of native speakers of English for intelligibility and comprehensibility. There were two main experiments: the production study and the perception study. The data for the production study were collected from two groups of learners selected by the English Language Experience Questionnaire: 1) those with high language experience (n = 15) and 2) those with low language experience (n =15). They performed three production tasks: passage reading, dialogue reading and spontaneous speech to elicit tonality, tonicity and tune patterns. Native speakers of British English (n =3) served as a control group for comparison purposes. Three learners from each group were drawn by stratified sampling to read nine test sentences. With respect to the perception study, two groups of native speakers of British English with different amounts of contact to Thai learners were recruited to be the judges. The first group (n = 5) had a minimum of three years of experience teaching Thai learners whereas the second group (n =5) were teacher trainees who had minimal experience with Thai learners. The speech stimuli for the intelligibility dimension were sentence reading from the intelligibility test. The speech recordings from passage reading were used for the comprehensibility dimension. This study provides insights into the features that inhibit intelligibility and comprehensibility. The findings contribute to pedagogical issues of pronunciation teachers to prioritising the aspects of intonation to be dealt with in their syllabuses.

The overall findings revealed that the Thai learners with high language experience had more similar tonality, tonicity and tune patterns to those of native speakers. On the other hand, the productions of the Thai learners with low experience contained more deviated patterns. The findings from the intelligibility dimension indicated that the experienced judges had more correct interpretations for both groups of learners than the judges with less experience did. The Thai learners with high experience obtained a higher percentage of correct perceptions from both groups of judges. The comprehensibility ratings for the learners with high experience were significantly higher from both groups of judges, and the judges with extensive experience found their speech easier to understand. Furthermore, the intonation scores from the production study showed a positive correlation with the degree of intelligibility (r = .784) and comprehensibility (r = .628), but the statistical analysis was only significant at the 0.01 level for comprehensibility.

Field of Study : English as an International language   Student's Signature ....

Academic Year : ....2011............................   Advisor's Signature ....

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List of Symbols and Abbreviations

Symbol

English transcription

//	tone group boundary
/	foot boundary
__	tonic syllable
^	silent ictus
…	pause
1	tune 1: falling
2	tune 2: high-rising
3	tune 3: low-rising
4	tune 4: falling-rising
5	tune 5: rising-falling
:	long vowel

Thai transcription

0	mid tone
1	low tone
2	falling tone
3	high tone
4	rising tone

Abbreviations

L1	first language
L2	second language
NL	native language
TL	target language
EFL	English as a Foreign Language
EFL-High	Thai learner with high English language experience
EFL-Low	Thai learner with low English language experience
NS	native speaker control group
NSJ-High	English native speaker judge experienced with Thai learners
NSJ-Low	English native speaker judge inexperienced with Thai learners

CHAPTER I

INTRODUCTION

1.1 Background of the study

English is considered a global language, and will inevitably continue its dominant status as a common language for communication spoken by a greater number of people than any other language (Crystal, 2003). With the goal of second language (L2) pronunciation aiming towards making learners understood by interlocutors, English pronunciation instruction emphasising segmental aspects in the past has been shifted towards the suprasegmentals over the last few decades (Celce-Murcia & Olshtain, 2000; Major, 1998). Research on rhythm and intonation is more beneficial in helping learners to improve the intelligibility and comprehensibility of their speech (Derwing & Rossiter, 2003).

Furthermore, pronunciation instruction focusing on English suprasegmentals is central to communication (Gilbert, 2008), leading the learners to transfer their knowledge to spontaneous speech (Derwing, Munro & Wiebe, 1998). One of the most interesting notes is that:

> *"We have found that giving priority to the suprasegmental aspect of English not only improves the learners' comprehensibility but it also less frustrating for students because greater change can be effected in a short time".*

> (McNerney & Mendelsohn, 1992: 186)

In addition, segmental errors can be resolved by contextual information whereas inappropriate intonation easily leads to the misinterpretation by the listener as intended messages by the speaker (Celce-Murcia & Olshtain, 2000; Hewings, 1995b; Wells, 2006). As indicated by Kachru and Smith (2008), non-native intonation patterns are considered a part of the speaker's personality rather than language competence. Despite the importance of suprasegmentals on communication, a survey by Gut (2009) of research on L2 speech based on 172 studies published between 1969 and September 2008 shows that there is still a dearth of studies on non-native English suprasegmentals.

However, English intonation has been a problematic area for L2 speakers, especially for tone languages (Boyle, 1987; Celce-Murcia & Olshtain, 2000). Intonation has also been perceived as notoriously difficult to teach (Dalton & Seidlhofer, 1994; Chapman, 2007; Johnson & Moore, 1997; Setter, Stojanovik & Martínez-Castilla, 2010). Cruz-Ferreira (1989) notes that intonation is still the last „stronghold' of L2 pronunciation to acquire. Trofimovich and Baker (2006) further support this position that certain features of English suprasegmentals may require several years of extensive and intensive experience and practice, rather than merely a few years of formal instruction in the classroom setting. The findings of Isarankura (2009)'s study into awareness raising show that proper training on intonation, at least for Thai learners, can lead to significant improvement in a short period of time, despite its subtlety. From the researcher's experience, English intonation occupies a very small proportion of lessons within Thai pronunciation classes. This may result from the inadequate knowledge of Thai teachers themselves. The problems are still prevalent and hardly dealt with, at least in schools and institutes in rural areas. This highlights the importance of more research studies on the English intonation patterns of Thai learners to pinpoint the problems and solutions, which will hopefully illuminate ways to make intonation learnable and teachable.

Thus, this study attempts to gain understanding of the difficulties of English intonation encountered by Thai learners. Also, the observations and the findings of the pilot work of this present study indicate that the amount of English experience is a vital factor in determining the intonation patterns used by Thai learners. Language experience, as defined in this study, refers to the way learners come into contact with English in a variety of ways since they first learn English, i.e. initial age of exposure, years of learning, formal instruction, informal instruction, time spent in an English speaking country, and exposure to English in their environment, e.g. through the media, with family members, friends, etc. Learners with low experience and high experience show a high tendency of conformity of performance to their group. However, there are some noticeable differences in the individuals who do not conform to the overall results. Despite an extensive amount of English language experience in some learners, they still make unacceptable errors in the use of

intonation, which can be barriers in understanding. The researcher, therefore, finds the need to identify the problems faced by Thai learners of English.

Additionally, findings from a number of studies have suggested that suprasegmentals have a great impact on listener judgements (Anderson-Hsieh, Johnson & Koehler, 1992; Munro & Derwing 1995a, 1998; Munro & Derwing, 2001). A number of research studies examine the perception of native speakers on the learners' use of English, in terms of intelligibility and comprehensibility. The status of English as an international language emphasises the need for more research on the intelligibility and comprehensibility, particularly of non-native speakers of different varieties (Matsuura, 2007). According to Anderson-Hsieh et al. (1992), prosodic errors contribute significantly to foreign accentedness ratings, while Munro and Derwing (1995a), and Derwing and Munro (1997) found that prosodic errors significantly caused the most difficulty in terms of both comprehensibility and intelligibility. In addition, some studies seek to provide support for the idea that intelligibility and comprehensibility can be maximised by explicit pronunciation instruction (Derwing & Munro, 2005; Field, 2005; Hahn, 2004; Parlak, 2010).

All of the studies including the ones mentioned explore the overall pronunciation features, none of which highlights the dimensions of intelligibility and comprehensibility of L2 intonation. Work remains to be done on the interlanguage intonation of Thai learners and how their use of intonation is perceived by native speakers of English in order to find the features of intonation that inhibit intelligibility and comprehensibility. The insights obtained from the research findings will certainly contribute to pedagogical issues of pronunciation teaching. Teachers and material designers can make use of the results in prioritising the features of intonation to be dealt with in their syllabuses.

1.2 Research questions

The goals of this study are to examine the intonation features of Thai L2 learners of English who are in different developmental stages, and to explore the perception of native speakers of English towards each group of learners in different aspects. The questions addressed in this study are:

1. What are the English intonation patterns of Thai learners with low and high language experience in terms of tonality, tonicity and tune?

2. What are the similarities and differences between the English intonation patterns of Thai learners and native speakers of English?

3. What are the similarities and differences between the English intonation patterns of Thai learners of English with low and high language experience?

4. What is the degree of intelligibility and comprehensibility in each group of Thai learners judged by native speakers of English with different experience to the Thai learners?

5. How is the degree of intelligibility and comprehensibility related to the English intonation patterns of Thai learners in each group?

1.3 Objectives of the study

Based on the research questions, the purposes intended for this study are:

1. To investigate the English intonation patterns of Thai learners with low and high language experience in terms of tonality, tonicity and tune.

2. To compare the English intonation patterns of Thai learners with those of native speakers of English.

3. To identify the English intonation patterns of Thai learners with low and high English language experience.

4. To examine the perceptions of native speakers of English with different experience to Thai learners in terms of intelligibility and comprehensibility.

5. To find the relationship between the English intonation patterns of Thai learners in each group and the perception of the native speakers of English.

1.4 Statement of hypotheses

To carry out the objectives of the study, the following hypotheses were formulated:

1. The English intonation patterns of the Thai learners with high experience group and low experience group will differ in all the three systems: tonality, tonicity and tune. Errors of L1 transfer will be more common in the low experience group.

2. The English intonation patterns of the Thai learners with high language experience will be more similar to those of the native speakers of English.

3. The English intonation patterns of the Thai learners with high language experience and those with low language experience will be different.

4. The learners in the high group will score higher in the degree of intelligibility and comprehensibility judged by the native speakers of English. Judges with more experience to Thai learners will give higher rating scores.

5. There will be a correlation between the English intonation patterns, and the degree of intelligibility and comprehensibility.

1.5 Scope of the study

1. It is the intention of this study to investigate the intonation patterns of the Thai EFL learners with reference to native speakers of English since it is an interlanguage study looking at how the learners deviate from the target language. In the context of English as an international language in which the interaction is not only between native speakers and non-native speakers, it is undeniable that the non-native speakers of English have outnumbered the native speakers. There is also a need to investigate how well the non-native listeners can judge and successfully comprehend accented English produced by other non-native speakers; particularly, how the specific linguistic background of non-native listeners contributes to their abilities to understand, and evaluate accented English from a speaker whose L1 is not linguistically related. However, it is beyond the scope of the study.

2. The framework of intonation used in this study was proposed by Halliday (1967, 1970). In any English utterance, three independent, though related, systems can be distinguished: tonality, tonicity and tone.

3. Intonation encompasses two dimensions: linguistic dimension and paralinguistic dimension (Tench, 1996: 92). The linguistic dimension refers to the message itself conveyed by intonation. The message can be the number of information pieces, status of information (new or given), complete or incomplete message, sentence modality (a statement or a question), or a signal of a new topic or the end of an old one. The paralinguistic dimension, on the other hand, refers to "the messenger rather than the message" (Tench, 1996: 92). In other words, the

paralinguistic dimension reveals the speaker's emotional state, degree of politeness and conversation interactions. This study will cover only the linguistic dimension of intonation.

1.6. Limitations of the study

Even though this study was designed to gain insights into the productions of English intonation and the perceptions of native speakers, the study has two pre-supposed limitations.

1. This study uses a pseudolongitudinal design. It investigates the English intonation patterns of Thai learners with different English language experience. Although it focuses on a single moment of the learners' developmental processes, the two groups of participants who are in different stages can be the representative of the interlanguage continuum. A longitudinal study would shed light on the rate of learning and the distribution of developmental and interference errors as well as phonological and phonetic errors throughout different learning stages. However, due to time constraints, this study was not conducted longitudinally.

2. This study is an experimental study, and this leads to some drawbacks in the design. The nature of an experiment with a microphone and a recording device may cause frustration and nervousness in some participants.

3. The sentence reading used in the intelligibility test in this study was set out in decontextualised settings. There has been very little work on the perceptions of the intelligibility of English intonation. To date, it has not yet been found the contextualised perceptions for intelligibility.

4. The native speakers of English recruited as the control group were limited to speakers of British English only. No attempt was made to compare their intonation patterns with speakers of other standard varieties of English.

5. The Thai participants in this study are English major students studying at a Rajabhat University. The findings from this study may not be generalisable to students from other traditional universities in Thailand. A recent study by Grubbs al. (2009) comparing institutional differences between Rajabhat universities located in rural areas with traditional universities found that the students in the two categories of universities differ in several aspects. For example, admission to traditional

universities is more competitive because of people's perception of their having higher standards than Rajabhat universities. The students entering traditional universities are mostly about 18 years of age or younger, while those going to Rajabhat are 19 or older due to a delay in pursuing their tertiary education. Also, students in traditional universities have more positive perceptions towards their English proficiency, and their teachers. Backgrounds of the students have to be taken in consideration in generalising the findings of this study.

1.7 Assumptions of the study

1. This study assumes that the EFL participants represent Thai-accented English. Their individual preferences for a particular variety of English which may be exhibited through their pronunciation will not be considered having an impact on the native speaker judges of this study.

2. The EFL participants are considered homogenous in terms of being L1 speakers of Central Thai. In addition, they are educated from schools in the same area and nearby provinces, which are assumed to have the same level of teaching quality.

1.8 Definition of terms

The terms used in the study are as follows:

1. Interlanguage

Selinker (1972) coined the term *interlanguage* and proposed that the language of the L2 learners was a language variety having its own features and rules. In acquiring an L2, learners have to undergo the developmental processes and use a language system distinct from both the native language (NL) and target language (TL). Some other alternative terms for interlanguage are: *idiosyncratic dialects* (Corder, 1971) and *approximative systems* (Nemser, 1971).

In this study, interlanguage refers to a separate system of language used by learners of a language. This linguistic system is different from the native language and the target language, and can vary among individuals as a result of amount of language experience and the mother tongue. Interlanguage intonation of Thai learners of English is, therefore, distinguishable from the interlanguage intonation of learners from a different native language background (See section 2.2.3 for more details).

2. Language exposure

Language exposure, as defined in this study, refers to the total amount of time in which a learner has contact with English, either actively or passively, e.g. conversing in English with family members, friends, etc.; exposing to English through the media, internet, or everyday communication. The degree of language exposure can be measured by the frequency of time a learner spends on the aforementioned activities, e.g. listening to songs or radio; watching news or movies; reading magazine or websites; instant messaging, etc.

3. Language experience

Language experience, in this study, covers a wider context in acquiring English in a number of ways: age of onset, number of years of learning, modes of instruction, learning settings, experience in an English-speaking country and ongoing exposure to English. Therefore, language experience incorporates language exposure as a part of a learner's experience. Language experience of an individual learner provides complete information about the process of acquisition of the learner, accounting for the differences in their performances.

4. Intonation

Luksaneeyanawin (1983: 16) refers to *intonation* as "a distinctive pitch of an information unit, either a word or a set of words which are semantically and syntactically unified. Its function in communication is to distinguish the meaning whether grammatical or attitudinal, of the information unit.

Crystal (1991: 182) defines *intonation* as "the distinctive use of patterns of pitch, or melody".

Using Hallidayian framework, "intonation" in this study covers the three interrelated systems of tonality, tonicity and tone, which conveys grammatical or attitudinal meaning of an information unit.

5. Tonality

Tonality refers to the division of speech into pause defined units or intonation units. In Hallidayian term this intonation unit is called *tone group*. Each tone group is

composed of one or more rhythmic units called *feet*. The tone group is the carrier of contrastive patterns of pitch, or intonation. A tone group consists of one or more rhythmic groups or feet. A foot begins with an accented syllable and ends before the next accented syllable. Tonality patterns are governed by the pragmatic, semantic, and syntactic structures of the utterance. Formation of the rhythmic groups or feet is governed by the embedded accents of the words in the utterance.

6. Tonicity

In this study, tonicity refers to the placement of focus of information in a tone group. This most prominent word in terms of pragmatic and semantic will be realised as the most phonetically salient word in a tone group. It is called a *tonic word*, and the accented syllable in the tonic word is known as the *tonic syllable*.

7. Tune

Tune is used in this study to refer to *tone* proposed by Halliday (1967, 1970), in order to avoid confusion with Thai lexical tones. The tune encompassed into the English intonation system refers to the pitch movement of the utterance especially on the tonic syllable of a tone group. There are five primary tunes in English: tune 1 (falling), tune 2 (high-rising), tune 3 (low-rising), tune 4 (falling-rising) and tune 5 (rising-falling). The tunal system is governed by the pragmatic and the semantic of the utterance in terms of *finality*, *non-finality*, and *contrariety* (Halliday 1967, 1970; Luksaneeyanawin 1983, 1994)

8. Native speaker

The term *native speaker* is defined by Gut (2007) as someone who "is usually exposed to the language from birth on, acquire it fully and use it throughout their lives. Non-native speakers of a language usually come into contact with it at a later stage, for example, in formal classroom teaching or by immigration to a foreign country. They often do not acquire the language fully and continue to use other languages in their daily lives" (Gut, 2007: 75). Cook (1999) expands that we are the native speaker of the first language that we learn in childhood. Also, this fact about our native language cannot be changed. Davies (2004) states that the native speaker of

a language acquires that language as their first language possesses intuitions of the grammar, exhibits a wide range of communicative competence: being able to write creatively, to interpret as well as to translate into their first language.

In this study, a native speaker of English refers to someone who is exposed to English as their first language since they were born and acquire it fully. Native speakers of English in this study are those from the United Kingdom, the United States of America, Canada, Australia and New Zealand.

9. Intelligibility

Munro and Derwing (1995, cited in Derwing & Munro, 2005: 385) define intelligibility as "the extent to which the speaker's intended utterance is actually understood by the listener". The degree of intelligibility is usually measured by asking the listener to transcribe what they hear or understand about an utterance. Similarly, Fayer and Krasinski (1987) suggest that the focus of intelligibility is on the hearer and on how much of the message is understood.

In this research, intelligibility will be used to refer to the degree to which the native speaker judges understand the message they hear.

10. Comprehensibility

In Munro and Derwing's study (1995, cited in Derwing and Munro, 2005: 385), comprehensibility means "the listener's perception of the degree of difficulty encountered when trying to understand an utterance". Comprehensibility is measured by subjective judgements of listeners using a Likert rating scale.

In the present study, comprehensibility refers to the listener's perception of the degree of difficulty to understand the meaning of an utterance. It will be assessed by native speakers' judgements by marking on a 5-point rating scale where 1 means very difficult to understand, and 5 means very easy to understand.

1.9 Significance of the study

1. The use of English intonation in Thai speakers remains unclear. The problem areas which may cause difficulties in interpretation and communication remain unanswered. This study will offer answers to these unsolved puzzles. If teachers

understand the areas of deviations, they can design or select ready-made materials to remedy the problems.

2. This study will provide information for English teachers on the intonation features that inhibit intelligibility and comprehensibility. With the goal of English pronunciation that aims for intelligibility rather than for eradicating a foreign accent, it is, therefore, necessary to identify which intonation features contribute most to the intelligibility and comprehensibility of Thai speakers so that teachers can focus on these aspects.

3. This study compares the intonation patterns of learners at different interlanguage stages; thus, it provides useful information on the characteristics of each group of learners in order to pinpoint the specific and realistic areas that they need. It seems impractical for the teachers to attempt to cover exhaustive intonation patterns. This study can help them in establishing a systematic approach in this selective area.

1.10 Overview of the dissertation

The dissertation consists of six chapters. Chapter I provides the background of the study. Chapter II reviews relevant issues and previous studies on second language English intonation as well as intelligibility and comprehensibility studies. Chapter III describes the research methodology, research instruments, data collection procedures and data analysis. Chapter IV reports the findings of the study regarding the production of intonation patterns in terms of tonality, tonicity and tune of the Thai learners as compared to those of native speakers of English. Chapter V reports the results on the perception part of the study. It also deals with the correlations between the scores of the intonation patterns as related to the intelligibility and comprehensibility dimensions. Chapter VI summarises the study, discusses the findings of the study and suggests pedagogical implications as well as recommendations for future studies.

CHAPTER II
LITERATURE REVIEW

2.1 Introduction

In this section, some theoretical frameworks related to this study—the concept of interlanguage, intonation in English and intonation in Thai—will be reviewed. Relevant previous studies on L2 intonation, with an emphasis on English, will also be covered. Moreover, it is necessary to include selective past work on English intonation and Thai learners as well as studies on intelligibility and comprehensibility of L2 speakers of English in order to provide an overview of the research studies leading to the conceptual perspectives the current study is based on.

2.2 The Emergence of Interlanguage

Interlanguage has been one of the central interests in second language acquisition for a few decades. The notion of interlanguage encompasses contrastive analysis and error analysis. In this section, theoretical backgrounds underlining the interlanguage theory will be reviewed.

2.2.1 Contrastive Analysis

Contrastive Analysis was actually originated by Fries (1945). The strong version of it was later elaborated by Lado (1957) who stated that if we compare the features of the first language (L1) and the second language (L2), we can possibly anticipate or predict the problematic areas for the learners from the same L1 background. The similar elements in the two languages seem to be easier to learn while different elements are more difficult. The assumption of Contrastive Analysis is based on the notion that the errors L2 learners produce are usually a result of L1 transfer. Differences in linguistic structures of the L1 and L2 will cause difficulties in learning the L2. The similarities of L1 and L2 will facilitate learning (positive transfer) whereas the differences will inhibit learning (negative transfer). This view of Contrastive Analysis is relatively pedagogically oriented. The teaching of L2 pronunciation during that time, therefore, mainly involved emphasising potential errors or problematic aspects for the learners through practice drills. Contrastive

Analysis is based on the theoretical assumptions of behaviourism. The acceptance of these views in the 50s and 60s had a strong influence on the Audiolingual Method of teaching which focused on extensive drilling in order to form the required habits.

The notion of Contrastive Analysis is reflected in Fries (1945)'s often quoted remarks in an attempt to rationalise the materials for teaching pronunciation. As Fries put it:

> *"The most efficient materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner."*

(Fries, 1945: 9, quoted in Selinker, 1992: 6)

Therefore, it is evident that the teaching materials during that time were based on Contrastive Analysis theoretical assumptions. The materials mostly focused on the areas of differences between the native language (NL) and the target language (TL), which were believed to cause difficulties in learning the L2. The similar aspects can be ignored whereas the dissimilar features must be learned (Gass & Selinker, 2008).

The perspectives of Contrastive Analysis underwent a number of criticisms. Scholars who were opposed to Contrastive Analysis pointed out that the errors predicted by Contrastive Analysis in accordance with their L1 were not always present in actual learner production. On the other hand, the predictive errors did not account for all types of errors occurred.

When Contrastive Analysis proved less efficient and inadequate to account for all the occurrences of errors in L2 acquisition, people shifted their interests to the relationship between L1 and L2 during the acquisition process. The weaker version of Contrastive Analysis was proposed by Wardhaugh (1970) which investigated the errors in order to find the recurring patterns, and tried to explain those errors in terms of the differences in the NL and TL. In other words, the strong version concerned *predictive* errors while the weak version focused on *explanatory* errors.

2.2.2 Error Analysis

Error Analysis had an important role in applied linguistics in the early 1970s, and it received considerable attention from scholars when pronunciation pedagogy based on Contrastive Analysis seemed not very productive. The beginning of interests in Error Analysis apparently resulted from the search for an alternative for Contrastive Analysis. Error Analysis took into account the creative aspect of language and placed the learner at the center of attention in the process of acquiring a second or foreign language. It was Corder (1967) who made the first argument for the significance of learners' errors. Error analysis is systematic and scientific oriented. Errors can be predictable and variable. Not all errors, in the view of error analysis, could be accounted for by comparing the L1 and L2. According to the error analysis framework, errors are seen from the positive point of view, i.e., errors are a part of natural processes in the production of L2 learners. Additionally, there are several other types of errors rather than transfer from L1 or interference.

Richards (1971) grouped errors into three categories: 1) interference errors, 2) intralingual errors, and 3) developmental errors. To illustrate, the interference errors are a result of the influence from the learner's L1. The intralingual errors, as the name suggests, originate within the structure of the L2 itself. Learners of English have to learn a large number of complex rules, which always have exceptions. English learners usually overgeneralise the rules and fail to learn the conditions for applying those rules. Therefore, we can see that L2 learners of English show a great tendency to produce similar errors in their productions. With respect to the developmental errors, they are often independent of the L1. These errors exhibit the strategies the learners employed in learning the L2. Due to their limited knowledge of the L2, learners are trying out the rules and making false hypotheses of the L2.

Schachter and Celce-Murcia (1977) criticised the weaknesses of research in Error Analysis under six headings: 1) analysis of errors in isolation, 2) the proper classification of identified errors, 3) statements of error frequency, the identification of points of difficulty in the target language, 4) the description of causes to systematic errors, and 5) the biased nature of the sampling procedures. In their conclusion, they remarked that teachers as well as researchers who used Error Analysis as a basis for

producing their pedagogical materials or studying language learning strategies had to be cautious in applying it.

2.2.3 The Rationale for interlanguage

Although Corder (1967, 1971) considered responsible for raising the issues of *idiosyncrasies* in learners' language which became central of interlanguage, it was Selinker (1972) who coined the term *interlanguage*. Selinker postulated that the language of the L2 learners was a language variety having its own features and rules. In acquiring an L2, learners have to undergo the developmental processes and use a language system distinct from both the NL and TL. Apart from *interlanguage*, there are also some other alternative terms that have been used by different scholars to refer to the same phenomenon. Corder (1971) proposed the term *idiosyncratic dialects* to identify the idea that the learner's language is peculiar and this *transitional competence* underscores the dynamic nature of the L2 learning process. By the term dialect, Corder refers to a linguistic dialect as opposed to a social dialect. He notes that when two languages share some common grammar rules, they are considered dialects. These dialects, in Corder's perspective, are in the transitional stage between the NL and TL in the learners' development along the route, with a partial overlapping area between the two languages, as shown in Figure 2.1:
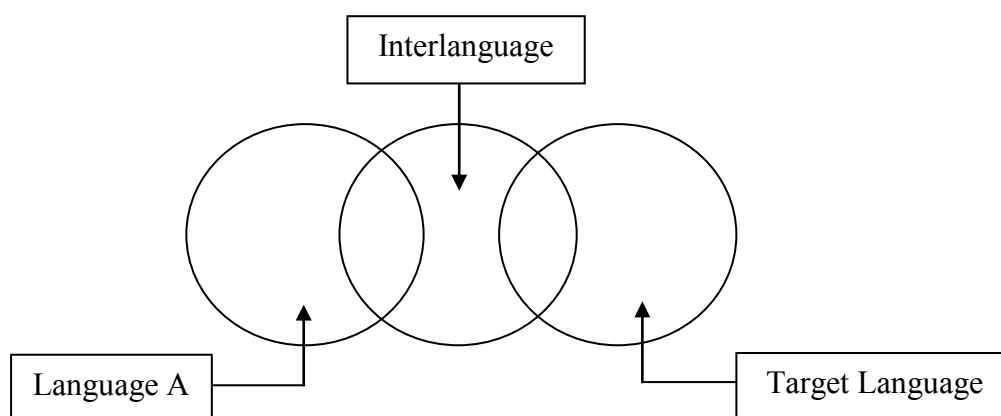
Figure 2.1: Diagram illustrating the overlapping areas of native language, target language and interlanguage (Corder, 1981: 17)

With a similar notion, Nemser (1971) referred to Corder's dialects as *approximative systems* which he defined as:

> *"...the deviant linguistic system actually employed by the learner attempting to utilize the target language. Such approximative systems vary in character in accordance with proficiency level; variation is also introduced by learning experience (including exposure to a target language script system), communication function, personal learning characteristics, etc."*

(Nemser, 1971: 115)

No matter what terminology has been used, these researchers made a great contribution in establishing the notion of a separate linguistic system which is a „dynamic continuum' (Corder, 1977).

Another influential paper associated with the interlanguage notion was written by Selinker (1972). He proposed five central processes of second language learning: 1) language transfer, 2) transfer of training, 3) strategies of second language learning, 4) strategies of second language communication, and 5) overgeneralization of TL linguistic material.

In sum, it can be said that interlanguage incorporates the theoretical assumptions of Contrastive Analysis and Error Analysis. From a pedagogical perspective, interlanguage embeds the assumptions of both Contrastive Analysis and Error Analysis. Error Analysis is a component of Contrastive Analysis in that it uses Contrastive Analysis to account for the learner's performance, though not covering all aspects of errors. It is similar to the weak version of Contrastive Analysis because both notions start from the learner's performance. However, Error Analysis and Contrastive Analysis differ in the focal point of comparison. While Contrastive Analysis makes a comparison between the NL and TL, Error Analysis examines the learner production and the TL. The most distinctive feature that makes interlanguage stand out is its notion towards errors as something not necessary to be eradicated immediately. The process of learning involves the learners moving along the continuum from the NL to TL. That is to say, the temporal aspect is significant in interlanguage. The learner's performance reflects their present stage of learning as

they gradually accumulate the knowledge in the L2. More exposure advances their L2 acquisition. This means that interlanguage has a dynamic character. This dynamic quality is evident in learner variability in their interlanguage as a part of their developmental stages. In addition, interlanguage considers nonlinguistic factors, i.e. transfer of training aforementioned as a part of the process. Therefore, individual learners from the same NL background can be different due to several aspects, e.g. initial exposure, amount of exposure, kind of instruction, learning strategies, etc. On top of that, interlanguage views errors as a component of learning, having distinctive characteristics from the NL and TL. It is a separate system of learner language in-between the NL and the TL, deriving the term "interlanguage". The underlying assumptions and distinctive characteristics of Contrastive Analysis, Error Analysis and interlanguage can be summarised in the following table:

Table 2.1 Theoretical assumptions and characteristics of contrastive analysis, error analysis and interlanguage

Theories / Aspects of comparison	Contrastive Analysis	Error Analysis	Interlanguage
Characteristic of errors	Predictive/ hypothetical errors	Explanatory/actual errors	Developmental errors
Cause of errors	L1 transfer	Several types of errors	Learner variability
Perspective towards errors	Deviations from TL are unwanted	Errors must be corrected and eradicated	Deviations from TL norms are characteristics of learner's system
Focal point	Product	Product	Process
Nature of language learning	Static	Static	Dynamic
Orientation	Pedagogical-oriented	Scientific-oriented	Pedagogical and scientific-oriented
Class activities	Pattern drills	Error-focused remedial lessons	A wide range of activities, including pair work and group work
Teaching ideology	Teacher-centred	Teacher-centred	Learner-centred

2.3 Tone vs Intonation

Languages of the world can be divided into two main groups according to their pitch patterns. Tone languages (like Thai, Chinese, Vietnamese) use pitch variation to distinguish word meanings. In other words, they use pitch lexically. For example, in Thai there are five contrastive tones, which are used to identify the meaning of words. Thus, the word [k^{h}a: 0] can have different meanings depending on the tone used which can be illustrated as follows:

high	/k^{h}a:3/	„to engage in trade'
mid	/k^{h}a:0/	„to get stuck'
low	/k^{h}a:1/	„galangal (a kind of spice)'
falling	/k^{h}a:2/	„I, price, to kill'
rising	/k^{h}a:4/	„leg'

Apart from tone languages, the languages without lexical tones are referred to as „non-tonal languages' or „intonation-only languages (Gussenhoven, 2004). As has been shown by Dediu and Ladd (2007), it can be estimated that half of the languages in the world are tonal, and half are non-tonal. Tone languages are commonly found in sub-Saharan Africa, in Southeast Asia, and among Native American languages especially in parts of Central and South America. Non-tonal languages are found in Europe and Central, South and West Asia, and among the aboriginal languages of Australia. However, when we classify languages into tone languages and non-tonal languages, it does not mean that tone languages do not possess intonation and vice versa. Pike (1948: 16) indicated that "All tone languages have intonation of the emotional type, with the general height of voice affected. Similarly, non-tonal languages also use tones, although not lexically like tone languages. They use tones syntactically and emotionally". Therefore, in this sense, we merely categorise languages of the world according to whether they have lexical tones or not.

To avoid confusion, this study will use the term *tune* to refer to the pitch patterns in English and tone will be referred to lexical tones in Thai.

2.4 Intonation in English

Halliday (1967, 1970) proposes that there are three interrelated systems of English intonation: tonality, tonicity and tone (tune, hereafter) (detailed definitions are given in Chapter I). Tonality can be roughly defined as the division of an utterance into units of information; tonicity signifies the important part of information or status of information, and tune is the pitch movement, conveying grammatical or attitudinal meanings. It is important at this juncture to clarify these three systems providing the theoretical framework for the analysis of English intonation in this study.

2.4.1 Tonality in English

Tonality refers to the division of an utterance into information units or *tone groups*. A tone group is one block of information as perceived by the speaker. The intended meaning that speaker wants to convey determines the distribution of an utterance into tone groups.

If one is to read the following paragraph, there can be some differences in the chunking of information, depending on the speaker's perception.

> *If you're staying more than one night and are happy to use your towels again, please hang them on the towel rail. If you'd like us to replace your towels, please put them in the bath. OK, it may not save the world, but it will certainly help.*

(Wells, 2006: 251)

One possible version can be:

// If you're staying more than one night // and are happy to use your towels again // please hang them on the towel rail // If you'd like us to replace your towels // please put them in the bath // OK // it may not save the world // but it will certainly help //

The term *utterance* in this sense can consist of only one word, one syllable or, in most cases, more than one word. As pointed out by Halliday (1967), the division of an information unit into tone groups tends to correspond to grammatical units. Tone groups reflect the perception of the speaker towards the message they want to communicate; thus, there is no fixed set of rules relating tone groups with

grammatical units in English. However, Halliday suggests a general rule that can be applied. He says "there is a tendency for the tone group to correspond in extent with the clause" (Halliday, 1967: 18). Therefore, one complete tone group tends to represent one complete clause, but every clause is not necessarily one tone group. Varying the number of tone groups results in the change of the number of pieces of information. For example:

(1) // I'm going into town this morning //   (one piece of information)

(2) // I'm going into town // this morning //   (two pieces of information)

(Tench, 1996: 9)

Separating the utterance into two tone groups with a slight pause makes a difference in meaning between examples (1) and (2). The difference lies in the speaker's perception of the message. For those people who argue that the latter case would need a comma after *town*, Tench (1996) remarks that commas are related to the written discourse, but the analysis in focus deals with the spoken discourse.

Tench (1996) gives an approximate number of quantities of tone groups or intonation units that a two-minute news reading, which is delivered at a fast pace, has usually between 70 and 80 tone groups. In a relaxed informal speech style, there would be approximately 25 tone groups per minute. He furthers to comment that a group of people reading the same passage would show a degree of conformity of about 80 per cent because the way they divide their utterances into units largely depends on their perception and management of information to be presented. Another possible reason for this diversity, as suggested by Tench, is the speaker's imagined speed of delivery.

2.4.1.1 Neutral Tonality

As pointed out by Halliday (1970: 3) "the tone group corresponds to a clause or a grammatical unit. One clause is one tone group unless there is a good reason for it to be otherwise". A clause here covers simple sentences, main clauses, co-ordinate clauses and some kinds of subordinate clauses. Neutral tonality is the case in which a clause contains only one tone group. Furthermore, Halliday (1970) notes that in reading aloud, or in formal speech style, which may consist of compound or complex sentences, clauses tend to be divided into quite a number of tone groups. These

clauses are rather long and full of information; thus, they need to be separated into manageable units, e.g.:

(3) // He kept his hat on and // took his shoes off //

(Halliday, 1970: 31)

(4) // I didn't want to hurry them // but I couldn't see any other hope of getting to the lecture on time //

(Halliday, 1970: 95)

Moreover, there are some other possible cases when syntactic units smaller than clauses will take their own units, especially in longer sentences, i.e., the subject of a clause, adverbials (Gimson, 1994; Watson & Gibson, 2004; Wells, 2006), as in the following examples:

(5) // The workers // have got a rising standard of living //

(6) // A tremendous amount of industry's profits // go in taxation //

(7) // I go to London // regularly //

(8) // Seriously // it seems to me // that the crucial issue // is…

(Gimson, 1994: 240)

Non-restrictive relative clauses, which are separated by a comma in written discourse, also regularly have a separate unit, while restrictive relative clauses do not, for instance:

(9) // The old man // who was clearly very upset // denied the charge //

(10) // The man who appeared in the dock // looked very ill //

(Gimson, 1994: 241)

Moreover, noun phrases which are long and consist of several words are likely to have a separate tone group (Wells, 2006), as in:

(11) // The head of a large school // has a lot of responsibility //

(12) // The people I've been talking to // were quite definite about it //

(Wells, 2006: 198)

2.4.1.2 Marked Tonality

An utterance will be marked in tonality when the speaker wants to convey a special meaning. The cases that tonality do not correspond to a syntactic structure, as mentioned in the previous section, can be regarded as *marked tonality*. For example, Tench (1996) notes that when there are two or more clauses in one tone group or when a clause is divided into two or more pieces of information, as in:

(13) // I'm going to town // this morning // (Tench, 1996: 34)

In this case, *this morning* is probably the information the speaker adds as an „afterthought'. In spoken utterances, the speaker has to manage the information spontaneously. It is common that the utterances are unfinished, or the speakers correct their own mistakes in information given, i.e. changing, omitting, repeating or adding some missing information. On the contrary, two short clauses can fit into one tone group, as in:

(14) // He did I saw it // (Tench, 1996: 34)

The first clause, *he did*, is given information and said quickly followed by the second part, *I saw it*, as new information.

Another case of marked tonality is the tonality contrast which disambiguates between two possible interpretations, as in the following examples:

(15) // He spoke to me honestly // or

(16) // He spoke to me // honestly //

(Tench, 1996: 34)

Honestly in example (15) is an adverb modifying the verb *spoke* whereas in the latter case it is a separate unit of information in order to appeal to the hearer to believe what is claimed.

2.4.2 Tonicity in English

The system of tonicity refers to "the construction of feet into tone groups, showing how the tone group serves to organise discourse into information units, with each information unit comprising the functions of Given and New" (Halliday, 1994: 292). A foot is a rhythmic unit beginning with a salient or stressed syllable and ending before the next stressed syllable. In general, the syllables which become salient in connected speech are content words or lexical words. This word class has semantic

significance, and can be either monosyllabic or polysyllabic words, i.e. nouns, verbs, adjectives, adverbs, numerals, interjections, and yes-no (in reply to polar questions). These words can be called *open class* words since new words can be added to the category. On the other hand, the syllables which are not salient in connected speech are: pronouns, prepositions, determiners, conjunctions, modals, auxiliaries, which have grammatical meanings. They can also be referred to as *closed class* words. For example:

(17) //ˌ My /mother has /bought a /new /house in the /heart of the /<u>ci</u>ty //

In the above example, the content words *mother*, *bought*, *new*, *house*, *heart* and *city* are stressed in this sentence whereas the function words *my*, *has*, *a*, *in*, *the*, *of*, *the*, are unstressed.

In one tone group, it is possible to have several feet, or maybe just one foot. In an utterance spoken in a normal speed, there can be up to seven to eight feet while in an informal speech style, we can find even ten feet or more. That means there is a tendency to have fewer feet in a more formal speech (Halliday, 1970).

Within each tone group, there is always a part of information the speaker perceives as the most important and wants to highlight it. This can be done by making that part the most *prominent*. Following Halliday (1970), the most prominent part in the tone group is called the *tonic prominence*. Therefore, the tonic always signals the beginning of the foot, which is a stressed or salient syllable. This stressed syllable is called the *tonic syllable*. The tonic syllable is often longer, and may be louder than other salient syllables in the tone group. Acoustically, a tonic syllable is usually signalled by steeper pitch movement or a change of pitch direction; duration and greater intensity (Halliday and Greaves, 2008). Similarly, Chun (2002) supports this notion, saying that it is pitch height or changing pitch rather than length or loudness that is realised in the tonic syllable of a tone group. Among the three features responsible for the tonic prominence; pitch is the most important, followed by length, and finally loudness.

Tench (1996) furthers that the system of tonicity has an important function in English intonation since it conveys the status of the message being presented in an utterance. The lack of a tonic syllable will affect the structure of information. The hearer does not know the structure as well as the point of emphasis in the information.

Thus, he or she cannot decide on the intention of the speaker in delivering the message.

2.4.2.1 Neutral Tonicity

As mentioned in the previous section, the tonic syllable falls on the last lexical item of the utterance, which is the case of neutral tonicity (Halliday, 1967). Crystal (1975: 23, cited in Tench, 1996: 56) discovered in his study that the tonic syllable fell on the last lexical item 80 per cent of the time. Similarly, the findings from Tench (1990) also found that in news reading, as high as 88 percent agreed with Crystal's data. Tench also remarks that this high proportion tends to retain across different spoken discourse.

2.4.2.2 Marked Tonicity

In case of neutral tonicity, there is no special meaning attached to it. If the prominence marked on the last content word of the tone group meets general expectations of the rule, it is considered neutral in tonicity. On the other hand, when the speaker wishes to convey a special message, he or she will highlight a part of the tone group other than the last lexical item. Following Halliday (1967), a marked tonicity occurs in two possibilities.
He says:

> "...either some element other than one just specified is "contrastive"; or the element just specified is "given"—has been mentioned before or is present in the situation or either a lexical element that is not final or final element that is not lexical."

> (Halliday, 1967: 23)

For example, the utterance „*The teacher said it was a stupid question*' can be said in a neutral case as follows:

//1ˌ The /teacher /said it was a /stupid /que̲stion //

The last lexical item, *question*, is the most prominent, which indicates that this utterance is neutral in tonicity. The most important part of the message introduced by the speaker is the word *question*. This is the new information presented to the hearer.

The same utterance with varying tonic syllables in the following examples illustrates a different place of new information in the tone group:

(18) //1ˏ The /teacher /said it was a /s<u>tu</u>pid /question //

The emphasis is placed on *stupid*, which means the focus of attention is shifted to *stupid*. In this case, *question* is treated as given or old information. We can assume that the utterance preceding this one may involve asking a question, and the new focus of information is on a new item being presented—what the teacher said about the question.

(19) //1ˏ The /teacher /said it /<u>was</u> a /stupid /question //

The grammatical word *„was'* received a stress in this sentence, indicating a marked tonicity.

(20) //1ˏ The /teacher /<u>said</u> it was a /stupid /question //

The teacher said this sentence, not just „thought'.

(21) //1ˏ The /<u>tea</u>cher /said it was a /stupid /question //

It was the teacher who said this, in contrast to somebody else.

(22) //1 <u>The</u> /teacher /said it was a /stupid /question //

The definite article *the* is stressed in this sentence to refer to a particular teacher who the speaker assumes that the hearer knows which one is being mentioned, as opposed to some other teachers.

2.4.3 Tune in English

Tune is the contrastive pitch on the tonic syllable. It is not just a matter of producing various pitch contours in order to sound native-like, or to be comfortably intelligible in the native speaker's ears. A common misinterpretation found in some L2 learners is that intonation means a good English accent. Most of the time, they do not seem to realise the meaning of the tune they use. Halliday (1970) emphasises the importance of intonation in English that it is used as a means to convey different meanings. Therefore, the same sentence can be said in a number of ways to make meaningful distinctions.

As proposed by Halliday (1970), there are five primary tunes in English: 1) falling, 2) high rising (or rising), 3) low rising, 4) falling-rising, and 5) rising-falling.

The semantic and pragmatic aspects of the tunes used in English will be discussed as follows:

2.4.3.1 Falling

Although statements can take any tune, the neutral or unmarked tune is a fall. A statement will be said with some other tunes if only the speaker has a particular reason or wishes to convey a special meaning as opposed to a general expected kind of meaning. As remarked by Collins and Mees (2008), it is evident in research that a falling tune is approximately used for 70 per cent of the tunes in conversation.

All the uses of a fall have some degree of meaning in common. As with other tune meanings, it is difficult to detect subtle differences of word meanings. Generally, we can conclude that a fall signals the meaning of finality, definiteness or closedness. This means that with a fall we indicate that the utterance is complete, and that the speaker expresses it with confidence or certainty. The falling tune may be illustrated using the grammatical form of sentences, as follows:

a. Declarative statements

(23) //1ˍ It's /<u>raini</u>ng //   (reporting the fact)

(24) //1ˍ It's /half /past /<u>eight</u> //   (reporting the fact)

(25) //1ˍ I /missed the /<u>bus</u> //   (reporting the fact)

(26) //1ˍWe're /all /<u>here</u> //   (expressing certainty)

(27) //1 Stop /<u>talki</u>ng //   (a command)

b. Wh-questions

Questions beginning with interrogative words, i.e. *who*, *what*, *which*, *when*, *where*, *why*, *how* or wh-questions in neutral situations are usually said with a fall. For instance:

(28) //1 who's /<u>it</u> //

(29) //1 where's my /<u>bag</u> //

(30) //1 what /did you /do /last /<u>night</u> //

2.4.3.2 High-rising

Most of the communicative functions attached to the high-rising tune are grammatical rather than attitudinal. Polar questions or yes-no questions ask whether something is the case or not. The answers to such questions can either „yes' or 'no'. The neutral tune for this type of question is a rise.

a. Yes-no questions

(31) //2ˏ Can you /speak /<u>Eng</u>lish //

(32) //2 Have you /<u>fin</u>ished yet //

(33) //2 Don't you /like /<u>tra</u>velling //

In informal style of speech, the auxiliary verbs and subject pronouns can be omitted, as in:

(34) //2 (Is it) Still <u>rain</u>ing //

(35) //2 (Did you) /See /what I /<u>mean</u> //

(36) //2 (Do you) /<u>Think</u> so //

It is also possible for a yes-no question to be said with a fall in a marked situation. This makes the question more *insistent*. It is more businesslike, more serious, perhaps more threatening. It also expresses an expected „Yes' to the question.

(37) //1 I'll /ask you /once /more: //1 „did you /take the /<u>money</u>'//

(38) //1 <u>No</u> // 1 I /<u>didn</u>'t //

(39) //1ˏ Can you /<u>prove</u> that //

(Wells, 2006: 46)

Similarly, Halliday (1970) notes that yes-no questions can be said with a fall in a „second attempt question', as in the following conversation:

(40) //2ˏ Can you /<u>eat</u> it //

//—ˏ<u>No</u>!—//

//1 Well then /can you /<u>drink</u> it //

(Halliday, 1970: 28)

Furthermore, the requests which have the grammatical form of yes-no questions also have a high-rising tune (Wells, 2006), for example:

(41) //2 Would you /pass me the /<u>sauce?</u> //

//2 Could I /have some /<u>rice</u>? //

The above cases of requests are the potential source of miscommunication that learners should be careful. If the utterances are said with a fall, it can be interpreted as threatening or a command instead of a polite request.

In addition, wh-questions can also be said with a rise. This makes the question more gentle, polite, encouraging, inviting, or sympathetic, as opposed to the businesslike fall. Wells (2006) calls this tone meaning the ‚encouraging rise'.

Contrast the meaning of the falling tone and the high-rise tune below.

(42) //1 When did you ar/<u>rive</u>? //   (neutral)

//2 When did you ar/<u>rive</u>? // (marked, encouraging or polite)

(43) //1 What's your /<u>name?</u> //   (neutral, businesslike)

//2 What's your /<u>name</u>? //   (marked, polite, encouraging, kindly)

(Wells, 2006: 43)

(44) //1 Why are you <u>cry</u>ing? //   (neutral)

//2 Why are you <u>cry</u>ing? //   (marked, interested, sympathetic)

However, when the tonic prominence is placed on the wh-word, it will be an echo question to confirm the question being said. For instance:

(45) //2 <u>Where</u> are you /going? //   (Is that what you said?)

(46) //2 Where are you /<u>go</u>ing? //   (May I ask?)

(Halliday, 1970: 22)

Therefore, it can be assumed that in the case of wh-questions, a high-rise would sound more appropriate than a falling tune, e.g. for people who give services, waiters, hotel clerks, flight attendants, etc. in order to be more polite and inviting. For example:

(47) //2 What would you /like to /<u>drink</u> sir? //   (inviting)

(48) //1 What would you /like to /<u>drink</u> sir? //   (general inquiry)

2.4.3.3 Low-rising

According to Halliday (1970), the low-rising tune is a compromise between the meaning of the falling and the rising tunes. It conveys uncertainty, incompleteness or confirmation of what is being said. Look at the following examples:

(49) //1 ˏ I'll /see what /I can /<u>do</u> //   (neutral)

(50) //3 ˏ I'll /see what /I can /<u>do</u> //   („since you ask me')

(51) //1 ˏ They'll /soon be /<u>here</u> //   (neutral)

(52)   //3 ˏ They'll /soon be /<u>here</u> //   („don't worry!')

(Halliday, 1970: 27)

The meaning of incompleteness conveyed by a low-rise can cause potential problems to learners of English. When a statement is said with a low-rise, the hearer is likely to anticipate more information to follow. If there is nothing to come, the hearer may question, „So, what's next?', or the interpretation can be that the speaker means to say more, but decides to hold that information instead.

A low-rising tune is also used in commands to soften the effect of them. A command either positive or negative with a low-rising tune is used to express a request, as in:

(53) //1 Tell me /all a/<u>bout</u> it //   (neutral)

(54) //3 Tell me/all a/<u>bout</u> it //   (mild imperative, an invitation)

(55) //1 Don't /stay /out /too /<u>long</u> //   (forceful, insisting)

(56) //3 Don't /stay /out /too /<u>long</u> // („I know you won't', „I'm not serious')

(Halliday, 1970: 28)

2.4.3.4 Falling-rising

Halliday assigned the meaning as „there is a *but* about it' (Halliday, 1967: 27); he extended the meanings to include reservation, contrast, conditions and tentative opinions (Halliday, 1970: 26-28). This is related to the notion of "Convolution" tune signifying "Contrariety" (Luksaneeyanawin, 1983, 1994). Here are some examples:

(57) //4 Give him a /<u>chance</u> //   („at least', „even though he may fail')

(Halliday, 1970: 28)

(58) //4 ˏIt's /very ef/<u>fi</u>cient //   (ˏit may not be beautiful', etc.)

(59) //4 ˏIt's a /bit of a /risk //   (ˏbut as long as you know that you can

try it if you want')

(Halliday, 1970: 26)

Tench (1996) assigns all of Halliday's meanings under the term „implication'. Tench also provides another common contrast between a falling tune and a falling-rising tune. This meaning involves the word „any', which was proposed by Lee (1956: 347, cited in Tench, 1996: 85). For instance:

(60) //1 ˏThe /program /doesn't ad/mit /<u>any</u> /students //   (nobody is admitted)

(61) //4 ˏThe /program /doesn't ad/mit /<u>any</u> /students //   (some are admitted)

The clear meaning of the two distinctions is that all students are excluded in (60), but some students are admitted in (61). The implication of (61) can be the fact that the program accepts only outstanding students.

2.4.3.5 Rising-falling

The fall-rise and the rise-fall, as noted by Halliday (1970) contain two aspects of meaning, reflecting the change of meaning from one to another. The falling-rising tune suggests a tentative opinion; on the contrary, the rising-falling tune specifies a strong assertion or emphasis. This is also related to the notion of universal „Convolution' tune signifying „Contrariety' (Luksaneeyanawin, 1983, 1994). She suggested that emphasis arises from „Contradiction' or the semantic of „Contrariety'. For example:

(62) //1 ˏ He wasn't /telling the /<u>truth</u> //   (neutral)

(63) //5 ˏ He wasn't /telling the /<u>truth</u> //   („I'm quite certain')

(Halliday, 1970: 27)

 It is common that a rise-fall is used to express intense feelings of approval, disapproval or surprise. Therefore, this tune may create a strong effect about the statement. Compare the following reply to the question „How did you find the movie?'

(64) //1 ˏ It was /very en/<u>joˏy</u>able //   (neutral answer)

(65) //5 ˏIt was /very en/<u>joˏy</u>able //   (assertive, stronger answer—perhaps

                                                    because of more intense feeling)

(66) //5 ˏHe /didn't /pass the e/<u>xam</u> // (you might not believe it, but it is true)

Additionally, a rise-fall can be used in committal answers to show involvement, assertion, superiority or encouragement (Halliday, 1967), as in:

(67) //5 ˏI /<u>cer</u>tainly /do //

(68) //5 ˏIt's /<u>ve</u>ry /interesting //

(69) //5 ˏOh I'm /<u>sure</u> it /was //

                                                    (Halliday, 1967: 27)

A rise-fall can be optional for beginner learners of English because it is not commonly found, comparing to a fall, a high-rise, low-rise and a fall-rise. Using a rise-fall may be risky for non-advanced learners, and learning them is also too burdening both for the teacher and the learners. For pedagogical purposes, mastering the use of a fall, the rises (high-rise and low-rise) and a fall-rise is perhaps sufficient in English beginner pronunciation lessons.

From the discussion on tunes in English, the five primary tunes proposed by Halliday can be summarised in the following table:

Table 2.2: Semantic aspect of tunes in English based on Halliday (1970: 24)

Tune	Phonetic characteristics	Semantic property	Example sentence	Meaning
1	Falling	Certain, definiteness	He could do	Neutral statement
2	High-rising	Uncertainty, undefiniteness	He could do	„Is that what you think? Could he?'
3	Low-rising	Not so certain, incompleteness, confirmation, of secondary importance	He could do	„I think he could, but it's of no importance.'
4	Falling-rising	Reservation, an implied „but'	He could do	„But he won't'; „But he won't help you'
5	Rising-falling	Contradictory, assertiveness	He could do	„So don't you imagine he couldn't!'

To conclude, the same utterance can be said in a variety of ways to convey contrastive meanings. Generally, a fall is the default tune indicating the commitment of the speaker towards the utterance being said while a rise signals that the speaker is not committed or uncertain about it. However, the interpretation of intonation meaning is largely context-dependent. Also, there are nonverbal communications that give clues to the meaning conveyed by intonation.

2.5 Intonation in Thai

As discussed earlier, Thai also has intonation although the way it manifests itself is different from the function of intonation in English. In the sections that follow, explanations on how intonation operates in Thai will be provided using the same trio systems based on Halliday's framework.

2.5.1 Tonality in Thai

The system of tonality is manifested in Thai, to some extent, similarly to that in English. However, the operation of tonality in Thai shares some common features and also distinctive characteristics. Luksaneeyanawin (1983: 269) defines tonality as 'the distribution of foot and tone group in an information unit'. She explains that tonality is determined by two different factors:

1) The word accents and the syntactic structure of the word(s) in the information unit. Compare:

(70) // ta:0 ma:0 / ju:1 t^{h}i:2 / ba:n2 //   ตา มาอยู่ที่บ้าน

   Grandad came to stay at home.

(71) //ˌta:0 / ma:0 / ju:1 t^{h}i:2 / ba:n2 //   ตามา อยู่ที่บ้าน

   Mr Maa stays at home.

(Luksaneeyanawin, 1983: 270)

The above examples clearly indicate that the two information units consist of different numbers of words. Example (70) contains five words: /ta:0/ (Grandad), /ma:0/ (came), /ju:1/ (stay), /t^{h}i:2/ (at), /ba:n2/(home), /ma:0 'ju:1/ มาอยู่ is a serial verb construction where the main verb /'ju:1/ is accented, /ma:0/ is unaccented; whereas example (71) has four words: /ta:0 ma:0/ (Mr Maa), /ju:1/ (stay), /t^{h}i:2/ (at), /ba:n2/ (home). These examples illustrate Luksaneeyanawin's perspective that "tonality differences of a set of identical syllables which are influenced by the underlying phonological and syntactical structure of the information units are linguistically in contrast, i.e. they form different sentence meanings" (Luksaneeyanawin, 1983: 283). In other words, the author suggests that this aspect of tonality has a referential or representative function, underlying linguistic contrasts in meanings.

2) The emphasis or focus of interest perceived by the speaker, as in:

(72) //ˌta:0 / ma:0 / ju:1 t^{h}i:1 / ba:n2 // Mr Maa stays at home.

(not rests at home)

(Luksaneeyanawin, 1983: 270)

The examples (71) and (72) are linguistically different, but the contrast in meaning underlies in its pragmatic structure. It reflects the information that the speaker wants to highlight in the utterance. Therefore, this factor of tonality contrasts can have an expressive function, influenced by the pragmatic aspect.

Luksaneeyanawin (1983: 271) adds that there is a great tendency for Thai speakers to put the tonic prominence on the last syllable (regardless of its accentedness) before the pause of each information unit. Therefore, this means that the tone group boundary or a pause is usually placed after the tonic prominence in Thai.

Several problems regarding the degree of intelligibility and comprehensibility may arise when Thai speakers speaking English, and these features in Thai are carried over to their English speech. One of the problems is the distribution of feet in a tone group, which affects the flows of speech. Thai learners tend to articulate every word clearly, resulting in shorter feet comparing to the placement of feet in English. Grammatical words, e.g. articles, pronouns or auxiliaries, are usually stressed in Thai learners' speech in case of neutral tonality. This fragmented speech may cause problems in understanding for native speakers of English. The second problem pertains to the assignment of tone groups. As suggested by Luksaneeyanawin (1983), in the case of unmarked tonality in Thai, a tone group or a pause-defined unit has an average number of five words. Therefore, when speaking or reading a text, Thai learners tend to divide their speech into shorter tone groups, comparing to the native speakers of English. The last difficulty is the transfer of the accentual pattern or word accent of Thai. As mentioned before, the division of feet or rhythmic units is in connection with the accentual system of Thai. A comparative study by Vairojanavong (1984) on the accentual system of Thai and English suggests that Thai and English share similar accentual pattern in monosyllabic words, but differ in terms of polysyllabic words. The findings indicate that the accent of polysyllabic words in the two languages is different. While the second syllable is usually accented in Thai, there is a great tendency in English words to place the word accent on the first syllable. As for multisyllabic words, the last syllable is still accented in Thai while the accented syllable in English is not on the final position. Thus, putting the word accent on the

wrong syllable is a typical problem for Thai learners because of the interference of their native language.

2.5.2 Tonicity in Thai

According to Luksaneeyanawin (1983), there are two kinds of information focus in a tone group in Thai: end focus and expressive focus. Whereas the end focus marks the ending of an information unit, the expressive focus highlights the information the speaker perceives as the most important part of the message for communicative effects, e.g. contrastive or new information, as illustrated in examples from Luksaneeyanawin (1998) below:

(73) // dæːŋ0 / tat1 kraʔ1 / proːŋ0 / <u>niː3</u> // Dang made this dress.

      Dang   cut   dress   this

(74) // dæːŋ0 / <u>tat1</u> kraʔ1 / proːŋ0 / niː3 // Dang made this dress (not bought).

      Dang   cut   dress   this

Example (73) indicates that the tonic prominence in Thai is the last word of the information unit before a pause regardless of the grammatical category of the word. Thus, the utterance of which the last word contains a tonic syllable is considered neutral in tonicity in Thai, as in (73). On the other hand, when the speaker desires to contrast or highlight a piece of information, the prominent stress can be placed on any word, either content or grammatical items. This is the case of marked tonicity.

In short, both Thai and English utterances contain rhythmic units, tonic prominence or focus of information. However, the tonic in Thai consists of only one foot which is the last one. There is no unstressed syllable after a tonic. Unlike Thai, the tonic prominence in English contains one or more feet, and when the tonic is on the last foot it can have more than one syllable. As a result, Thai learners tend to place the tonic syllable on the last syllable of a tone group in almost all cases. This fixed position of tonic makes it difficult for English speakers to know the point of emphasis or the part of information Thai learners would like to highlight. Even for the case of marked tonicity in which the Thai and English placement of prominence can be shifted to any word for emphasis, Thai learners are unlikely to conform to the features

of the Thai language, especially for low proficiency learners. As indicated by Rudaravanija (1965), Thai learners tend to give more precise enunciation to each syllable or to each word, which makes their speech unnatural to the English speakers. Also, the listener may not know the point of emphasis intended by the speaker.

Thai also has contrasts where the meaning changes when the stress is placed on different places (Noss, 1964: 46-47). However, it also depends on the pause, sentence-fractions and homophones, as shown below:

(75) // tua0 / ja:ŋ1 ni:3 //   „a body like this'   ตัว อย่างนี้

(76) //ˌ tua0 ja:ŋ1 / ni:3 //   „this example'   ตัวอย่าง นี้

(77) //ˌ tʰa:2 na:m3 / tɕa1 / hɛ:ŋ2 //   „the water sources will dry up   ท่าน้ำ จะแห้ง

(78) // tʰa:2 / na:m3 / tɕa1 / hɛ:ŋ2 //   „if the water dried up'   ถ้าน้ำ จะแห้ง

(79) // rɔ:ŋ3 / haj2 daŋ0 //   „try to shout loudly'   ร้อง ให้ดัง

(80) //ˌ rɔ:ŋ3 haj2 / daŋ0 //   „weeps loudly'   ร้องไห้ ดัง

(81) // kʰan0 / laŋ4 //   „(my) back itches'   (ฉัน) คันหลัง

(82) //ˌ kʰan0 lǎŋ4 //   „the one (car) behind'   (รถ) คันหลัง

The examples (75)-(82) exemplify that sentence stress is not a significant feature in Thai. Thai speakers can understand these sentences perfectly from the context even if the stress is placed incorrectly. In fact, the difference of stress in Thai is not easily recognised. Some Thai speakers do not even realise whether it is different. Realising this, it is clearly desirable that the teacher explains the unequal prominence in sentence stress in English.

2.5.3 Tune in Thai

Tune is defined by Luksaneeyanawin (1998: 390) as "the tune system of intonation in Thai to convey end focus and expressive focus in Thai". Although Thai is a tone language with five lexical tones, it also has stress and intonation. The same author proposes that there are four intonation contours or tunes according to the characteristics of pitch fluctuation. The four tunes asserted by Luksaneeyanawin are:

falling (tune 1), rising (tune 2), lowering (tune 3), and fluctuating (tune 4). Similar to English, tune 1 is used in statements and in unmarked speech. Tune 2 is common in questions, unfinished utterances, and it also conveys disagreement and surprise. Tune 3 with a lowering pitch marked hidden or concealed attitudes, e.g. anger or boredom. Lastly, tune 4 makes statements emphatic or authoritative, intense feelings, i.e. angry, very agreeable, very interested or very believing. Regarding the semantic aspect assigned to all four tunes, she categorises tune 1 and tune 3 into the falls, conveying finality and closedness; and tune 2 under the rises, signaling non-finality and openness. Tune 4, as noted by Luksaneeyanawin, possesses a shared property with Halliday (1967, 1970)'s tune 4 (fall-rise) and tune 5 (rise-fall) which indicate contradiction, as shown in Table 2.3.

Table 2.3 Grammatical and attitudinal meanings for the four tunes (proposed by Luksaneeyanawin, 1998)

Tune	Phonetic Characteristic	Grammatical and Attitudinal Meanings
1	Falling	Finality: statement, citation form, attitudinally unmarked, submissive, definiteness.
2	Rising	Non Finality: question, disagreeable, disbelieving, surprised, unfinished, politeness
3	Sustained Lowered	„Telephone-Yes', concealed anger, bored, non-authoritative
4	Convolution or Fluctuating	Contrariety: conflict, contradiction, emphatic, anger, very agreeable, very interested, very believing

Adapted from Luksaneeyanawin (1998: 384)

From the discussion on the tune system of intonation in Thai, as proposed by Luksaneeyanawin (1998), the manifestations of tune in the Thai intonation generally convey some identical semantic properties as those in the English tune system—the notion of finality or closedness and non-finality or openness, which is similar to English tunes, and the Convolution or Fluctuation (Contrariety) is identical to the

English tune 4 and tune 5. Although Thai possesses intonation that is more or less similar to the English intonation, Thai has five lexical tones that can interfere with the use of English contrastive pitch. Sankhavadhana (1989) anticipates that Thai learners may assign a lexical tone to every syllable when they speak English. This is because Thai lexical tones are inherent in and operate on syllables, but the phonemic pitch levels of English are movable and operate on utterances. Because the contrastive pitch in English contrasts for a communicative purpose, it assists the listener to perceive the differences between, for example, telling and asking or ordering and requesting. The deviance from the English tune may cause a misunderstanding in the listener part. Besides, tune is significant in expressing the speaker's attitudes, which has frequently been commented on—„that it is not what you said, but the way you said it'. Therefore, native speakers of English tend to rely on the use of pitch patterns in interpreting the intention of the speaker.

These problems on the use of English tune anticipated by linguists may not occur in the learner's actual performance. There are other factors that can influence their production of English intonation, e.g. transfer of training, English proficiency, concern for good pronunciation, etc. Some Thai learners use only the falling intonation in all utterances, especially those with limited proficiency of English. They may tend to be attentive to what they are saying without thinking about why they are saying it. There are some learners who use the rising intonation all the time without realising its function. Some learners even randomly select the falling tune and the rising tune. Therefore, it can be seen that the use of inappropriate tune together with the interference of the Thai lexical tones can make it difficult for English speakers to follow the Thai learners' speech, and to interpret the meaning and intention, especially when there is no other nonverbal clues, e.g. facial expressions, gestures, to facilitate their interpretation.

2.6 Previous studies on L2 intonation

Upon examination of the existing research on second language intonation, it is found that there is a paucity of studies dealing with L2 intonation in spite of the emphasis of pronunciation instruction moving from the segmental to the suprasegmental features. For ease of presentation, the earlier research studies will be reviewed in terms of their research questions, objectives, design, data collection and findings.

In order to study the L2 learners' intonation features, most studies explore the errors or deviations from the target language from a contrastive point of view. A study by Hewings (1995a), for example, investigated the similarities and differences in the intonation of native English speakers with Indonesian learners. Grabe, Rosner, Garcia-Albea and Zhou (2003) did a cross-language experiment on the perception of intonation contours in Southern British English intonation units, comparing to Spanish and Mandarin Chinese learners. This study aimed at examining the L1 influence—Spanish and Chinese—on the L2's intonation patterns.

To cite specific research questions, the notions of the three interrelated systems of English intonation—tonality, tonicity and tone or tune—have been a point of investigation in a number of studies. For example, Hewings (1995a) explored the tone unit length, the distribution of prominence in the tone units and tune choices. Similarly, Timková (2001)'s experimental study carried out an analysis of tune groups, pitch ranges, nucleus or tonic placement, and tune identification. Ramírez Verdugo (2002) compared the role of intonation systems in the information structure of their conversations used by Spanish learners and native speakers in the control group. This study also examined the use of intonation patterns in terms of tonality, tonicity, and tune. Another study by Rui (2007) employed dialogue reading and interview to explore the three elements of English intonation in Chinese learners.

Tonality is also a point of interest for a number of studies. For example, Johnson and Moore (1997), examined the relationship between reading proficiency and pausing in reading aloud. Chen (2006)'s study also used passage reading with Chinese learners. The author selected to examine the tonality because previous research studies show that pause is the most important boundary marker, and it also

causes common errors for Chinese speakers. The study merely replicated previous studies on Chinese EFL learners' intonation phrasing with a larger scale of subjects.

Since tonality and tonicity are closely linked, some studies investigated the two dimensions together. Diez (2008), for instance, identified errors relating to the division of the utterances into tone units and to onset and nucleus placement with the tone unit, and are grouped into interference errors and developmental errors. Monroy (2003)'s perception test examined how the Spanish learners perceive tonic placement in English, and the degree of familiarity with each tune in English. Furthermore, Nava (2008) as well as Taniguchi and Shibata (2007) investigated only the tonicity system. Taniguchi and Shibata's study was not a cross-linguistic experiment. No native speaker subject was included. They interestingly compared the differences between Japanese learners' intended tonicity and their performed tonicity. In other words, the learners' competence was contrasted with their actual performance. Nava (2008), on the other hand, worked on two groups of learners: Spanish learners of English, and English learners of Spanish in order to compare the tonicity system and to examine how it operates. In addition, this study aimed to find out whether English and Spanish differ in certain focus constructions. Wennerstrom (1994) compared the use of intonational or pitch contrasts in Spanish, Japanese and Thai learners to signal meaning in discourse structure.

The attitudinal function of intonation related to the tune or tone has received extensive attention from researchers. Hewings (1995b) compared tune choice of native British English speakers with the choice made by Korean, Greek, and Indonesian learners, all of whom had no extended stay in an English-speaking country. Similarly, Toivanen (2003) assessed the selection of tone in Finnish students to discover the important role of L1 interference of Finnish learners of English in the production of English intonation. Ramírez Verdugo (2005) studied how the use of tune in Spanish speakers might lead to pragmatic differences that could affect their spoken discourse in the expression of certainty and uncertainty. The researcher analysed the prosodic forms produced by the learners and compared it to the tune choice of native speakers to interpret the pragmatic meaning expressed by Spanish and native speakers.

Additionally, tune is also investigated in relation to its grammatical or syntactic function. Litzenberg (2003) explored the extent to which the tunal patterns can be a tool in measuring the interlanguage development of Chinese teaching assistants at a US university. Yes/no question intonation patterns of Chinese teaching assistants were compared with those of native speaker counterparts in an academic context. In a recent study by Anttila (2008) with Finnish subjects, the author examined the intonation of questions and statements in spontaneous and read speech, and studied the differences in the use of intonation between different types of questions. First of all, questions and statements found in spontaneous dialogues were compared. These utterances were also compared with read versions of the same utterances. Anttila also compared the strategies each subject employed in distinguishing between questions and statements.

The design of the study is one of the first basic decisions to be made in conducting research. The choice of the research design depends on the questions being investigated and the purposes of the study. Upon examination of the research design of some previous studies, the proportion of studies using longitudinal approach is lower than those using the cross-sectional approach. A cross-sectional method perhaps is preferred because of practicalities and convenience. Chan (2004) makes a remark that longitudinal data are of course better than cross-sectional data but in reality this kind of study is difficult to manipulate. This is due to the matter of finding participants who will be willing to cooperate in the study over a period of time.

Among a number of research studies being reviewed, the number of non-native subjects ranges from 4-102 in the test groups in the cross-sectional research. Hewings (1995a) collected data cross-sectionally with four non-native subjects in the experimental group while Litzenberg (2003) whose data were obtained longitudinally investigated on about the same number (3) of subjects. Ramírez Verdugo (2002)'s longitudinal study followed the 20 Spanish learners during their three-year university studies. For a longitudinal approach, studying only one or two subjects is very common; however, for a cross-sectional design the number of subjects should be large enough to conclude that there is a tendency for the learners to follow the same route, and the findings have statistical significance. The longitudinal study itself is useful in examining the developmental process of a few individuals. Most studies used equal

number of native speakers in the control group to serve as baseline data for comparative purposes (e.g., Hewings, 1995b; Litzenberg, 2003; Nava, 2008; Ramírez Verdugo, 2002; Toivanen, 2003, etc).

Studies of L2 intonation also differ in terms of the elicitation techniques used. Most of the research studies involve controlled production tasks, e.g. reading a paragraph, a story or a dialgoue (Diez, 2008; Hewings 1995a, 1995b Ramírez Verdugo, 2002; Taniguchi and Shibata, 2007; Timková, 2001; Toivanen, 2003). Cook (1986) notes that controlled data is advantageous in that it contains the intended information, but a major drawback of controlled data is its being artificial. Accordingly, Chaudron (2003: 790) adds that the elicited production tasks are "more tailored targets, more mechanical administration, a wider range of access to subjects, and ease of scoring—these most controlled tasks tend to achieve even more or better outcomes". However, he makes the point that the tasks elicit less contextualised and less extensive production comparing to naturalistic data collection procedures. Hewings (1995b) claims that using a dialogue offers comparable data by having a pair of subjects read a contextualised scripted dialogue which is identical to natural conversation. She indicates its advantages over the use of spontaneous speech data that it yields the utterances containing similar lexico-grammatical forms produced in the same contexts for analysis of intonation. In addition, a dialogue features an interaction with an interlocutor, comparable to a natural conversation. In another study by the same author (1995a), she mentions that in comparing intonation choice made by L2 learners and native speakers, the ideal research data should consist of the same utterances produced in the same contexts. In this current study, controlled production or experimental tasks will be used because the subjects are expected to produce targeted forms specially selected for the purposes of intonational analysis.

A study of the effect of interrogative function on intonation in spontaneous and read Finnish by Anttila (2008) compared the performances between spontaneous and reading tasks. The author asked the eight Finnish speakers to perform a spontaneous 45-60 minute dialogue, and their speech data were recorded. The contents of each speaker's turns were then transcribed in standard orthography. The subjects were asked to read their scripted dialogue containing only their turns. They were told to pause after each line of the dialogue. The study revealed an interesting

result that the reading task of each speaker differed in style. While some speakers could act their turns fluently and naturally, others used a more standard reading style. Some subjects faced some difficulties and indicated hesitation in reading some lines. Although this study examined intonation in Finnish, the findings reveal some methodological problems of reading a dialogue. The subjects in this study were not given any instruction about the speaking style when they were to read their scripted dialogue; they might interpret the intention in different ways. Therefore, in using dialogue reading, the researchers have to instruct the subjects to act or read the dialogue as naturally as possible to control the difference in speech styles. The subjects should understand the messages conveyed in each turn in order to perform the tasks in a natural way, reflecting the data comparable to a naturalistic conversation.

In a longitudinal study by Ramírez Verdugo (2002), data was collected of the subjects reading aloud 40 short conversations, and recorded twice a year over an extended period of three years. The aim of the research was to investigate authentic data representing a description of the use of spoken English of specific learner groups. The findings may reveal more accurate data of real use in spoken discourse but its being time consuming is certainly an obvious disadvantage.

Litzenberg (2003)'s study of yes/no question intonation also gathered data longitudinally. The objective of this study was to compare the non-native speech data with those of native English speakers in order to measure the interlanguage development. The non-native subjects were three international teaching assistants who were Chinese native speakers. The data were video recordings of their teaching sessions in part of the training course. The data were intended to be naturalistic production. However, the fact that the subjects realised the presence of the video equipment may be intrusive, and they may have been nervous from being visually monitored.

Let us move the discussion to the intriguing findings. The results from the studies investigating tonality errors in non-native speech provide somewhat similar phenomena. Hewings (1995a)'s comparative study of the intonation patterns of Indonesian learners found that Indonesian subjects produced considerably shorter tone units as measured by number of words than the native British subjects. None of the

Indonesian subjects produced intonation units with more than seven words whereas those containing eight to eleven words were found in the native speaker group. Ramírez Verdugo (2002) found that Spanish learners produced more tone groups than the native speakers. The findings of Diez (2008)'s study with Spanish learners were quite similar. A significant negative correlation was found between the number of tone units and tone unit length. This means that the larger the number of tone units, the smaller the number of words in each tone unit. These findings were also in line with those in Hewings's study in the point that the Spanish learners of English produced more tone units than native speakers (mean 69.87 as against 40 respectively). Chinese speakers in Chen (2006)'s study paused more often and longer than the native speakers, which resulted in unintelligible fragmented speech. Therefore, the results from these studies agree that L2 speakers of English tend to divide their speech into shorter units of information, which affects the flow of the rhythm.

As regards the tonicity dimension, Hewings (1995a) found that Indonesian subjects tended to move the tonic word to the end of the intonation unit. Ramírez Verdugo 2002's findings accordingly indicated that Spanish speakers often placed the focus in given information rather than new information as in the native speaker data. Also, the subjects were likely to locate the tonic in the last word of the utterance. Japanese learners in Taniguchi and Shibata (2007) and Spanish speakers in Diez (2008) produced similar tonicity errors: putting a stress in the last word of each intonation unit regardless of the context.

The findings concerning the tone choice of L2 speakers also indicate a general agreement. Hewings (1995a) studied the selection of tune in four Indonesian learners comparing to twelve British speakers. The five tunes studied were falling, rising-falling, rising, falling-rising and level tunes. The data showed that Indonesian learners produced very few rising-falling tunes, and a much higher percentage of level tune than the native speakers. However, it should be noted that the number of non-native subjects used for comparison in this study was quite small and may not represent the population.

Hewings (1995b) compared the tune choice of Korean, Greek and Indonesian subjects with a preferred choice of the native speakers, and found that the two groups

used falling and rising tune choices in similar contexts in the dialogue reading. However, the percentage of agreement was greater for the falling tune than for the rising tune in the non-native subjects. In other words, they did not select the rising tune while there was a strong agreement among the native speakers. The number of non-native subjects in each language group was relatively small (four subjects each). The generalisation of the findings may not be claimed with certainty. Hewings also broadened the definition of the rising tune to include rising and falling-rising tunes, and the falling tune to cover either falling or rising-falling tune. Only a brief explanation of the selection was provided. Finnish speakers in Toivanen (2003)'s study also indicated the use of falling tunes more frequently than British speakers. Native speakers selected rising tunes more often with statements (29%), but a small percentage was found in the Finnish data (6.5%). Moreover, while the native speakers used the falling-rising tune to convey uncertainly or reservation, the Finns were likely to use the falling tune.

2.7 Previous studies on Thai learners' English intonation

To date, there has been very little work in the area of English intonation in Thai learners. For example, Kanoksilapatham (2005) replicated Wennerstrom (1994)'s study with Thai speakers who had high proficiency level studying in the US for 18 months to 4 years. This study examined pitch contrasts to signal discourse relationship or tonicity in Hallidayian framework. The findings suggested that the Thai speakers also had problems with the use of pitch for contrastive information in the discourse although their performances displayed more similar features to the native speakers than the participants in Wennerstrom's study. It was concluded that prolonged exposure had an impact on the improvement of other pronunciation elements, but the problem with the use of pitch for contrastive information still persisted. A more recent research by Isarankura (2009) examined the productions of the learners in terms of word stress, stress and rhythm, pausing and intonation, and the perceptions of the English native speakers as raters of the learners' performance. Nevertheless, Isarankura's study aimed to examine the effects of instruction towards the improvement of the performance and intelligibility. The study did not seek to provide descriptions of the Thai learners' intonation patterns.

This section will focus only on the studies investigating the intonation patterns from a comparative point of view. These studies, although dated, shed light onto the descriptions of the intonation patterns of Thai learners, leading to the development of more recent studies.

Rudaravanija (1965) thoroughly compared the features of intonation in Thai which correspond to the English intonation patterns in order to identify the problems of Thai learners in learning English intonation. The data were transcriptions of approximately 30 hours of informal Thai conversations by 30 Thai learners. The findings suggest that the major differences between Thai and English intonation are: the pitch levels and the sentence stress. Therefore, the potential problems of Thai speakers stem from these differences. Pitch levels in English are phonemic; the points where pitch levels change are significant. However, in Thai, the overall pitch is phonetic and goes up or down gradually. The changing of pitch levels in English will pose problems for Thai learners. Also, Thai speakers tend to put the stress on the last syllable of the last word in an utterance while the sentence stress in English is movable according to the emphasis in an utterance. These are major problems for Thai learners.

Kanchanathat (1977) investigated the problems of Thai learners in learning English intonation and sought for the influence of Thai rhythmic patterns in the use of English intonation. The participants of this study were ten Thai speakers studying at a US university who had five months to five years living in an English speaking community. Five native speakers of English were served as the control group. The data in English intonation were derived from the recordings of free conversions of each Thai speaker with one of the native speakers. The conversation duration ranged from ten minutes to an hour. Also, the reading of a prepared dialogue of the Thai and English speakers were compared. To justify the relationships between Thai subjects' Thai intonation and English intonation, recordings of Thai speakers' free conversation and examples of reading word lists, connected speech and rhythmic contrasts in Thai were also collected. The analysis primarily focused on: rhythm and stress; pitch range and the shapes of Thai tones as well as traces of specific Thai tones transfer in Thai subjects' English intonation. The findings revealed some noticeable influences of the Thai intonation on the Thai speakers' English rhythmic patterns. Thai subjects tended

to place the stress on the last syllable of the words and rhythmic group when pronouncing English, which is in agreement with Rudaravanija (1965). Also, the Thai subjects showed a great tendency to give a rather equal weight to each syllable in the rhythmic group, and their English syllables were longer than those of the English native speakers. An overall observation of the Thai subjects' English pronunciation was that there were fewer attempts to stress certain syllables or words by means of length, pitch, or intensity. Compared to the English subjects, the Thai subjects used much less pitch change and intensity to make a certain word stand out. In other words, Thai subjects were much more flat-pitched than the English subjects, and used a narrower range of pitch. The most prominent syllable of an utterance pronounced by the Thai speakers appeared to be either a modifier or a verb, as in—*It very depend on coach*, or *I sweat all the time*. Besides, it was found that the Thai speakers applied some specific Thai tones, particularly the falling, high, and mid level tones when they speak English. Their application of these tones was not really different from the system of the Thai tone assignments to English loanwords in Thai contexts. To summarise, this study found that L1 transfer was a major cause of Thai speakers' problems in using English intonation. Their English intonation is systematically related to the Thai phonology.

Sankhavadhana (1989) carried out a contrastive study of intonation in English and Thai based on Halliday's (1967, 1970) three interrelated systems of tonality, tonicity and tune. The findings suggest that the differences of the two language phonological systems account for the problems of Thai learners in using English intonation. Regarding the chunking of information or the tonality system, the author states that an information unit in Thai usually corresponds to a noun phrase, a verb phrase or a sentence. Therefore, in Thai the tone group boundary tends to occur after a grammatical unit whereas in English a tone group is related to a clause. Regarding the rhythmic unit, there is a tendency for Thai learners to put an accent on an unaccented syllable, i.e. auxiliary verbs (is, am, are, etc.) and possessive adjectives (his, her, my, etc.). This problem stems from the different categorisations of word classes. Auxiliaries are main verbs in Thai, and possessive adjectives occur in compounds with the final syllable accented. From this difference, the author predicted that Thai learners usually pause after a tonic word since the tonic prominence in Thai

indicates tone group boundaries. Problems can arise from the transfer of Thai intonation when Thai learners speak English. That is, they tend to assign more tone groups and there are shorter feet or rhythmic units in a tone group than English speakers do. Concerning tonicity, both Thai and English utterances contain rhythmic units, tonic prominence or focus of information within a tone group. However, there are some obvious differences. The tonic prominence in Thai falls on the last syllable of the tone group although it is a grammatical word. Also, there is no unaccented syllable following the tonic syllable. In neutral tonicity in English, the tonic falls on the last content words of a tone group, and there can be one or more unaccented syllable(s) after the tonic syllable. In marked tonicity, both languages can stress any accented syllable in the tone group for emphasis. As for the English tone or pitch, the changing of pitch levels in English will pose problems for Thai speakers because the overall pitch goes up and down gradually in Thai. Also, each syllable in Thai contains an inherent lexical tone assigned by rules in the Thai phonology. Sankhavadhana notes that Thai learners show a great tendency to carry over the Thai lexical tone (or lexical pitch) to each English syllable whereas the English pitch movement operates on utterances. Therefore, if Thai uses this fixed tone on each syllable when speaking English, they cannot produce clear distinctions of the English pitch movement. To conclude, Sankhavadhana's study compared and contrasted the intonation in Thai and intonation in English from a contrastive analysis point of view. The study aimed to provide an extensive account of the potential problems of Thai learners with English intonation, based on the existing literature.

A more recent study by Limsangkass (2009) investigated interlanguage intonation of Thai learners living in Southern Thailand, whose first language is Pattani Malay, and second language is Southern Thai Dialect, and standard Thai. They learn English as a foreign language. Limsangkass' work was also based on Halliday's framework. The researcher took the findings from Sankhavadhana (1989) into account and obtained some speech data from thirty Thai learners to verify the problems encountered by Thai speakers. The participants of this study were assigned to two groups of high exposure and low exposure to English using a language exposure questionnaire. The items in the questionnaire elicited information from the participants on the frequency of doing activities in English. However, the author

found that some participants in the high exposure group who were ranked towards the bottom received quite close scores to those in the low exposure group in the top rankings. This indicated that these participants who received nearly equivalent scores were in the same interlanguage stages. Also, the participants were designated into two groups according to their current year of study at university—those in the first year in the low group and those in the fourth year in the high group. It is worth noting that Limsangkass' questionnaire required the participants to report if they had exposed to a number of activities in English. They were to rate the frequency of doing the activities in a five-scale of: *never, rarely, moderate, often* and *very often*. This questionnaire does not provide other factual details about the participants, i.e. age of initial exposure, number of years of exposure to English, length of stay in an English-speaking country, etc. Thus, the English language background questionnaire of the current study was developed to fill in these gaps and to elicit more detailed information about the participants' English language experience.

The objectives of Limsangkass' study were: to identify the problems of bidialectal Thai learners who speak Pattani Malay as their native language and also speak two dialects of Thai: Central Thai and Southern Thai; and to examine the problems of these Pattani Malay-speaking learners at two different interlanguage stages. The study employed three data elicitation tasks: reading a passage, reading a comic strip and reading a dialogue. These tasks were designed to investigate the dimensions of tonality, tonicity and tune, respectively. Regarding the tonality system, the researcher focused the analysis only on the accentual patterns used to segment a tone group into rhythmic units or feet. No detailed analysis concerning tone group boundaries were covered in this study. The overall findings revealed that the low exposure group was more influenced by Pattani Malay and Thai than the high exposure group. With regard to tonality, it was found that the performance of the low exposure group indicated more deviations in their accentual patterns than that of the high exposure group. Concerning tonicity, the majority of the participants in these two groups preferred to place the tonic prominence in the middle position, regardless of the context or word class. The author claimed that the location of a tonic word in a tone group was primarily influenced by the Thai and Pattani Malay tonic systems. In terms of the English tunes, there were three primary tunes found in the data: tune 1

(falling), tune 2 (high-rising) and tune 3 (low-rising). The participants in both groups showed a high level of agreement with the native speakers for the falling tune. The degree of conformity to the native speaker group decreased for the high-rise and the low-rise. The results indicated that the high group appeared to show fewer deviations from the native speakers for all the three English tunes.

From the review of some past works on Thai learners' English intonation, it can be seen that most studies aimed to provide descriptions of similarities and differences in Thai intonation and English intonation. These results were supported and verified by some speech data obtained from Thai informants and native speakers. The problems identified by Rudaravanija (1965), Kanchanathat (1977) and Sankhavadhana (1989) were claimed to be generalisable to Thai learners of English. On the contrary, Limsangkass (2009) considered the developmental aspects of learning an L2 into account. The Thai learners with low English exposure and high English exposure were regarded different groups of Thai learners whose performance could be varied. Similar to Limsangkass (2009)'s study, this present study also aimed at investigating Thai learners at two different interlanguage stages. However, the learners in Limsangkass' study were bidialectal speakers of Pattani Malay and Thai. The criteria of recruiting the learners of his study were: year of study at university, and prior and ongoing exposure to English. In addition, his speech data were obtained by means of controlled production tasks, excluding a free speech style.

The current study is different from Limsangkass (2009) in several aspects. First, it was conducted with Thai learners speaking the Central Thai dialect. Second, the criterion for selecting the learners was solely based on the scores from the English language background questionnaire developed by the researcher. The questionnaire served to elicit information on learners' language experience. Age of acquisition, the environment of learning, the degree of prior and current exposure to English as well as the frequency of use in a variety of activities were also taken into consideration. These factors were based on the rationale of the Language Experience and Proficiency Questionnaire (LEAP-Q), a valid and reliable tool for investigating language profiles, developed by Marian, Blumenfeld and Kaushanskaya (2007). Finally, this study went further by including the perceptions of native speakers' on the Thai learners' productions in order to gain insights into the understanding of the listeners.

2.8 Previous studies on intelligibility and comprehensibility of L2 speakers of English

Intelligibility has been widely considered an ultimate goal for second language pronunciation teaching and learning (e.g. Kenworthy, 1987, Pennington, 1996). However, there is no consensus among scholars on the definition of intelligibility. As indicated by Jenkins (2000: 70), "there is as yet no broad agreement on a definition of the term „intelligibility': it can mean different things to different people". In the view of Smith and Rafiqzad (1979: 371), intelligibility is "capacity for understanding a word or words when spoken/read in the context of a sentence being spoken/read at natural speed". In addition, Smith and Nelson (1985: 334) distinguish between the three terms: intelligibility, comprehensibility and interpretability. Intelligibility is defined as "word/utterance recognition". Comprehensibility is "the meaning of a word or utterance. Interpretability goes one level beyond comprehensibility; it is considered "meaning behind the word or utterance". Among several researchers, Munro and Derwing (1995a) and their later studies apply similar concepts in their research methodology. Intelligibility refers to the extent to which the listener understands an utterance where comprehensibility means the listener's perceptions of difficulty in understanding an utterance. Given that there is no generally accepted definition of intelligibility and comprehensibility; researchers have to specify the operational definition of these concepts for their research. In this study, the concepts postulated by Munro and Derwing (1995a) were followed.

Studies of overall degree of intelligibility and comprehensibility have differed in terms of the techniques used to elicit nonnative speech samples. To illustrate, subjects are required to read short sentences, (e.g. Gass & Varonis, 1984; Munro & Derwing, 1995; Bent & Bradlow, 2003; Kennedy & Trofimovich, 2008), a passage (e.g. Anderson-Hsieh et al. 1992). Some studies involve subjects performing spontaneous speech, for instance, narrating a story from picture prompts (Munro & Derwing, 1995a; Derwing & Munro, 1997; Gallardo de Puerto, Lacabex & Lecumberri, 2007; Derwing, Munro & Thomson, 2008; Derwing & Munro, 2009).

Since there is no generally accepted definition of intelligibility, perhaps it can be concluded that there is also no universal means of assessing intelligibility (Munro

& Derwing, 1999). The several methods adopted for assessing the degree of intelligibility can be elaborated as follows:

- Orthographic transcriptions / dictation (e.g. Brodkey, 1972; Derwing & Munro, 1997; Bent & Bradlow, 2003; Burda, Scherz, Hageman & Edwards, 2003; Zielinski, 2008)

- Cloze dictation/ partial dictation (Matsuura, Chiba & Fujieda, 1999; Matsuura, 2007)

- Cloze tests (Smith & Rafiqzad, 1979)

- True-false verifications / truth value judgment (Munro & Derwing, 1995b; Munro, 1998; Kennedy & Trofimovich, 2008)

- Comprehension tests (Anderson-Hsieh & Koehler, 1988)

- Matching pictures and speech stimuli (Smith & Bisazza, 1982)

- Recounting / summarizing (Perlmutter, 1989)

- Interviews (Zielinski, 2008)

- Subjective / impressionistic judgements (Calloway, 1980; Fayer & Krasinski, 1987; Anderson-Hsieh et al., 1992; Isaacs, 2008)

Regarding comprehensibility, the most common method to measure comprehensibility is the use of a rating scale. The Likert type rating scale has been used extensively in the literature to indicate the listener's effort in understanding the speech. The rating scale with anchor points labeled „very easy to understand' and „extremely difficult to understand' has been widely used. Numerous studies have shown that assessing this aspect of speech via a Likert type scale yield reliable results that correlate well with intelligibility (e.g. Derwing & Munro, 1997; Derwing, Rossiter, Munro & Thomson, 2004; Munro, Derwing & Morton, 2006). The rating scales that have been used in previous studies differed in their resolution. Matsuura (2007) adopted a 7-point scale whereas a 9-point rating scale have been extensively used in the literature (e.g. Munro & Derwing, 1995a; Munro & Derwing, 1995b; Derwing & Munro, 1997; Munro et al., 2006; Gallardo de Puerto et al., 2007; Venkatagiri & Levis, 2007; Derwing & Munro, 2009). Tracy Derwing and Murry Munro who have conducted a number of studies on the degree of intelligibility and comprehensibility, make a point in their study in 1995 that a 9-point rating was

proved to be effective since the listeners' judgments were reliable. However, in their later study (Derwing, Munro & Thomson, 2008), they adopted a 7-point rating scale to evaluate the comprehensibility dimension, where 1 means very easy to understand and 7 means extremely difficult to understand. Then, in their 2009 study, they state that at least a 9-point scale is appropriate in measuring the degree of comprehensibility.

Another concern for using a 9-point rating scale is the ability of untrained raters to employ a full range of scale in their ratings. In earlier studies, researchers usually provide the listeners or judges with a few practice items before the actual rating session begins to familiarise the listeners with the rating procedure. However, there is no specification of the characteristic of these practice items in these studies. Venkatagiri and Levis (2007) also adopted a 9-point rating scale, and provided a few items for practice. When they gave instructions to the listeners, they let the listeners hear a speech sample that was easy to understand and then one that was difficult to understand. This could be an effective way to anticipate the judges of the speech stimuli they are to encounter so that they can make use of the entire range of scale from 1 to 9. In this current study, a 7-point rating scale was tried out with three native speakers. It was found that the scale of this range required a considerable amount of time in rating, especially for untrained raters. Therefore, a 5-point rating scale will be used instead since the judges are not trained raters, and may not be able to make use of the full range of scales. Descriptions are assigned for each scale for the comprehensibility dimension, *1* = very difficult to understand, *2* = difficult to understand, *3* = neutral, *4* = easy to understand, and *5* = very easy to understand.

It is worth mentioning the validity of the use of a rating scale which is subjective by nature. It incorporates the attitudes of the listeners and their willingness and engagement in the rating tasks. Although the communicativeness and naturalness of the assessment of comprehensibility are questionable, the findings of these studies provide some beneficial insights for second language pronunciation teaching.

From the existing research studies on intelligibility and comprehensibility, it can be seen that a variety of methods have been adopted. Each method of measurement has strengths and limitations. In order to make use of each method,

researchers have to realise the weaknesses in order to minimise its effects. Also, more than one measurement method can be employed for cross-validating the data.

Thompson (1991) studied the factors related to the L2 pronunciation acquisition of 36 Russian-born immigrants in the US with ten native speakers in the control group. The subjects were tested individually performing three tasks: sentence reading, passage reading and spontaneous speech. In the first task, the subjects read a list of 20 prepared sentences containing problem sounds for Russian speakers. In the next task, they read a 160-word passage intended for comparison with the data from spontaneous speech. Performing the spontaneous speech task, the Russian immigrants described their activities on the day of the experiment to the researcher for about one minute. The sequence of the tasks was assigned to each subject randomly. The three samples were recorded on separate tapes with native speaker controls mixed with the non-native subjects. The findings suggested that the pronunciation of the participants was the most accented in the sentence reading task because it contained targeted problem sounds for Russian speakers. Their speech was the least accented in spontaneous speech. The arrival age in the US was the deciding factor for their pronunciation accuracy.

Anderson-Hsieh, Johnson and Koehler (1992) investigated the relationship between three aspects of pronunciation: prosody, segmentals and syllable structure, and subjective judgements in speech samples. They selected 60 tapes of male speakers reading a passage from the corpus available at Iowa State University. There was a balance between learners with low and high proficiency. After establishing norms of reading the same passage, the non-native speech samples were transcribed phonetically, and errors in sound segments, syllable structure and prosody were examined. Error rates were calculated by dividing the number of each error type by the number of total possible occurrences of errors. The prosody which in the study incorporated stress, rhythm, intonation, phrasing and overall prosody were rated by native judges. The authors found that the phonological variable that determined the scores of the subjects' pronunciation in all language subgroups was the prosodic variable.

An often cited study by Munro and Derwing (1995a) explored the correlation between intelligibility, perceived comprehensibility and foreign accent. Ten native

speakers of Mandarin who learned English as an L2 after their puberty, and scored more than 550 on the TOEFL participated in this study. They were asked to narrate an amusing story depicted in a page of cartoon. No preparation time was allowed before the recording. The researchers selected three speech samples from the initial 30 seconds from each speaker to be used in the listening sessions. The total number of 36 utterances varying in length was used as speech stimuli. In the intelligibility task, they employed a dictation technique in which the judges listened to the utterances and wrote out what they heard word for word in standard English orthography. Munro and Derwing adopted the scoring method from Gass and Varonis (1984) whose calculation of scores was based on deviations of the transcribed version and the intended messages (e.g. missing words, word substitution, etc). After completing the transcription task, the listeners then rated the degree of perceived comprehensibility measured by their ease of understanding on a rating scale. The second listening session was held four days later, in which the listeners rated on a similar rating scale the degree of foreign accent of each sample. Munro and Derwing did not state the reason why the second session was not done on the same day. A possible reason could be a matter of time. The first listening session lasted for about 20 minutes, and the second one took ten minutes to complete. Conducting the listening tasks on a separate day may prevent the listeners from being tired or bored. Another plausible explanation can be that they wished to separate the two sections: the intelligibility together with the comprehensibility dimensions, and the foreign-accentedness alone. It can be seen that the former part deals with the messages conveyed whereas the latter session is associated with the value judgements towards the L2 speakers. The findings revealed that intelligibility, comprehensibility and accentedness were separate dimensions although they were correlated. Speakers who had a strong accent can be intelligible, although the listeners took more processing time to understand. Therefore, these speakers may receive lower scores on the comprehensibility ratings.

Later on, Derwing and Munro (1997) extended their previous study conducted in 1995 with the same data elicitation task drawn from Cantonese, Japanese, Polish and Spanish. The listeners had to identify the native language of the speakers. The accentedness ratings were performed after a five-minute break from the transcription task and comprehensibility ratings. The speech samples were placed in a different

order from the first listening session. This study also found that intelligibility scores were higher than comprehensibility scores while comprehensibility scores were higher than accented scores. This means that lower comprehensibility scores tend to be given to more foreign-accented L2 speech.

Another important methodological issue of studies on intelligibility and comprehensibility is the characteristics of the listeners who rate the L2 speech data. Thompson (1991) employed two groups of native speaker listeners, with a number of eight people in each group. The listeners in the inexperienced group were college-educated standard American English speakers with little or no knowledge of foreign languages. They had taken no linguistic course and reported to have little or no exposure with nonnative speakers of English. The experienced group, on the other hand, had linguistic knowledge, spoke at least one foreign language fluently, had resided abroad and had extensive exposure with Russian speakers. The study revealed that listeners with less extensive exposure to a particular L2 accent generally perceived a higher degree of foreign accentedness than listeners with more contact to the language. In other words, familiarity with the L2 accent enhances intelligibility. The author discovered that the inexperienced listeners were stricter in rating in the degree of accentedness. The findings of this study support the position taken by Flege (1984) in that listeners may become less sensitive to predictable differences in pronunciation and ignore them, and that amount of exposure increases intelligibility of unfamiliar speakers. On the other hand, Gass and Varonis (1984) did not find a significant difference between the two groups of listeners. This finding is rather surprising since listener experience with L2 accent should play an important role in understanding. Gass and Varonis used only five sentences in the stimulus set, which may pose a problem. Larger samples might yield a different effect. In this present study, two groups of listeners—native speaker listeners with at least three years of experience in teaching Thai learners and listeners with listeners with minimal experience with Thai speakers or the Thai language—will be used to represent different types of raters. In real-life situations, L2 speakers must encounter either listeners with prior contact with their first language, and those who have not been exposed to the language. The purpose of having two groups of listeners is to examine the potential effects of listener familiarity.

2.9 Summary

This chapter reviews some relevant concepts of contrastive analysis, error analysis and interlanguage. A brief comparison of tone and intonation, intonation in Thai and English is presented. Previous studies on the production of L2 intonation, English intonation in Thai speakers are included. The perception studies on the intelligibility and comprehensibility of L2 speakers of English are also reviewed. Chapter 3 will present the research methodology of the study.

CHAPTER III
RESEARCH METHODOLOGY

3.1 Introduction

This chapter elaborates the procedures in conducting the current study. The population and sample as well as the research instruments used in the study will be justified. The content is divided into three main sections: production study, perception study and pilot study.

3.2 Production study

3.2.1 Population

The target population was English major students at Thepsatri Rajabhat University, Lop Buri. English majors were chosen because of the difficulty of the production tasks of this study, especially the spontaneous speech task. The findings of the pilot study showed that the task was difficult even for some English major students. Consequently, only English major students were employed for this study. There are three tracks of the English Programme at the University: Regular Programme, International Programme, and English Education Programme. With respect to the Regular Programme and the English Education Programme, English was used as a medium of instruction in most English courses, especially those taught by native speakers of English. On the other hand, the International Programme students were taught in English for all courses, except for Thai and other foreign languages (Chinese, Japanese or French). The questionnaires were distributed to all English major students prior to the study. Thirty students from the total number of 243 were selected as the sample group by using the English language experience questionnaire in Thai (Appendix B).

The details of the scores from the English Language Experience Questionnaire responded by the population are shown in Table 3.1.

Table 3.1 Descriptive statistics of scores obtained from the English Language Experience Questionnaire responded by the population ($n = 243$)

Statistics	Scores (200)	Percentage
Mean	82.38	41.19
SD	14.55	7.28
Max	115	57.5
Min	43	21.5
Median	84	42
Mode	86	43

Table 3.1 presents the descriptive statistics of scores obtained from the responses in the English Language Experience Questionnaire done by the population of this study. The scores were based on the scoring criteria (Appendix C). From the above table, the highest score was 115 (57.5%) and the lowest score was 43 (21.5%) from the total of 200. The mean score was 82.38 (41.19%), which was not very high. The standard deviation was 14.55 (7.28%). The median and mode values were 84 (42%) and 86 (43%), respectively.

3.2.2 Sample group

3.2.2.1 Thai EFL learners

The scores from the questionnaire were ranked from the highest to the lowest. The highest fifteen students and the lowest fifteen of the score rank were selected for this study. The former group was designated the high English language experience (hereafter, EFL-High), and the latter group was assigned to the low English language experience (hereafter, EFL-Low). The scores of the EFL-High and the EFL-Low are shown in Table 3.2.

Table 3.2 Descriptive statistics and percentage of scores of the Thai EFL learners ($n = 30$)

EFL-High ($n = 15$)			EFL-Low ($n = 15$)		
Statistics	**Scores (200)**	**Percentage**	**Statistics**	**Scores (200)**	**Percentage**
Mean	105.8	52.9	Mean	53.8	26.9
SD	5.16	2.58	SD	4.54	2.27
Max	115	57.5	Max	60	30
Min	100	50	Min	43	21.5
Median	103	51.5	Median	55	27.5
Mode	102	51	Mode	57	28.5

From the score rankings, the learners who were ranked from 1-15 were assigned to the EFL-High group ($n = 15$), and those who were ranked from 229-243 were placed in the EFL-Low group ($n = 15$). The scores of the EFL-High group ranged from 100-115 (50%-57.5%), and those of the EFL-Low group ranged from 43-60 (21.5%-30%). The values of standard deviations of both sample groups were not markedly different (EFL-High, 5.16 (2.58%); EFL-Low, 4.54 (2.27%)). The median and mode values of the EFL-High were 103 (51.5%) and 102 (51%). The median values of the EFL-Low were 55 (27.5%) and 57 (28.5%).

Table 3.3 Demographic details of the EFL learners

Characteristics	**EFL-High ($n = 15$)**	**EFL-Low ($n = 15$)**
Gender	12 females, 3 males	14 females, 1 male
Age	19-23 years old ($\bar{x} = 20.20$, $SD = 1.38$)	18-23 years old ($\bar{x} = 20.53$, $SD = 1.50$)
Age of onset	3-7 years old ($\bar{x} = 4.93$, $SD = 1.28$)	6-11 years old ($\bar{x} = 9.06$, $SD = 1.94$)
Years of exposure	13-18 years ($\bar{x} = 15.27$, $SD = 1.22$)	9-13 years ($\bar{x} = 11.20$, $SD = 1.66$)
Scores from the questionnaire (200)	100-115 ($\bar{x} = 105.8$, $SD = 5.16$)	43-60 ($\bar{x} = 53.8$, $SD = 4.54$)

The characteristics of the EFL learners shown in Table 3.3 indicated that there was homogeneity in each group of Thai learners. The low values of standard

deviations for age, age of onset and years of exposure demonstrated that there was not a high degree of dispersion in the data. The Thai learners selected for the EFL-High and EFL-Low were in the same age group with the mean of 20.20 and 20.53 years old, respectively. With respect to gender, the selected learners in both groups were female dominant. The characteristics of the two groups of learners were distinct in terms of age of onset and years of exposure. That is, the EFL-High started to learn English at the mean age of 4.93 years old whereas the EFL-Low started quite late at the mean age of 9.06 years old. Therefore, the EFL-High group was the learners who had been studying English for the mean of 15.27 years, comparing to the mean of 11.20 years in the EFL-Low group. The score range of the two groups of learners indicated that they represented the learners who had high and low English language experience, with the mean score of 105.8 in the EFL-High group as opposed to 53.8 in the EFL-Low group. It is worth mentioning the programme of study of the EFL learners in each group as presented in Appendix G. The EFL-High learners were from the three English programmes, with the majority from the International Programme ($n = 7$). On the contrary, most of the EFL-Low learners ($n = 14$), who received the fifteen lowest scores from the English Language Experience Questionnaire, were English Education Programme students.

Table 3.4 Details of scores from the English Language Experience Questionnaire

Aspect	Scores of the EFL-High Min-Max	Scores of the EFL-Low Min-Max
Age of onset (30)	25-30 ($\bar{x} = 27.67, SD = 2.58$)	15-25 ($\bar{x} = 20, SD = 4.63$)
Years of learning (30)	20-30 ($\bar{x} = 27, SD = 3.16$)	15-25 ($\bar{x} = 16.67, SD = 3.62$)
Formal instruction (15)	5-11 ($\bar{x} = 6.2, SD = 2.48$)	5 ($\bar{x} = 5, SD = 0$)
Informal instruction (20)	0-9 ($\bar{x} = 2.33, SD = 3.39$)	0-2 ($\bar{x} = 0.13, SD = 0.52$)
Experiences in the use of English (51)	2-11 ($\bar{x} = 5.73, SD = 2.76$)	1-4 ($\bar{x} = 2.8, SD = 1.01$)
Amount of current use (54)	22-47 ($\bar{x} = 36.67, SD = 6.35$)	2-20 ($\bar{x} = 9.27, SD = 6.72$)

Table 3.4 shows the scores of each aspect from the Questionnaire. The scores exhibited that the EFL-High group scored higher than the EFL-Low group. Regarding the age of onset and years of learning, the EFL-High learners received relatively high scores ($\bar{x}$ = 27.67, *SD* = 2.58 and $\bar{x}$ = 27, *SD* = 3.16, respectively) whereas the EFL-Low learners obtained about average scores ($\bar{x}$ = 20, *SD* = 4.63 and $\bar{x}$ = 16.67, *SD* = 3.62, respectively).

With respect to formal instruction, the questions enquired about the formal training in English phonetics and going to school which used English as a medium of instruction. The EFL-High received a slightly higher mean score ($\bar{x}$ = 6.2, *SD* = 2.48) than the EFL-Low ($\bar{x}$ = 5, *SD* = 0). Three EFL-High learners studied in the mini-English programme at the lower secondary level while all other studied in the regular classes. The informal instruction concerned extra English classes and intensive courses in English. For this aspect, both groups of learners obtained very low mean scores out of 20 although the EFL-High group scored slightly higher (EFL-High $\bar{x}$ = 2.33, *SD* = 3.39; EFL-Low $\bar{x}$ = 0.13, *SD* = 0.52). This means that the two groups of learners, especially the EFL-Low did not usually have special English tuitions or intensive courses.

Furthermore, the questionnaire items for the experiences in the use of English elicited information about the learners' experience in using English in English-speaking countries and/or other foreign countries; current exposure with native English teachers and amount of use in classrooms. Some of the EFL-High learners from the International Programme reported taking a study tour to Malaysia and Singapore. Thus, they obtained a score for this item. Apart from these learners, both groups of learners had very little opportunity to be exposed to English in the English surrounding environment. Although they took some English courses with native speaker teachers at their University, most students' responses revealed their minimal use of English in classrooms. This is evident in their scores for this part. That is, out of the total score of 51, the EFL-High learners received the mean scores of 5.73 (*SD* = 2.76) while the EFL-Low learners got the mean scores of 2.8 (*SD* = 1.01).

The amount of current use refers to the opportunities of using English outside classroom. The scores clearly exhibited that the EFL-High learners were more exposed to English outside class. Out of the total of 54, the EFL-High learners

obtained the mean scores of 36.67 (*SD* = 6.35), as opposed to 9.27 (*SD* = 6.72) in the EFL-Low group.

Even though Part 3 concerning the attitudes towards English pronunciation was not considered in the selection process of the sample group, it may be useful in explaining the instances when some learners with far less English language experience outperformed those with greater amount of experience (See Table 4.10, Chapter 4). The scores from Part 3 eliciting the learners' attitudes are shown in the following table.

Table 3.5 Attitudes towards pronunciation of the EFL participants

Group	EFL-High				EFL-Low			
	Min	*Max*	*Mean*	*SD*	*Min*	*Max*	*Mean*	*SD*
Scores (50)	42	50	44	3.34	35	45	40.8	3.17

As shown in Table 3.5, the mean scores from Part 3, the attitudes towards pronunciation, revealed the fact that the EFL-High had more concern for good pronunciation ($\bar{x}$ = 44, *SD* = 3.34), as compared to the EFL-Low ($\bar{x}$ = 40.8, *SD* = 3.17). Although the standard deviations indicated variation within the learners in each group, the values were not noticeably different.

3.2.2.2 Native speakers of English

To collect baseline data for comparison, three native English speakers of British English (NS, henceforth) were recruited to perform the same oral production task with the same procedure. The details of the NS control group are presented in the following table.

Table 3.6 Details of NS control group

Speaker	Age	Gender	Hometown	Length of residence	Teaching experience in Thailand
NS1	48	Male	London	1.5 years	1.5 years
NS2	25	Male	Stoke on Trent	5 years	3 years
NS3	22	Male	Leeds	6 months	6 months

The three male NSs in the control group were EFL teachers teaching English in Thailand recruited by the Native English Speaker Background Questionnaire (Appendix D). They were monolingual, received a bachelor's degree and spoke standard British English. Thus, they represented native speakers of British English. Since this study followed the intonation framework of the British School (Halliday, 1967, 1970), British speakers were selected for the control group. Furthermore, studies on gender differences in English intonation (McConnell-Ginet, 1978; Daly & Warren, 2001; Simpson, 2009, to name a few) strongly suggest that there are some intonation differences in male and female speakers. Thus, this study selected native speakers of the same gender. Male speakers were selected because of their convenient accessibility.

3.2.3 Research instruments

The research instruments for the production study were composed of the English Language Experience Questionnaire and data elicitation tasks. The details of the instruments are illustrated as follows.

3.2.3.1 English Language Experience Questionnaire (Appendix A)

The questionnaire items were adapted from Modehiran (2005) and Khamkhien (2006). The learners answered the questions about their English language experience and the frequency of activities they were exposed to in English. The purposes of the questionnaire were to collect information on the learners' language experience and learning background, and to assign them into two groups according to their English language experience. The questionnaire was developed and tried out during the pilot

work of this study. It was translated into Thai by the researcher to ascertain that the respondents completely understand the questions. The Thai version of the questionnaire (Appendix B) was administered to the Thai learners. This questionnaire was developed as a tool to study the competency of L2 learners, as a part of the main research project of Assistant Professor Dr Sudaporn Luksaneeyanawin. It has been proven that learners with different language experience are significantly different in their performances. The project also studies L2 proficiency in other aspects, namely pragmatics (Modehiran, 2005), lexical access (Sudasna Na Ayudhya, 2002), vowel reduction (Tarnisarn, 2011), syntactic ambiguity (Thaworn, 2011) and word formation (Wong-aram, 2011).

The questionnaire consisted of three parts: 1) personal information, 2) English language experience and 3) attitudes towards pronunciation. The answers from the first part on personal information provided demographic information about the learners. Part two was the main section of the questionnaire, and it was the only part which was scored. This part aimed to explore the learners' experience with English. The items consisted of five main areas: age of onset (item 1), years of learning (item 2), formal instruction (items 3-4), informal instruction (items 5-6), experiences in the use of English (items 7-10), and amount of current use (items 11-12). Part three dealing with attitudes towards pronunciation provided additional information about the learners.

3.2.3.2 Production tasks (Appendix E)

The speech data for the production tasks are based on the framework of pronunciation production continuum by Koren (1995), as shown in Figure 3.1:

Rising degree of care in pronunciation

careless --> *careful*

description of a story/picture	answers to questions	reading a story	reading a word-list	repetition of a dialogue	repetition of words
unattended speech data	slightly attended speech data	attended speech data	more attended speech data	highly attended speech data	most attended speech data

Figure 3.1: Pronunciation Production Continuum (Koren, 1995: 391)

Figure 3.1 illustrates the continuum of pronunciation production from careless to careful speech style or from unattended speech data to attended speech data. Based on the notion of speech style elicited from each kind of data elicitation technique presented in Figure 3.1, three tasks were designed for this study: prompted spontaneous speech, reading a dialogue and reading a passage. They represented unattended speech data, slightly attended speech data, and attended speech data, respectively. However, the degree of care in pronunciation was not the focal point of the elicitation tasks of this study. The order of the production tasks, therefore, started from reading a passage, reading a dialogue and spontaneous speech, i.e., ranging from more controlled to less controlled production. Consequently, the nature of the tasks was more demanding in terms of difficulty. The details for each task are as follows:

3.2.3.2.1 Reading a passage (Appendix E)

Reading a passage was aimed at eliciting speech data on the tonality patterns. A passage of 97 words was carefully selected from the Thai learners' in-house textbooks for a general education English course of Thepsatri Rajabhat University. The passage was chosen because it contained target language, i.e., listing of information, relative clauses and adverbial connectives. Also, it did not have any difficult vocabulary and had appropriate length. This task was expected to investigate the tonality because it was equipped with a rather long stretch of utterances. Therefore, it required the learners to chunk the information into small units, which is the notion of tonality.

3.2.3.2.2 Reading aloud of a dialogue (Appendix E)

Reading a dialogue was employed to elicit speech data on tonicity. The scripted dialogue was selected under the framework of Halliday (1967)'s tonicity. It was adapted from Wells (2006: 255). This dialogue was chosen for this study since the situation required the speakers to express their attitudes and emotions. The contextualised utterances in the dialogue enabled the learners to decide to highlight new information rather than what was already given in the situation. This dialogue between two fellow-students used informal language, and the topic was common in everyday interactions. The learners were encouraged to speak as naturally as possible

to converse with a native speaker's pre-recorded voice taking the role of the native speaker in the script.

3.2.3.2.3 Prompted spontaneous speech (Appendix E)

Spontaneous speech task aimed to provide speech data for tune. Each learner was required to talk about the most memorable event in their lives. This topic was chosen since the learners had to express their emotions and feelings towards the event as they were describing it. Some guidelines were given in order to provide the information they may include, hoping to facilitate their speaking. The guidelines are as follows:

- Describe the most memorable event in your life.
- Why was it the most memorable?
- How did you feel?

A preparation time of 5-10 minutes was allowed before the recording started. The learners were required to speak for about one minute. The researcher attempted to create a comfortable and friendly atmosphere by allowing the learners to control the recording themselves and to stop talking when they were satisfied. Also, they were permitted to re-record their speech if they wished to in order to allow for their best performance.

3.2.4 Data collection

The learners were recorded in individual sessions (20-40 minutes) in a quiet room, with a laptop computer using the Praat Program version 5.1.15 (Boersma & Weenink, 2009), with a 22.5 kHz sampling rate, 16-bit resolution, and a low-noise unidirectional microphone. The sound files were edited using a speech editing software, WavePad Sound Editor version 4.27 (NCH Software, 2009). The learners were allowed to repeat the recording as many times as they wanted to ensure accuracy in reading and eliminate slips of the tongue.

During the pilot study in a language laboratory using a desktop computer for recording, it was found that some learners did not complete the spontaneous speech task, and also some technical problems occurred in a few recordings. Thus, for the main study, the researcher decided to monitor the recording session with each individual learner so that the recording and the completion of all the tasks could be

immediately checked. Each session began with verbal instructions and visual presentations of the tasks with a PowerPoint file appearing on a computer screen. The learners were asked to familiarise themselves with the scripts. The researcher clarified the meaning of unknown vocabulary items, and explained the procedure to ascertain that the learners understood the tasks. To avoid bias, they were unaware of the purpose of the study. The recording was self-paced with the presence of the researcher at the other end of the room.

3.2.5 Data analysis

The data analysis for each system of intonation being investigated in this study is presented as follows.

3.2.5.1 Data analysis for tonality

For comparative purposes, an answer key for scoring the Thai learners' performance in terms of tonality, tonicity was established from the data of the NS control group. The NS speech data were transcribed using a combination of auditory and acoustic phonetic analyses using the PRAAT software program. The transcriptions were transcribed using Halliday's (1967,1970) notations. The answer key from the NS productions was checked by auditory perception by a native speaker of British English with linguistic knowledge. In case of disagreements, the PRAAT analysis was used to solve the conflicts. The following criteria (Crystal, 1969) were used in examining the tone group boundaries:

1) A change of pitch
2) A pause
3) A change of pace

The scores were calculated in percentage. The tonality system is composed of tone group chunking and rhythmic group division; therefore, each dimension received total scores of 50. The scoring process was as follows:

Scoring tonality patterns

The criterion was based on Tanner and Landon (2009)'s study of which two types of errors were counted. Tannon and Landon provided an answer key for scoring from the NS data. Regarding the tone group chunking, the answer key labelled the

required and optional or possible features were obtained. The two kinds of errors are: a missing feature and an incorrect feature. Thus, an error was counted for a missing boundary in a tone group or incorrect placement of pause. In this study, the same kind of answer key was constructed based on the performance of the three native speakers in the control group. In addition, the deviated data of the Thai learners were thoroughly investigated. As suggested by Tench (1996), semantic and syntactic criteria must be consulted in intonational analysis. Therefore, in this study, the researcher examined the deviations by consulting the semantic, syntactic and pragmatic criteria and securing general agreement among three native speakers of English. After completing these steps, an answer key for scoring the tonality patterns was derived.

In terms of the rhythmic group division, the scoring was based entirely on the performance of the NS group. The salient syllables which determined the boundary of the rhythmic group were analysed. The NS data agreed that 60 syllables must be stressed with and one optional syllable which may be stressed. The scores were deducted for incorrect placement of stress, resulting in minus scores in some EFL learners.

3.2.5.2 Data analysis for tonicity

The auditory perceptions were confirmed by PRAAT analysis of intensity, pitch, length and vowel quality of to examine the word accents and the tonic syllable of each tone group.

Scoring tonicity patterns

The answer key for the tonic syllable in each token of the dialogue reading was obtained from the NS control group data. There were also some cases where the three NS did not agree for tonic syllable placement. Furthermore, the division of tone groups affecting the assignment of tonic syllables also differed in the NS data. All of the performances of the NS were labelled in the answer key as correct. The learners whose performance of tone group chunking agreed with the answer key with a correct tonic syllable received a point. Those who assigned additional tone groups received

no point. An exception to this extra tone group division was the case of one learner who had a pause after the conjunction 'but', as in:

// But // you've had them for a month // already. //, which was considered accurate.

3.2.5.3 Data analysis for tune

It was initially decided that a 30-second portion of speech data from each Thai learner would be analysed (Munro and Derwing, 1999). The first sentence of each spontaneous speech data was excluded to allow the speaker to warm up. The three NSs in the control group data was extracted for about 30 seconds but allowing each speaker to finish the last sentence. The resulting excerpts contained 32.70, 29.08 and 31.15 seconds for NS1, NS2 and NS3 respectively. The data was analysed for number of tone group boundaries. The transcriptions consisted of 16, 14 and 15 tone groups for NS1, NS2 and NS3 in that order. Therefore, the mean of 15 tone groups from the NS group was decided to be used in the analysis of tune in spontaneous speech data. The tone groups containing pause fillers and hesitations were not counted in the number of 15 tone groups, and were not analysed for tune.

Scoring tune patterns

Due to the fact that the choice of tune is associated with meaning in contexts, the performance of spontaneous speech of the NS controls could not be used for scoring by means of comparison as manipulated in the tonality and tonicity dimensions. Therefore, a panel of three native speakers of British English who were experienced EFL teachers was recruited to evaluate the appropriateness of tune in spontaneous speech data. Three adjoined tone groups from each of the NS control group, EFL-High and EFL-Low learners were extracted from their excerpts of 15 tone groups used in the analysis part for the choice of tune from Appendix J. Small speech samples of three tone groups were chosen to avoid a fatigue effect in the panel of native speaker raters. The criteria for selecting the best three tone groups from the 15 tone group excerpts used in the scoring process were as follows:

- having no pause-fillers, e.g., uh.., um
- not too short tone groups

- having a complete intonation pattern

The three native speakers recruited as raters for the appropriateness of tune were instructed to rate the speakers for the use of tune for each individual tone group. It was emphasised in the instructions that they should not take the grammatical mistakes and mispronunciations into account in the rating. The complete script of each speaker was provided with the three selected tone groups underlined. After reading the script, each rater played the speech samples and rated the speaker in a 5-point rating scale, where *1* means not appropriate and *5* means very appropriate. Then, they justified the reason of their ratings for every single tone group in the space provided in the paper. The mean ratings of the three listeners were calculated in percentage, deriving the scores for tune of each Thai learner.

3.3 Perception study

3.3.1 Population and sample

The samples for the perception study were ten native speakers of British English (NSJ, henceforth) to be the judges for intelligibility and comprehensibility. They were not the same native speakers in the control group and were recruited for this study from the Native Speaker Background Questionnaire (Appendix D). They were all raised in monolingual homes and reported no hearing disorders. All listeners participated in the study voluntarily. They were paid upon the completion of the listening session. The ten judges were divided into two groups: half experienced and half inexperienced judges. The experienced judges were EFL teachers with extensive amount of exposure to Thai learners (hereafter, NSJ-High). The criterion for selecting was at least three years of experience of teaching English to Thai learners. The NSJ-High group (5 males) aged between 37-52 years ($\bar{x}$ = 46.4, *SD* = 5.85). Their experience in teaching Thai learners ranged from 3-12 years ($\bar{x}$ = 8 years, *SD* = 3.8). They reported to have poor to good command of the Thai Language. The remaining five judges were those who had less extensive experience with Thai learners (hereafter, NSJ-Low). They represented 'the people in the street'. The NSJ-Low (2 males, 3 females) age range was 22-35 ($\bar{x}$ = 25.4, *SD* = 5.41). At the time of testing, they had been in Thailand for 3-4 weeks ($\bar{x}$ = 3.6 weeks, *SD* = 0.54). They had no

knowledge of the Thai language and came to Thailand for the first time for a teacher training programme, except for one who had been in Thailand for a short visit for one week. The details of the native speaker judges are shown in Table 3.7.

Table 3.7 Demographic data of native speaker judges

Group	Gender	Age	Length of residence	Experience in teaching Thai learners
NSJ-High	5 M	37-52 years ($\bar{x}$ = 46.4, *SD* = 5.85)	3-12 years ($\bar{x}$ = 8 yrs, *SD* = 3.8)	3-12 years ($\bar{x}$ = 8 yrs, *SD* = 3.8)
NSJ-Low	2 M, 3 F	22-35 years ($\bar{x}$ = 25.4, *SD* = 5.41)	3-4 weeks ($\bar{x}$ = 3.6 wks, *SD* = 0.54)	1 week ($\bar{x}$ = 1 wk, *SD* = 0)

From the table, it can be seen that the mean age of the NSJ-High was significantly higher (46.4 years old), comparing to the mean age of the NSJ-Low (25.4 years old). The high values of standard deviations in the age of the two groups of judges indicated a wide dispersion in the data. Only one judge in the NSJ-Low group was aged 35 years old and age range of the remaining judges was 22-24 years old. Thus, this resulted in the high values of standard deviations in the NSJ-Low group. The length of residence and experience in teaching Thai learners of the NSJ-Low showed that there was homogeneity among the judges in this group ($\bar{x}$ = 3.6 wks, *SD* = 0.54). Apart from the age and the length of residence, the years of experience teaching Thai learners of the NSJ-High also illustrated that there was wide range of within group variation in this group of judges. From the age, length of residence and experience in teaching Thai learners in the NSJ-High and NSJ-Low, it can be concluded that the two groups of judges are markedly different.

3.3.2 Research instruments

The research instruments employed in the perception study consisted of the native speaker background questionnaire, the intelligibility test and a 5-point rating scale. The details of each instrument are as follows.

3.3.2.1 Native speaker background questionnaire (Appendix D)

The questionnaire adapted by the researcher from Kropf (2000) was administered to a group of native speakers of British English in order to select two groups of judges: 1) three native speakers who are experienced EFL teachers with at least three years of teaching experience to Thai learners, and 2) three native speakers who have less experience with Thai learners. The questionnaire elicited the following information from the native speaker respondents:

- City and country of origin
- Countries of residence
- Other languages spoken at home
- Level and field of education
- Years of teaching experience
- Length of stay in Thailand
- Formal instruction in the Thai language
- Ability to speak Thai
- Amount of current exposure to Thai speakers or the Thai language
- Hearing problems

3.3.2.2 Intelligibility test

The term *intelligibility* refers to the extent to which the intended utterance is actually understood by the listener (Munro & Derwing, 1995a). The intelligibility test used in this study was created by the researcher as a tool to elicit information on the degree of intelligibility. Three test items were designed to elicit speech data on each dimension: tonality, tonicity and tune. That is, three items for tonality, three for tonicity and three for tune were developed. Therefore, the test consisted of nine items which were adapted and taken from Cruz-Ferreira (1989), Halliday (1970), Tench (1996), Wells (2006) and Pongprairat (2009). The criterion for the test item selection was that the sentence could be uttered in three different ways to reflect three possible interpretations. To be specific, each test item for the tonality dimension was identical in writing, but differed in meaning according to the different placement of a pause. The items for the tonicity dimension varied in interpretations with different tonic

words. The three test items for tune uttered with different tunes varied in modality (statement vs question), attitudes or implications. For example,

(1) *They've left the children* (Cruz-Ferreira, 1989) can be spoken in three possible ways with different tonality:

a. //They've left the children. //   (They've left the children (neutral).)

b. //They've // left the children. //   (I can't believe that they've left the children.)

c. // They've left // the children. //   (The children have left.)

(2) *She was trying to lose weight* (Wells, 2006) can be spoken in three possible ways with different tonicity:

a. //She was trying to lose <u>weight</u>. //   (She was trying to lose weight (neutral).)

b. //She was <u>try</u>ing to lose weight. //   (She was trying without much success.)

c. //She was trying to <u>lose</u> weight. //   (She wanted to lose weight, not to gain weight.)

(3) *They'll soon be here* (Halliday, 1970) can be spoken in three possible ways with different tunes:

a. //1 They'll soon be here. //   (They'll soon be here (neutral).)

b. //3 They'll soon be here. //   (Don't worry. They're coming soon.)

c. //2 They'll soon be here. //   (Are they coming here soon?)

For each test sentence, three possible interpretations were given, *a*., *b*., and *c*. The test items and the transcription of expected performance of each item are presented in *Appendix K*. The alternative *a*. was always the intended answer. However, the three interpretations were randomised and re-lettered for presentation to the judges, as shown in *Appendix L*. The three alternatives given were possible interpretations of each test sentence. Also, one blank alternative in *d*. was provided for the judges to write any meaning they perceived, which was not included in the given choices. For each item, if the judges selected the choice which matched the intended meaning, it was counted as an accurate answer. This means that the message was intelligible to the hearer. The additional meaning specified in *d*. by the judges

was included in the discussion as the potential misunderstanding of the mismatch between the message conveyed and the message received.

3.3.2.3 Rating scales (Appendix L, Part 2)

A 5-point Likert scale was used in the judgement task by the native speaker judges to rate the speech samples in terms of comprehensibility. The interval scale had a description indicating the degree of difficulty in understanding. The rating scales for comprehensibility ratings are as follows.

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Figure 3.2 A 5-point rating scale for comprehensibility ratings

3.3.3 Data collection

The perception session for intelligibility and comprehensibility was conducted in the same session for each individual judge in a quiet location. They listened to the speech stimuli using a laptop computer and a high quality headphone. The data collection procedures for the perception study were explained for each dimension separately.

3.3.3.1 Intelligibility

The speech data for the intelligibility dimension were collected using the intelligibility test described in 3.3.2.2. Stratified sampling method was employed to select the samples for intelligibility. Three EFL learners were randomly selected from the EFL-High and EFL-Low groups to read the nine test sentences in the intelligibility test. It was assumed that each Thai learner in each group was the representative of that group; thus, only three learners from each group were selected for the recording. The purpose of limiting the number of speech samples was to avoid fatigue and flagging interest of the native speaker judges. The six Thai learners and one native speaker each read nine test sentences of the intelligibility test.

The speech stimuli for the intelligibility test contained 63 sentences ((9 utterances x 3 learners (EFL-High) + 9 utterances x 3 learners (EFL-Low) + 9 utterances x 1 native speaker (NS)). One sample was included in the stimuli to serve as a practice before the actual listening session began. The speaker for the practice session was not one of the participants in this study.

In the pilot work, the stimuli consisted of 45 utterances (9 x 2 (EFL-High) + 9 x 2 (EFL-Low + 1 NS)). The experienced judges took approximately 15-20 minutes to complete the test while the inexperienced judges required 20-35 minutes. Therefore, in the main study one additional speaker from each group of Thai learners was added, resulting in the number of three selected learners from the EFL-High and the same number from the EFL-Low to read the test sentences for the intelligibility test. This number was used in the main study, aiming to represent one-fifth (3 out of 15) of the total number in each group of Thai learners.

The recordings of the EFL-High, the EFL-Low and the NS reading the nine test sentences were put in a separate file for each speaker and each sentence. The sound files were normalised with WavePad Sound Editor to reduce differences in perceived loudness of the recordings. Then, the order of the test sentence presentation was randomised both for the speaker and the test sentence by means of random sampling. The sound files for the test sentences were numbered in accordance with the numbering of the test sentences in the answer sheet. The script for each test sentence was not written on the paper. The listening session was self-paced; the judges could proceed to the next file when they finished with each utterance. To ensure that the listening time was constant for all the judges, they were allowed to play each sentence no more than two times.

3.3.3.2 Comprehensibility

The listening session for comprehensibility was conducted in the same session as intelligibility after a five-minute break. A rating scale was provided on paper without the script for the passage. The speech data taken from the production study of all the 30 Thai learners reading a passage was used. One NS performance on passage reading was added to ensure reliability of the judges. The stimulus of each learner was placed in a separate file. The order of presentation of the files was randomised.

Similar to the test of intelligibility, the manipulation of the files was self-controlled. After the native speaker judges listened to each stimulus, they rated the speaker for the degree of comprehensibility (how easy it is to understand) on a 5-point rating scale on the comprehensibility rating form by ticking in the box. The judges were instructed to play each file until they were certain that they could rate the speaker, and they played the next file.

3.3.4 Data analysis

The data analysis procedures for the intelligibility and comprehensibility dimensions are as follows:

3.3.4.1 Intelligibility

The quantitative analysis for intelligibility dealt with the number and percentage of accuracy for each group of judges for the NS, the EFL-High and the EFL-Low groups. The percentage of accuracy for each dimension of tonality, tonicity and tune was reported. The interpretations in alternative *d.* by the judges were also given in the qualitative analysis.

3.3.4.2 Comprehensibility

The mean rating scores and standard deviations of each group of Thai learners by each group of native speaker judges were calculated. The mean differences of the scores were computed by SPSS 16.0 using independent samples t-test. The comprehensibility ratings were subjected to a two-way analysis of variance (ANOVA) with the judge experience (experienced, inexperienced) as a between-subjects factor and the learner English language experience (high, low) as within-subjects factor. The reliability of the judges was calculated using Cronbach's Alpha coefficient (α).

To answer research question 5, the scores from the performance of the learners in terms of tonality, tonicity and tune were compared with those from intelligibility and comprehensibility dimensions. The tabulation and calculation presented all the scores of each speaker to find the correlation between the intonation patterns of each group and the degree of intelligibility and comprehensibility.

3.4 Pilot study

The questionnaires and data elicitation tasks were tried out with ten English majors at Thepsatri Rajabhat University during August-September 2009. Five of them were first year students, and the remaining learners were in their fourth year. These students did not participate in the main study. The questionnaire was primarily used to elicit data on English language experience of the ten learners and assigned them into two groups of high language experience and low language experience learners. The Thai version of the questionnaire translated by the researcher was used in the pilot study. After the pilot work, some parts of the questionnaires were revised for clarity and ease of response. In the previous version, items 8 and 10 provided a range of percentage of 5%, 25%, 50%, 75% and 100% to measure the opportunities in using English when living in an English-speaking country and with native English teachers in class, respectively. The learners reported that it was difficult to assess the amount of use in percentage. Therefore, a five-point scale of *never, rarely, sometimes, often* and *always* was substituted. In addition, item 12 inquiring about the frequency performance of several kinds of activities in English, was also revised. The earlier alternatives of *never, < 1 hr/week, 1 hr/week, 2 hr/week, 3 hr/week and > 3 hr/week* were replaced by *never, once a week, once a month, 2 or 3 times a month, 2 or 3 times a week and every day.* Apart from the questionnaire, the instructions for each task as well as the processes in administering them were reconsidered.

It was found that some of the learners who were not taught by the researcher did not try their best in performing all the tasks. Two learners in the EFL-Low group were excluded because of the incompletion of the spontaneous speech task and the production of errors in misreading. Three weeks later, one additional task—the intelligibility test—was added in the research instruments. All of the learners were required to do this task. Two more learners were, therefore, recruited to replace the excluded ones. The eight remaining learners were the same.

The findings from the production test of the pilot study will be briefly discussed as follows:

3.4.1 Reading a passage: Safety rules for using the ladder

NS

Although tonality reflects the speakers' perception of the organisation of information and there can be several possibilities, the three native speakers appeared to show a high degree of conformity in their performance. Their tone group boundaries occurred at the end of a syntactic unit, e.g. a clause, a phrase, an adverbial. The division of tone groups for this 97-word passage of the NS group was nearly equivalent (20 and 21 tone groups). The average number of words in a tone group in the NS group was 4.69 words. There are also some variations in the NS group which some extra pausing in some speakers. The tone group boundaries still corresponded to the end of a grammatical unit. For example, two native speakers divided the speech into tone groups and rhythmic units as follows:

(1) // Putting your /trust in a /ladder de/pends // for the /most /part // on /following /certain /safety /rules. //

One speaker had an extra pause at the end of the phrase functioning as the subject.

(2) // Putting your /trust in a /ladder //de/pends // for the /most /part // on /following/certain /safety /rules**. //**

Apart from a clause or a phrase, pausing also occurred after adverbials, signalling the sequence of steps, as in:

(3) // First // make /sure that the /ladder // has no /broken or /cracked /parts. //

(4) // Then // set the /ladder /firmly in /place // so that it /won't /slip or /shift /under your /weight. //

EFL-High

The EFL-High revealed more instances of conformity to the norms established by the NS. Some deviated cases involved the missing of pauses when the utterance was neutral in tonality, as in:

(5) EFL-High: //Firemen and /others // who /climb /ladders /every /day /know the im/portance of /using /both /hands when they /climb // it's /safer /surer // and /faster. //

NS: //Firemen and /others who /climb /ladders every day // know the im/portance of /using /both /hands when they /climb // it's /safer// surer //and /faster. //

In example (5), there should be a pause after *every day* since it is the end of the clause *who climb ladders every day*. The missing pause in this case makes it difficult to manage in reading because the utterance is too long for one breath. One possible reason could be that the learner concentrated on reading or pronunciation and did not manage the structure of information presented in the utterance.

EFL-Low

The findings indicate more deviance in the EFL-Low group. The common error was to locate the tone group boundaries at a place that does not correspond to grammatical structure in neutral tonality. The data also revealed that the EFL-Low learners tended to assign shorter tone units than the EFL-High did.

Also, two learners appeared to have problems with the pronunciation of some vocabulary items; thus, they paused before the words of which they were not certain about the pronunciation. For instance:

(6) EFL-Low: // Put/ting /your /trust in a /ladder // de/pends // for the /most /part // on /following // cer/tain // safety /rules. //

NS: // Putting your /trust in a /ladder de/pends // for the /most /part on /following /certain /safety /rules. //

From this EFL-Low learner's performance, the extra pauses before *certain* and *safety* may indicate that these two words are unfamiliar to this learner. Another example showed that the learner had a trouble with pronunciation. She focused heavily on reading and pronouncing correctly, and the meaning was neglected, as in:

(7) EFL-Low: // So // face the lad // der // and // use /both /hands. //

NS: //So /face the /ladder // and /use /both /hands. //

Besides, it is worthy to note that both groups of EFL learners revealed the use of inappropriate accentual patterns or word accents. There are more variations in the performance of the EFL-Low than that of the EFL-High. In other words, the EFL-High learners were generally more homogeneous in terms of their performance. Also, it is found that the EFL learners tend to put the accent on the final syllable of the words, as in cer'tain, fi'nished, firm'ly, impor'tance, put'ting, un'der, etc. Moreover, it

was common that they stressed the unaccented words in the unmarked tonality, e.g. in, of, it, the, or, have, that, your, etc.

The tone group boundaries of the three groups of speakers are illustrated in the following table.

Table 3.8 Average length of tone groups in passage reading

Speaker	NS 1	NS 2	NS 3	$\bar{x}$	H1	H2	H3	H4	H5	$\bar{x}$	L1	L2	L3	L4	L5	$\bar{x}$
Total tone groups	21	20	21	**20.66**	16	20	18	30	25	**21.8**	25	31	23	32	25	**27.2**
Words per tone group	4.61	4.85	4.61	**4.69**	6.06	4.85	5.38	3.23	3.88	**4.68**	3.88	3.12	4.21	3.03	3.88	**3.62**

Table 3.8 compares the length of tone groups of the passage reading task among the three groups of participants. From the table, it can be seen that the average of total tone groups in the NS, EFL-High and EFL-Low participants was 20.66, 21.8 and 27.2, respectively. The tone groups in the EFL-High ranged from 16-30 tone groups and 23-31 tone groups in the EFL-Low learners. The range of average number of words per tone group was nearly equivalent in the NS (4.69) and EFL-High (4.68) whereas the EFL-Low appeared to have shorter tone group (3.62 words per tone group). Although the average figures suggest that the EFL-High's performance is more similar to that of the NS, there are some discrepancies if we investigate each individual EFL-High learner's data. From the table, H4 and H5 assigned more number of tone groups than the NS (30 and 25 tone groups, in that order) while H1 and H3's data revealed the division of less tone groups (16 and 18 tone groups). The EFL-Low's data revealed more number of tone groups than that of the NS. L4 assigned as many as 32 tone groups in her reading data, which is twice that of H1's data (16 tone groups) who had the least number of tone groups in all the speech data.

To sum up, the data of the EFL-Low displayed more deviations from the NS, as compared to the performance of the EFL-High. The aspects of common deviations are the use of incorrect accentual patterns and pausing too often without a special or marked meaning. This results in fragmented speech with a roughly equal weight of

timing for each lexical unit, either content or grammatical units. It should be noted that the data revealed the intonation of reading style of speech. The EFL-Low learners appeared to have problems in segmental pronunciation as well. Therefore, their performance mainly focused on forms rather than functions or meaning. The data of the EFL-High also contained some variations within the group. Fewer errors were produced in comparison with the EFL-Low whose performance was less homogeneous. More errors were found, and their performance was not consistent in accuracy.

3.4.2 Reading a dialogue: A conversation between two classmates

NS

It can be seen that the native speakers indicate a high percentage of conformity in the placement of tonic syllables in the tokens:

(8) NS1   // <u>Two</u> years ago? //

    NS2   // Two <u>years</u> ago? //

    NS3   // Two <u>years</u> ago? //

This utterance is a declarative used as a question. The alternative given by NS1 is the tonic assigned on the word *two*. This can be a result of the difference in the tune. NS1 chose a falling tune whereas the other two used a high-rising tune. This variety in the NS group reflects the fact that one utterance can be said in different ways, and it makes meaningful distinctions. There must be a reason for the variety of tune selection, e.g. to convey a particular message. In this case, the phrase 'two years ago' is written with a question mark in the scripted dialogue, and NS2 and NS3 perceived it as a query by using a high-rising intonation. NS1, on the other hand, wished to be assertive and certain about the utterance (which is reduced form of 'Is it two years ago?') by uttering it with a falling tune. Both cases of tonic placement will be regarded as acceptable in the performance of EFL groups because it conforms to the native speakers' norms.

The other case is the following utterance with the tonic prominence on *go*:

(9) NS1 // Are you <u>go</u>ing to return those books of mine you borrowed? //

    NS2 // Are you going to return those <u>books</u> of mine you borrowed? //

    NS3 // Are you going to return those <u>books</u> of mine you borrowed? //

NS1's utterance puts the emphasis on *go*, as in going. This speaker may want to question if the hearer is going to return the books or not, while the other two would like to introduce new information about *books*.

EFL-High

The performance of the EFL-High group showed higher rate of correspondence to the NS group although there were some variations in some tokens, for example:

(10) H1   // Two years a<u>go</u>?//

    H2   // <u>Two</u> years ago? //

    H3   // Two years a<u>go</u>? //

    H4   // Two <u>years</u> ago? //

    H5   // Two <u>years</u> ago? //

    NS   // Two <u>years</u> ago? //

From the above data, H4 and H5 placed the tonic prominence on *years*, whereas the NS group's tonic syllable fell on the final syllable of the word *years*. The meaning of this utterance appears to be neutral in tonicity because the speaker merely asked for confirmation of information.

In some other tokens, H4 also made mistakes in tonicity. For instance:

(11) H4 // Haven't <u>seen</u> you for ages! //

    NS // Haven't seen you for <u>ages</u>! //

(12) H4 // What've you <u>been</u> doing? //

    NS // What've you been <u>doing</u>? //

(13) H4 // <u>By</u> the way //,…

    NS // By the <u>way</u> //,…

The deviated forms of tonicity in H4's performance were similar to those in some of the EFL-Low learners. Although this participant was placed in the high experience group by the scores from the English language background questionnaire, her performance indicated that she may not have acquired how the tonicity functions in the English intonation system. This is evident in her misplacement of the tonic syllables.

EFL-Low

The EFL-Low, on the other hand, revealed more deviations from the NS group norms. Since tonicity is closely related to tonality, assigning additional tone groups means more tonic syllables. The discussion in the prior section suggests that the EFL Thai learners tend to divide their speech into more number of tone groups than the native speakers, and the number of extra tone groups increases in the EFL-Low group. Therefore, it can be seen in the tonicity of the EFL-Low that they assign more divisions of intonation units, and have deviated tonic prominence, as in:

      (14) EFL-Low   // <u>What</u>'ve // you been doing? //

           NS   // What've you been <u>do</u>ing? //

      (15) EFL-Low   // Are <u>you</u> // going to re<u>turn</u> // those <u>books</u> // of <u>mine</u> //

                                    // you <u>borr</u>owed? //

           NS   //Are you going to return those <u>books</u> of mine you

                                    borrowed? //

      (16) EFL-Low   //<u>But</u> you've had // them for a month al<u>rea</u>dy. //

The findings in (14), (15) and (16) indicate that although the EFL-Low learners also assigned the tonic for each tone group, their tonic prominence did not occur in the right place in the utterance. They put the stress on grammatical items, i.e. you, been, by, mine, etc.

3.4.3 Spontaneous speech: The most memorable event in my life

From a total of 147 tone groups in the speech data, the pitch patterns or tone were analysed acoustically. The percentage of distributions of tone types is displayed in the table below.

Table 3.9 Distributions of tunes in the spontaneous speech task

Participant group	Number of tone groups	Tune 1 Falling	Tune 2 High-rising	Tune 3 Low-rising
NS	35	62.85%	-	37.14%
EFL-High	55	61.81%	1.81%	36.36%
EFL-Low	57	77.19%	10.52%	12.28%

We can see from Table 3.9 that the falling tune dominated in all groups of participants. The percentage of the use of the falling tune in the NS (62.85%) and EFL-High (61.81%) was nearly equivalent. In the data produced by the EFL-Low, 77.19% of the tone groups contained a falling tune. Tune 2 (high-rising) was not present in the NS data whereas it was found in both EFL groups. The spontaneous speech data consisted of declarative statements only because the learners described the most memorable event in their lives. The high-rising tune which is normally used in questions was selected by the EFL-High learners (1.81%). On the other hand, the percentage was much higher (10.52%) in the EFL-Low group. The percentage of the use of tune 3 (low-rising) was again closer in the NS group (37.14%) and the EFL-High (36.36%). The EFL-Low data revealed 12.28% of tune 3 in their speech data.

NS

The NS group data indicated a tendency to use the low-rising tune to signal continuation, and the falling tune is used when their statements came to an end. For example:

(17) // **3** Femur is the biggest bone in your body // **1** and I had never broken any bone before in my whole life. //

However, one native speaker used the falling tone only in all tone groups even in unfinished statements. For example:

(18) // **1** But one night // **1** I was in a desert in Iran // **1** and there was a crescent moon // **1** and it was casting a silvery light on a sand dune //

In this case, the falling tune appears to signal definiteness or assertion.

EFL-High

The EFL-High showed a tendency to correspond to the NS group, for example:

(19) // **1** It was the first time that I // **3** participate in the contest like this // **3** because when I was a kid // **1** I shy to speak out or outstanding. //

EFL-Low

The EFL-Low's data revealed more deviations from that of the NS group. One participant showed an unsystematic use of tunes 1, 2 and 3 in statements, as shown in (20):

(20) // **1** I am them fan // **2** for Smash Thailand family // **2** first // **2** I met Smash at Siam Discovery // **1** Um..I see them // **2** singing // **2** and dancing // **3** for sound check at eleven o'clock //

From the data in (20), it is obvious that this participant has limited ability in speaking. The narrative contained only declarative statements but this learner employed a falling tune, a high-rising tune and a low-rising tune unsystematically. Her fragmented speech with long pauses was a result of her low speaking ability. Therefore, the focus was levelled on the content of the speech rather than the use of intonation.

3.4.4 Intelligibility test

The intelligibility test measured the extent to which the English native speaker judges understand the meaning conveyed by the intonation patterns by means of tonality, tonicity and tune in the nine test sentences for each participant. From the five EFL learners in the high and low experience group, stratified sampling was used to select two learners from each group to read the test sentences for the speech stimuli. The percentage of accuracy in the listeners' perceptions is presented in Table 3.10.

Table 3.10 Percentage of correct interpretations from the intelligibility test

Speaker	Total number of tokens	Number of correct interpretation	Percentage of accuracy in intelligibility
NS	54	34	62.96 %
H1	54	17	31.48 %
H2	54	11	20.37 %
L4	54	16	29.62 %
L5	54	13	24.07 %

From the table, the overall findings suggested that the percentage of the degree of intelligibility for the NS participant was fairly high (62.96%) although a higher percentage of accuracy could reasonably have been expected. One possible

explanation is that the test itself is de-contextualised; hence, the judges had no clues of the situation involved to assist them in the interpretation when the meaning was unclear to them. Although the interpretation of intonation is highly context-dependent (Wilson & Wharton, 2006), no leading context was provided in the intelligibility test in order that the listeners could decipher the meaning from the speech stimuli they heard rather than from the written context given to them.

Apart from its being de-contextualised, another weakness of the test was its multiple-choice format, which may encourage guessing. With regard to the four EFL learners' productions, it was found that the highest percentage of scores was one participant in the high group (31.48%), followed by the two in the EFL-Low (29.62% and 24.07%). The other EFL-High participant received the lowest scores (11 out of 54 items) or 20.37%. This inconclusive finding can be attributed to the small numbers of learners in each group. The EFL participants used in the pilot study were fourth year students ($n = 5$) and first year students ($n = 5$) to represent high English language experience learners and low English language experience learners respectively. This selection was based on convenience sampling. Thus, the EFL participants for the main study were selected by using the scores from the English Language Experience Questionnaire.

Table 3.11 Correct interpretations of the experienced and inexperienced judges

Speaker	Total number of tokens	Number of correct interpretation	Experienced judges	Inexperienced judges	Percentage of accuracy for experienced judges	Percentage of accuracy for inexperienced judges
NS	54	34	20	14	37.03 %	25.92 %
H1	54	17	8	9	14.81 %	16.66 %
H2	54	11	6	5	20.37 %	11.11 %
L4	54	16	7	9	12.96 %	16.66 %
L5	54	13	5	8	11.11 %	14.81 %

The findings of the native speaker judges with different degrees of experience with Thai learners were somewhat surprising. The percentage of correct answers for the NS speech samples from both groups of listeners was only 37.03% in the experienced listeners and 25.92% in the inexperienced judges. The interpretations

were more accurate in the less experienced judges in both EFL learners in the low experience group. However, in the data of the high experience group, the scores were not in agreement. For H1, the percentage of accuracy was somewhat higher in the less experienced judges than the experienced ones (16.66% and 14.81%). Despite the fact that this participant can speak quite fluently, he is rather flat-pitched. Two listeners selected answer *d.* from the test for this participant, which means that they could not find any matched interpretation for this participant. They wrote a similar comment that there was no point of emphasis in the utterance they heard. Regarding the experienced native judges' percentage of accuracy, the percentage was significantly higher (20.37% and 11.11%). It is interesting to note that the data of NS which was used to ensure the reliability of the interpretations, the percentage was higher in the experienced judges (37.03% and 25.92%). T. Wharton (personal communication, August 17, 2010) commented on the test that the intelligibility scores for the NS speech data were rather low partly because of the lack of explicit knowledge on the English intonation system of the native speaker judges. He asserted that despite being native speakers, they are not aware of how they use intonation. Therefore, in the main study some explanations on the systems of tonality, tonicity and tune will be given to the native speaker judges prior to the listening session.

From this very small scale study, the results did not indicate consensus in the degree of intelligibility towards the EFL-High and EFL-Low learners. The percentage of accuracy was higher in the less experienced listeners. This is rather surprising since more exposure or familiarity with a specific accent should enhance their understanding. Nevertheless, more data is required to claim the degree of intelligibility in each listener group.

3.4.5 Comprehensibility ratings

The comprehensibility ratings assess the degree of the listeners' effort in understanding the speech data. The findings suggested that the native speaker judges showed quite a high degree of agreement in their judgements, as shown in Table 3.10:

Table 3.12 Average scores of comprehensibility ratings of native speaker judges

Speaker	experienced	inexperienced
NS	5	5
H1	3.33	4
H2	4	4.33
H3	4.66	4.33
H4	3.33	4
H5	4.33	4.33
L1	3.33	3.66
L2	2.66	3.66
L3	3	2.66
L4	2	1.66
L5	2	2

From the speech data of passage reading used in the comprehensibility ratings, it was found that the mean scores for the EFL-High ranged from 3.33-4.66, and the scores for the EFL-Low were between 1.66 and 3.66. This obviously indicates that the EFL-High's speech was perceived as easier to understand or more comprehensible than that of the EFL-Low. Five EFL learners (3 EFL-High and 2 EFL-Low) were rated higher by the less experienced listeners whereas three learners (1 EFL-High and 2 EFL-Low) received lower average scores by the judges with less experience. Three participants (NS, H5 and L5) obtained similar average scores of 5, 4.33 and 2, respectively from both groups of judges.

From all the speech stimuli (n =11), the NS sample added to ensure reliability was rated the easiest to understand with an average score of 5. On the other hand, L4 was the least easy to understand. The purpose of having two panels of listeners with different degree of experience with Thai learners was to determine whether the level of perceptions would be influenced by the familiarity with Thai speakers' pronunciation. Nevertheless, the overall findings did not lead us to conclude that there was a significant difference between the listeners with different degree of experience with Thai learners. Generally, it was found that native listeners with less experience showed a tendency to understand the speech sample better than did the more experienced judges. It should be noted that this pilot study employed only six native speaker judges. More number of judges may yield different results.

After the pilot phase to try out the research procedures and instruments, some alterations were made for the main study. Concerning the recording process, holding a

session with the EFL learners in a laboratory was problematic due to some technical problems from the machines and disturbing noise from the air-conditioners. Therefore, recording each participant individually in a quiet room was tested. It was found that the learners understood the tasks better since they could be instructed individually, and all learners completed the requirement of the tasks. The researcher also could check the quality of the recording immediately after its completion. Moreover, the intelligibility test was revised for more clarity and brevity of the alternatives. For the main study, some explicit explanations on English intonation were given to the listeners before the intelligibility test and comprehensibility ratings to ascertain the reliability of the perceptual judgements. Figure 3.3 summarises the procedures of data collection in the present study.

① Administering English language experience questionnaire to English majors → To select a sample group (*N* = 30)

Answers are scored using the scoring criteria to select the samples → EFL-High *N* = 15 → EFL-Low *N* = 15

② Administering native speaker questionnaire → To select NSs for the control group and judges (*N* = 13)

NS control group *N* = 3

Production

NS listeners (*N* = 10)

Experienced *N* = 5 | Inexperienced *N* = 5

Intelligibility and comprehensibility test

③ Stratified sampling → EFL-High *N* = 3 ↔ EFL-Low *N* = 3

To select EFL participants to do the intelligibility test

Sentence reading for intelligibility test

④ Stimuli preparation for perception test

Randomising speech data from sentence reading task ↔ Adding NS to ensure reliability *N* = 1

Randomising speech data from passage reading task

63 utterances (9x3EFL-High) + (9x3EFL-Low) + (9x1NS)

31 recordings (15 EFL-High) + (15 EFL-Low) + (1 NS)

Intelligibility dimension

Comprehensibility dimension

⑤ Perception study

To measure the degree of intelligibility and comprehensibility

10 NS judges listen to 63 utterances

10 NS judges listen to 31 recordings of passage reading

Select the interpretations from the three choices

Rate the degree of comprehensibility on a 5-point scale

Figure 3.3 Data collection procedures

3.5 Summary

This chapter presents the research methodology in terms of population and sample, research instruments, data collection and data analysis of the production and the perception study. The findings of the pilot study are also described. Chapter 4 will report the results of the production study as related to the English intonation patterns of native speakers of English and Thai learners.

CHAPTER IV
ENGLISH INTONATION PATTERNS OF
NATIVE SPEAKERS AND EFL PARTICIPANTS

4.1 Introduction

This chapter will identify the intonation patterns of Thai EFL participants concerning tonality, tonicity and tune with reference to the NS control group's performance as a norm. The differences of the intonation patterns of the Thai learners with high English language experience and low experience will also be discussed.

4.2 Comparison of tonality in the NS, the EFL-High and the EFL-Low groups

The tonality system, after Halliday (1967, 1970), is composed of tone group chunking and rhythmic group division. The boundary of each tone group is mostly determined by a pause, with the combination of the presence of a tonic syllable, a change in pitch and pace (Crystal, 1969). The rhythmic group boundaries are decided by a salient syllable as the beginning and the next salient one marks the end of it.

In this study, a passage reading task was used to elicit the tonality patterns of the participants. The mean values and standard deviations of the number of tone groups, the length of tone groups and the number of rhythmic groups in passage reading by the three groups of speakers are presented in Table 4.1.

Table 4.1 Comparison of tone group and rhythmic group divisions in the NS, the EFL-High and the EFL-Low groups

Feature	NS		EFL-High		EFL-Low	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*
Number of tone groups	24.33	1.53	32.33	7.62	43.8	8.27
Average length	3.99	0.24	3.15	0.70	2.3	0.53
Number of rhythmic group boundaries	63.33	2.08	77.53	6.75	88.07	2.69

From Table 4.1, the mean values of the EFL-High are closer to those of the NS group in all the three aspects, as compared to those of the EFL-Low group. In reading the short passage of 97 words, the NS assigned a mean of 24.33 tone groups

with an average length of 3.99 words per tone group. Their read speech was divided into an average of 63.33 rhythmic groups. The standard deviations for the NS group indicate a high degree of agreement among the three NSs. The average length of tone groups in the EFL-High is not considerably shorter to that of the NS (i.e., 3.15 vs 3.99). The EFL-Low, on the other hand, assigned shorter tone groups in their read speech. The higher numbers of salient syllables which determine the rhythm of speech in the EFL groups indicate that they left only a small proportion of syllables unstressed. It is interesting to note that the high standard deviations in the EFL-High (7.62) and the EFL-Low (8.27) as related to the number of tone groups suggest wide within-group variations in both groups of learners. Accordingly, the standard deviation of salient syllables in the EFL-High (6.75) indicates a wide range of difference among the learners in this group.

Table 4.2 Number of tone group boundaries across three groups of participants

Sentence	Number of words	NS		EFL-High		EFL-Low	
		Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*
1	16	3.67	0.58	4.93	1.91	6.67	1.72
2	12	3.67	0.58	4.27	1.49	5.73	1.44
3	17	4	0	5.87	1.51	8.07	1.91
4	23	6.67	0.58	9.13	2.5	12.47	2.26
5	8	2.33	0.58	2.6	0.51	3.47	0.74
6	21	4.33	0.58	5.53	1.46	7.4	2.23

The low standard deviations in the NS group illustrate that there is a high degree of agreement in the assignment of tone groups in passage reading. The mean values of the EFL-High as compared to those of the NS were relatively close except for sentence 4 in which the mean difference is rather high (2.46). In addition, the standard deviation for sentence 4 shows the greatest dispersion in the EFL-High data. Sentence 4 ‗*Firemen and others who climb ladders every day know the importance of using both hands when they climb: it's safer, surer and faster*.' is a complex sentence with modifying clauses and listing of information. This can be interpreted that the EFL-High has more difficulty in breaking the information into units when the degree of sentence complexity increases.

The EFL-Low data, on the other hand, indicate great differences from the NS norm in long stretches of words (sentences 1, 3, 4, and 6). In sentence 4, it is most apparent that as the sentence is longer and becomes more complex, the EFL-Low seemed to divide their speech into small chunks when reading aloud. The range of mean values for each group of EFL learners is presented in Table 4.3.

Table 4.3 Descriptive statistics of tone group boundaries in passage reading in the EFL-High and the EFL-Low groups

	EFL-High				EFL-Low			
Topic	*Min*	*Max*	*Mean*	*SD*	*Min*	*Max*	*Mean*	*SD*
Total number of tone groups	22	46	32.33	7.62	28	55	43.8	8.27
Average length (in words)	2.1	4.4	3.15	0.70	1.76	3.46	2.3	0.53
Number of errors	1	20	7.8	6.89	7	29	20.2	6.96
Percentage of accuracy	**75.88%**				**53.88%**			

From the min and max and standard deviation values in Table 4.3 above, it can be seen that there is a wide variability among the learners in both groups concerning the total number of tone groups and errors. The EFL-High learners made a range of 1 to 20 errors in tone group chunking whereas the EFL-Low data ranged from 7 to 29 errors. However, the mean number of errors of the EFL-High group was markedly lower (7.8) than those of the EFL-Low group (20.2). The overall findings indicate a greater percentage of accuracy in the EFL-High group (75.88%), as opposed to that of the EFL-Low group (53.88%).

Table 4.4 Descriptive statistics of rhythmic group boundaries in passage reading in the EFL-High and the EFL-Low groups

Topic	EFL-High				EFL-Low			
	Min	*Max*	*Mean*	*SD*	*Min*	*Max*	*Mean*	*SD*
Total number of rhythmic group boundaries	64	88	77.53	6.75	84	93	88.07	2.69
Number of errors	6	40	24.53	8.96	32	56	48.73	6.71
Percentage of accuracy	68.36%				44.66%			

As shown in Table 4.4, the broader range of rhythmic group boundaries, number of errors and the high standard deviations (6.75 and 8.96) in the EFL-High group indicate wider within-group dispersion among the learners in this group. Comparing to the data in the EFL-Low group, the range of values of Min (84) and Max (93) for the number of rhythmic group boundaries is not very wide. This can be concluded that their performance reveals somewhat similar rhythmic patterns. The number of errors in case of wrong stress placement is relatively high. The percentage of accuracy shows that the EFL-High (68.36%) again outperformed the EFL-Low (44.66%) in terms of rhythmic group divisions.

A comparison of percentage of accuracy of tonality patterns comprising tone group and rhythmic group divisions of the EFL-High and EFL-Low is illustrated Figure 4.1.

	Tone group	Rhythmic group
⊟ EFL-High	75.88%	68.36%
☐ EFL-Low	53.88%	44.66%
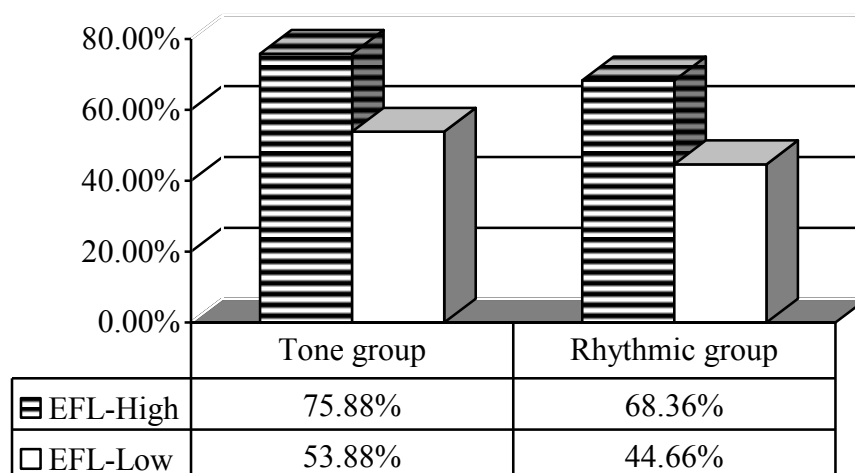
Figure 4.1 Comparison of percentage of accuracy in tone group and rhythmic group divisions in the EFL-High and the EFL-Low groups

To sum up the quantitative findings of the tonality patterns, Figure 4.1 indicates that the EFL-High made fewer errors in both areas. Nevertheless, rhythmic group division is more problematic for them, as compared to tone group chunking. The percentage of accuracy reveals that the EFL learners in both groups have more troubles with which syllables should be stressed or salient in a sentence than they have with where to chunk the information in passage reading.

4.2.1 Tonality of the NS

The location of the tone group boundaries in the NS group mostly coincided with grammatical units. For example:

- After a long noun phrase, as in:

(1) // Putting your trust in ladder // depends…

- After adverbials

(2) // First //…

(3) // Then //…

(4) // Finally //

- After a series of information or a list

(5) …//it's safer // surer // and faster. //

- After a clause

(6) // Then // set the ladder firmly in place // so that it won't slip // or shift under your weight. //

(7) // Finally // when you have finished using the ladder // put it in a special place // or store it out of the way. //

The data in (6) and (7) show that the boundary of tone groups occurs after a clause in both cases. However, there are also some variations in the NS performance, as in:

(8) …//know the importance of using both hands // when the climb //…

(9) …//know the importance of using both hands when they climb //…

This stretch of sentence is somewhat lengthy; thus, it can be divided into sub-clauses. Two NSs out of three in the control group assigned a separate tone group for *when they climb*. One NS had a clearly identifiable pause in (8) whereas there was no perceivable pause in the other. Nevertheless, the change in pitch and the presence of a tonic stress in *climb* provide the evidence that they were separate tone groups. Another example of variation in the NS are shown below:

(10) // So // face the ladder // and use both hands. //

(11) // So face the ladder // and use both hands. //

The NS's performance in (10) placed a pause after the adverbial *so* for emphatic use while the pause is absent in (11). This may be because the clause is rather short; therefore, it is not necessary to pause after *so*. Another case of the deviations in the NS group is:

(12) // Firemen // and others who climb ladders every day //…

(13) // Firemen and others // who climb ladders every day //…

There are two possible meanings for the relative clause *who climb ladders every day*. In (12), *Firemen* has a separate tone group, so the relative clause *who climb ladders every day* modifies *others*. In (13), the relative clause defines the whole phrase *Firemen and others* because it was treated as a separate tone group.

Regarding the rhythmic group division, there were 58 stressed syllables in the speech data which were agreed by all the three NSs. Apart from the word accent, the stress usually falls on content words in a sentence, which results in a rhythmic stress in the sentence. Function words are not stressed in a neutral situation. However, there

was one optional syllable in a function word *and* which received a stress by one of the NSs, as in:

(14) //…it's /safer // surer // **and** /faster //

4.2.2 Tonality of the EFL-High

The tone group boundaries in the EFL-High group mostly conform to the NS's performance. However, as shown in Table 4.3, there was a wide variation among the learners in this group. Some EFL-High learners' performance deviated from the NS. Nevertheless, there are some tone group boundaries which were all agreed by all the EFL-High. The number of errors was also lower in the EFL-High group, as compared to the EFL-Low. The following data displays the number of learners who placed the tone group boundaries in the above locations. The first value underneath is the number of the EFL-High learners and the second is the EFL-Low learners.

(15) // So // face // the // ladder // and // use // both // hands. //
     (5,2)   (4,13)   (0,2)   (15,11)   (0,5)   (1,8)   (2,7)

The performance of NS for (15) is:

(16) // So (//) face the ladder // and use both hands. //

From the data in (15), it can be seen that all EFL-High learners assigned a pause before *and*, which corresponds to a syntactic unit. The number of the EFL-High learners who made errors was lower than that of the EFL-Low. No EFL-High learner made a pause after *the* and after *and* whereas two EFL-Low learners had a pause after *the* and five learners paused after *and*. The data in (15) demonstrates that the performance of the EFL-High contained less variance from that of the NS.

Concerning the rhythmic group division, the quantitative data clearly shows that the EFL-High had more difficulties in the stress placement than they did with tone group chunking. Two major problems for them were:

- incorrect accentual patterns, e.g. put/ting, lad/der, /importance, impor/tance, fi/nished, cer/tain, safe/ty

It was occasionally difficult to identify the stressed syllable in a word using auditory analysis. This is because every syllable was pronounced with relatively equal

force. This problem had to be resolved by acoustic analysis of stress correlates: pitch, duration, intensity and vowel quality.

- stress placement on function words, e.g. in, for, on, of, the

These function words were mostly pronounced with a full vowel. The EFL-High performance reflected the fact that they attempted to enunciate each word and syllable clearly and correctly.

To summarise the tonality patterns of the EFL-High, Figure 4.2 compares two EFL-High learners receiving the highest and lowest scores on tonality.

Best EFL-High performance	**Worst EFL-High performance**
// Putting your /trust // in a/ladder // de/pends // for the /most /part //on /following /certain /safety /rules.// First // make /sure that the /ladder // has /no /broken // or /cracked /parts.// Then // set the /ladder /firmly in /place // so that it /won't /slip // or /shift /under your /weight.// Firemen /and /others // who /climb // ladders /every /day // know the im/portance of /using /both /hands //when they /climb //it's /safer // surer //and /faster.// So /face the /ladder // and /use /both /hands.// Finally // when you /have /finished /using the /ladder // put /it in a /special /rack // or /store it /out of the /way.//	// Put/ting /your // trust in a /ladder de/pends // for the /most /part // on follow/ing cer/tain safe/ty /rules.// First // make /sure /that // the /ladder /has // no /broken // or /cracked // parts.// Then // set the /ladder firm/ly // in /place // so /that // it /won't /slip // or /shift //un/der /your /weight.// Firemen // and /others // who /climb // ladders // every /day // know // the impor/tance //of us/ing /both /hands // when /they /climb /it's /saf// er // surer // and /faster.// So /face // the /ladder // and /use /both /hands**.**// Finally // when /you /have fi/nished // using // the /ladder //put /it // in /a /special /rack // or /store // it /out /of the /way.//

Figure 4.2 Comparison of the performance of two EFL-High learners receiving the highest and lowest scores on tonality

4.2.3 Tonality of the EFL-Low

The performance of the EFL-Low contains a number of deviations from the NS control group. The overall impression of the Low group is that their speech was

divided into small chunks which did not coincide with grammatical units. For example:

(17) // Firemen // and // others // who // climb // **ladders every day** // know the importance // of using // both hands // when they climb // **it's** // safer // surer // and faster.

(18) // Finally // when you have finished // **using the** // **ladder put** // **it in a special rack** // or store // **it out** // of the way. //

The misplacement of tone group boundaries can be categorised as follows:

- After prepositions, e.g., *in, on, under*

(19) // Putting your trust in // a ladder // depends for the most part **on** //…

(20) // Then // set the ladder // firmly **in** //…

(21) …//shift **under** //…

- After conjunctions, e.g., *and, or*

(22) // Firemen **and** //…

(23) // So face // the ladder **and** //…

(24) //…so that it won't slip **or** //…

- Separate the syllable within the same word

(25) //…when they // climb // it's // saf//er //

Regarding the rhythmic group boundaries, the EFL-Low data reveals a great number of deviations of the English accentual pattern. In scoring the performance on rhythmic groups, the scores for misplacement of stress had to be deducted from the correct stressed syllables. This is due to the fact that the learners put a stress on almost every syllable. Additionally, it was difficult to decide the stressed or salient syllable in a word. The acoustic analysis indicated that there are more than one syllable which were equally stressed in a word, e.g., im/por/tance, /un/der, /lad/der, /us/ing. Most cases, however, suggest that the misplacement of word stress fell on the final syllable of a word, e.g., put/ting, eve/ry, safe/r, fi/nished, us/ing, o/thers, safe/ty, cer/tain, etc. Content words were mostly salient in the EFL-Low read speech and reduced vowels were not usually used in their read speech. The overall performance on rhythmic

group reveals that they enunciated almost every syllable clearly. Figure 4.3 compares the performance on tonality of two EFL-Low learners obtaining the highest and lowest scores.

Best EFL-Low performance	Worst EFL-Low performance
// Put/ting /your /trust /in a /ladder // de/pends // for the /most /part // on /following /cer/tain safe/ty // rules.// First // make /sure /that the /ladder // has /no /broken //or /cracked //parts.// Then // set the /ladder //firmly // in /place //so /that //it /won't /slip //or /shift //un/der /your /weight.// Fire/men // and o/thers // who /climb /ladders // eve/ry /day // know //the impor/tance /of /using /both// hands //when /they /climb //it's /safer //surer //and /faster.// So /face // the /ladder // and /use /both /hands.// Finally // when /you /have fi/nished // using the /ladder // put /it /in a /special /rack // or /store //it /out // of /the /way.//	// Put/ting /your /trust //in a lad/der // de/pends // for the /most /part // on // follow/ing // cer/tain // safe/ty /rules. // // First // make /sure // that the lad/der //has // no bro/ken //or //cracked //parts.// // Then /set the lad/der firm/ly // in /place /so // that // it // won't // slip // or // shift un/der // your // weight.// Fire/men /and o/thers //who /climb //lad/ders eve/ry /day /know //the impor/tance //of /us//ing // both //hands //when //they //climb //it's saf/er //sur/er//and fast/er.// So /face // the lad/der // and /use // both /hands // // Final/ly // when /you /have fi/nished // us/ing /the // lad/der /put // it /in /a spe/cial /rack // or /store // it /out /of the /way.//

Figure 4.3 Comparison of the performance of two EFL-Low learners receiving the highest and lowest scores on tonality

4.2.4 Summary of tonality

In conclusion, the tonality patterns of the NS involved chunking their speech into units according to syntactic units. In neutral tonality, a clause, a phrase, an adverbial, and a conjunction are treated as a separate tone group. Also, within a tone group, there are a number of syllables which are salient or stressed. A rhythmic group boundary starts on a stressed syllable and ends before the next stressed one. The EFL-High's tonality in their read speech indicated relatively similar features to those of the NS group. On the average, their tone group chunking corresponded to a grammatical unit. Their problems involved incorrect accentual patterns and misplacement of stress on function words. The EFL-Low's group deviated performance showed more

identical features to their L1 rather than English. For instance, the word stress was placed on the final syllable. Each syllable in a rhythmic group was pronounced with a full vowel and was stressed. Regarding the tone group boundaries, their speech was mostly divided into very small units. A number of their tone group consisted of only one word without a marked meaning in the sentence, resulting in fragmented speech.

4.3 Comparison of tonicity in the NS, the EFL-High and the EFL-Low groups

Tonicity involves the placement of prominence on a syllable known as a tonic syllable on the most significant information or focus in an utterance. The system of tonicity was examined in this study by means of dialogue reading. The participants had to read the assigned role in the dialogue given on the computer screen. The context of conversation was to converse with a male friend who they had not seen for a long time, and to remember to ask the friend to return the books he borrowed. Table 4.5 reports the overall findings of the placement of tonic syllables in the dialogue reading of the NS, the EFL-High and the EFL-Low.

Table 4.5 Percentage of tonic prominence from the dialogue reading task

Token	Native speakers	Non-native speakers	
		EFL-High	EFL-Low
1 // Haven't seen you for <u>ages</u>! //	100%	66.7%	60%
2 // What've you been <u>doing</u>? //	100%	53.3%	26.7%
3// You've been there be<u>fore</u> //…	100%	60%	26.7%
4 //…<u>haven</u>'t you? //	100%	53.3%	53.3%
5 // Two <u>years</u> ago? //	100%	40%	40%
6 // By the <u>way</u> //…	100%	93.3%	93.3%
7.1 //…are you going to return those <u>books</u> of mine you borrowed? //	66.7%	0%	0%
7.2 //… are you going to return those <u>books</u> of mine // you <u>borrowed</u>? //	33.3%	13.3%	6.7%
8 // The ones about <u>culture</u> //…	100%	40%	6.7%
9 //…pronunci<u>a</u>tion //…	100%	73.3%	46.7%
10 // ,…and <u>language</u>. //	100%	86.7%	66.7%
11.1 // But you've had them for a <u>month</u> already.//	33.3% 33.3%	0% 0%	0% 0%
11.2 // But you've had them for a <u>month</u> // al<u>ready</u>. //	33.3%	6.7%	0%
11.3 // But // you've had them for a month al<u>ready</u> //			
12 // I sup<u>pose</u> so. //	100%	40%	13.3%

The data in Table 4.5 demonstrates that the NS group had similar performance in reading the dialogue in almost all tokens except for tokens 7 and 11. Because of the relationship between tonality and tonicity, the greater number of tone groups means the larger number of tonic syllables. The difference in the NS was the result of an additional tone group division; thus, there was a tonic syllable for each extra tone group. The division of speech into units greatly depends on the speaker's perception of the message. The three NSs assigned two tone groups as shown in Token 7.2. As a result, this utterance contained two tonic syllables: *book* and *borrowed* in their performance. The other NS did not divide an extra tone group; *books* was the most prominent syllable or the focus of the message because it is new information in this context.

Tokens 11.1-11.3 indicate the greatest variance in all the tokens. The three NSs performed differently in terms of tonality: containing one, two and three tone groups. Therefore, there were differences in the placement of tonic syllables of each NS participant.

Regarding the two groups of learners, the EFL-High distinctively performed better than the EFL-Low in Tokens 2, 3, 8 and 12, with reference to the NS norms. For Token 1, the EFL-High slightly outperformed the EFL-Low (66.7% and 60%, respectively). Tokens 4, 5 and 6 which are relatively short utterances; the two groups of learners performed equally well with the same percentage of accuracy. Tokens 7 and 11, in which there was variance in the NS group, were problematic for both groups of learners. Only two EFL-High learners as opposed to one EFL-Low learner received the scores for Token 7.2. For Token 11, there was only one learner in the EFL-High group whose performance resembled one of the NSs. Token 9 and 10 concerning word accent, the EFL-High outscored the EFL-Low in Token 9 in the polysyllabic word *pronunciation* where the two-syllabic word *language* did not cause a great difficulty for the EFL-Low learners (66.7% of accuracy, as opposed to 86.7% in the EFL-High).

In a neutral or unmarked situation, the tonic syllable or the most salient syllable usually falls on the last content word in an utterance. It is the part of information the speaker wants to highlight. When the tonic is placed on other positions, the meaning is marked for some reasons, e.g. to contrast information, new

information or focus. For ease of understanding, the performance on tonicity will be grouped according to the location of tonic syllables. Contexts are crucial in selecting the information to highlight. Consequently, the script for the dialogue reading task is provided with the role assigned to the participants specified in the underlined parts.

Dialogue Reading Task

You meet John, a classmate, who you have not seen for some time. You remember that he has not returned the books he borrowed, so you ask him about the books.

You:	<u>Haven't seen you for ages! What've you been doing?</u>
John:	I've been travelling in Chiang Mai.
You:	<u>You've been there before, haven't you? Two years ago?</u>
John:	Yeah, exactly.
You:	<u>By the way, are you going to return those books of mine you borrowed?</u>
John:	Which books? I can't remember borrowing any.
You:	<u>The ones about culture, pronunciation, and language</u>.
John:	Oh, those books. Er—could I keep them a few more days?
You:	Why?
John:	Because I need them for my essay.
You:	<u>But you've had them for a month already</u>.
John:	Just give me till Monday, and then you can have them back. OK?
You:	<u>I suppose so</u>.
John:	Thank you. You're such a good friend.

Adapted from:

Wells, J. C (2006). *English intonation: An introduction*. Cambridge: Cambridge University Press.

From the performance on tonicity, the data will be presented in order from the dialogue. The chunking of the utterance is based on a grammatical unit. The difference in tone group division from the NS group performance was not counted as correct in the scoring, even with a correct tonic syllable in one of the tone groups.

Token 1: Haven't seen you for <u>age</u>s!

Group	<u>age</u>s/<u>age</u>		<u>ages</u>		haven't		seen		*other*	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	3	100								
EFL-High	10	66.7	1	6.7			2	13.3	2	13.3
EFL-Low	9	60			1	6.7			5	33.3

All the NSs agreed for the placement of the tonic on the last content word *ages*, of which the first syllable was stressed. The EFL-High (66.7%) performed slightly better than the EFL-Low (60%). However, some learners failed to pronounce the second syllable –*es*. Such performance was also scored for a correct tonic syllable. Four EFL-High learners and eight EFL-Low fell in this category. Other deviated performances of the tonic prominence on, i.e., *a<u>ge</u>s*, *haven't*, *<u>seen</u>* were considered incorrect and received no score. From the table of Token 1, the last column labelled *other* indicated other performances which were not scored because of the deviance in the tone group chunking, resulting in additional tonic syllables. Other performances for Token 1 include:

    (26) //1 Have/n't <u>seen</u> //1 <u>you</u> /for /<u>age</u>! //

    (27) //3 Have/<u>n't</u> //1<u>seen</u> //1 you /for /<u>age</u>! //

    (28) //1 Haven't /<u>seen</u> /you //1 for /<u>age</u>! //

Token 2: What've you been <u>doing</u>?

Group	<u>do</u>ing		do<u>ing</u>		what've		*other*	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	3	100						
EFL-High	8	53.3	1	6.7	1	6.7	5	33.3
EFL-Low	4	26.7			1	6.7	10	66.7

There was also conformity in the tonicity of the three NSs. Eight EFL-High and four EFL-Low received scores for this token. The misplacement of word accent in one EFL-High, as in *do<u>ing</u>* was considered incorrect. Two learners, one from each group, assigned the tonic prominence on *what've*. Other deviated cases include:

    (29) //1 <u>What've</u> //1 you /<u>been</u> /doing? //

    (30) //3 <u>What've</u> //1 you /been /<u>do</u>ing? //

    (31) //1 <u>What've</u> /you //2 <u>been</u> doing? //

    (32) //3 <u>What've</u> //1 <u>you</u> /been /doing? //

Token 3: You've been there be<u>fore</u>…

Group	be<u>fore</u>		you've		been		*none*		*other*	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	3	100								
EFL-High	9	60			2	13.3			4	26.7
EFL-Low	4	26.7	2	13.3	3	20	2	13.3	4	26.7

Token 3 is another case of neutral tonicity where the tonic syllable is the last content word in the utterance. All three NSs agreed with one another. The majority of the EFL-High (60%) obtained the score for correct tonic syllable, with 13.3% of errors of placing the tonic on *been*. The EFL-Low, on the other hand, had 26.7% of accuracy. Other learners in this group incorrectly assigned the tonic on *you've* (13.3%) and been (20%). Two EFL-Low learners (13.3%) had one tone group, but each syllable was equally stressed. Therefore, it was regarded as having no tonic prominence and categorised under the label *none* in the table.

Other deviated performances from both groups of EFL-learners for Token 3 are, for example:

(33) //1 <u>You've</u> //3 <u>been</u> //1 there be/<u>fore</u> //…

(34) //3 <u>You've</u> //3 been /there be/<u>fore</u> //…

(35) //3 You've /<u>been</u> //3 <u>there</u> be/fore //…

Token 4: …, ha<u>ven</u>'t you?

Group	ha<u>ven</u>'t		you		*other*	
	n	*%*	*n*	*%*	*n*	*%*
NS	3	100				
EFL-High	8	53.3	6	40	1	6.7
EFL-Low	8	53.3	5	33.3	2	13.3

There was again no variance in the NS group. The EFL-learners in both groups had the same percentage of accuracy (53.3%). Six EFL-High learners (40%) placed the tonic syllable on the pronoun *you* in this question tag, as opposed to 33.3% in the EFL-Low group. The remaining errors resulted from the division of an extra tone group, as in:

(36) …//3 <u>have</u>/n't //1 <u>you?</u> //

Token 5: Two <u>years</u> ago?

Group	years		two		ago		*none*		*other*	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	3	100								
EFL-High	6	40	1	6.7	7	46.7			1	6.7
EFL-Low	6	40	1	6.7	6	40	1	6.7	1	6.7

The three NSs agreed to put the emphasis on *years* in Token 5. The EFL-learners in each group obtained 40% of accuracy. One learner from the EFL-High and one from the EFL-Low assigned the tonic on *two*, with a different tune, as in:

(37) //2 <u>Two</u> /years a/go? // (EFL-High)

(38) //1 <u>Two</u> /years a/go? // (EFL-Low)

The performance of the EFL-High with a high-rising tune received a score because it is possible in meaning to stress the word *two* for a contrastive meaning with *one* year, for example. The EFL-Low's performance in (2) was considered incorrect because there is a question mark, indicating that this utterance is an interrogative statement. Therefore, Tune 1, a fall, is not appropriate in this context.

In addition, one EFL-Low put an equal weight of stress in this token as in:

(39) //1 Two /years a/go? //

This learner, therefore, obtained no score for this token.

The errors from the *other* category include:

(40) //1 Two /<u>years</u> //2 a/<u>go</u>? //

(41) //3 Two /<u>years</u> //1 a/<u>go</u>? //

Token 6: By the <u>way</u>,..

Group	way		by	
	n	*%*	*n*	*%*
NS	3	100		
EFL-High	14	93.3	1	6.7
EFL-Low	14	93.3	1	6.7

There was not much variance in the performance of the EFL-learners in this adverbial used in changing the topic of speaking, with the NSs all agreed for the tonic on *way*, EFL-High and Low obtaining 93.3% of accuracy. The deviated performance was the placement of emphasis on *by* as in:

(42) //1 <u>By</u> the /way //

Token 7: …are you going to return those <u>books</u> of mine you borrowed?

Group	books		books, borrowed		books, borrowed		those, borrowed		<u>borrowed</u>		*other*	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	2	66.7	1	33.3								
EFL-High			2	13.3	1	6.7	1	6.7	1	6.7	10	66.7
EFL-Low			1	6.7	1	6.7	1	6.7			12	80

For Token 7, two NSs uttered the sentence in one tone group, with the tonic prominence on *books* whereas the other divided the sentence into two tone groups, with the emphasis on *books* and <u>*borrowed*</u>, as in:

(43) //4 are you /going to re/turn those /<u>books</u> of /mine you /<u>borrowed</u> //

(44) //1 are you /going to re/turn those /<u>books</u> of /mine you /<u>borrowed</u> //

(45) //4 ˏ are you /going to re/turn those /<u>books</u> of /mine //4 ˏ you /<u>borrowed</u> //

No learner received a score for this token because of the deviance in tone group division. This is a long sentence and the learners divided it into small chunks, except for one EFL-High who had only one tone group, as in:

(46) //1 are /you go/ing to re/turn /those /books /of /mine you /<u>borrowed</u> //

Although this learner's performance was identical to the NS group in terms of tonality, the tonic syllable was placed in the wrong place.

Other incorrect performance of Token 7 include:

(47) //1 are you go/<u>ing</u> to re/turn //1 those /<u>books</u> //3 of /<u>mine</u> //1 you /<u>borrowed</u> //

(48) //2 are /you /<u>going</u> //3 to re/<u>turn</u> //1 <u>those</u> /books //3 of /<u>mine</u> //1 you /<u>borrowed</u> //

(49) //1 are /you go/<u>ing</u> /to /re/turn//4 <u>those</u> /books //1 of /<u>mine</u> /you//1 <u>borrowed</u> //

(50) //1 are you /going /to re/turn /those /<u>books</u> //1 of /<u>mine</u> /you //1 <u>borrowed</u> //

(51) //1 are /<u>you</u> //1 <u>going</u> /to //4 re/turn /<u>those</u> /books /1 <u>of</u> /mine /you //
    1 bor/<u>row</u>/ed //

Token 8: The ones about <u>cul</u>ture,…

Group	<u>cul</u>ture		cul<u>ture</u>		ones		*other*	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	3	100						
EFL-High	6	40	4	26.7			5	33.3
EFL-Low	1	6.7	2	13.3	3	20	9	60

The NS group agreed to put the stress on *cul*ture. The EFL-High obtained a higher percentage of accuracy (40%), as opposed to the EFL-Low group (6.7%). Although some learners (26.7% of EFL-High and 13.3% of EFL-Low) assigned the tonic on the word *culture* in this token, the misplacement of stress on the second syllable as in *cul<u>ture</u>* was regarded as incorrect. Another error of the misplacement of tonic occurred only in the EFL-Low in case of one tone group was on *ones* (20%). Some other deviated data concerned the division of an additional tone group, as in:

(52) //3 the /<u>ones</u> //1 about cul/<u>ture</u> //

(53) //3 the /<u>ones</u> //3 a/<u>bout</u> //1 <u>cul</u>ture //

Token 9: ,…pronunci<u>a</u>tion,…

Group	pronunci<u>a</u>tion		<u>pro</u>nunciation		pro<u>nun</u>ciation		pronunci<u>a</u>tion	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	3	100						
EFL-High	11	73.3			1	6.7	3	20
EFL-Low	7	46.7	2	13.3			6	40

Token 9 was a part of information in the list of books continuing from Token 8. This concerns the correct placement of word stress. All NSs again stressed the fourth syllable, as in: *pronunci<u>a</u>tion*. The EFL-High outperformed the EFL-Low with 73.3% of accuracy, compared to 46.7% in the EFL-Low. Variance in the learners' performance included *<u>pro</u>nunciation* (13.3% of EFL-Low), *pro<u>nun</u>ciation* (6.7 % EFL-High), *pronunci<u>a</u>tion* (20% of EFL-High and 40% of EFL-Low).

Token 10: ,…and <u>language</u>.

Group	<u>language</u>		<u>language</u>	
	n	*%*	*n*	*%*
NS	3	100		
EFL-High	13	86.7	2	13.3
EFL-Low	10	66.7	5	33.3

Token 10 was the last item in the list continuing from Token 9. This item is another one concerning the word stress. The EFL-High placed the stress more correctly (86.7%), as opposed to the EFL-Low group (66.7%). The EFL-High learners; made fewer errors (13.3%), comparing to the EFL-Low learners (33.3%).

Token 11: But you've had them for a <u>month</u> already.

Group	month		month, al<u>rea</u>dy		but al<u>rea</u>dy		but, month, al<u>rea</u>dy		others	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	1	33.3	1	33.3	1	33.3				
EFL-High							1	6.7	14	93.3
EFL-Low									15	100

Token 11 indicated the greatest variance in the NS group both in tonality and tonicity. NS1 had one tone group with the tonic prominence on *month* NS2 and NS3 assigned an additional tone group, with the tonic on *month* and *al<u>rea</u>dy* for the former, and *but* and *al<u>rea</u>dy* for the latter. Only one EFL-High learner obtained a score for Token 1; however, he assigned three tone groups. Therefore, there were three tonic syllables: *but*, *month*, *al<u>rea</u>dy*, which is also regarded as correct. Other deviations which received no score were:

(54) //3ˎ But /<u>you'</u>ve /had //3 them /<u>for</u> //3ˎ a /<u>month</u> //1 al/<u>rea</u>dy //

(55) //1 <u>But</u> //1 you've /<u>had</u> //3 them /for a /<u>month</u> //3 <u>already</u> //

(56) //1 But /<u>you'</u>ve //1 <u>had</u> //3 <u>them</u> //1 for a /<u>month</u> //1 al/<u>rea</u>dy //

(57) //1 But /<u>you'</u>ve //1 <u>had</u> /them //3 for /a /<u>month</u> //1 al/<u>rea</u>dy //

Token 12: I sup<u>pose</u> so.

Group	suppose		so		<u>suppose</u>		I		other	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	3	100								
EFL-High	6	40	8	53.3			1	6.7		
EFL-Low	2	13.3	8	53.3	1	6.7			4	26.7

There are two general possibilities for the tonic prominence of Token 12; *suppose* and *so*, with a difference in meaning and attitude. For the tonic on *sup<u>pose</u>*, it indicated irritation or reluctant whereas the tonic on *so* conveyed resignation of the fact or displeasure of the speaker. The three NSs agreed to place the tonic on *sup<u>pose</u>* in this context to soften the meaning of the utterance. More EFL-High learners (40%) obtained the scores for Token 12, as opposed to the EFL-Low group (13.3%). Eight learners in each group (53.3%) put the stress on *so*, which was also regarded as correct. One EFL-Low learner (6.7%) assigned the tonic on the right word suppose with the wrong placement of stress, as in: <u>sup</u>pose. Other errors which obtained no score were:

(58) //1 <u>I</u> sup/pose /so //

(59) //1 I sup/<u>pose</u> //1 <u>so</u> //

(60) //3 I /sup/<u>pose</u> //1 <u>so</u> //

4.3.1 Tonicity of the NS

The NS group's performance on dialogue reading indicated agreement in most of the tokens with a few variances which resulted from the difference of the number of tone groups; therefore, adding an additional tonic syllable to each tone group. This was due to the speaker's perception and interpretation of the message in the given dialogue and context. For instance, in Token 11 *But you've had them for a month already*, the three NSs performed differently in terms of tonality and tonicity, as in:

(61) //1 ˏbut you've /had them for a /<u>month</u> //1 al/<u>rea</u>dy //

(62) //4 ˏbut you've /had them for a /<u>month</u> al/ready //

(63) //1 ˏbut //1ˏ you've /had them for a /month al/<u>rea</u>dy //

Two NSs in (61) and (62) assigned the focus of the message on *month* as contrastive information with day or year. The NS performance in (61) also assigned a separate tone group for *already* to reinforce the final adverbial. The NS in (63) placed the tonic prominence on the final adverbial *already* to soften the message, making it less aggressive. On the whole, the NS group seemed to agree with one another on tonicity.

The tonic syllables in the NS group were auditorily salient. It was not difficult to identify by ear as to which syllable was the most prominent in a tone group. This is because of the combination of widest pitch range, duration, volume and vowel quality produced by the NS that facilitated the perception of the stress syllables. Nevertheless, the acoustic analyses were also performed to seek for confirmation with the researcher's auditory perception. The spectrogram of the three NSs' productions for Token 1: *Haven't seen you for ages*! is shown in Figure 4.4 below.

| NS1 | NS2 | NS3 |
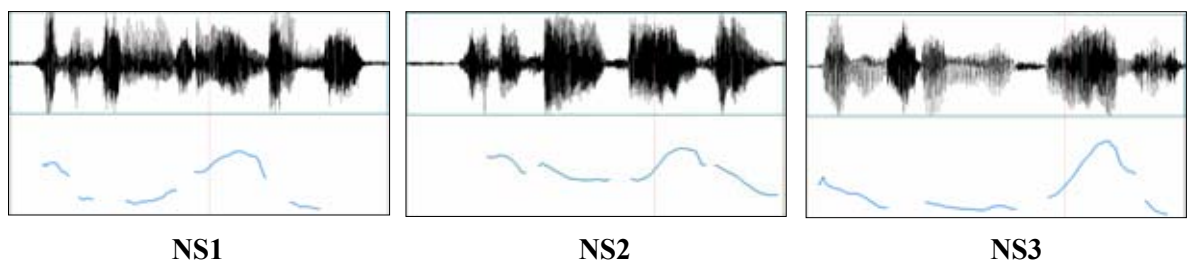
Figure 4.4 Comparison of the spectrograms of NS speech

As shown in Figure 4.4, a change of pitch and pitch movement in the NS performance can be easily observed. The vertical line in the spectrogram marked the tonic syllable *age* as in *ages*.

4.3.2 Tonicity of the EFL-High

Despite the number of agreement with the NS performance, there were also some deviated data in the EFL-High. The common errors in the EFL-High can be categorised as follows:

- Misplacement of word accent

The errors in the misplaced word accent usually involved placing the stress on

the second syllable in bisyllabic words, e.g. do/ing, bor/rowed, cul/ture. In some cases, both syllables were equally stressed by the auditory perception. However, the acoustic analysis revealed that there was only a slight difference in the two syllables. Figure 4.5 illustrates the spectrogram of the word *language*.
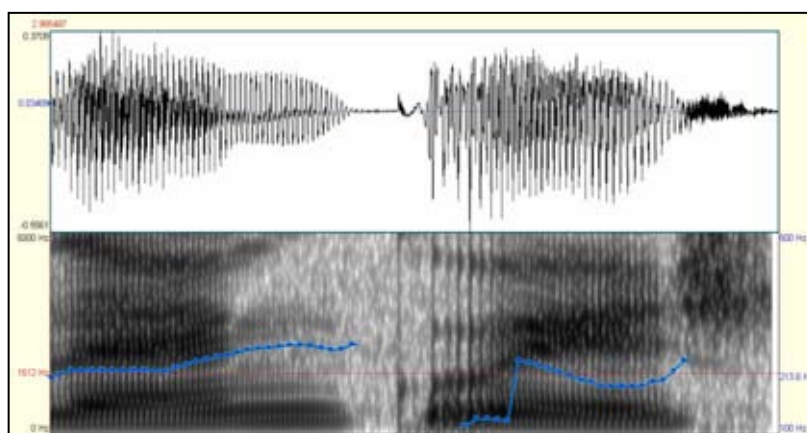
Figure 4.5 Spectrogram of the word *language* in one EFL-High learner

The above figure illustrates the performance of an EFL-High learner who assigned almost equal stress on the word language.

- Assignment of additional tone groups

Although the findings on tonality indicate that the performance of the EFL-High, to a large extent, conformed to that of the NS, the problem was worse in dialogue reading. The nature of the task concerned more colloquial speech style, containing contractions *what've, you've, haven't*. The tonicity and tune also played a role in dialogue reading. In a long stretch of sentence, the problem of tone group chunking is clearly seen:

(64) //2 Are /you /<u>go</u>ing //3 to re/<u>turn</u> //1 <u>those</u> /books //3 of /<u>mine</u> //1 you /<u>bor</u>rowed? //,

comparing to the NS group's performance for the same token:

(65) //4ˆ Are you /going to re/turn those /<u>books</u> of /mine //4ˆ you /<u>bor</u>rowed? //

(66) //4 Are you /going to re/turn those /<u>books</u> of /mine you /borrowed? //

(67) //1 Are you /going to re/turn those /<u>books</u> of /mine you /borrowed? //

The NS performance shows that none of the NS paused after *books*. This is because *of mine* modified the word *books*. Locating a tone group boundary between

after *books* was common in the performance of the EFL-High learners. Only two out of fifteen learners did not pause after *books*, as in:

(68) // 1 Are /you go/ing to re/turn /those /books /of /mine you /<u>bor</u>rowed? //

(69) // 1 Are you go/ing /to re/turn /those /books /of /<u>mine</u> //3 you /<u>bor</u>rowed? //

However, these two learners who performed tokens (68) and (69) did not receive any score due to the misplaced tonic syllable.

- Misplacement of tonic prominence

The misplacement of tonic syllables usually concerned placing the focus in an inappropriate place in a neutral situation. Their tonic syllables fell on non-final positions of the sentences. For example:

(70) //1 You've /<u>been</u> /there be/fore //

For this token, the NS group agreed for that the focus of the message was the word *before*. This is the case of a neutral tonicity where the tonic falls on the final content word. Placing the tonic on the syllable other than the last content word indicates a marked meaning. The tonic on *been* suggests the feeling of frustration of the speaker or to imply ―Why again!‖.

Another interesting example of the misplaced tonic syllable is in Token 2: *What've you been doing?*

(71) //1 What've you /<u>been</u> /doing? //

Six out of fifteen EFL-High learners assigned the tonic prominence on *What've*. Although it is also possible to put a focus on *what've* in case of marked tonicity to express anger, it is unlikely the case for the learners. This is because of their tone of voice and the use of reading speech style. In most cases, they paused after *What've*, which aggravated the degree of emphasis, as in:

(72) //1 <u>What've</u> //1 you /<u>been</u> /doing? //

(73) //3 <u>What</u>'/ve //1 <u>you</u> /been /doing? //

The learner in (73) pronounced an extra syllable for the contracted form *'ve*, adding even more emphasis to it.

4.3.3 Tonicity of the EFL-Low

The performance of tonicity in the EFL-Low indicated less conformity to that of the NS. They made similar errors to the EFL-High group did, but the problem seemed more serious. The common errors of the EFL-Low learners are:

- Misplacement of word accent

The performance for Token 9,…*pronunciation*,… clearly shows that this group of learners had difficulty with the word accent of polysyllabic words. The most cases of deviations were related to the stress on the last syllable, as in *pronunciation*. Concerning bisyllabic words in the data, e.g., *before*, *ago*, *return*, *suppose* where the accent was on the final syllable, the learners, therefore, were not likely to misplace the word accent.

- Additional tone groups

Similar to the EFL-High group, the EFL-Low learners also have the problem of assigning extra tone groups. From the frequencies in the data for Tokens 1-12 discussed earlier, it can be seen that this problem seemed to be more severe for the EFL-Low group. In a short utterance, i.e., Token 12 *I suppose so*; some learners also had an extra tone group for *so*, as in:

(74) //1 I sup/pose //1 so //

- Misplacement of tonic syllable

Similar to the EFL-High, the Low group learners also have difficulty with the placement of prominence. Their misplacement of the tonic syllable resulted in a marked meaning, as in:

(75) //3 What've //1 you /been /doing? //
(76) //1 What've /you //2 been /doing ? //

As discussed before in the EFL-High's data, the focus placed on *What've* in (75) and (76) may be perceived as to show anger of the speaker although it was not their intention. Other cases of misplacement of tonic were usually on function words, e.g.:

(77) //1 Have/n't /seen /you //1 for /age. //
(78) //1 What've /you /been //3 doing //

(79) //1 <u>You've</u> /been /there be/fore //…

(80) //3 Are /you go/<u>ing</u>//3 to /re/turn /<u>those</u> /books//1 of /<u>mine</u> /you //1 <u>bor</u>rowed?//

- No tonic syllable

Some EFL-Low learners assigned every syllable an equal weight of stress. No tonic prominence was realised by ear perception, as in:

(81) //1 You've /been /there be/fore //…

From the acoustic analysis provides us the evidence of the level pitch with only a slight movement, as shown in Figure 4.6.
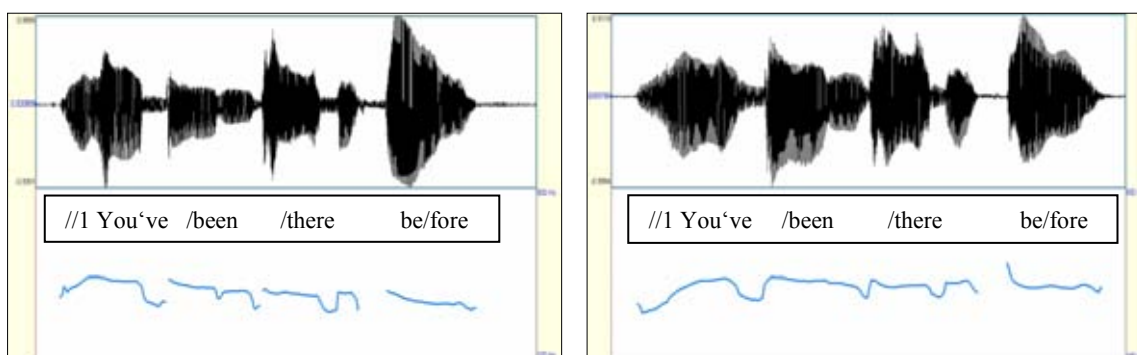
Figure 4.6 Spectrograms displaying a lack of tonic prominence in two EFL-Low learners

4.3.4 Summary of tonicity

From the data on tonicity, it can be clearly seen that the EFL-High learners had a higher percentage of correct tonicity, comparing to the NS group establishing the norm for analysis. The deviance in tone group chunking directly affected the production of tonic syllables in reading the given dialogue. The EFL-Low assigned more tone groups to each token, which had an impact on their accuracy of the tonic prominence. Their performances reflected the focus on the accuracy of reading the scripted dialogue rather than interacting with the NS interlocutor taking the other role in the pre-recorded conversation. The EFL-High, on the other hand, outperformed the EFL-Low with some idiosyncrasies among the learners in this group. The occurrences of chunking their speech into small units were also evident in the EFL-High group with far lower frequency as against those in the EFL-Low group.

4.4 Comparison of tune in the NS, the EFL-High and the EFL-Low groups

The choice of tune in spontaneous speech was elicited in this study by telling an anecdote. The participants were required to talk on the topic ―The most memorable event in my life". An excerpt of 15 tone groups from each speaker, omitting the first sentence, was extracted for the analysis of tune. The percentage of the use of tune when narrating a story from the spontaneous speech task is displayed in Table 4.6.

Table 4.6 Percentage of tune in the spontaneous speech across three groups

Tune	NS (N = 3)		EFL-High (N = 15)		EFL-Low (N = 15)	
	N	%	N	%	N	%
Falling	20	44.44	129	57.33	133	59.11
High-rising			5	2.22		
Low-rising	21	46.67	85	37.78	90	40.00
Falling-rising	4	8.89				
Rising-falling			6	2.67	2	0.89
Total	45	100	225	100	225	100

From Table 4.6, it can be seen that the selection of tune in the three groups of speakers was rather different. That is, the NS used a fall, a low-rise and a fall-rise in their speech. The EFL-High used the widest range in the choice of tune among the three groups. They narrated their stories using a fall, a high-rise, a low-rise and a rise-fall. The EFL-Low, on the other hand, used a fall, a low-rise and a rise-fall in their spontaneous speech data.

Overall, a low-rising tune (46.67%) is dominant in the NS. The percentage of a fall (44.44%) was slightly lower than a low-rise in this group. A fall-rise was the least used in the NS (8.89%). A high-rising tune (2.22%) was only used by the EFL-High learners, and a rise-fall was used in both groups of learners in small proportions (EFL-High, 2.67%, as against EFL-Low, 0.89%). In sum, a falling tune and a low-rising tune were the two most common in the speech data of the three groups of speakers. Unlike the NS who used a low-rise, a falling tune was dominant in the EFL-High and EFL-Low groups (57.33% and 59.11%, respectively).

The following section will identify the use of each tune in the spontaneous data of each group of participants. The discussion only deals with the choice of tune found in the speech data of each group from the 15 tone group excerpt from the data.

4.4.1 Tune of the NS

In the speech data of the three NSs in the control group, the use of a fall, a low rise and a fall-rise was found. A low-rise was dominant in the NS speech data, followed by fall. A fall-rise was the least used tune in the NS data.

Tune 1: Falling

A fall was used in the NS group to convey finality in a sentence or a sense-group, as in:

(82) //3 It was a /big //**1** big /ceremony //**1** obviously an im/portant thing. //

From the example in (82), we can see that a fall was used at the end of the sense-group after *ceremony*, and the NS used a fall again when the sentence ended to signal completeness.

(83) …//3 in /England //**1** at uni/versity. //

In (83), a low-rise was used before the end of the sentence, and a fall signalled that the speaker had reached the end of what he wanted to say.

Tune 3: Low-rising

A low-rising tune was dominantly used in the excerpt of 15 tone groups from each speaker. It was used to signal the meaning of non-finality, as in:

(84) …//**3** and a /beautiful //1 beautiful /baby. //

A low-rise was also used to indicate a list of information, as in:

(85) …//**3** just getting together with //**3** everybody I'd spent the last three years //**3** studying with //**3** gathering together //…

The speaker used a low-rise to describe a series of event which he recalled. The use of a low-rise in his speech, therefore, showed that the list of information was unfinished.

Tune 4: Falling-rising

A fall-rise was only used by one of the three NSs. This tune commonly signals the meaning of reservations, implications and tentativeness. This speaker described the birth of his first child. A fall-rise occurred four times in the excerpt as follows:

(86) …//3 she's /now //**4** twenty /one /years /old //**4** and /studying to be a /doctor //3 in /England //1 ˎ at uni/versity. //1 um.. //1 so //1 twenty /one //**4** twenty /two /years a/go //1 um.. //3 she was /born //**4** ˎ on /March the seven/teenth //3 ˎ and a /beautiful //1 beautiful /baby. // 1 it /was a…//1 well /very /changing //3 having a /new /baby to /look /after //…

This speaker used a fall-rise when giving information about his daughter, which added the meaning of uncertainty. In the scoring procedure where a panel of NS judges rated the appropriateness of tune, this speaker received a rating of 4 in the following excerpt of three tone groups, as in:

(87) //3 she's /now //**4** twenty /one /years /old //**4** and /studying to be a /doctor //…

One NS commented that a low-rise (tune 3) was perfectly appropriate here for the beginning of a list. The next two tone groups were a continuation of the list in which the speaker emphasised by using a fall-rise. Another NS rated the first and second tone group a 4 for each from the scale of 5 (very appropriate). The rater explained that the use of his rises was weird in this context because it seemed that the speaker hesitated and had to think about the information to add in order to describe the event about his own daughter. Two of the NS raters in this panel of judges independently suggested that the speaker invented the story about his daughter because there were hesitations and uncertainty conveyed through the use of tune. Therefore, they were skeptical about the information he gave.

4.4.2 Tune of the EFL-High

Tune 1: Falling

A fall was also used in the EFL-High to express finality, as in:

(88) //3 Me /and /my /friend /<u>went</u> //**1** to /Chiang /<u>Mai</u>. //

This learner used a low-rise to signal that there was more to come and continued the story and ended it with a fall when the sentence was complete.

(89) //3 I /<u>write</u> my po/em //3 with/out /<u>hope</u> //**1** that will /be a/<u>ward</u>. //

The example in (89) was another case where a low-rise was used when there was more information to come and a falling tune signalled the end of the sentence.

However, there were some deviations from the NS where the learners used a falling tune when the information was not complete, as in:

(90) //**1** the /<u>one</u> //**1** <u>wo</u>man in the /world //**1** she /is /<u>stronger</u> /than /<u>me</u>. //

Example (90) illustrates the inappropriate use of a fall when the message was not complete. A fall was dominantly used by this speaker who used a low-rise in only one out of the 15 tone groups of the excerpt.

One interesting result found in the EFL-High group is the attempt not to be atonal. From the rating of the appropriateness of tune, a few EFL-High learners were criticised as stagey and unnatural because they deliberately projected the tune. The panel of NS judges reported that it was painful to listen to stagey speech. Figure 4.7 displays the sample of an EFL-High learner's performance of stagey speech.
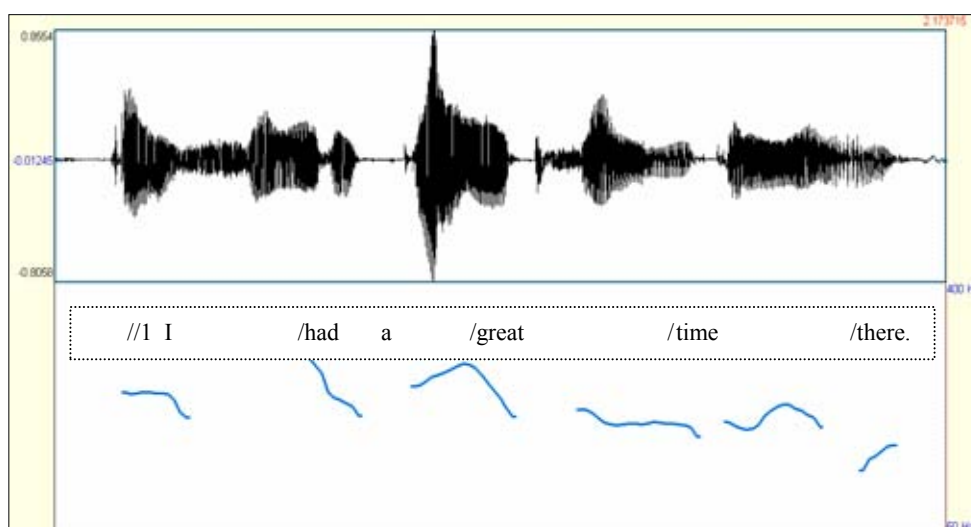
Figure 4.7 Performance of an EFL-High learner's stagey speech

(91) //1 I /had a /<u>great</u> /time /there. //

This EFL-High learner enunciated the stressed syllables very clearly, with the tonic syllable *there* slightly more salient. There was also a falling tune attached to every stressed syllable: *had, great, time, there*. This learner received low ratings for the use of tune. One NS commented on her speech that: *"Speaker is attempting not to be atonal and over-emphasising inappropriately idiosyncratic tone pattern."*

Tune 2: High-rising

A high-rising tune, which is usually used in questions either in interrogative statements or in sentences beginning with wh-word and polar questions, was also found in the spontaneous data of the EFL-High although the narration contained only statements. To cite some examples:

(92) //**2** I /met /two /guys.//**2** He's a /foreigner.//3 And a/nother /guy//3 he's /Thai.//

(93) //**2** I /don't ex/pect /that hap/pened //1 in /my /family. //

The data in (92) and (93) illustrate the cases where a high-rising tune was used inappropriately in statements. As shown in (92), this learner always used the rises. There was no falling tune found in the 15 groups extracted from her speech.

In (93), the speaker used a rising tune to signal non-finality, but a high-rising tune was used instead of a low-rising tune. None of the NS used a high-rising tune in the data because they were narrating a story which involved telling and giving information.

(94)…//3 <u>don't</u> /have //3 <u>father</u> //**2** <u>mother</u>. //

This is another inappropriate use of a high-rise in a statement where a fall should be used.

Tune 3: Low-rising

The frequency of the use of a low-rising tune came second after a falling tune in the EFL-High speech spontaneous speech data. Similar to the NS group, this tune was used by the EFL-High to express non-finality, as in:

(95) //**3** First /<u>day</u> //**3** we /<u>go</u> //**3** to /Chiang /Mai Universi/<u>ty</u> //**3** for /<u>test</u> //1 but /nobo/dy /pass the /<u>test</u>. //

(96) //**3** I /made //**3** appli/cation //1 at the /centre my/self. //

However, in some cases the learners used a low-rise inappropriately where a fall should be used and vice versa, for example:

(97) //**3** Three //1 years //**3** a/go //1 I /have to /go /to //**3** some /countries //**3** in /Southeast /Asia. //

The last chunk of speech was the end of the sentence but it was said with a low-rise. In the previous tone groups, this learner tended to use a low-rise and a fall incorrectly. The same speaker also used a low-rise and a fall appropriately in some tone groups, as in:

(98) //**3** That coun/try /is // 1 Ko/rea. //

Tune 5: Rising-falling

A rise-fall was not found in the NS and the EFL-Low group. It was used by two learners in the EFL-High, as in:

(99) //3 One of the /most //**5** memorable /event //**5**ˌ in /my /life //**5** uh../happened //

//3ˌ when /I //1 was a /second /year /student //3 at //**5** Silapa/korn Uni/versity. //**5** At /that /time //3 I //1 had /many /friends. //

This learner used a rise-fall in five tone groups in the excerpt of his 15 tone groups in the data. The example in (99) illustrates his attempt to vary the tunes in this sentence with a low-rise, a rise-fall and a fall. He received low scores from a panel of three NS judges who rated the appropriateness of tune. One of the judges remarked that *"I have no idea what's going on here, but the tone of every word is off. The whole excerpt sounds dead and insincere. He's not emotionally connected to this."*. Another judge named this tune pattern as ‿a sing-song pattern'. The spectrogram and the pitch of his speech is displayed in Figure 4.8:

//3Uh. /one of the /most // //5 memorable /event // //5 in /my /life // //5 happened //
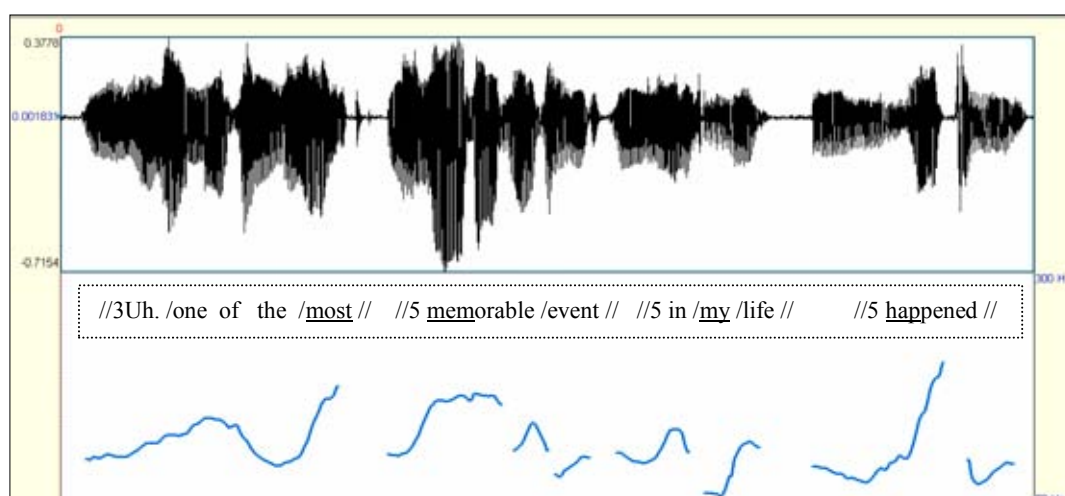
Figure 4.8 Inappropriate use of rising-falling tune in EFL-High

(Singsong pattern)

Although this learner has high English proficiency, his use of tune in spontaneous speech received low scores from the judges because of his idiosyncratic use of a rising-falling tune.

4.4.3 Tune of the EFL-Low

As shown in Table 4.6, there are three tunes used in the EFL-Low group: a fall, a low-rise and a rise-fall, as follows:

Tune 1: Falling

Similar to the EFL-High group, a falling tune dominated in the EFL-Low group. There were a few instances where a combination of a low-rising tune conveyed non-finality followed by a falling tune for the meaning of finality, as in:

(100) //3 I /want to /go /there //**1** very /much. //

(101) …//3 this /trip //3 I /went //3 to cow/boy /night //3 festival //**1** at Sa/rabu/ri /Province. //3 I /went to /my /close /friend //**1** a/bout /seven /person. //

Tune 3: Low-rising

A low-rise was also frequently used by the EFL-Low learners. However, most cases occurred unsystematically, as in the following examples:

(102) //**3** Have /my /father //**1** my //**3** brother //**1** my /grand //**3** my /sister// **1** brother //…

(103) //**1** We /are /three //**3** tea/cher //**1** and for/ty //**3** student. //

A low-rise in (102) and (103) tended to be used interchangeably with a fall. Sentence (103) exhibits the opposite use of a fall for non-finality and a low-rise at the end of a sense-group and a sentence for finality.

Additionally, the most striking result emerging from the data is that the uses of a falling tune and a low-rising tune was mostly linked to the Thai accented English spoken with a Thai tone assigned to each syllable, for example:

(104) //**3** I /went /in/to the/ house //**1** and /I /walk a/round //**3** to /see /who /is /in a /house. //

(105) //**3** This /school /is //**1** E/RIC Cen/tre //**1** in Chai/nat //**1** last /Thursday. //

(106) //**3** We /went //**3** by /bus. //

The comments from a panel of three native speaker judges provide the evidence that the learners seemed to speak English using a Thai tone. In these cases, the learners assigned a high Thai tone to words *house*, *is*, *went* and *bus*, which was commented as very non-native by the English judges. Moreover, the judges remarked that the learners assigned equal stress on all syllables and a sing-song pattern usually occurred in the EFL-Low group. To cite some examples:

(107) //**3** My pa/rents /tell /me a/bout //…

(Comment: *Rise/fall/rise/fall = sing-song pattern*)

(108) //**3** I /like //**3** mo/dern /house. //

(Comment: *„like' = Thai tone, equal stress on all syllables*)

The so-called sing-song pattern can be clearly seen in the following spectrogram.
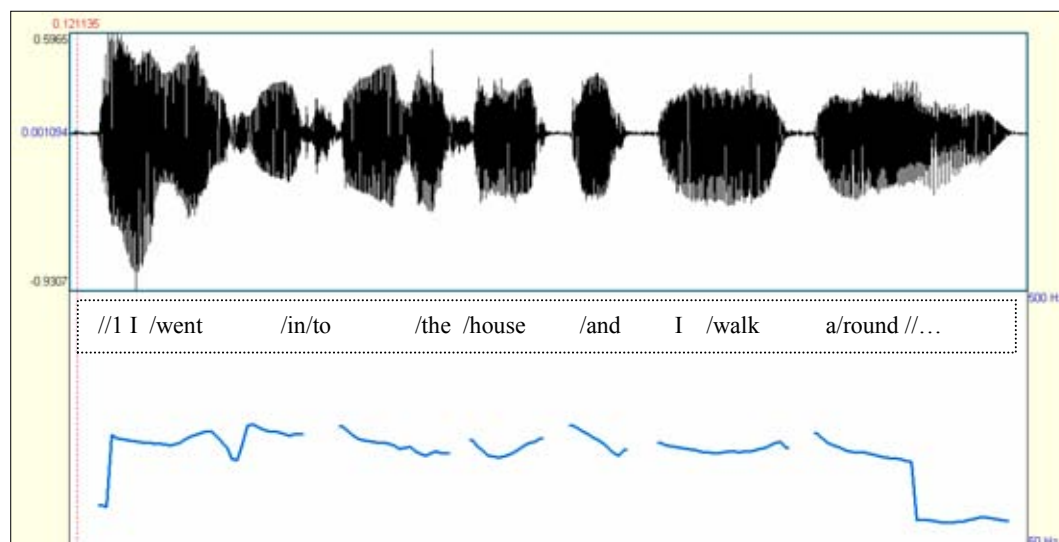
Figure 4.9 Sing-song pattern (rise-fall-rise-fall) in the EFL-Low

Tune 5: Rising-falling

A rise-fall was found in two tone groups in an EFL-Low learner. However, the comments from the panel of NS judges indicated that it was used inappropriately, as in:

(109) //**5** One /day //**5** my /friend //3 in/vite me //1 to /go /to the /beach. //

(Comment: *It's a sing-song pattern although she's trying but the intonation is unnatural, possibly linked to the pauses in strange places.*)

4.4.4 Summary of tune

Five primary tunes were found in the data on spontaneous speech: a fall, a high-rise, a low-rise, a fall-rise and a rise-fall. The performance of the EFL-High in terms of tune, to a large extent, conformed to that of the NS group. However, there was a wide variation in the performance of the learners in this group. From the discussion above, it can be seen that the learners selected an inappropriate tune at times. The amount of data used for analysis was too trivial to lead us to conclude if the learners varied the tune randomly or they knew the meaning attached to it.

Additionally, there were also a number of deviations in the EFL-High group. The learners attempted not to be atonal by varying the tunes, but some of them were tonally incorrect. Sometimes, they used the tune accurately; other times, however, they misused it.

In contrast, the EFL-Low learners mainly used a fall and a low-rise, with a few instances of a rise-fall found in one learner. The learners in this group mostly spoke in very small chunks, and the Thai tone was attached to some English words. The comments from the judges revealed that the EFL-Low's speech was difficult to score in terms of the appropriateness of tune because of their speech was incomparable to the NS norm.

4.5 Scores for the productions of EFL participants on tonality, tonicity and tune

This study was undertaken to investigate the productions of English intonation patterns of Thai EFL learners as well as the perceptions of the native speakers of English. To prepare the data for further analysis in the perception part, the performances of the EFL-High and EFL-Low on the three systems of intonation—tonality, tonicity and tune—were scored using the performance of the NS control group as a norm for tonality and tonicity. There was a variation in the data on spontaneous speech determined to elicit the use of tune. Thus, a panel of three NS judges who were experienced EFL teachers were employed in the scoring procedure. The scores for each system of intonation are displayed in the following tables:

Table 4.7 Percentage of scores for tonality in the EFL-High and the EFL-Low groups

Group	Min	Max	Mean	SD
EFL-High	40.90	93.83	66.74	13.88
EFL-Low	2.90	54.24	21.70	13.43

Table 4.8 Percentage of scores for tonicity in the EFL-High and the EFL-Low groups

Group	Min	Max	Mean	SD
EFL-High	25.00	83.33	56.94	15.72
EFL-Low	16.67	62.50	39.77	11.19

Table 4.9 Percentage of scores for tune in the EFL-High and the EFL-Low groups

Group	Min	Max	Mean	SD
EFL-High	40.00	75.56	55.56	9.58
EFL-Low	22.22	73.33	45.92	14.92

As shown in Tables 4.7 - 4.9, the EFL-high group received higher mean scores than the EFL-Low for the three intonation systems. The great values of standard deviations indicate that there is a range of within-group variability in both groups of learners. Among the three systems of intonation, the EFL-High scored highest in tonality, followed by tonicity and tune. On the other hand, the mean scores for the EFL-Low were in the inverse order: tune, tonicity and tonality. It is interesting to note that the EFL-Low learner who scored highest for tune (73.33%) was very close to the EFL-High (75.56%), and the mean scores of both groups are not significantly different (EFL-High: 55.56%; EFL-Low: 45.92%).

Table 4.10 Score rankings of the intonation productions of tonality, tonicity and tune in the EFL-High and EFL-Low groups

Rank	Learner	Intonation scores (300)	Percentage	Attitude scores (50)	Mean and SD of attitude scores
1	EFL-H13	218.14	72.71	43	
2	EFL-H15	215.53	71.84	46	
3	EFL-H4	211.61	70.54	41	
4	EFL-H5	200.48	66.83	43	
5	EFL-H2	198.22	66.07	37	
6	EFL-H9	193.51	64.50	43	
7	EFL-H14	192.85	64.28	45	$\bar{x}$ = 43.5
8	EFL-H3	185.84	61.95	40	SD = 3.34
9	EFL-H6	179.38	59.79	46	
10*	EFL-L11	177.57	59.19	45	
11	EFL-H10	165.12	55.04	43	
12	EFL-H1	163.78	54.59	50	
13	EFL-H12	156.45	52.15	47	
14*	EFL-L13	150.50	50.17	40	
15	EFL-H11	136.88	45.63	46	
16	EFL-H7	135.62	45.21	42	
17	EFL-H8	135.22	45.07	48	
18	EFL-L15	132.6	44.2	37	
19	EFL-L12	117.49	39.16	40	
20	EFL-L3	117.26	39.09	38	
21	EFL-L5	116.16	38.72	43	
22	EFL-L9	110.41	36.80	41	$\bar{x}$ = 41.43
23	EFL-L7	100.37	33.46	44	SD = 3.61
24	EFL-L1	98.15	32.71	39	
25	EFL-L8	97.60	32.53	44	
26	EFL-L14	91.21	30.40	43	
27	EFL-L4	81.58	27.19	37	
28	EFL-L6	77.35	25.78	45	
29	EFL-L10	72.10	24.03	35	
30	EFL-L2	70.51	23.50	41	

The score rankings indicated that the majority (n = 13) of the EFL-High learners outperformed the EFL-Low learners, with the highest intonation score being 218.14 (72.71%) and the lowest intonation score being 70.51 (23.50%). An interesting

finding is that two learners from the EFL-Low group were in higher ranking than some EFL-High learners. That is, the EFL-L11 (rank 10th, score: 177.57 or 59.19%) and the EFL-L13 (rank 14th, score: 150.50 or 50.17%). One possible explanation for this can be attributed to their attitudes towards pronunciation as resported in Part 3 of the Questionnaire (Appendix G). Out of the total score of 50, EFL-L11 received the attitude score of 45 whereas EFL-L13 obtained a score of 40, which is a relatively high score. Their concern for pronunciation may result in their attempt to produce intonation patterns close to the target language. Another intriguing finding is that these two EFL-Low learners also outscored EFL-H1 (rank 12th, score: 163.78 or 54.59%) who received the highest score from the Questionnaire. This learner also got the highest score (50) from Part 3, indicating that she had a very positive attitude towards good pronunciation. A likely explanation can be the effect of quality of teaching or transfer of training which made the EFL-H1 who had extensive amount of experience and very positive attitudes outperformed by the EFL-L11 and EFL-L13.

Looking at the mean values of the attitude scores, the values were calculated for the learners who received more than 50% of the intonation scores, which is considered the passing score (ranks 1-14). The other group (ranks 15-30) contained those who scored less than 50%. It was found that the mean attitude scores of the passing group were slightly higher ($\bar{x} = 43.5$, $SD = 3.34$) than the other group ($\bar{x} = 41.43$, $SD = 3.61$). Thus, the overall attitude scores may be inconclusive to establish the relationship between the attitudes and the intonation production scores of the learners in this study.

4.6 Summary

This chapter presents the findings on the production part of the study, concerning tonality, tonicity and tune. The data were presented quantitatively followed by qualitative analysis with reference to the NS control group as a norm for comparison. Each learner's performance was scored for each dimension for measuring the correlations between the intonation scores and intelligibility scores and comprehensibility ratings in the perception study in the next chapter.

CHAPTER V
COMPARISON OF THE INTELLIGIBILITY AND COMPREHENSIBILITY OF THE NATIVE SPEAKERS AND THAI LEARNERS

5.1 Introduction

This chapter presents the findings from the perception part of the study concerning the intelligibility and comprehensibility of the production data of the participants. The aim of this chapter is to report the correlations between the three subsystems of English intonation—tonality, tonicity and tune—and intelligibility (the extent to which the message is understood), and comprehensibility (the listener's perception of the degree of difficulty in understanding).

5.2 Judgements for intelligibility

The perception for the intelligibility of intonation was primarily based on *A test for non-native comprehension of intonation in English* by Cruz-Ferreira (1989). The test was designed to assess non-native learners' comprehension of English intonation. The intelligibility test in this study expanded from Cruz-Ferreira's test to include new items for tonality, tonicity and tune. Each sentence could be spoken with different intonation patterns to reflect at least three possible interpretations. To limit the number of speech stimuli to avoid flagging interest and a tiring effect in the judges, three Thai learners in each group were randomly selected to read the nine test sentences in the intelligibility test as a part of the production task. One native speaker control was added to read the same sentences. They were given the intended interpretations for each sentence they were to read and were instructed to read the sentence to reflect the meaning given. These speech stimuli were used in the perception study of native speaker judges. The judges listened to each sentence which was randomised for speakers and sentences, and selected the interpretation from the three alternatives corresponding to the sentence they heard. One blank space for alternative d. was provided for the judges to write their own interpretations in case they could find any interpretation to match the meaning of the sentence.

The scores for accurate interpretations derived from the perception of the native English judges are shown in the table below.

Table 5.1 Overall percentage of accuracy from the intelligibility dimension for the NS, the EFL-High and the EFL-Low groups

Percentage of Perception Accuracy Production Group	*n*	Total items used for Perception	Accurate perception	Percentage of Accuracy
NS	1	90	80	88.89%
EFL-High	15	270	102	37.78%
EFL-Low	15	270	88	32.59%

Table 5.1 displays the overall findings of the intelligibility of English intonation across the three groups of participants. Native speaker judges (*n* = 10) with different amounts of contact with Thai learners were recruited to listen to the speech stimuli of sentence reading determined to elicit the intelligibility in terms of the meaning of intonation. The judges were divided into two groups: half experienced and half inexperienced judges. The experienced judges were EFL teachers with extensive amount of exposure to Thai learners (NSJ-High). The less experienced or inexperienced judges were those who had less experience with Thai learners (NSJ-Low). The finding revealed that the NS production added to ensure reliability of the judgement obtained the highest percentage of accuracy (88.89%), 80 correct items out of 90 items from the judges. The EFL-High received slightly higher percentage of scores (37.78%), as compared to the EFL-Low (32.59%).

Table 5.2 Comparison of the judgements of the NSJ with high experience and the NSJ with low experience

Perception of Accuracy Production Group	NSJ-High			NSJ-Low		
	Total items	Accurate Perception	Percentage of Accuracy	Total items	Accurate Perception	Percentage of Accuracy
NS	45	35	77.78%	45	44	97.78%
EFL-High	135	56	41.48%	135	46	34.07%
EFL-Low	135	46	34.07%	135	42	31.11%

Table 5.2 indicates that the NSJ-High interpreted the NS speech less correctly than did the NSJ-Low (97.78%, as opposed to 77.78%). However, the NSJ-High scored higher in the interpretations of sentence reading of the EFL-High and EFL-Low than the NSJ-Low did. These findings support that perception is influenced by the degree of familiarity. Among the three production groups, the NS obtained the greatest percentage of accuracy followed by the EFL-High and the EFL-Low in the judgments of both groups of judges.

The details of accurate items and percentage of perception accuracy from the nine test items, comprising of three items from tonality, tonicity and tune, are shown in Table 5.3.

Table 5.3 Percentage of accuracy for tonality, tonicity and tune for the production of NS, the EFL-High and the EFL-Low groups

Group	Tonality		Tonicity		Tune	
	n	%	*n*	%	*n*	%
NS	26 (30)	86.67	30 (30)	100	24 (30)	80
EFL-High	47 (90)	52.22	29 (90)	32.22	26 (90)	28.89
EFL-Low	40 (90)	44.44	15 (90)	16.67	33 (90)	36.67

Table 5.3 illustrates the details of correct items in the perception study for the intelligibility dimension. The total number of items was indicated in brackets. The test items were the read speech of the scripted sentences by one NS and three selected EFL-High and three EFL-Low learners. The participants were instructed to read the sentences to reflect the given meaning for each item. The test was designed to examine the different interpretations resulted from the differences in tonality, tonicity and tune. The NS production received the highest percentage of accuracy in the three systems. The order of accuracy of the NS speech production is tonicity (100%), tonality (86.67%) and tune (80%). The EFL-High outperformed the EFL-Low in tonality (52.22, as opposed to 44.44%) and tonicity (32.22%, as opposed to 16.67%). With regard to tune, the EFL-Low obtained greater percentage of accuracy (36.67, as against in the EFL-High 28.89%). The order of accuracy of the EFL-High is tonality,

tonicity and tune. Tonality also came first for the EFL-Low, followed by tune and tonicity.

The results of the perception accuracy for the NS who scored highest for tonicity may be explained by the fact that the quality of the stressed syllable in the tonic word was easily perceived by auditory perception. The pause, on the other hand, was too subtle to perceive. In reading the sentences, the speakers were instructed to read them as naturally as possible. Thus, there was no attempt to make the expected feature explicit or to lead the listeners to a particular interpretation in the perception. In terms of tune, it was the most difficult dimension probably because the sentences were spoken in decontextualised nature, which provided no clue for the accurate perception.

With respect to the tonality dimension of which both groups of learners received the highest percentage of accurate perception, one possible explanation is that two sentences out of three in the test required a neutral meaning with no tone group boundary assigned. Therefore, the learners just read the sentence with no break, leading to the accurate perception of the judges. The findings that the EFL-High scored better for tonicity than for tune, and the EFL-Low outperformed for tune than for tonicity, were inconclusive due to the small sample size in this study. In addition, the disadvantage of the test itself which was in a multiple-choice format may encourage guessing although one blank alternative was provided for the judges to write their own interpretations.

Table 5.4 Percentage of accuracy of the judgements of NSJ-High and NSJ-Low on tonality, tonicity and tune across three groups of participants

Group	NSJ-High						NSJ-Low					
	Tonality		Tonicity		Tune		Tonality		Tonicity		Tune	
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
NS	11 *(15)*	73.33	15 *(15)*	100	10 *(15)*	66.67	15 *(15)*	100	15 *(15)*	100	14 *(15)*	93.33
EFL-High	24 *(45)*	53.33	19 *(45)*	42.22	13 *(45)*	28.89	23 *(45)*	51.1	10 *(45)*	22.22	13 *(45)*	28.89
EFL-Low	20 *(45)*	44.44	6 *(45)*	13.33	20 *(45)*	44.44	20 *(45)*	44.44	9 *(45)*	20	13 *(45)*	28.89

Table 5.4 compares the accurate perception of the judges with extensive experience to Thai learners (NSJ-High) and judges with minimal experience (NSJ-Low). It can be seen from the table that the NSJ-Low interpreted the NS production more correctly than the NSJ-High did, with only one incorrect item for tune. Comparing the percentage of accurate perception of the judges across the three groups, the NS productions received the greatest percentage of correct perceptions as compared to those of the EFL-High and EFL-Low in all aspects: tonality, tonicity and tune in both groups of judges.

For the tonality system, the percentage of accuracy for the EFL-High from the NSJ-High (53.33%) was only slightly different from that obtained from the NSJ-Low (51.11%). The EFL-Low received equal number of correct items for perception from both groups of judges (20 items or 44.44%).

Regarding tonicity, the NSJ-High interpreted the EFL-High more correctly than the NSJ-Low (42.22%), comparing to the NSJ-Low (22.22%). On the contrary, the NSJ-Low (20%) outperformed the NSJ-High (13.33%) for the EFL-Low speech.

Concerning tune, the EFL-Low obtained more correct interpretations from the NSJ-High (44.44%), as opposed to the EFL-High (28.89%). The NSJ-Low, on the other hand, interpreted 13 correct items (28.89%) for both groups of learners.

To summarise, the EFL-High received higher or equal scores compared to the EFL-Low for the three intonation systems in both groups of judges, except for tune. Regarding the order of accuracy percentage in the EFL learner groups for each intonation system, the order is tonality, tune and tonicity in both groups of judges and learners. An exception to this was the performance of the EFL-High judged by the NSJ-High where the order of accuracy is tonality, tonicity and tune. Comparing the accurate perception of the NSJ-High and NSJ-Low for the production of EFL learners, the NSJ-High obtained greater or equal percentage of accuracy for all the three systems of intonation, except for tonicity of the EFL-Low where the NSJ-Low did better.

Table 5.5 Number of correct items in the tonality part (items 1-3) across three groups of participants

Item (Expected performance)	NSJ-High			NSJ-Low		
	NS	EFL-High	EFL-Low	NS	EFL-High	EFL-Low
1. They've left the children. (//1 They've /left the /<u>chil</u>dren //)	3 (5)	12 (15)	11 (15)	5 (5)	9 (15)	9 (15)
2. He also translated the book. (//1 He /also trans/<u>late</u>d the /book //)	4 (5)	8 (15)	4 (15)	5 (15)	9 (15)	2 (15)
3. The man and the woman dressed in black are my friends. (//3 The /<u>man</u> //1 and the /<u>wo</u>man /dressed in /black //1 are my /<u>friends</u> //)	4 (5)	4 (15)	5 (15)	5 (15)	5 (15)	9 (15)
Total correct items	**11 (15)**	**24 (45)**	**20 (45)**	**15 (45)**	**23 (45)**	**20 (45)**

As shown in Table 5.5, on the whole the NSJ-Low indicated more correct perception for meaning for the NS production, comparing to the NSJ-High (15 vs 11 items). In case of correct interpretations in item 1, two NSJ-High judges agreed on the same answer *I can't believe that they left the children*. The total correct answers for the tonality part from the two groups of judges were not relatively different. However, upon examination of each individual item, the NSJ-High scored higher for the EFL-Low for items 1 and 2. Also, they interpreted more correct answers for the EFL-High's speech.

Since the participants were required to read the sentence to reflect the meaning given for each item, the incorrect interpretations may be a result of their performance. It was assumed that their performance in sentence reading reflect the meaning they wanted to convey. Although the intended meaning was written in English, it was accompanied by a Thai translation to ensure their understanding, especially for the low proficiency learners.

The answers the judges gave in the blank alternative *d.* provided for them to write their own interpretations indicated a high degree of conformity in the perception of the judges for the items they did not select the three given choices.

(1) //1ˬ The /<u>man</u> //1 and the /<u>wo</u>man /dressed in /black //1 are /<u>my</u> /friends //

For sentence (1), the expected interpretation was *The man and that particular woman dressed in black are my friends.* Some judges who did not select this answer appeared to agree in their perception, as shown below.

NSJ-High: They are my friends (not someone else's friends).

NSJ-Low: They are my friends, no one else here's friends.

This meaning was also in accordance with the learner's performance of which the tonic prominence was placed on *my*. Another example from an EFL-Low learner showed that the perception reflected the learner's performance:

(2) //3 <u>They've</u> //2 <u>left</u>//1 ˌ the chil/<u>dren</u> //

NSJ-Low: They've left the children (no one else has).

From the above mentioned cases in (1) and (2), although the judges' own interpretations agreed with the possible meaning for the actual performance of the learner, they received no score for this item. This is because the aim of this task is to assess the extent to which the message is understood by the listener. Therefore, despite the fact that the interpretation given by the judges matched the learner's performance, it was considered incorrect since it was assumed that the way the learner read the sentence was intended for the meaning given.

It is interesting to note that one EFL-High learner production received all correct perception from all judges for item 2 (tonality), as in:

(3) //1 he /also trans/<u>lated</u> the /book //

This may be due to the fact that this the performance was congruent with the expected tonality patterns for this test item.

Table 5.6 Number of correct items in the tonicity part (items 4-6) across three groups of participants

Item (Expected performance)	NSJ-High			NSJ-Low		
	NS	EFL-High	EFL-Low	NS	EFL-High	EFL-Low
4. She was trying to lose weight. (//1 She was /<u>trying</u> to /lose /weight //)	5 (5)	8 (15)	4 (15)	5 (5)	4 (15)	4 (15)
5. I'm flying to London tomorrow. (//1 I'm /flying to /<u>Lon</u>don to/morrow //)	5 (5)	6 (15)	2 (15)	5 (15)	1 (15)	2 (15)
6. I saw your sister at the market. (1 I saw /<u>your</u> /sister at the /market //)	5 (5)	5 (15)	2 (15)	5 (15)	5 (15)	3 (15)
Total correct items	**15 (15)**	**19 (45)**	**8 (45)**	**15 (45)**	**10 (45)**	**9 (45)**

The data in Table 5.6 shows that both groups of the NS judges had all accurate perception for tonicity for the NS production. The number of correct answers for items 4 and 5 obviously indicate that the NSJ-High selected more correct interpretations for both the EFL-High and the EFL-Low, comparing to the NSJ-Low. For item 6, the NSJ-Low selected more correct answers, but the number was not significantly higher. One EFL-High received all correct perception from all judges for item 6:

(4) //1ˌ I /saw /your /sister at the /market //

On the whole, the NSJ-High chose more correct meanings for the EFL-High (19 correct items), as compared to the meaning perceived by the NSJ-Low (10 correct items).

Table 5.7 Number of correct items in the tune part (items 7-9) across three groups of participants

Item (Expected performance)	NSJ-High			NSJ-Low		
	NS	EFL-High	EFL-Low	NS	EFL-High	EFL-Low
7. They'll soon be here. (//3 They'll /soon be /here //)	4 (5)	8 (15)	6 (15)	5 (5)	4 (15)	4 (15)
8. Did you take the money? (//2 Did you /take the /money //)	4 (5)	3 (15)	8 (15)	5 (15)	6 (15)	3 (15)
9. Do you want to borrow my car? (//1 Do you /want to /borrow my /car //)	2 (5)	2 (15)	6 (15)	4 (15)	3 (15)	6 (15)
Total correct items	**10** **(15)**	**13** **(45)**	**20** **(45)**	**14** **(45)**	**13** **(45)**	**13** **(45)**

As indicated in Table 5.7, the NSJ-Low scored higher than the NSJ-High for the NS production (14 items vs 10 items, respectively). Comparing the overall findings of the two groups of judges, the NSJ-High selected more correct interpretations for the EFL-Low (20 items vs 13 items). For item 7, the NSJ-High also scored higher for both groups of learners, comparing to the perception of the NSJ-Low. The NSJ-Low, on the contrary, outperformed the NSJ-High for items 8 and 9.

5.2.1 Summary of the intelligibility dimension

From the perception test for intelligibility based on intonation patterns of sentence reading, the NS production received the greatest percentage of accuracy (88.89%) from the NS judges, comparing to the percentage of accuracy of the EFL-High and EFL-Low groups. The NSJ-High exhibited higher degree of intelligibility for both groups of learners than the NSJ-Low. However, the most striking result is that the judges with less experience with Thai learners interpreted more correct answers for the NS. This can be attributed to the fact that the NSJ-Low judges were young university graduates who had minimal exposure to other foreign languages which may influence their perceptions. Furthermore, the NSJ-Low judges were outperformed by the NSJ-High who had more correct perceptions for both groups of learners. This finding supports the notion of *phonological bias* proposed by Burnham (1992) and Burham and Keane (1996). In their studies, it was found that speech perception was influenced by phonological bias, towards their own language, i.e., the subjects with phonological bias could make distinction between contrastive sounds in their own language better than the sounds that are not contrastive in their language. In the present study, the findings clearly indicate that the NSJ-Low had phonological bias against non-native accents.

5.3 The comprehensibility dimension

The degree of comprehensibility was assessed by perceptual judgements of native speaker judges (*n* = 10) who were the same group of judges for the intelligibility dimension. In this part of the perception test, they listened to the passage reading data of the EFL learners. The judges rated each speaker for the extent to which they perceived the speech easy to understand on a 5-point rating scale, where *1* means very difficult to understand and *5* means very easy to understand. The rating scores and percentage of scores of the EFL-High and EFL-Low are displayed in Table 5.8.

Table 5.8 Overall rating scores and percentage of comprehensibility scores of the EFL-High and the EFL-Low groups

Group	Total score	Raw score	Percentage
EFL-High	750	490	65.33%
EFL-Low	750	387	51.60%

The above table shows that the EFL-High obtained greater percentage of comprehensibility ratings (65.33%) from the native speakers' judgements than did the EFL-Low (51.60%). This indicates that the EFL-High's read speech data was perceived as easier to understand compared to that of the EFL-Low. The mean and standard deviation values of the rating scores are displayed in Table 5.9.

Table 5.9 Descriptive statistics of comprehensibility scores of the EFL-High and the EFL-Low groups

Group	N	Total score	Min	Max	Mean	SD
EFL-High	15	50	23	47	32.67	6.59
EFL-Low	15	50	13	38	25.80	5.29

Table 5.9 presents the rating scores of each group of learners, receiving from the NSJ-High and NSJ-Low. The EFL-High was rated more favourably than did the EFL-Low. In other words, the judges had less difficulty in understanding the EFL-High's learners' speech. Out of 50 scores of which each of the ten judges rated on a 5-point rating scale for each learner, the mean score for the EFL-High was 32.67 (*SD* = 6.59), with the lowest and highest scores being 23 and 47, respectively. The EFL-Low's rating scores ranged from 18 to 38 with a mean of 25.80 (*SD* = 5.29). The high values of standard deviations in both groups of learners indicate that there is a high degree of within-group variability among the learners in these two groups.

5.4 Perception for comprehensibility

The mean ratings of the experienced (NSJ-High) and less experienced judges (NSJ-Low) are compared in the following table.

Table 5.10 Judgements of the NSJ-High and the NSJ-Low on the degree of comprehensibility

Participants	NSJ-High				NSJ-Low			
	Min	*Max*	*Mean*	*SD*	*Min*	*Max*	*Mean*	*SD*
EFL-High	1	5	3.53	0.98	1	5	3.00	1.16
EFL-Low	2	5	2.92	0.82	1	5	2.24	0.98

From Table 5.10, the NSJ-High rated the read speech more favourably than the NSJ-Low did for both groups of learners. Furthermore, the EFL-High received higher ratings than the EFL-Low did from both groups of judges. This can be interpreted that the NSJ-High found the read speech of both groups of learners easier to understand than did the NSJ-Low. Comparing the EFL-High and the EFL-Low's speech, the NSJ-High and the NSJ-Low rated the EFL-High better in the degree of comprehensibility. The mean differences of the scores were computed by SPSS 16.0 using independent samples t-test, as shown in Table 5.11.

Table 5.11 Independent samples t-test results for judgements of the NSJ-High and the NSJ-Low

Participants	NSJ-High vs NSJ-Low		
	t	df	Sig.(2-tailed)
EFL-High	3.04	148	.003[*]
EFL-Low	4.60	148	.000[*]

[*] The mean difference is significant at the .05 level.

The t-test results show that the observed differences in the means of the NSJ-High rated the EFL-High (3.53) and the NSJ-Low rated the same group of learners (3.00) were statistically significant ($p = .003 < .05$). The mean differences of the EFL-Low from both groups of judges were also significant ($p = .000 < .05$).

In order to test whether the read speech of each group of learner affected comprehensibility in the judges, similar t-test was used, as shown in Table 5.12.

Table 5.12 Independent samples t-test results for comprehensibility ratings for the EFL-High and the EFL-Low groups

Participants	EFL-High vs EFL-Low		
	t	df	Sig.(2-tailed)
NSJ-High	4.17	148	.000[*]
NSJ-Low	4.32	148	.000[*]

[*] The mean difference is significant at the .05 level.

According to the t-test results, the differences between the two mean scores of each group of learners received from NSJ-High and NSJ-Low were significant (p = .000 < .05). Also, the NSJ-Low perceived the read speech of the EFL-Low more difficult to understand. Therefore, it was concluded that the read speech data of the learners correlated with comprehensibility ratings.

Upon examination of inter-rater reliability of English judges' ratings, Cronbach's Alpha coefficient was computed. The finding revealed good internal consistency (George and Mallery, 2003) in the judgements (α = .880), which suggests that the judges were highly consistent in their judgements.

The comprehensibility ratings were subjected to a two-way analysis of variance (ANOVA) with the judge experience (experienced, inexperienced) as a between-subjects factor and learner English language experience (high, low) as within-subjects factor. A 2x2 ANOVA revealed a significant main effect of the judges' experience ($F(1, 296) = 25.58$, p = .000, η^2_p = .080). The analysis also yielded a significant main effect of the learner English language experience ($F(1, 296) = 33.13$, p = .000, η^2_p = .101). However, there was non-significant interaction between the judge experience and the learner experience ($F(1, 296) = .760$, p = .384, η^2_p =.003), indicating that the main effects were not qualified by interaction between the two variables.

5.5 Correlations between the intonation scores and intelligibility and comprehensibility

A Pearson correlation coefficient was computed to assess the relationship between the total intonation scores derived from the performances on tonality, tonicity and tune of the EFL-High and EFL-Low, and the intelligibility scores and comprehensibility scores. The results are shown in Table 5.13.

Table 5.13 Pearson correlations between the intonation scores and intelligibility scores and comprehensibility ratings

	Intelligibility	**Comprehensibility**
Pearson Correlation	.784	.628**
Sig. (2-tailed)	.065	.000
n	6	30

** Correlation is significant at the .01 level (2-tailed).

As shown in Table 5.13, the correlation analysis indicated a moderate to high positive correlation between the intonation scores and comprehensibility ratings (*r* = .628, *n* = 30, *p* = .000). To be precise, the higher intonation scores the learners received, the comprehensibility ratings tend to increase. On the other hand, the intonation scores and intelligibility scores (*r* = .784, *n* = 6, *p* = .065) were highly correlated, but it was not statistically significant. Increases in intonation scores, therefore, were correlated with increases in the comprehensibility scores at a significant level. In conclusion, the performance of intonation in passage reading had an impact on the degree of difficulty in understanding (comprehensibility).

5.6 Summary

This chapter reports the results on the perception part of the study in terms of the degree of intelligibility and comprehensibility in native speakers' judgements. Also, the correlations of the two dimensions and intonation scores displayed in Chapter 4 are presented. The next chapter will summarise and discuss the findings of this study as related to the research questions addressed in this study. Pedagogical implications and recommendations for future studies will also be discussed.

CHAPTER VI

DISCUSSIONS AND PEDAGOGICAL IMPLICATIONS

6.1 Introduction

This chapter begins with the summary of the major findings, which are given in three sections: 1) intonation patterns and 2) intelligibility and comprehensibility, and 3) the discussions of the results. The pedagogical implications of the study are discussed. Then, the chapter ends with the limitations and recommendations for future research.

6.2 Summary of the study

This study was divided into two main parts: the perception study and the production study. The production study investigated the intonation features—tonality, tonicity and tune—of two groups of Thai EFL learners with high English language experience (EFL-High, n = 15) and low English language experience (EFL-Low, n = 15). The learners were recruited as a sample group by the scores on the English Language Experience Questionnaire distributed to English major students (n = 243) at Thepsatri Rajabhat University in Lop Buri, Thailand. The production tasks to elicit the data on tonality, tonicity and tune were: passage reading, dialogue reading and spontaneous speech, respectively. The recording session was conducted individually with each participant in a quiet room with only the researcher present, using a laptop computer and a high quality unidirectional handheld microphone. The participants were unaware of the purpose of the study. They participated in the study voluntarily and were remunerated for their time.

To provide a description of English intonation patterns for comparison purposes, this study also had a control group of native speakers of British English (NS, n = 3). The aim of the production study was to find the similarities and differences of the intonation patterns across the three groups: the NS, the EFL-High and the EFL-Low. The performances of the two groups of EFL-learners were scored on tonality and tonicity, based on the answer keys established from the performances of the NS performing the same tasks. Tune was scored on the appropriateness in the use by a panel of native speakers of British English who were experienced EFL teachers (n = 3). They rated a short excerpt from the recording of each learner

narrating an anecdote from the spontaneous speech task in the production study. The ratings were based on the appropriateness of tune on a 5-point rating scale, and the judges also had to justify the reasons for their ratings. The scores were, then, converted into percentage for each individual learner for tonality, tonicity and tune, and were used in establishing the correlations with the intelligibility and comprehensibility in the perception study.

The perception study consisted of two dimensions: intelligibility and comprehensibility. Intelligibility was operationalised as the extent to which the message was understood by the listener. The intelligibility test containing nine test items with three multiple choices was constructed. There were three items for each system of tonality, tonicity and tune. Each test item was a statement which could have at least three interpretations when uttering with different tonality, tonicity or tune. To avoid fatigue effects of the listeners, three EFL-High and three EFL-Low participants were selected by means of stratified sampling to provide the speech stimuli for the intelligibility test. They were instructed to read each sentence to reflect the meaning given. Their speech was recorded in the same session as the production part. Therefore, the six selected participants from the EFL-High and the EFL-Low groups performed an additional data elicitation task.

Regarding comprehensibility or the listener's effort in understanding, the speech data from passage reading of the EFL-High and EFL-Low were used as stimuli for comprehensibility with one NS stimulus added to ensure reliability.

Two groups of native speakers of British English were used as judges ($n = 10$) for the speech stimuli from the intelligibility test (for intelligibility) and passage reading (for comprehensibility). The judges were selected by Native English Speaker Background Questionnaire to recruit two groups of judges with different amounts of contact to Thai learners. The first group of native speaker judges (NSJ-High, $n = 5$) had a minimum of three years of experience in teaching English to Thai learners. The other group of judges (NSJ-Low, $n = 5$) were those who had minimal experience in teaching Thai learners. The judges in each group were quite homogeneous in that the former had extensive experience with Thai learners and the latter were teacher trainees who had one-week experience teaching Thai learners and arriving in Thailand for three to four weeks prior to the study. This study was designed to determine the

effect of familiarity with a particular L2 accent on understanding; thus, two groups of judges were recruited for the perception study.

Concerning the intelligibility dimension, the speech stimuli for the perception study were 63 utterances (9x3 EFL-High + 9x3 EFL-Low + 9x1 NS). The speech stimuli for comprehensibility were 31 read speech from the passage reading task (15 EFL-High + 15 EFL-Low + 1 NS). All the stimuli for each dimension were normalised by comparing and adjusting perceived loudness and randomised. For intelligibility, the judges listened to each utterance and select their interpretation of meaning from the three alternatives given with a space provided for each item to write their own interpretation. Regarding comprehensibility, the judges listened to the stimulus of each speaker reading a short passage and rate the degree of difficulty in understanding on a 5-point rating scale. The listening session was self-paced using a laptop computer and high fidelity headphones.

6.3 Findings

The goal of this study is to examine the production of the intonation features of Thai learners of English who are in different developmental stages, and to explore the perception of native speakers towards each group of learners in different aspects. The production part of this study was addressed to the following research questions:

1) What are the English intonation patterns of Thai learners with low and high language experience in terms of tonality, tonicity and tune?

2) What are the similarities and differences between the English intonation patterns of Thai learners and native speakers?

3) What are the similarities and differences between the English intonation patterns of Thai learners of English with low and high language experience?

The overall findings suggest that the performance of the Thai learners with high language experience (EFL-High) was more similar to that of the native speakers of English ($n = 3$) recruited to perform the same data elicitation tasks to establish the norms for analysis. The results of the each intonation system of the EFL-High and the EFL-Low, as compared to the NS control group can be summarised as follows:

6.3.1 Tonality

Regarding tonality, the EFL-High assigned nearly equivalent average length of tone groups in passage reading to that of the NS. Increased sentence complexity had an impact on the deviations of the EFL-High's performance from the NS group. Similar to the NS tonality patterns, the location of tone group boundaries in the EFL-High group largely corresponded with syntactic units. In addition, the EFL-High had more difficulty with rhythmic group division, as compared to their performance on tone group chunking. An obvious problem was the placement of stress on function words, even in learners who obtained very high scores. The high values of standard deviations revealed that there was a wide variation in the learners in the EFL-High group.

As for the EFL-Low learners, the data showed that they assigned shorter tone groups in passage reading. The average length of their tone groups was 2.3 words per tone group, as compared to 3.99 words in the NS and 3.15 words in the EFL-High. This finding is consistent with the result of previous studies with learners from different L1 backgrounds: Luksaneeyanawin (1983) with Thai learners, Hewings (1995a) with Indonesian learners, Riazantseva (2001) with Russian learners, Rui (2007) with Chinese learners, and Diez (2008) with Spanish learners, to name a few. This reflects the function of interlanguage and L2 abilities which are linked with reading ability (Johnson & Moore, 1997).

The placement of tone group boundaries in the EFL-Low learners also showed a great tendency of not relating to syntactic units. There were some occurrences of pauses which separated the syllable within the same word, for example, saf//er, us//ing. The performance of the EFL-Low obviously indicates that the learners struggled with the pronunciation of each word. They focused on the accuracy of reading each word, and failed to plan their speech in terms of information management. Unlike the NS and the EFL-High whose tone group boundaries were located before conjunctions and prepositions, the EFL-Low learners seemed to pause after conjunctions and prepositions. This feature of tonality, to a large extent, was only found in the EFL-Low group. As discussed earlier that they had problems with pronunciation, pausing after conjunctions and prepositions can be the positions they took for a rest before reading the next chunk of information. Another possible

explanation is that the unfamiliar words may occur after these positions; thus, the learners paused to figure out the pronunciation. For example,

…// has no broken or // cracked parts //

...// for the most part on // following // certain // safety //rules //

Furthermore, this may be a result of their low English proficiency; therefore, the EFL-Low learners focused on the form rather than the content of the passage.

The rhythmic group division was even more problematic for the EFL-Low learners. Almost every syllable was stressed. Within the same word, the perceived difference of stressed and unstressed syllable was not very clear. It is interesting to note that the high values of standard deviations for the errors in rhythmic group boundaries suggest a wide within-group variation.

Taken together these findings on tonality, it can be concluded that the EFL-High's read speech flew more smoothly and fluently, reflecting the chunking of speech into units based on grammatical units. The EFL-Low learners reflect a typical characteristic of Thai accented English with equal stresses on almost every syllable. Also, they paused more frequently at unusual places without a marked meaning. The differences in the EFL-learners in the High and Low experience group demonstrate the difference in their proficiency. The EFL-High learners who have more English language experience performed more similarly to the norms in the target language, English, whereas the EFL-Learners indicate a more native language based performance, reflecting more Thai accented English patterns.

6.3.2 Tonicity

The NS performance on dialogue reading indicated conformity in most tokens. Although the assignment of tonic syllables depends on the perception of the speaker, the NS speech data shows that they seemed to agree for most of the cases. Variations of tonic prominence within the NS group were related to the differences in tone group chunking. Additional tone groups were accounted for the differences in tonic syllables in the NS group

The EFL-High learners had a higher percentage of accuracy in tonicity, compared with that of the EFL-Low Learners. The EFL-High's performance demonstrated more similar tonicity patterns to those of the NS. The EFL-High had

fewer occurrences of assigning additional tone groups, as compared to the EFL-Low learners, who had difficulty with tonality patterns as mentioned earlier. Common errors shared by both groups of learners are: the misplacement of word accent, the misplacement of tonic syllable and the assignment of additional tone groups. The difference between the two groups is the absence of a tonic syllable which was only found in the EFL-Low group's data. The learners enunciated each syllable with equal weight in terms of stress; thus, no tonic syllable was perceived.

The misplacement of tonic syllables reflects the Thai learners' lack of awareness of how tonicity functions in conversational speech. The misplaced tonic prominence sometimes resulted in a marked meaning in the utterance although it was not the learners' intention. For example, the tonic syllable placed on *suppose* or *so* in *I suppose so*, can generate different impressions in the native speaker listeners. The former one expresses irritation and reluctance whereas the latter implies resignation of the fact.

6.3.3 Tune

The EFL-High exploited the widest range in the choice of tunes in their spontaneous speech. Whereas the NS used a fall, a low-rise and a fall-rise, the EFL-High learners selected a fall, a high-rise, a low-rise and a rise-fall. The EFL-Low used a fall, a low-rise and a rise-fall. This finding was surprising in that the EFL learners exhibited the attempt to vary the tune of their speech in a different manner from the NS did.

Upon examination of the meaning of tune found in the NS spontaneous speech data, a low-rise was used to indicate non-finality and a fall was used to convey finality of a sense-group or a sentence. A fall-rise was found in one NS data who described his daughter's birth and his pride about her. A fall-rise commonly signals the meaning of reservations, implications and tentativeness. The panel of NS judges who rated the appropriateness of tune remarked that they were not certain if this NS who gave information about his own daughter was telling the truth. The skeptical impression of this speaker may stem from the fact that a fall-rise implies uncertainty and hesitations. Two NS judges in the panel, who conducted the ratings independently, agreed that they did not believe the story of this speaker. They commented that a fall-rise was not

appropriate in this context since it signalled uncertainty of the speaker about the information. Also, he paused at unusual places. A plausible explanation for the use of inappropriate tune in the NS speech can be accounted for by the experimental setting of this study. Speaking in front of a microphone with awareness that his speech was being recorded may create frustration in the speaker. Therefore, the hesitation and uncertainty was displayed through the use of tune which came from his intuition. However, if it was true that the speaker invented the story, it was revealed through the use of tune in his speech. The results support the theory of intonation "Convolution" (Luksaneeyanawin, 1993, 1998) which suggests that this intonation pattern signifying "Contrariety" or "Conflict" between the speaker and the hearer or within the speaker himself. According to Luksaneeyanawin (1998), the Convolution pattern is the mixed pattern of the falls and the rises which is a contradiction of finality and non-finality, e.g. a disagreement in the speaker's mind as shown in the finding of this study.

Apart from a fall and a low-rise, the use of a high-rise and a rise-fall in this group of learners clearly indicated that the learners attempted to make use of the tune available in English although they used them inappropriately. On the other hand, the majority of the EFL-Low learners used a fall and a low-rise. A rise-fall was selected by one learner in two tone groups of her spontaneous speech. The speech data of the EFL-Low learners contained a number of English words spoken with a Thai tone, as compared to a minimal number in the EFL-High speech. This is supported by the comments from the judges who rated the appropriateness of tune that the learners seemed to use a Thai tone in their speech.

From the performance of the Thai learners in telling an anecdote, three types of tunes can be specified from the comments of the three native speaker judges rating the appropriateness of tune. The first group is the stagey speech. This type of speech may be perceived by other non-native listeners as having good intonation. To the native speakers' ears, however, at least from the three judges in this study, reported that it was painful and irritating to listen to this kind of English speech. This is because the learners seemed to overemphasise the tune by deliberately projecting it, and this resembled a poorly staged performance. The majority of EFL-High learners tend to fall into this category. Their speech was not flat-pitched, and they attempted to avoid being atonal. This phenomenon can be attributed to the EFL-High learners'

concern for good pronunciation (See Table 3.3, Chapter 3). Thus, they may try to imitate native speakers' speech by varying the tunes unsystematically, which is not appropriate in narratives. The second type is the typical Thai-accented English spoken with Thai tones. This group of learners also received lower ratings in terms of appropriateness in the use of tune by the English judges. The judges reported to have difficulty in deciphering the meaning of the tune because of the Thai tone interference. The two types of tunes aforementioned can be said to be in a marked form. The first stagey speech was marked in terms of emphasis while the second type was marked because of influences from tones in Thai. The last type of tune patterns was the neutral speech which contained minimal influence of Thai tones or stagey unnatural pitch patterns. This type of speech was found in both the EFL-High and EFL-Low learners. These learners were likely to obtain above average to high rating scores; thus, it should be the goal for non-native learners.

An interesting observation of the learners' performance in terms of tune is that the learners, especially in the EFL-High group were likely to act. Their spontaneous speech did not seem to reflect the same manner they perform in a natural conversation. This can be explained by the artificial setting of this study. The participants realised that their speech was being examined for some research purposes. In the view of Monahan and Fisher (2010), this phenomenon is known as observer's effects. Although it was attempted to minimise the effects by allowing the participants to control their own recording, the staged performances were almost inevitable.

With respect to the scores for tonality, tonicity and tune patterns based on the comparison with the NS norms, the EFL-High learners obtained high mean scores than the EFL-Low did for the three intonation systems. To illustrate, the EFL-High scored highest in tonality, followed by tonicity and tune. Unexpectedly, the mean scores of the EFL-Low were in inverse order: tune, tonicity and tonality. Among the three task types, the EFL-Low learner scoring highest for the appropriateness of tune in spontaneous speech (73.33%) was very close to best EFL-High learner (75.56%). The mean scores of tune in both groups of learners also indicated only the slightest difference in the values (EFL-High: 55.56; EFL-Low: 45.92).

To sum up, the present study points out that the Thai EFL learners, as compared to native speakers, have the following intonation features:

Table 6.1 Features of tonality, tonicity and tune patterns of Thai EFL learners

Problems	Tonality		Tonicity		Tune	
	EFL-High	EFL-Low	EFL-High	EFL-Low	EFL-High	EFL-Low
• Short tone groups		✓				
• Difficulty with complex sentences		✓				
• Tone groups ≠ syntactic units		✓				
• Short rhythmic groups	✓	✓				
• Pause within a word		✓				
• Additional tone groups			✓	✓		
• Misplacement of word accent			✓	✓		
• Misplacement of tonic syllables			✓	✓		
• No tonic syllable				✓		
• Stagey speech, overemphasising tune					✓	
• Sing-song pattern					✓	✓
• Inappropriate use of English tune					✓	✓
• Thai tone attached to English words						✓

The differences in the production of the EFL-High and EFL-Low learners in this study clearly reflect the fact that they are in different developmental stages of learning English. The production of the EFL-Low learners indicated that their speech contained characteristics closer to the Thai language rather than to English.

Although the EFL-High learners outperformed the EFL-Low learners, there was a wide within-group variation in EFL-High as indicated by the high values of standard deviation in the descriptive statistics of their performances. The causes of the deviated intonation patterns from the NS productions in the EFL-High group were mainly a result of transfer of training and development errors. It is evident, for example, in the misuse and choices of tune in their spontaneous speech. On the other

hand, the errors in the EFL-Low group can be explained by the interference from their native language.

The findings of this study show that the learners assigned to each group had markedly different productions in the three systems of intonation. The learners were recruited for this study by the scores from the English Language Experience Questionnaire administered to all English major students at a university in Lop Buri. Thus, the population contained students who were in their first to fourth year at university. They were assigned to the high experience and low experience group based on their scores from the questionnaire, based on their age of initial learning, number of years learning English, kinds of instruction, experience in English-speaking countries and amount of current use. The samples were selected from the top and the bottom with respect to score range obtained from their responses from the Questionnaire. The EFL-Low learners obtained the lowest scores from the rank, which means that they have low English language experience and exposure. In addition, they were late starters, with the age range from 6-11 years old, as opposed to 3-7 years old in the EFL-High group. A study by Tahta and Wood (1981) suggested that:

> "...up to the age of 8, abilities to replicate pronunciation and intonation are good, but the ability to reproduce intonation is lost comparatively quickly and universally, so that by 11, non-native pronunciation is still quite good, but non-native intonation is poorly replicated".

Tahta and Wood (1981: 371)

Therefore, the EFL-Low's biological constraints may be one of the factors accounting for their deviated intonation patterns from the NS productions. The fact that the EFL-Low learners in this study were studying to be English teachers also reflect the urgent need at the policy level to attract proficient students into the educational realm.

To conclude the findings to answer research questions 1-3 posed in this study, it was found that the overall productions of the EFL-High were closer to those of the NS. The EFL-High made fewer errors than the EFL-Low did. The EFL-Low learners'

productions were more similar to their native language, Thai. Therefore, the results derived from this study support the hypotheses about the intonation patterns in each group of learners for these questions.

The perception study examined the intelligibility and comprehensibility of intonation patterns in native speakers' judgements. In response to research question 4: What is the degree of intelligibility and comprehensibility in each group of Thai learners judged by native speakers with different exposure to the Thai language, the intelligibility and comprehensibility dimensions will be discussed separately.

6.3.4 Intelligibility

The overall findings of intelligibility suggest that the NS added to ensure reliability of the judges received the highest percentage of accuracy (88.89%), as compared to the EFL-High (37.78%) and EFL-Low (32.59%). One may expect the performance of the NS to obtain a hundred percent of accuracy, but this is not the case. There are two possible explanations for this result. First, all the NS judges for the intelligibility dimension were linguistically naïve. They may have no explicit knowledge about their intonation system because they use their native language intuitively. From an informal interview with each of the judges after the perception test, they mentioned that it was quite difficult to distinguish the differences of each interpretation in the choices given to them. Also, they noted that intonation was very subtle for them. Second, intonation is context-dependent. Listeners usually rely on the contexts when interpreting the meaning. It may be inferred that the native speakers' perception of intonation depend on their experience and contexts. Thus, with a decontextualised setting and judges with no linguistic background, the 88.89% or 80 out of 90 items of correct answers should be considered satisfactory.

Another interesting result of the judgements of the NS speech stimuli was that the NSJ-Low judges interpreted the NS speech more correctly than did the NSJ-High (97.78%, as opposed to 77.78%). From the Native Speaker Background Questionnaire, the NSJ-High judges reported to have extensive experience teaching English in several countries whereas the NSJ-Low were young teacher trainees who just graduated from university. Furthermore, the NSJ-High judges had been in Thailand for 3-12 years while the NSJ-Low had been in Thailand for only 3-4 weeks

prior to the study. Hence, the NSJ-High judges could be influenced by other foreign languages they knew. Some of them have a Thai family and to a great extent, are exposed to the Thai language and Thai accented English spoken by their family members.

Regarding the judgements of the EFL-High and EFL-Low's productions, the NSJ-High had higher degree of intelligibility for both groups of learners than the NSJ-Low did. The EFL-High learners obtained 41.48% of correct perceptions from the NSJ-High, and 34.07% from the NSJ-Low. The percentage of correct interpretations of the NSJ-High for the EFL-Low learners (34.07%) was slightly higher than that of the NSJ-Low (31.11%). The finding leads to the conclusion that the experience of the NSJ-High with Thai learners facilitated their intelligibility for the Thai learners. Moreover, the NSJ-High were experienced teachers who had extensive experience teaching in several countries. This can be interpreted that Englishes are more accepted for people who are exposed to other English accents. This supports the findings of previous studies, e.g. Thompson (1991) who found that familiarity with the L2 accent enhanced the level of understanding and Flege (1984) who suggested that judges may become less sensitive to predictable differences in pronunciation and ignore them, and that amount of exposure increased the understanding of unfamiliar speakers.

6.3.5 Comprehensibility

With respect to comprehensibility, the NSJ-High rated the read speech more favourably than the NSJ-Low did for both groups of Thai learners. Furthermore, the EFL-High learners received higher ratings than the EFL-Low learners did from both groups of judges. This can be interpreted that the NSJ-High found the read speech of both groups of learners easier to understand than did the NSJ-Low.

The higher ratings the EFL-High learners obtained from both groups of judges were not surprising. This is because, as mentioned earlier, the intonation patterns of the EFL-High group were more similar to the performances of the NS control group. Therefore, the judges perceived it as easy to understand. The t-test results to compare the means in the ratings illustrated that the observed differences in the means of the NSJ-High rated the EFL-High (3.53) and the NSJ-Low rated the same group of learners (3.00) were statistically significant. Also, the differences between the two

mean scores of each group of learners obtained from the ratings by the NSJ-High and NSJ-Low were significant. Thus, it can be concluded about the comprehensibility dimension that the read speech data from passage reading of the Thai learners correlated with comprehensibility ratings of the NS judges. With respect to the perceptions of the NSJ-High and the NSJ-Low, the comparison of comprehensibility ratings showed that the amount of experience plays an important role in their judgements.

To summarise the findings on the intelligibility and comprehensibility dimensions, it was found that the learners with high English language experience outperformed those with low experience by the judgements of native speakers. Moreover, the judges with prolonged experience to Thai learners interpreted the sentence meaning more correctly in the intelligibility dimension. Also, they gave higher rating scores for comprehensibility. Therefore, the findings support the hypothesis for research question 4.

The last research question addressed in this study is: How is the degree of intelligibility and comprehensibility related to the English intonation patterns of Thai learners in each group? A Pearson correlation coefficient was computed to evaluate the relationship between the total intonation scores derived from the performances on tonality, tonicity and tune of both groups of learners, and intelligibility scores and comprehensibility scores. The results indicated that the intonation scores had a correlation with the intelligibility scores although it was not statistically significant. On the other hand, the intonation scores were found to correlate with the comprehensibility scores at a significant level. This means that the higher intonation scores the learners received from, the comprehensibility ratings tend to usually also increase.

There are two possible explanations for a non-significant correlation of scores for intelligibility. The intelligibility dimension employed speech stimuli from sentence reading. However, intonation is not a local sentence level feature; it is more related to a global discourse level feature. This can be accounted for the significant feature in the comprehensibility dimension. Another reason is related to the small sample size used for the intelligibility dimension. Not only the small sample size to avoid tiring effect in the perception test, the problem of the intelligibility study may

be due to its decontexualised nature that is somewhat unnatural to the real use of intonation. Unlike the comprehensibility dimension which exploited the passage reading data from all the thirty Thai learners as stimuli, the intelligibility limited the number of speech stimuli to avoid tiring or fatigue effects of the listeners. A further study with a larger sample size is therefore suggested.

6.4 Pedagogical Implications

This interlanguage study recruited the EFL learners with different stages of English language experience, as judged by the scores from the questionnaire administered to them. The findings of this study have shown that the learners with more experience developed more similar intonation patterns to those of English native speakers. On the contrary, the learners with far less experience generally produced deviated intonation patterns. The errors they made can generally be attributed the transfer from their native language. This can lead to the conclusion that more experience and contact with the target language—English—benefited the learners in the acquisition of intonation. Also, the results from the perception study indicated that the intonation patterns similar to the native speaker norms were easier for the English native speaker listeners to perceive in terms of intelligibility and comprehensibility.

From the problems of the productions of intonation patterns specified in Table 6.1, it can be seen that both groups of learners had difficulty with the accentual system in English whereas tone group division was especially problematic for the EFL-Low learners. The two groups of learners were divided in terms of their English language experience. The EFL-Low learners were those who had less experience, which may be considered beginner learners of English, while the EFL-High learners were intermediate learners. Therefore, in designing pronunciation materials, the accentual pattern and rhythm should be marked as high priority for both groups of learners. Learners should be introduced to English accentuation and word accents and the realisation of the word stress as early as possible to familiarise themselves with the English stress patterns which are different from those of their L1 in order to enhance the intelligibility and comprehensibility of their speech.

In addition, tone group division must be included in lessons for beginners. The findings of this study have pointed out that the tonality patterns of L2 speech

conforming to the norms in English help the listeners to process the information more easily because of its smooth continuity. In helping the learners to increase the comprehensibility of their speech, they have to be made aware of the functions of tonality in English. For instance, a listening activity in which the learners have to listen to tone groups can be a good starting point to introduce the concept of how speech is divided into meaningful chunks. Then, production activities, e.g. reading a short passage, can follow to improve the L2 learners' tonality patterns. Reading aloud not only benefits the learners in practising the flows of speech, it also enhances their abilities in information organisation and speech planning.

With regard to tonicity or sentence stress, it caused difficulty for both groups of learners. This feature needs to be included in pronunciation lessons. Apart from sentence stress, emphasis should also be placed on the production of reduced vowels and full vowels. Both groups of learners, especially the beginners had problems with making the stressed syllable more prominent than other syllables. They were likely to pronounce every syllable with equal force, which affected the listener's perception of meaning due to the lack of a tonic syllable. As remarked by Grant (1993: 98), "If you have a tendency to stress every word and syllable equally, you might sound abrupt, angry, adamant, or impatient without intending to". Therefore, this issue should receive special attention in the classroom.

Tunes and their meanings should be addressed for beginner and intermediate learners. Teachers should not bother to cover all the primary tunes in English. The falling, rising and falling-rising tunes are frequently used by native speakers of English, which are the point of focus in most pronunciation textbooks (e.g. Wells, 2006; Hudson, 2010). Therefore, intonation practice should be loaded on these tunes. Awareness raising activities may involve recording the learners' speech and allowing them to listen to their own selection of tunes as wells as other learner's productions, and rate them in terms of appropriateness in the use. In addition, the features of neutral accent which was found to be the most listener-friendly pattern in this study should be pointed out to the learners.

As mentioned in Chapter I, little is known about the intonation patterns of Thai learners due to the scarcity of studies in the area. The findings of this study provide insights into the problems of production as related to the perception of native

speakers. The results are also beneficial in designing materials to direct to the problems of Thai learners in order to promote intelligibility and comprehensibility.

Although the current goal for English pronunciation teaching is not to aim towards a native-like or near-native pronunciation, the results of this study point out that the trend may have to be reconsidered, especially for intonation. The current findings add substantially to our understanding of the importance of English intonation and its impact on the native speakers' perception. The results suggest that English pronunciation classroom that focuses on intonation tends to benefit L2 learners in maximising the degree of intelligibility and comprehensibility for native speakers, especially those who are not experienced with Thai accented English.

6.5 Recommendations for future research

These findings provide considerable insights for future research. What is now needed is a study investigating the English intonation patterns in naturalistic settings. Further work needs to be done to establish the similarities and differences of the use of intonation in a different setting. Another interesting area of study concerns the perceptions of the listeners. It would be interesting to employ non-native speaker judges, as compared to the judgements of native speaker judges. Regarding the tune patterns, further investigation of the interpretations of meaning by English native speaker judges listening to native speaker and non-native speaker speech could be done. This will lead us to understand whether native speaker listeners tone down the importance of tune when listening to non-native speech. Concerning the correlational analysis, more research on this topic needs to be undertaken before the association between intelligibility and comprehensibility as related to intonation patterns is established.

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Appendices

APPENDIX A

English Language Experience Questionnaire

Guidance Information:
    This questionnaire consists of three parts: 1) personal information, 2) English language experience, and 3) attitudes towards pronunciation. Please answer all the questions by ticking the box or writing in the space provided.

Part 1: Personal Information

1 Name ……………………………………………

2 Age ……………………………………………

3 Gender   ❑ Female   ❑ Male

4 Year of study   ❑ 1st year   ❑ 2nd year   ❑ 3rd year   ❑ 4th year

5 Program of study ❑ English ❑ English Education ❑ English (International)

6 E-mail …………………………………….. Phone number ……….................

7 I was born in ❑ Thailand ❑ other countries (specify) ……………………………

8 My native language is ❑ Thai ❑ other (please specify) …………………………

Part 2: English Language Experience

1 I started studying English when I was …… years old, in grade … or kindergarten year …..

2 I have studied English for …………………years.

3 Did you study in an English program (EP), or mini-English program (MEP) at any school in which English was a medium of instruction? ❑ Yes for ….years ❑ No

4 Have you taken or are you taking the course *English phonetics and phonology*? ❑ Yes   ❑ No

5 Are you attending an extra English class? ❑ Yes   ❑ No   If yes, for many hours a week?

    ❑ < 2 hours   ❑ 2-4 hours   ❑ 5-6 hours   ❑ 7-8 hours   ❑ > 8 hours

6 Have you taken or are you taking an intensive English course in speaking skills or English for communication or pronunciation skills? ❑ Yes   ❑ No

If yes, please give the name and the duration of each course.

    1) Course name…………………………………………………… for.…hours/day

2) Course name…………………………………………………… for.…hours/day

3) Course name…………………………………………………… for.…hours/day

7   Have you lived or studied in an English-speaking country (United Kingdom, America, Canada, Australia, New Zealand)? ❑ Yes   ❑ No (skip item 8)

If yes, which country? And for how long?

1)……………………………………………. for ………weeks/months/years

2)……………………………………………. for ………weeks/months/years

3)……………………………………………. for ………weeks/months/years

8   When you were living or studying in the country mentioned in 7, how often did you use English for communication?

❑ Never   ❑ Rarely   ❑ Sometimes ❑ Often   ❑ Always

9   Other than the countries mentioned in 7, have you ever travelled to other foreign countries where you used English for communication? ❑ Yes   ❑ No

If yes, which countries? …………………………………………………………...

And for how long? …………………………………………………………...

10 During this term, are you studying English with a native English speaker?

❑ Yes   ❑ No   If yes, please state the course name(s) and the frequency of chance you speak English in class.

1) Course name ……………………………………………………………

❑ Never   ❑ Rarely   ❑ Sometimes   ❑ Often   ❑ Always

2) Course name ……………………………………………………………

❑ Never   ❑ Rarely   ❑ Sometimes   ❑ Often   ❑ Always

3) Course name ……………………………………………………………

❑ Never   ❑ Rarely   ❑ Sometimes   ❑ Often   ❑ Always

4) Course name ……………………………………………………………

❑ Never   ❑ Rarely   ❑ Sometimes   ❑ Often   ❑ Always

5) Course name ……………………………………………………………

❑ Never   ❑ Rarely   ❑ Sometimes   ❑ Often   ❑ Always

11 How often do you speak English outside the class?

❑ Never   ❑ Rarely   ❑ Sometimes   ❑ Often   ❑ Always

12 Outside the class, do you use English in the following activities?

1) Listening to songs

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

2) Listening to the radio

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

3) Watching news

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

4) Watching movies

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

5) Watching TV programs

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

6) Reading magazines or newspapers

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

7) Reading websites

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

8) Writing websites or weblogs

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)……………………………………..

9) Writing e-mails or text messages

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)………………………………..

10) Instant messaging

❑ Never ❑ Once a month ❑ 2 or 3 times a month

❑ Once a week ❑ 2 or 3 times a week ❑ Every day

❑ Other (specify)………………………………..

Part 3: Attitudes towards pronunciation (For this part, the scores are not added in the English language experience scores used for the selection of the sample groups).

Please circle one number that **best** reflects your opinion:
    5 = strongly agree
    4 = agree
    3 = uncertain
    2 = disagree
    1 = strongly disagree

1	I think correct pronunciation is very important for effective communication.	5	4	3	2	1
2	If I use the right vocabulary words but incorrect pronunciation, foreigners may not understand me.	5	4	3	2	1
3	I appreciate Thai people who have good English pronunciation, and wish I could be like them.	5	4	3	2	1
4	I usually tell the native speaker I am talking with to correct my pronunciation.	5	4	3	2	1
5	I usually try to imitate the pronunciation of native English speakers.	5	4	3	2	1
6	I do not care what others think when I imitate the pronunciation of native English speakers.	5	4	3	2	1
7	I enjoy studying or practising English pronunciation very much.	5	4	3	2	1
8	I always look up the pronunciation of English words in a dictionary.	5	4	3	2	1
9	I listen to English news, and songs to improve my pronunciation.	5	4	3	2	1
10	I would like to take some training in English pronunciation.	5	4	3	2	1

Thank you for your cooperation.

APPENDIX B

แบบสำรวจประสบการณ์ภาษาอังกฤษ

> *คำชี้แจง:*
> แบบสอบถามนี้มี 3 ตอน คือ ตอนที่ 1) ข้อมูลส่วนตัว 2) ประสบการณ์การใช้ภาษาอังกฤษ
> 3) ทัศนคติต่อการออกเสียงภาษาอังกฤษ   กรุณาตอบคำถามให้ครบทุกข้อโดยทำเครื่องหมาย ✓
> ในกรอบสี่เหลี่ยมที่ให้มาหรือเขียนตอบในช่องว่าง

1 ข้อมูลส่วนตัว

1 ชื่อ...

2 อายุ...

3 เพศ   ❑ หญิง   ❑ ชาย

4 ศึกษาอยู่ ❑ ชั้นปีที่ 1   ❑ ชั้นปีที่ 2   ❑ ชั้นปีที่ 3   ❑ ชั้นปีที่ 4

5 โปรแกรมวิชา ❑ อังกฤษ (ศศบ.)   ❑ อังกฤษ (คบ.)   ❑ อังกฤษ (หลักสูตรภาษาอังกฤษ)

6 อีเมล์... .....เบอร์โทรศัพท์.................................. ....

7 เกิดที่ ❑ ประเทศไทย   ❑ ต่างประเทศ (โปรดระบุ)……………………………….......

8 ภาษาแม่คือ ❑ ภาษาไทย   ❑ อื่นๆ (โปรดระบุ).. ....

2 ประสบการณ์การใช้ภาษาอังกฤษ

1 นศ.เริ่มเรียนภาษาอังกฤษเมื่ออายุ..............ปี ตอนอยู่ชั้นประถม........./อนุบาล..........

2 นศ.เรียนภาษาอังกฤษรวมเป็นเวลา............ปี

3 นศ.เคยเรียนหลักสูตร English program (EP) หรือ Mini-English program (MEP) ซึ่งใช้ภาษาอังกฤษ ในการสอนหรือไม่ ❑ ไม่เคย ❑ เคย ที่โรงเรียน.. ....ระยะเวลา..........ปี

4 นศ.เคยเรียนหรือกำลังเรียนวิชา English phonetics and phonology หรือไม่ ❑ ไม่เคย   ❑ เคย

5 ขณะนี้นศ.กำลังเรียนพิเศษวิชาภาษาอังกฤษหรือไม่   ❑ ไม่ใช่   ❑ ใช่ (โปรดระบุเวลาเรียน/สัปดาห์)
    ❑ น้อยกว่า 2 ชม.   ❑ 2-4 ชม.   ❑ 5-6 ชม.   ❑ 7-8 ชม.   ❑ มากกว่า 8 ชม.

6 นศ.เคยเรียนหรือกำลังเรียนหลักสูตรภาษาอังกฤษแบบเข้ม (intensive course) ด้านทักษะการพูด ภาษาอังกฤษเพื่อการสื่อสาร หรือทักษะการออกเสียงหรือไม่ ❑ ไม่เคย ❑ เคย (โปรดระบุชื่อหลักสูตรและ ระยะเวลาที่เรียน)

    1) หลักสูตร……………………………………………….....วัน/สัปดาห์/เดือน   จำนวน......ชั่วโมงต่อวัน

    2) หลักสูตร……………………………………………….....วัน/สัปดาห์/เดือน   จำนวน......ชั่วโมงต่อวัน

    3) หลักสูตร……………………………………………….....วัน/สัปดาห์/เดือน   จำนวน......ชั่วโมงต่อวัน

7 นศ.เคยอาศัยหรือเรียนในประเทศที่ใช้นศ.ภาษาอังกฤษในการสื่อสาร (เช่น สหราชอาณาจักร สหรัฐอเมริกา แคนาดา ออสเตรเลีย นิวซีแลนด์ ฮ่องกง มาเลเซีย สิงคโปร์ ฯลฯ) ❑ ไม่เคย (ข้ามข้อ 8 และ9) ❑ เคย (โปรด ระบุชื่อประเทศและระยะเวลา)

          1) ประเทศ... เป็นเวลา........................... วัน/สัปดาห์/เดือน/ปี

          2) ประเทศ... เป็นเวลา........................... วัน/สัปดาห์/เดือน/ปี

          3) ประเทศ... เป็นเวลา........................... วัน/สัปดาห์/เดือน/ปี

8 ขณะที่อาศัยหรือเรียนอยู่ในประเทศที่ระบุในข้อ 7 ได้ใช้ภาษาอังกฤษในการสื่อสารบ่อยเพียงใด

     ❑ ไม่เคย   ❑ ไม่ค่อยใช้   ❑ บางครั้ง   ❑ บ่อยๆ   ❑ เสมอๆ

9 นอกจากประเทศที่ระบุในข้อ 7 นศ.เคยเดินทางไปท่องเที่ยวในประเทศที่ใช้ภาษาอังกฤษในการสื่อสารหรือไม่

     ❑ ไม่เคย ❑ เคย โปรดระบุชื่อประเทศและระยะเวลา...

....

10 ในภาคเรียนนี้ นศ.กำลังเรียนวิชาภาษาอังกฤษกับอาจารย์ชาวต่างชาติหรือไม่   ❑ ไม่ใช่   ❑ ใช่

โปรดระบุชื่อวิชาและโอกาสในการพูดภาษาอังกฤษในชั้นเรียน

          1) ชื่อวิชา………………………………………………………..

            ❑ ไม่เคย   ❑ ไม่ค่อยใช้   ❑ บางครั้ง   ❑ บ่อยๆ   ❑ เสมอๆ

          2) ชื่อวิชา………………………………………………………..

            ❑ ไม่เคย   ❑ ไม่ค่อยใช้   ❑ บางครั้ง   ❑ บ่อยๆ   ❑ เสมอๆ

          3) ชื่อวิชา………………………………………………………..

            ❑ ไม่เคย   ❑ ไม่ค่อยใช้   ❑ บางครั้ง   ❑ บ่อยๆ   ❑ เสมอๆ

          4) ชื่อวิชา………………………………………………………..

            ❑ ไม่เคย   ❑ ไม่ค่อยใช้   ❑ บางครั้ง   ❑ บ่อยๆ   ❑ เสมอๆ

          5) ชื่อวิชา………………………………………………………..

            ❑ ไม่เคย   ❑ ไม่ค่อยใช้   ❑ บางครั้ง   ❑ บ่อยๆ   ❑ เสมอๆ

11 นศ.พูดภาษาอังกฤษนอกชั้นเรียนมากน้อยเพียงใด   เลือกตอบเพียงข้อเดียวจากคำตอบต่อไปนี้

     ❑ ไม่เคย   ❑ ไม่ค่อยใช้   ❑ บางครั้ง   ❑ บ่อยๆ   ❑ เสมอๆ

12 นอกชั้นเรียน นศ.ใช้ภาษาอังกฤษในการทำกิจกรรมใดต่อไปนี้

          1) ฟังเพลง

     ❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง

     ❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน

     ❑ อื่นๆ (ระบุ).......................................

          2) ฟังวิทยุ

     ❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง

     ❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน

     ❑ อื่นๆ (ระบุ).......................................

          3) ดูรายการข่าว

     ❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง

     ❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน

     ❑ อื่นๆ (ระบุ).......................................

4) ดูภาพยนตร์
❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง
❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน
❑ อื่นๆ (ระบุ)...

5) ดูรายการโทรทัศน์
❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง
❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน
❑ อื่นๆ (ระบุ)...

6) อ่านนิตยสารหรือหนังสือพิมพ์
❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง
❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน
❑ อื่นๆ (ระบุ)...

7) อ่านเวบไซต์
❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง
❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน
❑ อื่นๆ (ระบุ)...

8) เขียนเวบไซต์หรือเวบล็อก
❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง
❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน
❑ อื่นๆ (ระบุ)...

9) เขียนอีเมล์หรือส่งข้อความโทรศัพท์มือถือ
❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง
❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน
❑ อื่นๆ (ระบุ)...

10) เล่นโปรแกรมแชต
❑ ไม่เคย   ❑ เดือนละครั้ง   ❑ เดือนละ 2-3 ครั้ง
❑ สัปดาห์ละครั้ง   ❑ สัปดาห์ละ 2-3 ครั้ง   ❑ ทุกวัน
❑ อื่นๆ (ระบุ)...

3 <u>ทัศนคติต่อการออกเสียงภาษาอังกฤษ</u> (สำหรับข้อนี้คะแนนจะไม่ได้นำไปรวมกับคะแนนประสบการณ์ทาง
ภาษาอังกฤษที่ใช้ในการคัดเลือกกลุ่มตัวอย่าง)

อ่านข้อความข้อ 1-10 แล้ววงกลมตัวเลขที่ตรงกับทัศนะของนักศึกษา**มากที่สุด**เพียงระดับเดียว

      5   หมายถึง เห็นด้วยอย่างยิ่ง
      4   หมายถึง เห็นด้วย
      3   หมายถึง ไม่แน่ใจ
      2   หมายถึง ไม่เห็นด้วย
      1   หมายถึง ไม่เห็นด้วย

1	ฉันคิดว่าการออกเสียงถูกต้องเป็นสิ่งจำเป็นมากสำหรับการสื่อสารที่มีประสิทธิภาพ	5 4 3 2 1
2	ฉันคิดว่าถ้าฉันใช้คำศัพท์ถูกต้องแต่ออกเสียงผิด ชาวต่างชาติอาจไม่เข้าใจ	5 4 3 2 1
3	ฉันรู้สึกชื่นชมคนไทยที่ออกเสียงภาษาอังกฤษได้ดี และอยากจะเป็นเหมือนเขา	5 4 3 2 1
4	ฉันมักจะบอกเจ้าของภาษาที่ฉันคุยด้วยให้ช่วยแก้ไขเมื่อฉันออกเสียงผิด	5 4 3 2 1
5	ฉันมักจะพยายามออกเสียงให้เหมือนกับเจ้าของภาษา	5 4 3 2 1
6	ฉันไม่สนใจว่าคนอื่นจะคิดอย่างไรที่ฉันพยายามออกเสียงให้เหมือนเจ้าของภาษา	5 4 3 2 1
7	ฉันชอบเรียนหรือฝึกออกเสียงภาษาอังกฤษมากๆ	5 4 3 2 1
8	ฉันตรวจดูการออกเสียงของคำศัพท์จากพจนานุกรมเสมอๆ	5 4 3 2 1
9	ฉันฟังข่าวภาษาอังกฤษ และเพลงภาษาอังกฤษเพื่อพัฒนาการออกเสียงของตนเอง	5 4 3 2 1
10	ฉันอยากจะเรียนคอร์สฝึกอบรมการออกเสียงภาษาอังกฤษ	5 4 3 2 1

ขอขอบคุณในความร่วมมือ

APPENDIX C

Scoring Criteria for English Language Experience Questionnaire

Part 1: Personal Information

Answers from the personal information part will provide demographic details about the participants. The information in this part will not be counted in the scoring process, but will be taken into consideration in the discussion of the results.

Part 2: English Language Experience (200 marks)

Only the information in this part will be considered in the scoring. A total score of 200 marks are assigned for several types of experience with the English language. The answer from each item is calculated in the scoring weight in percentage as follows:

- items 1 and 2   (age of onset and years of exposure)   =   30%
- items 3 and 4   (formal instruction)   =   7.5%
- items 5 and 6   (informal instruction)   =   10%
- items 7 to 10   (experiences in the use of English)   =   25.5%
- items 11 and 12 (amount of current use)   =   27%

The scoring weight can be illustrated in the chart below:
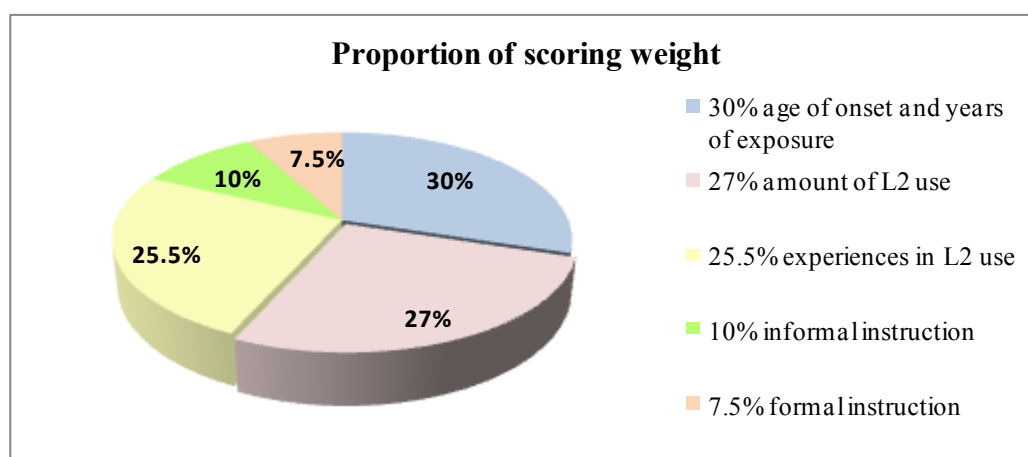
There have been a considerable number of studies on the effect of age of onset and the attainment of L2 pronunciation (e.g. Patnowski, 1990; Flege, 1987, Piske, MacKay & Flege, 2001), especially intonation (Tahta & Wood, 1981). Thus, age of onset was considered one of the major factors which were the predictor of near-native

or native-like intonation. As indicated in Chapter 1 (See 1.8 Limitations of the study), this study used a pseudolongitudinal design, focusing on a single moment of the learners' developmental processes. The aim of the questionnaire was to recruit two groups of learners who are in different stages of the interlanguage continuum. The temporal aspect as related to years of learning was, therefore, another major concern of this study. For these reasons, items 1 and 2 were considered the determining factor in targetlike productions of intonation, receiving the largest proportion of scoring weight (30%). The amount of current use (27%) illustrated the learners' motivation in using English for their personal benefits outside classrooms. The experiences in the use of English (25.5%) exhibit the exposure to English in an English-speaking environment, i.e. studying with native speakers and spending time in English-speaking countries. With regard to the types of instruction—formal or informal instruction provided information on how the learners were exposed to English explicitly. Informal instruction was given a slightly higher scoring weight than formal instruction since it indicated special tuition classes and intensive courses, which added extra language experience in the learners.

The details of scores assigned for each answer are as follows:

1   *Age of initial exposure*   *(30 marks)*
>   > 12 years old   =   10 marks
>   11-12 years old   =   15 marks
>   9-10 years old   =   20 marks
>   6-8 years old   =   25 marks
>   3-5 years old   =   30 marks

2   *Number of years of exposure*   *(30 marks)*
>   < 9 years   =   10 marks
>   9-11 years   =   15 marks
>   12-13 years   =   20 marks
>   14-15 years   =   25 marks
>   > 15 years   =   30 marks

3   *English as a medium of instruction (10 marks)*

      No.   =   0 mark

      1 years   =   2 marks

      2 years   =   4 marks

      3 years   =   6 marks

      4 years   =   8 marks

      5 years and more =   10 marks

4   *Formal phonetic training*   *(5 marks)*

      No   =   0 mark   Yes   =   5 mark

5   *Extra English classes*   *(5 marks)*

      No.   =   0 mark

      < 2 hours/week   =   1 mark

      2-4 hours/week   =   2 marks

      5-6 hours/week   =   3 marks

      7-8 hours/week   =   4 marks

      > 8 hours/week   =   5 marks

6   *Intensive courses*   *(15 marks)*

A maximum score of 5 marks is assigned to each intensive course taken. Up to three courses are counted in the scoring.

      No.   =   0 mark

      < 2 hours/day   =   1 mark

      2-4 hours/day   =   2 marks

      5-6 hours/day   =   3 marks

      7-8 hours/day   =   4 marks

      > 8 hours/day   =   5 marks

7   *Contact to English in an English-speaking country*   *(15 marks)*

Each time of exposure gets a maximum score of 5 marks. Up to three times of experience will be counted.

      No.   =   0 mark

      1-2 months   =   1 mark

      3-5 months   =   2 marks

      6-8 months   =   3 marks

9-12 months   =   4 marks

More than 12 months   =   5 marks

8   ***Amount of English use***   ***(12 marks)***

Referring to answer in item 7, each time of exposure gets a maximum score of 4 marks.

Never	=	0 mark
Rarely	=	1 mark
Sometimes	=	2 marks
Often	=	3 marks
Always	=	4 marks

9   ***Experience of English in a foreign country***   ***(4 marks)***

Never	=	0 mark
5-7 days	=	1 mark
8-14 days	=	2 marks
15-21 days	=	3 marks
22 and more	=	4 marks

10   ***Current exposure in classrooms***   ***(20 marks)***

Each course gets a maximum score of 4 marks. Up to five courses will be counted.

Never	=	0 mark
Rarely	=	1 mark
Sometimes	=	2 marks
Often	=	3 marks
Always	=	4 marks

11   ***Amount of English use outside class***   ***(4 marks)***

Never	=	0 mark
Rarely	=	1 mark
Sometimes	=	2 marks
Often	=	3 marks
Always	=	4 marks

12   *Using English for personal gains or benefits   (50 marks)*

        Each activity gets a total score of 5 marks.

Never	=	0 mark
Once a month	=	1 mark
2-3 times a month	=	2 marks
Once a week	=	3 marks
2-3 times a week	=	4 marks
Every day	=	5 marks

Part 3: Attitudes towards pronunciation

        The score derived from this section determine the attitudes of the participants on having good pronunciation. This information will support the findings of the study, and will not be counted in the scoring.

APPENDIX D

Native English Speaker Background Questionnaire

1 What city and country are you originally from? …………………………………

2 Where else have you lived and for how long? …………………………………...

 …………………………………………………………………………………

3 Is there anyone in your family who is not a native speaker of English? ❏ Yes ❏ No

If yes, what is his/her native language? …………………………………….......

4 What is your highest level of education?

  ❏ BA in ………………………………. ❏ MA in ……………………………….

  ❏ PhD in …………………………………. ❏ other (please specify)……………….

5 Are you a teacher of English?   ❏ Yes   ❏ No

If yes, how long have you been teaching English? …………………………………

6 How long have you been living or staying in Thailand? ……………………………

7 Have you ever had a formal instruction on the Thai language? ❏ Yes   ❏ No

8 Can you speak or understand Thai? ❏ Yes   ❏ No

If yes, how would you rate your Thai ability? ❏ poor ❏ fair ❏ good ❏ very good

9 Do you have frequent or regular contact with Thai people, e.g. in your workplace or with acquaintances? ❏ Yes   ❏ No

10 Do you have a hearing problem? ❏ Yes   ❏ No

If yes, do you think your problem affects your pronunciation now? ❏ Yes   ❏ No

APPENDIX E

Production Tasks

Task 1: Passage Reading

Read the following passage at a normal speed.

> Putting your trust in a ladder depends, for the most part, on following certain safety rules. First, make sure that the ladder has no broken or cracked parts. Then, set the ladder firmly in place so that it won't slip or shift under your weight. Firemen and others who climb ladders every day know the importance of using both hands when they climb: it's safer, surer and faster. So face the ladder and use both hands. Finally, when you have finished using the ladder, put it in a special rack or store it out of the way.

Reference:

Department of English, Thepsatri Rajabhat University. (n.d.). Success in reading
English workbook. (n.p.)

Task 2: Dialogue Reading

You meet John, a classmate, who you have not seen for some time. You remember that he has not returned the books he borrowed, so you ask him about the books.

You: Haven't seen you for ages! What've you been doing?

John: I've been travelling in Chiang Mai.

You: You've been there before, haven't you? Two years ago?

John: Yeah, exactly.

You: By the way, are you going to return those books of mine you borrowed?

John: Which books? I can't remember borrowing any.

You: The ones about culture, pronunciation, and language.

John: Oh, those books. Er—could I keep them a few more days?

You: Why?

John: Because I need them for my essay.

You: But you've had them for a month already.

John: Just give me till Monday, and then you can have them back. OK?

You: I suppose so.

John: Thank you. You're such a good friend.

Adapted from:

Wells, J. C (2006). <u>English intonation: An introduction</u>. Cambridge: Cambridge University Press.

Task 3: Prompted spontaneous speech

Please talk for one minute about "the most memorable event in your life". You may follow the outline below.

Describe the most memorable event in your life.

Why was it the most memorable?

How did you feel?

Reference:

Pongprairat, R. (2009). A study of interlanguage English intonation of Thai learners and the degree of intelligibility, comprehensibility, and foreign accentedness. Term paper submitted for the course Directed Research in English Linguistics. Chulalongkorn University.

APPENDIX F

Rating the Appropriateness of Tune (pitch patterns)

<u>**Instructions**</u>:

You will hear short excerpts of some speakers narrating an anecdote. After listening to each of them, please rate the appropriateness of the use of tune or pitch patterns in the speech. You are to rate by circling a number on the rating scale of 1 to 5, where 1 means *not appropriate* and 5 means *very appropriate*.

Your rating should focus on the speaker's use of intonation patterns, not on the content of the speech. Some of the recordings contain grammatical mistakes and mispronunciations; however, they should not be taken into account in the rating. The script of each anecdote is provided. You will hear the underlined part of each script.

<u>**Practice**</u>

Six speech samples are provided for you as a practice. You can play each recording as many times as you wish until you are certain about your rating. Then, please give a brief comment for your judgement after your rating.

Speech sample 1

Once I have been to Stockholm in Sweden. Um..I was very excited because it was the first time that I went abroad. I met my friend there. She…he..er..her name is Neung. <u>She moved into Sweden for two years maybe</u> with her family. Um…she had been studying at Stockholm University. And fortunately it was a spring break and she invited me to visit her home in Gotenberg. It was very cool because that helped me save my money. (Continued)

1.1 // She moved into Sweden for //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

1.2 // two year //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

1.3 // maybe //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

Speech sample 2

In my life, I have many events. I can remember but I can't…I could not remember. But this one I can remember it very well. It is about..<u>my family had to go to Chumporn province to visit my sister</u>. So, my brother had to drive a car alone because in the car nobody could drive. So when he drove for a long, a long, a long way, he felt asleep. So, we had to find the way to solve this problem. (Contined)

2.1 // My family have to go to Chumporn province //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

2.2 // to visit my //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

2.3 // sister //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

Speech sample 3

The most memorable event in my life is on the last year when I went to May's home. May is my friend. I go with her by motorcycle. May rode the motorcycle. On the way home, <u>I saw the man who rode the motorcycle after me</u>. I looked at him. His eyes were very fade. I was afraid of him and I told May to ride fast. It was the most memorable because I was afraid very much. So at that time I felt so bad.

3.1 //…I saw //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

3.2 // the man who rode the motorcycle //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

3.3 // after me.//

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

Speech sample 4

The most memorable moment of my life is when I broke my femur on a dirt bike. Femur is the biggest bone in your body and I had never broken any bone before in my whole life. Then I go, and I broke the biggest bone in my body. <u>So I was driving through the woods with my friends on dirt bikes</u>. It was raining. The weather was very bad but we didn't care coz we were going out to have fun. (Continued)

4.1 // So I was driving through the woods //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

4.2 // with my friends //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

4.3 // on dirt bikes. //

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

Speech sample 5

       The last October I went to Pai with my teacher. When we arrived at Pai we walked for one hour to look for a room. When we got a room <u>we unpacked and getting around with motorcycle</u>. We had to pay for it one hundred Baht per day. That day, we went around by motorcycle. And that evening we came back and shopped at Pai market. About 4 p.m. we came back to our room and planned for um..tomorrow. (Continued)

5.1 //…we unpacked and //

```
      1---------------2---------------3---------------4---------------5
      Not appropriate                                 Very appropriate
```

Comment:

_____

_____

5.2 // getting around //

```
      1---------------2---------------3---------------4---------------5
      Not appropriate                                 Very appropriate
```

Comment:

_____

_____

5.3 // with motorcycle. //

```
      1---------------2---------------3---------------4---------------5
      Not appropriate                                 Very appropriate
```

Comment:

_____

_____

Speech sample 6

       The most memorable event in my life was probably the day I did my driving test. I already failed two times so it was very serious that I pass. I was soon to be eighteen years old <u>and I wanted to drive so there was much pressure that day</u>. I went to the uh..the test centre and uh...waited in the queue to be called to do my test when I heard the man called my name my heart sank. (Continued)

6.1 //…and I wanted to //…

```
    1----------------2----------------3----------------4----------------5
    Not appropriate                                        Very appropriate
```

Comment:

_____

_____

6.2 // drive //…

```
    1----------------2----------------3----------------4----------------5
    Not appropriate                                        Very appropriate
```

Comment:

_____

_____

6.3 // so there was much pressure that day. //

```
    1----------------2----------------3----------------4----------------5
    Not appropriate                                        Very appropriate
```

Comment:

_____

_____

****

Now you can start the real ratings of the speech samples.

Speaker 1

The most memorable event in my life. <u>The one woman in the world she is stronger than me</u>. She gave all her love to me. She is my mum. She has cancer. When I knew about her, I was very confused and afraid to lose her. This made me know who I love. Then, I will take care of her and promise beside her forever. I will be a good child and I don't make her tired and what she wants I try to give her.

1.1 // The one //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

1.2 //…woman in the world. //

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

1.3 // She is stronger than me. //

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

Speaker 2

The most memorable event in my life happened last year. I went to Pha Taem National Park in Ubon Ratchathanee Province. <u>I went to with my family. Have my father</u>, my brother, my grandmother, my sister, brother, and er…they stayed at Pha Taem National Park. In the morning, I and my family saw the sun rise. And the afternoon one day I and my family watched the waterfall at Pha Taem National Park and had lunch at the waterfall. I was so happy. Um..when I travelled with my family because I study hard at university. I don't come home very often.

2.1 // I went to //…

1----------------2----------------3----------------4----------------5
Not appropriate · Very appropriate

Comment:

_____

_____

2.2 // with my family. //

1----------------2----------------3----------------4----------------5
Not appropriate · Very appropriate

Comment:

_____

_____

2.3 // Have my father //…

1----------------2----------------3----------------4----------------5
Not appropriate · Very appropriate

Comment:

_____

_____

Speaker 3

      My most memorable of my life is I went to Koh Chang. <u>I had a great time</u> <u>there.</u> <u>I went with my aunt's family.</u> <u>I have</u>…ur…Praewa is my aunt's niece. We played er.. we swam together in the pool and in evening we go out for we went out for eating. The food was very delicious and the sea at Koh Chang is very clear. When I went home, at the road on the mountain, I saw out. First, I thought it was the cloud, but it was the sea. I think that's the most beautiful scene in my life I had ever seen before. And that was a very big experience for me, and we arrived home safely.

3.1 // I had a great time there. //

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

3.2 // I went with my aunt's family. //

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

3.3 // I have //…

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 4

I travelled to Khao Yai. I went with my family, had my mother, my father, my sister, and me. Go by father car. <u>I met the elephant on the way</u>. I was frightened but it was not dangerous. It went to forest. It was not easy. It made the elephant on the way. I slept in two tents with my family and I walked in the wood at the Pha Gluay Mai Floral. Half an hour I went home. It is the most memorable event to my life because I love to travel to Khao Yai and I went with my family and I met elephant on the way.

4.1 // I meet //…

1----------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

4.2 // the elephant //…

1----------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

4.3 // on the way.//

1----------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

Speaker 5

Er..my story is a.. in my life and I'm excited because when I come back home and in the evening after New Year's Day. My bus hit the bridge. Um…because um…motorcycle um…suddenly the motorcycle and turned right and passed my bus. But my body wasn't broken and the motorcycle was broken and he died. I came back home with my friend after my bus hit the bridge. My friend's head broke. And finally er.. the hospital had a..and came to help to my friend and I remember it because I was excited. And I think about I have died and so I don't fear and really really I think I die.

5.1 //…in evening//…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

5.2 // after //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

5.3 // New Year. //

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

Speaker 6

I'm going to tell you about memorable person. He is not my family. He is not my boyfriend but I love him because he is the great person of my life. Now this is his story. <u>I'm very proud of being Thai live in the country which has the King</u> who really loves his citizens and we really love him as well. He is the great king of Thai people in Thailand. I love and respect him. No any king is greater than him. He is the king of the king. As Thailand is the peaceful country and peacefulness of Thai people. He..er he has dedicated himself to work hard for the well-being of all Thai people.

6.1 // I'm very proud of being Thai //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

6.2 // live in the country //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

6.3 // which has the King //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

Speaker 7

The most memorable for me is the New Year's Day in 2011. I and my friend went to the Sis Pub for countdown on the first January, two thousand eleven at midnight. <u>This pub is a karaoke and restaurant</u>. There are many, there are many food and there are many kinds of food and many drinks. It's the most memorable for me because this was the first time for me because I and my friend went to count down. This is the first time and I went to the Sis Pub for the first time too. I think it's very exciting for me to count down. It made me happy and I sang a song with my friend.

7.1 // This pub //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                         Very appropriate
```

Comment:

_____

_____

7.2 //is a //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                         Very appropriate
```

Comment:

_____

_____

7.3 // karaoke and restaurant. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                         Very appropriate
```

Comment:

_____

_____

Speaker 8

The most memorable in my life when I was young. Er..I live in Sing Buri Province and I must go to the camp about Mattayom three at Dong Phaya Yen at Sara Buri Province for three days. I was happy. I was happy and I had fun. <u>One day, I opened the door, I see my parents</u>. He gave donuts, biscuits and another thing for me. I was very surprised. They didn't know the way to Dong Phaya Yen. They asked other people anywhere and they tried for me. I felt good. I love my parent. Thank you.

8.1 // One day //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

8.2 // I opened the door //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

8.3 // I see my parents. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

Speaker 9

The great memory I can remember is when I study in grade 12. <u>Me and my friend went to Chiang Mai. It's first time for me</u>. We went to Chiang Mai to contact about our study and for travelling. First day, we went to Chiang Mai University for test but nobody passed the test. Er..suddenly, we decided to go to Doi Suthep to make merit and to buy souvenirs. On the second day, we had to go back home. We left from Chiang Mai around 9 pm and we arrived at Lop Buri around 6 am. It was a good trip for me and my friend. And I had a lot of experience from Chiang Mai. The experience is I met an old man on the train and we talked to each other. The old man asked me a lot of questions. And he told me about how to live your life and how to succeed. We had a good conversation and he got off the train at Phitsanuloke. And I can remember his words.

9.1 // Me and my friend went //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

9.2 // to Chiang Mai. //

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

9.3 // It's first time for me. //

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 10

I never go to the beach and the sea. I want to go there very much. <u>One day my friend invited me to go to the beach</u>. I was very happy and excited because this is the first time to the beach. When I arrived, I saw the beach and the sea very beautiful. The sea had blue water. Then, I started to go swimming. I was very happy and had fun. This is touching my heart. I never forget the first time to the sea.

10.1 // One day //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

10.2 //…my friend //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

10.3 //…invite me to go to the beach.//

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 11

Everyone has both happiness and sadness during the life. In my life, I was very sad to hear that my grandmother had cancer. <u>I don't expect that happened in my family. Furthermore</u>, the doctor told me that my grandmother had cancer in the last step which could not be cured. Everyone in my family tried to find the best way to cure, such as herbs or a good thing to help her better..for prolonging because I had my single grandmother. She instructed me to be a good girl. So, I will follow her advice. The saddest day for me took place as a result of the death of my grandmother. So, I keep her in mind for my inspiration and I mean to study for success in my life. I promise.

11.1 // I don't expect that happened //…

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

11.2 // in my family. //

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

11.3 // Furthermore //…

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 12

One my life at Tha Wung Wittayakarn School. This day English week. I'm general agency my homeroom. <u>My teacher come to realize give student use drama Loy Krathong</u>. I played the role of selling Krathong and explain how to make Krathong to foreigners. I got script from my teacher. I don't accent English. I tried to practise with teacher for two weeks. I pay attention make drama with my friend. Although I didn't speak with a good accent but I was proud to do it.

12.1 // My teacher come to //…

```
    1---------------2---------------3---------------4---------------5
    Not appropriate                                Very appropriate
```

Comment:

_____

_____

12.2 // realise //…

```
    1---------------2---------------3---------------4---------------5
    Not appropriate                                Very appropriate
```

Comment:

_____

_____

12.3 // give student use drama Loy Krathong. //

```
    1---------------2---------------3---------------4---------------5
    Not appropriate                                Very appropriate
```

Comment:

_____

_____

Speaker 13

I had a sister while I studied in Pratom 5. <u>She is my first sister. She is lovely. My parents tell me about</u> tell me about her give me take care take care her. Now I'm twenty one years old and she's ten years old. Um..she tell, she tell me in the future, she wanted to be a doctor. She wanted to study to be a doctor for taking care of my parents and me. I love you because you lovely. She is lovely and she's inquisitive. She liked me um..she wanted to travel. She wanted travel with me.

13.1 // She is my first sister. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

13.2 // She lovely. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

13.3 // My parents tell me about //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

Speaker 14

Hello. Today I want to talk about the impression of mine. When I was fifteen years old, that time I was studying in Mattayom three at Winitsuksa School. Last semester, I found a handsome man. He was studying in Mattayom five. I felt interested in him very much because he was smart, handsome and good at sport. He liked to play football and table-tennis. In my free time, I always looked at him and tried not to be noticed. In the last day of the final exam, I felt very sad because I wanted to talk with him but I didn't have anytime to talk him. I wanted a flower from him before I left from school. That day in the evening, I was going to come back home. He ran to me and gave a rose to me. I felt very glad and very shy. He told me, "I liked you for a long time and I want to be a boyfriend of you". Wow, is it my dream? I answered to him, "OK I liked you for a long time too. After that we exchanged mobile phone number. Finish story of mine.

14.1 //…that time //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

14.2 // I was studying in Mattayom three //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

14.3 // at Winitsuksa School. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

Speaker 15

I would say the most memorable memorable event in my life was the birth of my first child. Ah..she's now twenty one years old and studying to be a doctor in England at university. Um..so twenty one twenty two years ago umm..she was born on March the seventeenth and a beautiful beautiful baby. It was a..well very changing having a new baby to look after but myself and my wife were very very excited and it changed our lives completely so it was a very memorable event.

15.1 // She's now //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

15.2 // twenty one years old //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

15.3 // and studying to be a doctor //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 16

Today I will speak about the impression of life. Nowadays, the life a good happy. I feel will the various of life. <u>I am happy get the study English Education</u>. In the future, I want to be a good teacher. I hope that maybe a life that's good. I am impressed with my parents because I have good parents. They make I have today and I impression of my friend because I have a good smile friend. For that help eat together. Thanks for everybody the mind give me I will hide the feeling this give forever. Thank you very much.

16.1 // I am happy get //…

```
        1---------------2---------------3---------------4---------------5
        Not appropriate                                  Very appropriate
```

Comment:

_____

_____

16.2 // the study //…

```
        1---------------2---------------3---------------4---------------5
        Not appropriate                                  Very appropriate
```

Comment:

_____

_____

16.3 // English Education. //

```
        1---------------2---------------3---------------4---------------5
        Not appropriate                                  Very appropriate
```

Comment:

_____

_____

Speaker 17

Well, after I've been thinking. <u>One of the most memorable event in my life</u>, er..happened when I was a second year student at Silapakorn University. At that time I had many friends. But one of my closest friends is a girl. We started as a friend. But when time passed by, I think there's something special happened, a special feeling, something more than friendship. She always ran to me when she had any problems. She always asked me to go to everywhere with her. And then I started to feel that I loved her but the problem is I can't talk to her. I can't confess with her that I love her because she thought of me just only a close friend. Then one day I can't stand it anymore, I can't keep it so I decided to confess my feeling to her. But the outcome is she wouldn't accept it. She said that, "Sorry we could be only friends". And thank you for my feelings. Then, I don't know what to do. It's really sad I couldn't do anything. I kept myself in the room. I won't go anywhere. I don't want to meet anyone. But when the time passed by I came to realize that it was a great memory. It's worth telling her my feeling and when I made up my mind, I rise and shine once again and keep it as one of best memorable event and I won't forget it in the rest of my life.

17.1 // One of the most //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

17.2 // memorable event //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

17.3 // in my life. //

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

Speaker 18

Okay. It's very hard to choose one most memorable event in the lifetime of sixty years. But I'll tell you about something that I experienced when I was twenty-one. I was driving from Amsterdam to India over land. <u>In those days, you could drive through Iran and Afghanistan. And that's exactly what I did</u>. But one night, I was in a desert in Iran. And it was a…there was a crescent moon. And it was…it was casting a silvery light on a sand dune. And the sand dune was a gentle and typical sand dune shape. And as we drive through the desert, there was a young man hitch-hiking. And we picked him up. He was a Dutch guy, and he had a new cassette tape with him.

18.1 // In those days, you could drive through //…

```
         1----------------2----------------3----------------4----------------5
         Not appropriate                                      Very appropriate
```

Comment:
_____
_____

18.2 // Iran and Afghanistan //…

```
         1----------------2----------------3----------------4----------------5
         Not appropriate                                      Very appropriate
```

Comment:
_____
_____

18.3 // and that's exactly what I did. //

```
         1----------------2----------------3----------------4----------------5
         Not appropriate                                      Very appropriate
```

Comment:
_____
_____

Speaker 19

The most memorable event in my life. I travelled to many festivals but this…this trip I went to cowboy night festival in Saraburi Province. <u>I went with my close friend about seven person.</u> <u>I stay at home my friend</u>. It's a beautiful home and comfortable for everyone. In daytime at Book's home…er..have waterfall. It was so beautiful and I enjoyed with me.

19.1 // I went to my close friend //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

19.2 // about seven person. //

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

19.3 // I stay at home my friend. //

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 20

I like to perform Thai dancing. I have been practising since I was eighteen years old. I have a chance to perform Thai dancing with Center of Arts and Culture. I made application at the center myself. And I had to go to several fairs, each show I gave the money about 500 Baht. But all of several fairs, I was impressed with one place. This place is called Wang Narai in Lop Buri. Because this place is a hometown and I had a chance to perform my show to tourists. But almost important thing was to perform the show to my parents because my parents did not agree with me practicing Thai dancing. But I can do it very well. After the show, my parents took a photograph and praised me.

20.1 // I made //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

20.2 // application //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

20.3 // at the center my myself. //

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 21

The most memorable event in my life happened in my third year. I got…I got highest grade. It is three point seven zero. I was so happy. It is the first time that I got this grade. <u>I told my mother and my aunt</u>. They were so happy. Then, I never got this grade but I will keep..I promise that I will pay attention to my studies.

21.1 // I told //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

21.2 // my mother //…

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

21.3 // and my aunt. //

1----------------2----------------3----------------4----------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 22

The most memorable in my life is in the past when I went to the city for singing a song in the Fish Festival in Sing Buri. <u>I'm so very happy and excited</u> because I…I have never done that before in my life. When the music started, I waited for the lyrics to sing a song. I was so excited because I…I couldn't remember the lyrics of the song. But when the time came, I sang a song so it's very better end. And this is the good memory in my life.

22.1 // I'm so very //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

22.2 // happy and //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

22.3 // excited //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

Speaker 23

      The most memorable event in my life happened six months ago. I don't know why I walked into the woods. I walked until I go see the first house. <u>I went into the house and I walked around to see who was in a house</u>. And I found nobody in the house. So I walked out from a house and I walked around to find the way out of woods until I saw an old woman sitting under a tree. She was eating chicken was not dead. Then she looked at me. I frightened and I ran away into the same house. Then I tried to find my way home and the old woman poped out of a big jar in front of the house. Then I woke up. It was just a dream.

23.1 // I went into the house //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

23.2 // and I walk around //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

23.3 // to see who is in a house. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                      Very appropriate
```

Comment:

_____

_____

Speaker 24

When I was thirteen, my school had a poem contest. All students needed to contest because it was a part of Thai subject. <u>I write my poem without hope that will be award</u>. After that students who got a prize go on the stage. I was very surprised when I knew I was one of them. And I was very glad when I was the winner of the contest. I got an award. The director said, "Tell your mum, you can do it". That event made me very happy. Next year, my school had a poem contest again. I entered that contest again. And I was the winner again. My family, my teacher and friend were very glad with me. That event made me very happy.

24.1 // I write my poem //…

1---------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

_____

_____

24.2 // without hope //…

1---------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

_____

_____

24.3 // that will be award. //

1---------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 25

I'm going to tell you about my house and happy family. There are many kinds of house which differed in their look, features and lot of other things. <u>As for me, I like modern house</u>. When I come back from Thepsatri Rajabhat University, it makes me feel safe, comfortable and settled. I live in a special two-story house in Amphoe Thepsatit, Changwat Chaiyaphum. When people look at my house from the beautiful street, they see mango trees, guava trees, coconut trees, several fruit trees around my house. And father planted by himself. When I and my family have free time, we will go to Pa Hin Ngam National Park, because it is near my house. And it's a good atmosphere. Then, we have a picnic and cook. It makes me feel relax and happy. And it makes my family happy together.

25.1 // As for me //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

25.2 // I like //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

25.3 // modern house. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

Speaker 26

I will tell you about this memorable. Three years ago, <u>I have to go to some countries in Southeast Asia</u>. That country is Korea. The Korea I think is very very fantastic for me and for my life because I went to stay there I could speak out about Thai culture, Thai traditions and Thai language. I could make some friendship, I could meet new friends. At that time I think that was very fantastic and very wonderful for my life. I could meet for some first time for to see the snow. I could play the ski. I could play the ski board. And I could do something the Korean guys do. That time I felt very very good.

26.1 //…I have to go to //…

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

26.2 // some countries //…

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

26.3 // in Southeast Asia. //

> 1----------------2----------------3----------------4----------------5
> Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 27

I suppose the most memorable event in my life at the moment anyway would be my university graduation. <u>It was a big big ceremony obviously an important thing</u>. Umm..it left and it left a mark just getting together with everybody I'd spent the last three years studying with gathering together while we all got our degrees, watched everybody else from every other departments who we maybe didn't know maybe did know vaguely get their degrees as well, everybody in academic robes looking kind of silly but still good. Umm..it was a great sort of sense of achievement and a sense of moving from one stage of life to another, I suppose.

27.1 // It was a big //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                  Very appropriate
```

Comment:

_____

_____

27.2 // big ceremony //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                  Very appropriate
```

Comment:

_____

_____

27.3 // obviously an important thing. //

```
1---------------2---------------3---------------4---------------5
Not appropriate                                  Very appropriate
```

Comment:

_____

_____

Speaker 28

Four years ago, I had a poodle dog. Um..her name is Taengmo. She was er…intelligent. <u>She is listen to me everything</u>, such as, pick up a doll. I told her to lie down but the memory was good. I was impressed. She gave right lottery. I had the money fifty thousand. I was very glad. I bought a motorcycle. When I went home, she was waiting in front of my house. I love it very much.

28.1 // She is //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

28.2 // listen to me //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

28.3 // everything //…

```
1---------------2---------------3---------------4---------------5
Not appropriate                                    Very appropriate
```

Comment:

_____

_____

Speaker 29

Two months ago, I met a fantastic experience for me. I met two guys. <u>He's a foreigner and another guy he's Thai</u>. Foreigner we loved each other around one month and we broke up three times. So bad and for Thai people he took care of me very well, he's awesome. Before I had a boyfriend I thought foreigner maybe they will say….better than Thai people, but it was not true. Thai people are sincere and have a real love than foreigners. And foreigners, they can make love to anybody. They don't have a real love. I thought like that because I met by myself.

29.1 // He's a foreigner //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

29.2 // and another guy //…

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

29.3 // he's Thai.//

| 1----------------2----------------3----------------4----------------5 |
| Not appropriate   Very appropriate |

Comment:

_____

_____

Speaker 30

I was very proud to have study tour at Kura Prachasan School. This school is ERIC Center in Chainat last Thursday. We are three teachers and forty students. We went by bus. <u>This is first time for me to learn about English lesson plan. And the teacher</u> talked about history of ERIC Center and she gave us to activity. After that we have enjoy to have lunch. I can use this knowledge to apply to my teaching. At last, I went to Sam Chook Market in Suphan Buri. It took me thirty minutes. I went shopping and bought some food and drinks. It was very hot and there were a lot of people. I went to toilet before. I was tired to go back home.

30.1 // This is first time for me //…

```
         1----------------2----------------3----------------4----------------5
         Not appropriate                                      Very appropriate
```

Comment:

_____

_____

30.2 // to learn about English lesson plan, //

```
         1----------------2----------------3----------------4----------------5
         Not appropriate                                      Very appropriate
```

Comment:

_____

_____

30.3 // And the teacher //…

```
         1----------------2----------------3----------------4----------------5
         Not appropriate                                      Very appropriate
```

Comment:

_____

_____

Speaker 31

The saddest of my life. The story that happened to me was very sad. I live with my mother. Yeah, she kind. She's good for me. She do everything for me. <u>I love her so much</u>. <u>But for two years ago, I live with her in Song Kran Day</u>. She…er..happened something with her. She had a high blood pressure and she died in front of me. I see her when she died. I tried to help her but I couldn't. I shouted to my neighbor, "Help my mum, please. Help my mum!". But they didn't help her. She died. When she was in a hospital, I called her name all the time, "My mum, my mum. Please come back to me. Oh, but it was too late. She died.

31.1 // I love her so much. //

1---------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

_____

_____

31.2 // But for two years ago //…

1---------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

_____

_____

31.3 // I live with her in Song Kran Day. //

1---------------2---------------3---------------4---------------5
Not appropriate   Very appropriate

Comment:

_____

_____

Speaker 32

Every day me and my family went to the farm for work in my farm. <u>We help to plant papayas</u>, chilis and vegetables. We worked hard. My father and my mother, me and my sister will sell the vegetable. My father and my mother worked hard for taking care of me. They worked hard every day. They were tired but they supported our family. I think I feel happy when they work in my farm and they smile when they live together.

32.1 // We help to plant//…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                       Very appropriate
```

Comment:

_____

_____

32.2 // papaya//…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                       Very appropriate
```

Comment:

_____

_____

32.3 // chili //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                       Very appropriate
```

Comment:

_____

_____

Speaker 33

Hi everybody. OK, so I would like to tell you about my secret. Okay, I will tell you about someone I fell in love. Okay, let's begin. <u>When I was sixteen years old, I went to travel at Chainat with my friends,</u> don't have father, mother. It was my first trip for me. In that time, I could go to every place if I want. It was very fun and I met someone. He was great. Ah..we could talk about every story, such as music, artist, sport and love. I think he was very first first love for me. But we couldn't go in boyfriend or girlfriend because he had girlfriend. And I think it doesn't matter because we can be best friends. And now I meet him, we can talk to each other by MSN or facebook. OK, thank you.

33.1 // When I was sixteen years old//…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

33.2 // I went to travel at Chainat //…

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

33.3 // with my friends. //

```
1----------------2----------------3----------------4----------------5
Not appropriate                                        Very appropriate
```

Comment:

_____

_____

****

Appendix G

Demographic Details of the Thai Learners

Code	Gender	Year of study	Programme of study	Age	Age of onset	Language experience scores	Attitudes towards pronunciation
EFL-H1	F	2	Arts	19	4	115	50
EFL-H2	F	1	Inter	19	4	113	37
EFL-H3	M	3	Inter	20	6	112	40
EFL-H4	M	1	Inter	21	6	112	41
EFL-H5	F	2	Arts	19	3	108	43
EFL-H6	F	1	Inter	19	3	108	46
EFL-H7	F	1	Inter	20	6	106	42
EFL-H8	M	3	Arts	23	6	103	48
EFL-H9	F	3	Inter	21	5	103	43
EFL-H10	F	3	Inter	21	6	102	43
EFL-H11	F	1	Ed	19	4	102	46
EFL-H12	F	1	Ed	19	3	102	47
EFL-H13	F	2	Arts	21	7	101	43
EFL-H14	F	4	Ed	23	5	100	45
EFL-H15	F	1	Ed	19	6	100	46
EFL-L1	F	4	Ed	22	11	60	39
EFL-L2	F	4	Ed	22	9	59	41
EFL-L3	F	3	Ed	20	11	58	38
EFL-L4	F	2	Ed	19	6	57	37
EFL-L5	F	2	Ed	20	7	57	43
EFL-L6	F	1	Ed	18	10	56	45
EFL-L7	F	1	Ed	18	7	55	44
EFL-L8	F	3	Ed	21	11	55	44
EFL-L9	F	1	Ed	20	6	54	41
EFL-L10	F	3	Ed	21	11	53	35
EFL-L11	F	4	Ed	21	10	51	45
EFL-L12	F	2	Ed	19	8	50	40
EFL-L13	M	3	Ed	22	11	50	40
EFL-L14	F	3	Arts	20	7	49	43
EFL-L15	F	4	Ed	22	11	43	37

Arts = Regular English Programme
Inter = International Programme
Ed = English Education Programme

Appendix H

Performance of Passage Reading

NS1

//1 putting your /<u>trust</u> in a/ladder // 4 de/<u>pends</u> // 4ˬ for the /<u>most</u> /part //1ˬ on /following /certain /<u>safe</u>ty /rules//

// 3 <u>first</u> //3 make /<u>sure</u> that the /ladder // 3ˬ has /no /<u>broken</u> // 1ˬ or /<u>cracked</u> /parts //

// 3 <u>then</u> //1 set the /ladder /<u>firm</u>ly in /place //3ˬ so that it /won't /<u>slip</u> //1 or /<u>shift</u> /under your /weight //

// 3 <u>fire</u>men //1ˬ and /<u>o</u>thers who/climb /ladders /every /day//1 know the im/portance of /using /<u>both</u> /hands //1ˬ when they /<u>climb</u>//3 it's /<u>safer</u> //3 <u>surer</u> //1ˬand /<u>fas</u>ter //

//3 so /<u>face</u> the /ladder //1ˬ and /use /<u>both</u> /hands //

//3 <u>fin</u>ally //1ˬ when you /have /<u>finished</u> /using the /ladder //1 put it //1ˬ in a /special /<u>rack</u> //1 or /<u>store</u> it out of the /way //

NS2

//1 putting your /<u>trust</u> in a/ladder //1 de/pends for the /<u>most</u> /part //1 on /following /<u>cer</u>tain /safety /rules//

//1 <u>first</u> //1 make /<u>sure</u> that the /ladder //3ˬ has /no /<u>broken</u> //1ˬ or /<u>cracked</u> /parts //

//3 <u>then</u> //1 set the /ladder /<u>firm</u>ly in /place //3ˬ so that it /<u>won't</u> /slip //1ˬ or /shift /under your /<u>weight</u> //

//3 <u>fire</u>men //1ˬ and /<u>o</u>thers who /climb /ladders /every day //1 know the im/portance of /using /<u>both</u> /hands when they /climb //3 it's /<u>safer</u> //3 <u>surer</u> //1 and /<u>fas</u>ter //

//1 <u>so</u> //3 <u>face</u> the /ladder //1ˬ and /use /both /hands //

//3 <u>fin</u>ally //1 when you /have /<u>finished</u> /using the /ladder //1 put it in a /special /<u>rack</u> //1 or /store it out of the /<u>way</u> //

NS3

//1 putting your /trust in a/ladder de/<u>pends</u> //1ˬ for the /<u>most</u> /part //1ˬ on /following /certain /<u>safe</u>ty /rules//

//3 <u>first</u> //3 make /<u>sure</u> that the /ladder has /no /broken //1ˬ or /<u>cracked</u> /parts //

//3 <u>then</u> //1 set the /ladder /<u>firm</u>ly in /place //3ˬ so that it /won't /<u>slip</u> //1ˬ or /<u>shift</u> /under your /weight //

//1 <u>fire</u>men and /others //1ˬwho /<u>climb</u> /ladders /every /day //1 know the im/portance of /using /both /<u>hands</u> //1ˬ when they /<u>climb</u>//3 it's /<u>safer</u> //3 <u>surer</u> //1ˬand /<u>fas</u>ter //

//3 so /<u>face</u> the /ladder //1ˬ and /use /both /hands //

//4 <u>fin</u>ally //3ˬ when you /have /<u>finished</u> /using the /ladder //3 put it in a /<u>special</u> /rack //1ˬ or /<u>store</u> it out of the /way //

EFL-H1

// put/ting /your // trust//in a /ladder // de/pends // for the /most /part // on /following//certain//safe/ty /rules //
// first // make /sure /that the /ladder /has // no /broken /or // cracked // parts //
// then // set the /ladder //firmly // in /place so /that // it /won't /slip //or /shift /under // your /weight //
// firemen //and /others /who //climb //ladders //every /day //know the im/portance //of /using //both //hands //when they /climb //it's /safer // surer //and /faster //
// so /face the /ladder // and /use /both /hands //
// finally //when you /have fi/nished // using the /ladder // put /it /in a /special //rack /or /store // it /out /of the /way //

EFL-H2

// put/ting /your /trust /in a /ladder de/pends // for the /most /part // on /following cer/tain safe/ty /rules //
// first //make /sure /that the /ladder /has /no /broken //or /cracked /parts //
// then // set the /ladder /firmly in /place // so /that it /won't /slip //or /shift un/der /your /weight //
// firemen /and /others /who /climb //ladders /every /day //know the im/portance /of /using /both /hands /when /they /climb /it's //saf/er // sur/er //and /fast/er //
// so /face the /ladder // and /use /both /hands //
// finally // when you /have /finished /using the /ladder // put /it in a spe/cial /rack //or /store /it /out /of the /way //

EFL-H3

// putting your /trust // in a /ladder de/pends // for the /most /part // on /following cer/tain /safety /rules //
// first /make /sure /that the /ladder //has /no /broken //or /cracked //parts //
// then // set the /ladder // firmly in /place // so /that it /won't /slip // or /shift /under /your /weight //
// firemen /and /others //who /climb /ladders //every /day //know the impor/tance /of /using //both /hands //when /they /climb //it's /safer //surer //and /faster //
// so //face the /ladder //and /use /both /hands //
// finally // when you /have /finished /using the /ladder // put /it in a /special /rack // or /store it /out /of the /way //

EFL-H4

// putting your /trust // in a/ladder // de/pends // for the /most /part //on /following /certain /safety /rules//

// first // make /sure that the /ladder // has /no /broken // or /cracked /parts //

// then // set the /ladder /firmly in /place // so that it /won't /slip // or /shift /under your /weight //

// firemen /and /others // who /climb // ladders /every /day // know the im/portance of /using /both /hands //when they /climb //it's /safer // surer //and /faster //

// so /face the /ladder // and /use /both /hands //

// finally // when you /have /finished /using the /ladder // put /it in a /special /rack // or /store it /out of the /way //

EFL-H5

// put/ting your /trust in a /ladder de/pends // for the /most /part // on /following cer/tain safe/ty /rules //

// first // make /sure /that the /ladder // has /no /broken // or /cracked /parts //

// then //set the /ladder /firmly in /place // so /that it /won't /slip // or /shift /under your /weight //

// firemen // and /others /who /climb /ladders //every /day // know the impor/tance of /using /both /hands // when they /climb // it's /safer //surer //and /faster //

// so /face the /ladder // and /use /both /hands //

// finally //when you /have fi/nished /using the /ladder // put /it /in /a /special /rack // or /store it /out /of the /way //

EFL-H6

// put/ting /your /trust in a lad/der de/pends // for the /most /part //on /following // cer/tain safe/ty // rules //

//first // make /sure /that the /ladder /has /no bro/ken // or /cracked /parts //

// then // set the /ladder /firmly /in /place // so /that /it /won't /slip // or /shift un/der //your //weight //

// firemen // and /others // who /climb /ladders /every /day //know the impor/tance /of /using // both // hands // when // they /climb // it's /safer // surer // and /faster //

// so // face the /ladder // and /use /both /hands //

// finally // when you /have fi/nished // us/ing the /ladder // put /it /in a /special /rack /or /store it /out /of the /way //

EFL-H7

// put/ting /your // trust in a /ladder de/pends // for the /most /part // on follow/ing cer/tain safe/ty /rules //

// first // make /sure /that // the /ladder /has // no /broken // or /cracked // parts //

// then // set the /ladder firm/ly // in /place // so /that // it /won't /slip // or /shift //un/der /your /weight //

// firemen // and /others // who /climb // ladders // every /day // know // the impor/tance //of u/sing /both /hands // when /they /climb /it's /saf// er // surer //and /faster //

//so /face // the /ladder // and /use /both /hands //

// finally // when /you /have fi/nished // using // the /ladder //put /it // in /a /special /rack // or /store // it /out /of the /way //

EFL-H8

//put/ting // your /trust // in a /ladder // de/pends // for the /most /part // on /following // cer/tain // safe/ty // rules //

// first // make /sure // that the /ladder // has /no /broken // or // cracked // parts //

// then // set the /ladder //firmly // in /place /so //that it /won't //slip //or /shift // under // your /weight //

// firemen and /others // who /climb // ladders /every /day // know // the im/portance /of /using /both /hands // when /they /climb // it's // safer // surer // and /faster //

// so /face // the /ladder // and /use /both /hands //

// finally // when you /have /finished // using the /ladder // put /it /in // a /special /rack // or /store // it /out // of the /way //

EFL-H9

// putting /your /trust // in a /ladder de/pends // for the /most /part // on /following cer/tain /safety /rules //

// first // make /sure /that //the /ladder /has /no /broken // or /cracked //parts //

// then // set the /ladder /firmly in /place // so /that // it /won't /slip //or /shift /under /your /weight //

// firemen // and /others who /climb /ladders /every /day // know the /importance /of /using /both /hands // when /they /climb // it's /safer // surer // and /faster //

// so // face the /ladder // and /use /both /hands //

// finally // when /you /have /finished /using the /ladder // put /it // in a /special /rack // or /store /it /out /of the /way //

EFL-H10

// put/ting /your /trust in a /ladder de/pends // for the /most /part // on /following cer/tain /safety /rules //

// first // make /sure /that the /ladder /has no brok/en // or /cracked /parts //

// then // set the /ladder /firmly in /place // so /that // it /won't /slip // or /shift // under /your /weight //

// firemen /and /others // who /climb /ladders every /day // know the impor/tance /of /using /both /hands // when /they /climb /it's /safer // surer // and /faster //

// so /face the /ladder // and /use /both /hands //

// final/ly // when /you /have /finished // us/ing the /ladder // put /it /in a /special /rack //or /store /it /out /of the /way //

EFL-H11

//put/ting your /trust // in a /ladder de/pends // for // the /most // part //on follow/ing cer/tain safe/ty // rules //

// first // make /sure /that //the /ladder // has /no //broken // or /cracked //parts //

// then // set the /ladder // firmly // in /place // so /that // it /won't /slip // or /shift //under /your /weight //

// fire/men and /others // who /climb // ladders /every /day //know // the impor/tance /of /using //both //hands //when /they //climb //it's//safer //surer //and /faster //

//so /face the /ladder // and /use /both /hands //

// finally // when /you /have /finished /using the /ladder // put /it //in a /special /rack // or /store it //out /of the /way //

EFL-H12

// putting your /trust // in a /ladder // de/pends // for the /most /part // on /following cer/tain // safe/ty /rules //

// first // make /sure /that //the /ladder // has no /broken // or /cracked /parts //

// then // set the /ladder /firmly // in /place // so /that // it /won't /slip // or /shift // under /your /weight //

// firemen //and /others // who /climb //ladders /every /day //know the im/portance // of /using // both /hands // when //they /climb // it's /safer // surer // and /faster //

// so // face the /ladder // and /use /both /hands //

// finally // when /you /have fi/nished //using the /ladder // put /it /in a /special /rack // or /store // it /out // of the /way //

EFL-H13

// putting your /trust // in a /ladder de/pends // for the /most /part //on /following /certain /safety /rules //

// first // make /sure that the /ladder /has no /broken // or /cracked /parts //

// then // set the /ladder /firmly in /place // so /that // it /won't /slip // or /shift /under /your /weight //

// firemen // and /others who /climb /ladders /every /day // know the /importance // of /using /both /hands //when /they /climb // it's /safer // surer // and /faster //

// so // face the /ladder // and /use /both /hands //

// finally // when you /have /finished // using the /ladder // put /it in a /special /rack // or /store it /out of the /way //

EFL-H14

// putting your /trust in a /ladder // de/pends // for the /most /part // on /following // cer/tain // safety /rules //

// first // make /sure /that the /ladder /has no /broken // or /cracked /parts //

// then // set the /ladder // firmly // in /place // so /that /it /won't /slip // or /shift un/der your /weight //

// firemen // and /others who /climb /ladders every /day //know the impor/tance /of /using /both /hands // when they /climb // it's /safer //surer // and /faster //

// so /face // the /ladder // and /use /both /hands //

// finally // when you /have /finished // using the /ladder // put /it /in // a /special /rack // or /store // it /out /of the /way //

EFL-H15

// put/ting /your /trust in a /ladder /depends // for the /most /part // on /following /certain /safety /rules //

// first // make /sure that the /ladder /has no /broken // or /cracked /parts //

// then // set the /ladder /firmly in /place // so /that it /won't /slip //or /shift /under //your /weight //

// firemen /and /others // who /climb /ladders every /day // know /the /importance /of /using /both /hands //when /they /climb // it's /safer // surer //and /faster //

// so /face // the /ladder // and /use /both /hands //

// final/ly // when you /have /finished /using the /ladder // put /it //in a /special /rack // or /store it /out // of the /way //

EFL-L1

// put/ting /your /trust /in /a lad/der de/pends // for the /most /part // on follow/ing cer/tain safe/ty /rules //

// first //make /sure /that // the lad/der /has /no brok/en // or /cracked /parts //

// then // set the lad/der // firm/ly in /place /so // that it /won't /slip //or /shift un/der /your /weight //

// fire/men // and o/thers // who /climb // lad/ders eve/ry /day /know the im/portance // of us/ing /both /hands //when /they /climb //it's saf/er //sur/er //and fast/er//

// so /face the lad/der // and /use /both /hands //

// final/ly // when /you /have fi/nished us/ing the lad/der // put /it /in a spe/cial /rack // or /store // it /out /of the /way //

EFL-L2

// put/ting /your /trust // in /a lad/der // de/pends // for the /most // part // on follow/ing // cer/tain // safe/ty /rules //

// first // make /sure /that //the // lad/der /has // no // brok/en /or //cracked // parts //

// then /set the //lad/der // firm/ly // in /place //so that // it /won't /slip // or /shift und/er /your //weight //

// firemen /and o/thers /who /climb // lad/ders // every /day // know // the impor/tance //of /using /both /hands //when // they // climb //it's //saf/er //sur/er //and fast/er//

// so /face // the //lad/der /and // use /both /hands //

// final/ly // when /you /have fi/nished // us/ing the lad/der // put /it // in /a spe/cial /rack // or /store // it /out /of // the /way //

EFL-L3

// put/ting /your /trust // in /a lad/der de/pends // for the /most /part // on follow/ing cer/tain safe/ty /rules //

// first // make /sure /that //the lad/der / has /no brok/en //or /cracked /parts //

// then // set the lad/der // firm/ly /in /place /so /that // it /won't /slip // or /shift und/er /your /weight //

// fire/men and o/thers /who /climb // lad/ders eve/ry /day // know // the impor/tance // of us/ing /both /hands /when /they /climb // it's saf/er // sur/er //and fast/er//

// so /face //the lad/der /and // use /both /hands //

// final/ly // when /you /have fi/nished us/ing the lad/der // put /it /in /a spe/cial /rack // or /store /it /out /of the /way //

EFL-L4

// put/ting /your /trust //in // a lad/der de/pends // for the /most /part // on // follow/ing // certain // safe/ty // rules //

// first // make sure /that // the lad/der //has no brok/en /or // cracked // parts //

// then // set the lad/der // firm/ly // in // place // so /that //it /won't /slip // or /shift // und/er /your //weight //

// fire/men //and //others //who //climb//lad/ders eve/ry /day //know the im/portance //of /using//both /hands //when /they /climb//it's //saf/er //sur/er //and // fast/er //

// so // face // the lad/der /and // use /both /hands //

// finally // when you /have // fi/nished // using // the // lad/der // put //it /in // a spe/cial /rack // or /store /it // out /of the /way //

EFL-L5

// put/ting /your /trust //in a lad/der // de/pends // for the /most /part // on follow/ing // cer/tain // safety /rules //

// first // make /sure /that // the lad/der /has /no bro/ken // or //cracked //parts //

// then // set the lad/der firm/ly // in /place //so /that //it // won't //slip // or /shift // under /your /weight //

// fire/men // and o/thers // who /climb //lad/ders //every /day // know // the impor/tance /of //using /both //hands //when they /climb //it's /safer //sur/er //and fast/er //

// so /face // the lad/der // and /use //both //hands //

// final/ly // when you /have // fi/nished // us/ing the lad/der // put /it //in /a spe/cial /rack // or /store /it /out /of the /way //

EFL-L6

// put/ting /your /trust //in a lad/der // de/pends // for the /most /part // on // follow/ing // cer/tain // safe/ty /rules //

// first // make /sure // that the lad/der //has // no bro/ken // or // cracked //parts //

// then /set the lad/der firm/ly // in /place /so // that // it // won't // slip // or // shift un/der // your // weight //

//fire/men /and o/thers //who /climb //lad/ders eve/ry /day /know //the impor/tance // of /us//ing // both //hands //when //they //climb //it's saf/er //sur/er//and fast/er //

// so /face // the lad/der // and /use // both /hands //

// final/ly // when /you /have fi/nished //us/ing /the // lad/der /put // it /in /a spe/cial /rack // or /store // it /out /of the /way //

EFL-L7

// put/ting /your /trust /in a /lad/der // de/pends /for the /most /part // on follow/ing // cer/tain // safe/ty // rules //

// first /make /sure /that // the /lad/der / has /no bro/ken // or /cracked // parts //

// then // set /the /lad/der // firm/ly // in // place /so /that // it /won't /slip // or // shift /un/der // your /weight //

//fire/men /and //o/thers /who /climb //lad/ders //eve/ry /day // know /the im/por/tance /of /us/ing /both /hands //when /they //climb //it's //saf//er //surer //and /faster //

// so /face // the // lad/der // and /use /both /hands //

// final/ly // when /you /have fi/nished //us/ing the /lad/der /put /it /in /a spe/cial /rack /or /store /it /out //of /the /way //

EFL-L8

// put/ting /your /trust //in a lad/der // de/pends // for the /most // part //on follow/ing // cer/tain //safe/ty /rules //

//first // make /sure /that // the lad/der has // no bro/ken /or // cracked // parts //

// then // set the lad/der // firm/ly // in /place /so /that // it /won't /slip // or //shift //un/der /your //weight //

// fire/men //and o/thers //who //climb //lad/ders //eve/ry /day //know /the//impor/tance of us/ing /both /hands //when /they//climb//it's//saf/er//sur/er//and fast/er //

// so /face // the lad/der // and /use /both /hands //

// final/ly // when /you /have /finished // us/ing// the lad/der // put /it // in //a spe/cial // rack // or /store //it /out //of the /way //

EFL-L9

// put/ting /your /trust //in a lad/der // de/pends // for the /most /part // on follow/ing // cer/tain safe/ty /rules //

// first // make /sure /that // the /ladder / has /no bro/ken //or /cracked //parts //

// then // set the /ladder firm/ly // in //place /so /that //it /won't /slip //or /shift un/der /your /weight //

// fire/men //and o/thers //who //climb//lad/ders //eve/ry /day//know /the impor/tance /of us/ing /both /hands //when /they /climb//it's// saf/er// sur/er //and fast/er //

// so /face // the lad/der // and /use //both /hands //

// final/ly // when /you /have fi/nished // us/ing /the lad/der // put /it // in /a spe/cial // rack /or /store /it // out /of the /way //

EFL-L10

// put/ting // your /trust // in a lad/der //de/pends // for the /most /part // on follow/ing //cer/tain //safe/ty //rules //

// first // make /sure /that // the /ladder // has /no /broken //or /cracked //parts //

// then // set the// lad/der // firmly // in // place //so /that //it /won't // slip //or /shift //un/der // your /weight //

// fire/men //and /others //who //climb//lad/ders//eve/ry /day //know the im/portance //of us/ing // both //hands //when /they /climb//it's //saf/er //sur/er //and//fast/er //

// so /face //the lad/der // and /use /both /hands //

// final/ly // when // you /have fi/nished // us/ing the lad/der // put /it // in a spe/cial // rack // or /store //it /out /of the /way //

EFL-L11

// put/ting /your /trust /in a /ladder // de/pends // for the /most /part // on /following /cer/tain safe/ty //rules //

// first // make /sure /that the /ladder // has /no /broken //or /cracked //parts //

// then // set the /ladder //firmly // in /place // so /that //it /won't /slip //or /shift //un/der /your /weight //

// fire/men // and o/thers // who /climb /ladders // eve/ry /day // know //the impor/tance /of /using /both // hands //when /they /climb //it's /safer //surer //and /faster //

// so /face // the /ladder // and /use /both /hands //

// finally // when /you /have fi/nished // using the /ladder // put /it /in a /special /rack // or /store //it /out // of /the /way //

EFL-L12

// put/ting /your trust //in a lad/der // de/pends // for /the /most /part // on follow/ing //certain safe/ty // rules //

// first // make /sure /that // the /ladder /has /no /broken //or /cracked /parts //

// then // set the /ladder // firmly // in /place // so /that //it /won't /slip //or /shift //un/der /your /weight //

// firemen //and /others //who //climb //ladders /every /day //know // the im/portance /of /using /both /hands //when //they //climb //it's // safer //surer //and // faster //

// so //face the /ladder // and /use /both /hands //

// finally // when /you /have fi/nished //us/ing //the //ladder // put /it /in //a /special /rack // or /store // it /out /of the /way //

EFL-L13

// put/ting /your // trust in a /ladder // de/pends // for the /most /part // on follow/ing // cer/tain // safe/ty // rules //

// first // make /sure /that // the //ladder // has //no /broken //or /cracked //parts //

//then // set the /ladder // firmly /in /place /so /that // it /won't /slip /or // shift // un/der /your // weight //

// fire/men //and o/thers //who /climb //lad/ders eve/ry /day //know the im/portance //of us/ing /both /hands //when /they /climb //it's //saf/er //surer // and //fast/er//

// so /face // the /ladder /and /use // both /hands //

// final/ly /when /you /have fi/nished //us/ing the /ladder // put /it /in /a /special // rack /or // store /it /out /of /the /way //

EFL-L14

// putting /your /trust // in a lad/der de/pends //for the /most /part // on follow/ing //cer/tain // safe/ty /rules //

// first // make /sure // that the /ladder /has // no brok/en /or //cracked // parts //

// then /set /the // ladder firm/ly // in /place /so /that // it //won't //slip // or /shift un/der /your /weight //

// fire/men //and /others /who /climb //lad/ders eve/ry /day //know //the impor/tance /of us/ing /both//hands//when /they /climb //it's saf/er //surer //and /faster//

// so /face // the lad/der // and // use /both /hands //

// final/ly // when /you /have fi/nished // us/ing /the // lad/der /put // it /in a spe/cial /rack // or /store // it /out // of /the /way //

EFL-L15

// put/ting /your /trust // in //a lad/der // de/pends // for the /most /part // on follow/ing cer/tain //safe/ty /rules //

// first // make /sure /that // the lad/der //has /no brok/en //or /cracked // parts //

// then // set /the lad/der // firmly // in /place // so /that // it /won't /slip //or /shift // un/der /your /weight //

// firemen //and //o/thers //who /climb//lad/ders // eve/ry /day //know/the impor/tance //of us/ing /both /hands //when /they /climb /it's //saf/er //sur/er //and //fast/er//

// so /face // the lad/der //and /use /both /hands //

// finally // when // you /have // fi/nished us/ing /the // lad/der // put /it /in // a spe/cial /rack //or /store //it /out /of /the /way //

Appendix I

Performance of Dialogue Reading

Participant	Token 1: Haven't seen you for ages!
NS1	//**1** haven't /seen you for /<u>ages</u> //
NS2	//**1** haven't /seen you for /<u>ages</u> //
NS3	//**1** haven't /seen you for /<u>ages</u> //
EFL-H1	//**1** haven't /seen /you for /<u>ages</u> //
EFL-H2	//**1** haven't /seen you /for /<u>ages</u> //
EFL-H3	//**1** haven't /seen /you /for /<u>age</u> //
EFL-H4	//**1** haven't /seen /you for /<u>ages</u> //
EFL-H5	//**1** haven't /seen you /for /<u>ages</u> //
EFL-H6	//**1** haven't /seen /you /for /<u>age</u> //
EFL-H7	//**1** haven't /seen /you /for /<u>age</u> //
EFL-H8	//**3** have/n't /<u>seen</u> //**1** <u>you</u> /for /age //
EFL-H9	//**1** haven't /seen you /for /<u>age</u> //
EFL-H10	//**3** haven't /<u>seen</u> //**1** you /for /<u>ages</u> //
EFL-H11	//**1** haven't /<u>seen</u> you /for ag/es //
EFL-H12	//**3** haven't /seen you /for /<u>ages</u> //
EFL-H13	//**1** have/n't /seen you /for /<u>ages</u> //
EFL-H14	//**1** haven't /<u>seen</u> you /for /<u>ages</u> //
EFL-H15	//**1** have/n't /seen you /for ag/<u>es</u> //
EFL-L1	//**1** have/n't /seen /you /for /<u>ages</u> //
EFL-L2	//**3** <u>haven</u>'t /seen /you /for /ag/es //
EFL-L3	//**1** haven't /seen /you /for /<u>age</u> //
EFL-L4	//**1** have/n't /seen /<u>you</u> //**1** for /<u>age</u> //
EFL-L5	//**1** have/n't /<u>seen</u> //**1** you /for /<u>age</u> //
EFL-L6	//**3** have/<u>n't</u> //**1** <u>seen</u> //**1** you /for /<u>age</u> //
EFL-L7	//**1** haven't /seen /you /for /<u>age</u> //
EFL-L8	//**1** haven't /seen /you /for /<u>age</u> //
EFL-L9	//**1** <u>haven</u>'t /seen /you //**1** for /ag/es //
EFL-L10	//**1** have/n't /seen /you /for /<u>age</u> //
EFL-L11	//**1** haven't /<u>seen</u> /you //**1** for /<u>age</u> //
EFL-L12	//**1** haven't /seen /you /for /<u>age</u> //
EFL-L13	//**1** haven't /seen /you /for /<u>age</u> //
EFL-L14	//**1** have/n't /seen /you /for /<u>age</u> //
EFL-L15	// **1** haven't /seen /you for /<u>age</u> //

Participant	Token 2: What've you been doing?
NS1	//**1** what've you /been /<u>doing</u> //
NS2	//**1** what've you /been /<u>doing</u> //
NS3	//**1** what've you /been /<u>doing</u> //
EFL-H1	//**1** <u>what</u>'ve you /been /doing //
EFL-H2	//**1** what've you /been /<u>doing</u> //
EFL-H3	//**1** what've /you /been /<u>doing</u> //
EFL-H4	//**1** what've you /been /<u>doing</u> //
EFL-H5	//**1** what've /you /been /<u>doing</u> //
EFL-H6	//**1** what've /you /been /<u>doing</u> //
EFL-H7	//**3** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-H8	//**3** <u>what</u>/'ve //**1** <u>you</u> /been /doing //
EFL-H9	//**1** what've you /been do/<u>ing</u> //
EFL-H10	//**1** what've you /been /<u>doing</u> //
EFL-H11	//**1** <u>what've</u> //**1** you /<u>been</u> /doing //
EFL-H12	//**3** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-H13	//**1** what've /you /been /<u>doing</u> //
EFL-H14	//**3** <u>what've</u> //**1** you /<u>been</u> /doing //
EFL-H15	//**1** what've you /been /<u>doing</u> //
EFL-L1	//**1** what've /you /been /<u>doing</u> //
EFL-L2	//**1** <u>what've</u> /you //**2** <u>been</u> /doing //
EFL-L3	//**1** what've /you /been /<u>doing</u> //
EFL-L4	//**2** what've /you /been /<u>doing</u> //
EFL-L5	//**3** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-L6	//**3** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-L7	//**1** <u>what've</u> /you /been /do/<u>ing</u> //
EFL-L8	//**1** <u>what've</u> //**3** you /been /<u>doing</u> //
EFL-L9	//**1** what've /you /been /<u>doing</u> //
EFL-L10	//**3** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-L11	//**1** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-L12	//**2** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-L13	//**3** <u>what've</u> //**1** <u>you</u> /been /doing //
EFL-L14	//**3** <u>what've</u> //**1** you /been /<u>doing</u> //
EFL-L15	//**1** what've /<u>you</u> /been//**3** <u>doing</u> //

Participant	Token 3: You've been there before...
NS1	//**1**ˏ you've /been /there be/<u>fore</u> //
NS2	//**1** you've /been /there be/<u>fore</u> //
NS3	//**1** you've /been /there be/<u>fore</u> //
EFL-H1	//**1** you've /been /there be/<u>fore</u> //
EFL-H2	//**1** you've /been /there be/<u>fore</u> //
EFL-H3	//**2** you've /been /there be/<u>fore</u> //
EFL-H4	//**1** you've /<u>been</u> /there be/fore //
EFL-H5	//**1** you've /been /there be/<u>fore</u> //
EFL-H6	//**1** you've /<u>been</u> /there be/fore //
EFL-H7	//**1** you've /been /there be/<u>fore</u> //
EFL-H8	//**1** <u>you've</u> //**3** <u>been</u> //**1** there be/<u>fore</u> //
EFL-H9	//**4** you've /been /there be/<u>fore</u> //
EFL-H10	//**4** you've /been /there be/<u>fore</u> //
EFL-H11	//**1** <u>you've</u> //**3** <u>been</u> //**3** there be/<u>fore</u> //
EFL-H12	//**3** <u>you've</u> //**3** been /there be/<u>fore</u> //
EFL-H13	//**1** you've /been /there be/<u>fore</u> //
EFL-H14	//**3** <u>you've</u> //**2** been /there be/<u>fore</u> //
EFL-H15	//**1** you've /been /there be/<u>fore</u> //
EFL-L1	//**1** you've /<u>been</u> /there be/fore //
EFL-L2	//**1** you' ve /been /there be/fore //
EFL-L3	//**1** you've /been /there be/<u>fore</u> //
EFL-L4	//**1** you've /been /there be/<u>fore</u> //
EFL-L5	//**1** <u>you've</u> //**1** been /there be/<u>fore</u> //
EFL-L6	//**1** you've /<u>been</u> /there be/fore //
EFL-L7	//**1** you've /<u>been</u> // there be/<u>fore</u> //
EFL-L8	//**1** you've /been /there be/fore //
EFL-L9	//**1** you've /<u>been</u> /there be/fore //
EFL-L10	//**3** you've /<u>been</u> //**3** <u>there</u> be/fore //
EFL-L11	//**1** you' ve /been /there be/fore //
EFL-L12	//**3** <u>you've</u> //**3** <u>been</u> //**1** there be/<u>fore</u> //
EFL-L13	//**3** you' ve /been /there be/<u>fore</u> //
EFL-L14	//**1** <u>you' ve</u> /been /there be/fore //
EFL-L15	//**4** you've /been /there be/<u>fore</u> //

Participant	Token 4: ..., haven't you?
NS1	//**2** <u>have</u>n't you //
NS2	//**2** <u>have</u>n't you //
NS3	//**2** <u>have</u>n't you //
EFL-H1	//**3** haven't /<u>you</u> //
EFL-H2	//**2** <u>have</u>n't /you //
EFL-H3	//**2** <u>have</u>n't /you //
EFL-H4	//**1** <u>have</u>n't /you //
EFL-H5	//**2** <u>have</u>n't you //
EFL-H6	//**1** have/n't /<u>you</u> //
EFL-H7	//**1** have/n't /<u>you</u> //
EFL-H8	//**3** <u>have</u>/n't //**1** <u>you</u> //
EFL-H9	//**1** <u>have</u>n't /you //
EFL-H10	//**3** haven't /<u>you</u> //
EFL-H11	//**2** have/n't /<u>you</u> //
EFL-H12	//**1** <u>have</u>/n't /you //
EFL-H13	//**3** <u>have</u>n't /you //
EFL-H14	//**2** haven't /<u>you</u> //
EFL-H15	//**2** <u>have</u>n't /you //
EFL-L1	//**1** have/n't /<u>you</u> //
EFL-L2	//**2** <u>have</u>n't /you //
EFL-L3	//**1** <u>have</u>/n't /you //
EFL-L4	//**1** <u>have</u>n't /you //
EFL-L5	//**1** have/n't /<u>you</u> //
EFL-L6	//**1** <u>have</u>n't //**1** <u>you</u> //
EFL-L7	//**1** <u>have</u>/n't /you //
EFL-L8	//**1** <u>have</u>/n't /you //
EFL-L9	//**1** <u>have</u>n't /you //
EFL-L10	//**3** have/<u>n't</u> //**1** <u>you</u> //
EFL-L11	//**2** <u>have</u>n't /you //
EFL-L12	//**2** have/n't /<u>you</u> //
EFL-L13	//**3** have/n't /<u>you</u> //
EFL-L14	//**3** have/n't /<u>you</u> //
EFL-L15	//**2** <u>have</u>n't you //

Participant	Token 5: Two years ago?
NS1	//**1** two /<u>years</u> a/go //
NS2	//**2** two /<u>years</u> a/go //
NS3	//**2** two /<u>years</u> a/go //
EFL-H1	//**1** two /years a/<u>go</u> //
EFL-H2	//**2** two /years a/<u>go</u> //
EFL-H3	//**1** two /years a/<u>go</u> //
EFL-H4	//**2** two /years a/<u>go</u> //
EFL-H5	//**2** two /<u>years</u> a/go //
EFL-H6	//**2** two /<u>years</u> a/go //
EFL-H7	//**1** two /years a/<u>go</u> //
EFL-H8	//**2** two /years a/<u>go</u> //
EFL-H9	//**4** two /years a/<u>go</u> //
EFL-H10	//**1** two /<u>years</u> //**2** a/<u>go</u> //
EFL-H11	//**2** two /<u>years</u> a/go //
EFL-H12	//**3** two /<u>years</u> a/go //
EFL-H13	//**2** two /<u>years</u> a/go //
EFL-H14	//**2** <u>two</u> /years a/go //
EFL-H15	//**4** two /<u>years</u> a/go //
EFL-L1	//**1** two /years a/<u>go</u> //
EFL-L2	//**2** two /<u>years</u> a/go //
EFL-L3	//**1** two /years a/<u>go</u> //
EFL-L4	//**1** <u>two</u> /years a/go //
EFL-L5	//**1** two /years a/<u>go</u> //
EFL-L6	//**1** two /years a/go //
EFL-L7	//**1** two /<u>years</u> a/go //
EFL-L8	//**1** two /<u>years</u> a/go //
EFL-L9	//**1** two /years a/<u>go</u> //
EFL-L10	//**3** two /<u>years</u> //**1** a/<u>go</u> //
EFL-L11	//**2** two /<u>years</u> a/go //
EFL-L12	//**1** two /years a/<u>go</u> //
EFL-L13	//**1** two /<u>years</u> //**3** a/<u>go</u> //
EFL-L14	//**1** two /<u>years</u> a/go //
EFL-L15	//**2** two /years a/<u>go</u> //

Participant	Token 6: By the way,...
NS1	//**1**˰ by the /<u>way</u> //
NS2	//**4**˰ by the /<u>way</u> //
NS3	//**1** by the /<u>way</u> //
EFL-H1	//**1** by the /<u>way</u> //
EFL-H2	//**1** by the /<u>way</u> //
EFL-H3	//**3** by the /<u>way</u> //
EFL-H4	//**3** by the /<u>way</u> //
EFL-H5	//**1** by the /<u>way</u> //
EFL-H6	//**1** by the /<u>way</u> //
EFL-H7	//**1** by the /<u>way</u> //
EFL-H8	//**1** by the /<u>way</u> //
EFL-H9	//**3** by the /<u>way</u> //
EFL-H10	//**1** by the /<u>way</u> //
EFL-H11	//**3** by the /<u>way</u> //
EFL-H12	//**1** <u>by</u> the /way //
EFL-H13	//**1** by the /<u>way</u> //
EFL-H14	//**3** by the /<u>way</u> //
EFL-H15	//**1** by the /<u>way</u> //
EFL-L1	//**1** by the /<u>way</u> //
EFL-L2	//**1** by the /<u>way</u> //
EFL-L3	//**1** <u>by</u> the /way //
EFL-L4	//**1** by the /<u>way</u> //
EFL-L5	//**1** by the /<u>way</u> //
EFL-L6	//**1** by the /<u>way</u> //
EFL-L7	//**1** by the /<u>way</u> //
EFL-L8	//**1** by the /<u>way</u> //
EFL-L9	//**1** by /the /<u>way</u> //
EFL-L10	//**3** by the /<u>way</u> //
EFL-L11	//**3** by the /<u>way</u> //
EFL-L12	//**1** by the /<u>way</u> //
EFL-L13	//**3** by the /<u>way</u> //
EFL-L14	//**3** by the /<u>way</u> //
EFL-L15	//**3** by the /<u>way</u> //

Participant	Token 7: ...are you going to return those books of mine you borrowed?
NS1	//**4**˛ are you /going to re/turn those /<u>books</u> of /mine //**4**˛ you /<u>bor</u>rowed //
NS2	//**4** are you /going to re/turn those /<u>books</u> of /mine you /borrowed //
NS3	//**1** are you /going to re/turn those /<u>books</u> of /mine you /borrowed //
EFL-H1	//**1** are you go/<u>ing</u> to re/turn //**1** those /<u>books</u> //**3** of /<u>mine</u> //**1** you /borrowed //
EFL-H2	//**1** are /you go/ing to re/turn /those /books /of /mine you /<u>borrowed</u> //
EFL-H3	//**1** are /you /going /to re/turn /those /<u>books</u> //**2** of /mine you /borrowed //
EFL-H4	//**3** are you /going to re/turn /<u>those</u> /books //**1**˛of /mine //**1**˛ you /<u>borrowed</u> //
EFL-H5	//**1**˛are you go/ing to re/turn /<u>those</u>/ books //**1** of /mine you /<u>borrowed</u> //
EFL-H6	//**1** are /you /going /to re/turn /those /<u>books</u> //**1** of /mine you /<u>borrowed</u> //
EFL-H7	//**1** are you go/ing to re/turn /those /<u>books</u> //**1** of /mine /you /<u>borrowed</u> //
EFL-H8	//**1** are /you /going /to re/turn /those/ <u>books</u> //**3** of /mine //**1** you bor/<u>rowed</u> //
EFL-H9	//**2** are you go/ing /to re/turn /those /books /of /<u>mine</u> //**3** you /<u>borrowed</u> //
EFL-H10	//**1** are /you go/ing to re/turn /<u>those</u> /books //**3** of /<u>mine</u> //**1** you /<u>borrowed</u> //
EFL-H11	//**2** are /you /going //**2** to re/turn /those /<u>books</u> //**2** of /<u>mine</u> //**1** you //**1** borrowed //
EFL-H12	//**2** are /you /go<u>ing</u> //**3** to re/<u>turn</u> //**1** those /books //**3** of /<u>mine</u> //**1** you /borrowed //
EFL-H13	//**3** are /you /going to re/turn /<u>those</u> /books //**3** of /mine //**1** you /<u>borrowed</u> //
EFL-H14	//**1** are you /go<u>ing</u> to re/turn //**3** those /<u>books</u> //**3** of /mine //**1** you /<u>borrowed</u> //
EFL-H15	//**3** are you /go<u>ing</u> to re/turn /those /books //**1** of /<u>mine</u> //**2** you bor/<u>rowed</u> //
EFL-L1	//**1** are /you /going /to /re/turn /<u>those</u> /books //**1** of /mine you /<u>borrowed</u> //
EFL-L2	//**1** are /you go/<u>ing</u> /to /re/turn //**4** those /books //**1** <u>of</u> /mine /you //**1** borrowed //
EFL-L3	//**3** are /you /go/ing /to /re/turn /<u>those</u> /books //**1** of /mine /you bor/<u>rowed</u> //
EFL-L4	//**1** are you /going /to re/turn /those /<u>books</u> //**1** of /<u>mine</u> /you //**1** borrowed //
EFL-L5	//**1** are /you /going /to /return /those /<u>books</u> //**1** of /mine /you bor/<u>rowed</u> //
EFL-L6	//**1** are /you go/<u>ing</u> //**3** to re/turn /<u>those</u> /books //**1** of /<u>mine</u> //**1** you /<u>borrowed</u> //
EFL-L7	//**1** are /<u>you</u> //**1** going /to //**4** re/turn /<u>those</u> /books //**1** <u>of</u> /mine /you //**1** bor/<u>row</u>/ed //
EFL-L8	//**3** are /you /go<u>ing</u> //**4** to /re/turn /<u>those</u> /books //**1** of /<u>mine</u> /you//**3** <u>bor</u>/rowed //
EFL-L9	//**3** are /you go/<u>ing</u> /to //**1** re/turn /those /<u>books</u> //**1** of /mine /you /<u>bor</u>/rowed //
EFL-L10	//**3** are /you go/<u>ing</u> //**3** to /re/turn /those /<u>books</u> //**2** of /mine /you /<u>borrowed</u> //
EFL-L11	//**1** are you go/<u>ing</u> to /return /those /<u>books</u> //**3** of /<u>mine</u> //**2** you bor/<u>rowed</u> //
EFL-L12	//**1** are /you /going /to re/turn /those /<u>books</u> //**3** of mine //**1** you /<u>borrowed</u> //
EFL-L13	//**3** are /you go/<u>ing</u> //**3** to /re/turn /<u>those</u> /books //**1** of /<u>mine</u> /you //**1** borrowed //
EFL-L14	//**1** are /you /going /to re/turn /<u>those</u> /books //**1** of /<u>mine</u> /you //**1** borrowed //
EFL-L15	//**1** are /you go/ing /to re/turn /those /<u>books</u> //**1** of /mine /you /<u>bor</u>rowed //

Participant	Token 8: The ones about culture, pronunciation and language.
NS1	//1 ˬthe /ones a/bout /<u>cul</u>ture //4 pronunci/<u>a</u>tion //1 ˬand /<u>lan</u>guage //
NS2	//3 ˬthe /ones a/bout /<u>cul</u>ture //3 pronunci/<u>a</u>tion //1 ˬand /<u>lan</u>guage //
NS3	//3 ˬthe /ones a/bout /<u>cul</u>ture //1 pronunci/<u>a</u>tion //1 ˬand /<u>lan</u>guage //
EFL-H1	//3 ˬthe /<u>ones</u> a/bout //1 <u>cul</u>ture //1 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H2	//3 ˬthe /ones a/bout /<u>cul</u>ture //1 pronuncia/<u>tion</u> //1 and /lang/<u>uage</u> //
EFL-H3	//3 the /ones a/bout cul/<u>ture</u> //1 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H4	//3 ˬthe /ones a/bout /<u>cul</u>ture //3 pronunci/<u>a</u>tion //1 and /<u>lan</u>guage //
EFL-H5	//3 the /<u>ones</u> a/bout //1 <u>cul</u>ture //1 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H6	//1 the /ones a/bout /<u>cul</u>ture //4 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H7	//3 the /<u>ones</u> a/bout //3 cul/<u>ture</u> //3 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H8	//3 the /ones a/bout /<u>cul</u>ture //1 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H9	//3 the /ones a/bout /<u>cul</u>ture //3 pronuncia/<u>tion</u> //3 and /<u>lang</u>/uage //
EFL-H10	//1 the /ones a/bout cul/<u>ture</u> //1 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H11	//3 the /<u>ones</u> a/bout //1 <u>cul</u>ture //1 pro/<u>nun</u>ciation //1 and /<u>lang</u>/uage //
EFL-H12	//3 the /<u>ones</u> a/bout //1 <u>cul</u>ture //4 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H13	//1 the /ones a/bout /<u>cul</u>ture //1 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-H14	//1 the /ones a/bout /<u>cul</u>ture //3 pronuncia/<u>tion</u> //1 and /<u>lang</u>/uage //
EFL-H15	//3 the /ones a/bout cul/<u>ture</u> //3 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-L1	//3 the /<u>ones</u> //1 a/bout /cul/<u>ture</u> //1 pronuncia/<u>tion</u> //1 and /<u>lang</u>/uage //
EFL-L2	//3 the /<u>ones</u> a/bout //3 <u>cul</u>ture //3 pronuncia/<u>tion</u> //1 and /<u>lang</u>/uage //
EFL-L3	//3 the /<u>ones</u> a/bout /cul/ture //1 pronunci/<u>a</u>tion //1 and /lang/<u>uage</u> //
EFL-L4	//3 the /<u>ones</u> a/bout //1 <u>cul</u>ture //1 <u>pro</u>nunciation //1 and /<u>lang</u>/uage //
EFL-L5	//3 the /<u>ones</u> //3 a/bout /<u>cul</u>/ture //3 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-L6	//1 the /<u>ones</u> //1 a/bout cul/<u>ture</u> //1 pronuncia/<u>tion</u> //1 and /<u>lang</u>/uage //
EFL-L7	//3 the /<u>ones</u> //3 a/<u>bout</u> //1 culture //1 pro/nuncia/<u>tion</u> //1 and /<u>lang</u>/uage //
EFL-L8	//3 the /<u>ones</u> a/bout cul/<u>ture</u> //3 pronunci/<u>a</u>tion //1 and /lang/<u>uage</u> //
EFL-L9	//1 the /<u>ones</u> a/bout /cul/<u>ture</u> //1 pronuncia/<u>tion</u> //1 and /<u>lang</u>/uage //
EFL-L10	//3 the /<u>ones</u> //3 a/<u>bout</u> /<u>cul</u>ture //3 pronunci/<u>a</u>tion //1 and /lang/<u>uage</u> //
EFL-L11	//1 the /<u>ones</u> a/bout cul/ture //3 pronunci/<u>a</u>tion //1 and /<u>lang</u>/uage //
EFL-L12	//3 the /<u>ones</u> a/bout //1 <u>cul</u>ture //3 pronunci/<u>a</u>tion //1 and /<u>lan</u>guage //
EFL-L13	//3 the /ones a/bout /<u>cul</u>ture //3 pronunci/a/tion //1 and /<u>lang</u>/uage //
EFL-L14	//1 the /<u>ones</u> a/bout cul/<u>ture</u> //1 <u>pro</u>nunciation //1 and /<u>lang</u>/uage //
EFL-L15	//3 the /<u>ones</u> a/bout cul/<u>ture</u> //1 pronuncia/tion //1 and /<u>lang</u>/uage //

Speaker	Token 9: But you've had them for a month already.
NS1	//**1** ˏbut you've /had them for a /<u>month</u> //**1** al/<u>ready</u> //
NS2	//**4** ˏbut you've /had them for a /<u>month</u> al/ready //
NS3	//**1** ˏbut //**1** ˏyou've /had them for a /month al/<u>ready</u> //
EFL-H1	//**3** ˏbut /<u>you've</u> /had //**3** them /<u>for</u> //**3** ˏa /<u>month</u> //**1** al/<u>ready</u> //
EFL-H2	//**1** but /<u>you've</u> /<u>had</u> //**1** them /for a /month al/<u>ready</u> //
EFL-H3	//**3** but you've /<u>had</u> /them //**3** for a /month //**1** al/<u>ready</u> //
EFL-H4	//**1** <u>but</u> //**1** you've /had them for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-H5	//**1** <u>but</u> //**1** you've /<u>had</u> //**3** them /for a /<u>month</u> //**3** already //
EFL-H6	//**1** <u>but</u> //**1** you've /<u>had</u> //**3** them /for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-H7	//**1** but /<u>you've</u> //**3**had //**3** them /for a /month //**1** al/<u>ready</u> //
EFL-H8	//**1** but /<u>you've</u> //**1** had //**3** <u>them</u> //**1** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-H9	//**1** <u>but</u> //**3** you've /<u>had</u> /them /for a /month //**2** al/<u>ready</u> //
EFL-H10	//**3** <u>but</u> //**3** you've /<u>had</u> /them //**3** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-H11	//**1** <u>but</u> //**1** <u>you've</u> //**3** had /them /for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-H12	//**3** but /you've /<u>had</u> /them //**3** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-H13	//**3** but //**1** <u>you've</u> //**3** had /them //**1** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-H14	//**1** but /you've /<u>had</u> //**3** <u>them</u> /for a /month //**1** al/<u>ready</u> //
EFL-H15	//**3** but you've /<u>had</u> //**3** <u>them</u> /for a /month //**1** al/<u>ready</u> //
EFL-L1	//**3** but /<u>you've</u> /had //**3** them /for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L2	//**1** <u>but</u> //**3** you've /<u>had</u> //**3** them /for a /month //**1** al/<u>ready</u> //
EFL-L3	//**1** <u>but</u> //**1** you've /<u>had</u> //**3** them /for a /month //**1** al/<u>ready</u> //
EFL-L4	//**3** but you've /<u>had</u> /them //**3** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L5	//**1** but /<u>you've</u> //**3** had /them /for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L6	//**1** <u>but</u> /you've //**3** <u>had</u> //**1** <u>them</u> //**3** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L7	//**1** <u>but</u> //**3** you've /<u>had</u> //**3** them /for a /<u>month</u> //**1** al/<u>read</u>/y //
EFL-L8	//**1** <u>but</u> //**1** you've /had /<u>them</u> //**3** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L9	//**1** but /you've /<u>had</u> /them //**3** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L10	//**1** <u>but</u> //**1** you've /had /<u>them</u> //**3** for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L11	//**1** <u>but</u> //**3** <u>you've</u> /had /them //**3** for a /<u>month</u> //**2** al/<u>ready</u> //
EFL-L12	//**1** <u>but</u> //**1** you've /<u>had</u> //**3** them /for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L13	//**1** but /<u>you've</u> //**1** had /them //**3** for /a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L14	//**1** <u>but</u> //**3** <u>you've</u> //**3** had //**3** them /for a /<u>month</u> //**1** al/<u>ready</u> //
EFL-L15	//**1** <u>but</u> //**1** <u>you've</u> /had //**3** them /for a /<u>month</u> //**1** al/<u>ready</u> //

Speaker	Token 10: I suppose so.
NS1	//**1** I sup/<u>pose</u> /so //
NS2	//**1**ˏ I sup/<u>pose</u> /so //
NS3	//**3** I sup/<u>pose</u> /so //
EFL-H1	//**1** I sup/<u>pose</u> /so //
EFL-H2	//**1** I sup/pose /<u>so</u> //
EFL-H3	//**1** I sup/pose /<u>so</u> //
EFL-H4	//**1** <u>I</u> sup/pose /so //
EFL-H5	//**1** I sup/<u>pose</u> /so //
EFL-H6	//**1** I /sup/pose /<u>so</u> //
EFL-H7	//**1** I sup/pose /<u>so</u> //
EFL-H8	//**1** I sup/<u>pose</u> /so //
EFL-H9	//**4** I sup/pose /<u>so</u> //
EFL-H10	//**1** I sup/pose /<u>so</u> //
EFL-H11	//**1** I /sup/pose /<u>so</u> //
EFL-H12	//**1** I sup/pose /so //
EFL-H13	//**1** I sup/pose /<u>so</u> //
EFL-H14	//**4** I sup/<u>pose</u> /so //
EFL-H15	//**1** I sup/<u>pose</u> /so //
EFL-L1	//**1** I sup/<u>pose</u> //**1** <u>so</u> //
EFL-L2	//**1** I sup/pose /<u>so</u> //
EFL-L3	//**1** I /sup/pose /<u>so</u> //
EFL-L4	//**1** I sup/pose /<u>so</u> //
EFL-L5	//**1** I sup/<u>pose</u> /so //
EFL-L6	//**1** I /sup/<u>pose</u> //**1** <u>so</u> //
EFL-L7	//**3** I /sup/<u>pose</u> //**1** <u>so</u> //
EFL-L8	//**1** I /<u>sup</u>/pose /so //
EFL-L9	//**1** I /sup/<u>pose</u> /so //
EFL-L10	//**1** I /sup/<u>pose</u> //**1** <u>so</u> //
EFL-L11	//**1** I /sup/pose /<u>so</u> //
EFL-L12	//**1** I sup/pose /<u>so</u> //
EFL-L13	//**1** I /sup/pose /<u>so</u> //
EFL-L14	//**1** I /sup/pose /<u>so</u> //
EFL-L15	//**4** I /suppose /<u>so</u> //

Appendix J

Spontaneous Speech Transcriptions

NS1

I would say the most memorable memorable event in my life was the birth of my first child. <u>Ah..she's now twenty one years old and studying to be a doctor in England at university. Um..so twenty one twenty two years ago umm..she was born on March the seventeenth and a beautiful beautiful baby. It was a..well very changing having a new baby to look after</u> but myself and my wife were very very excited and it changed our lives completely so it was a very memorable event.

// Ah…//**3** she's /<u>now</u> //**4** <u>twen</u>ty /<u>one</u> /years /old //**4** and /studying to be a

/<u>doctor</u> //**3** in /<u>Eng</u>land //**1** ˏ at uni/<u>ver</u>sity. // um.. //**1** <u>So</u> //**1** twenty /<u>one</u> //

//**4** twenty /two /<u>years</u> a/go //um.. //**3** she was /<u>born</u> //**4** ˏ on /<u>March</u> the

seven/teenth. //**3** ˏ And a /<u>beau</u>tiful //**1** beautiful /<u>ba</u>by. //**1** It /<u>was</u> a…//

//**1** well /very /<u>chang</u>ing //**3** having a new baby to look after //…

NS2

The most memorable event in my life was probably the day I did my driving test. <u>I already failed two times so it was very serious that I passed. I was soon to be eighteen years old and I wanted to drive so there was much pressure that day. I went to the uh..the test centre and uh...waited in the queue</u> to be called to do my test when I heard the man called my name my heart sank. I thought oh..no it was a shame that the man who failed me the second time. I was very nervous but I managed to keep focused and drive without too many mistakes and that day I passed my test. It was a very stressful day but very happy and successful day in my life.

//**1** <u>I</u> //**1** al/<u>read</u>y /**1** <u>failed</u> //**1** two /<u>times</u> //**3** so it was /very /<u>se</u>rious//**3** ˏthat I

/passed. //**3** ˏ I was //**3** ah..soon to be /<u>eigh</u>teen /years /old //**1** ˏ and I /<u>wanted</u> /to //

//**3** <u>drive</u> //**1** ˏ so there was /<u>much</u> /pressure that /day. //**3** ˏ I /<u>went</u> to /the //

//**3** ˏ uh..the /<u>test</u> /centre //and uh...//**1** <u>waited</u> in //**3** ˏ the /<u>queue</u>//…

NS3

I suppose the most memorable event in my life at the moment anyway would be my university graduation. <u>It was a big big ceremony obviously an important thing. Um..and it left, it left a mark just getting together with everybody I'd spent the last three years studying with gathering together while we all got our degrees, watched everybody else from every other departments who we maybe didn't know maybe did know</u> vaguely get their degrees as well everybody in academic robes looking kind of silly but still good. Um..it was a great sort of sense of achievement and a sense of moving from one stage of life to another, I suppose.

//**3**ˏ It was a /<u>big</u> //**1** <u>big</u> /ceremony //**1** obviously an im/<u>portant</u> /thing. //

//um..//**1** and it /<u>left</u>//**1** it /left a /<u>mark</u> //**3** just /<u>get</u>ting to/gether with //

//**3** <u>e</u>verybody I'd /spent the /last /three /years //**3** <u>stud</u>ying /with //**3** <u>gath</u>ering

to/gether //**3**ˏ while we /all /got our de/<u>grees</u> //**1** <u>watched</u> /everybody /else

from //**3** every /other de/<u>part</u>ments //**1** <u>who</u> we // **3** maybe /<u>didn't</u> /know //

//**3** maybe /<u>did</u> /know //…

EFL-H1

Uh.my story is uh… accident. <u>In my life and I'm excited because when I come back home and in evening after New Year. My bus hit the bridge. Um…because um…motorcycle um…suddenly the motorcycle and turn</u> right and pass my bus. But my body don't broken and the motorcycle is broke and he died. I come back home with my friend after my bus hit the bridge. My friend is head broke. And finally uh.. the hospital had a..and she is a help to my friend and I remember it because I am exciting. And I think about I have died and so I don't fear and really really I think I die.

//**1**ˌ In my /<u>life</u>../<u>and</u> //**1** I'm ex/<u>cited</u> //**3** be/<u>cause</u> //**1**ˌ when I come /<u>back</u>

/home /<u>and</u> //**1**ˌ in /<u>evening</u> //**3** af/<u>ter</u> //**1** New /<u>Year's</u>. //**3** My /<u>bus</u> //**3** uh../<u>hit</u> //

//**1** the /<u>bridge</u>. //**1** Um..be/<u>cause</u> um..//**1** motor/<u>cycle</u> //**1** um.. /<u>suddenly</u>…uh //

3ˌ the motor/<u>cycle</u> //**1** and turn //…

EFL-H2

Hello. Today I want to talk the impression of mine. <u>When I was fifteen years old that time I was studying in Mattayom three at Winitsuksa School. Last semester I have found a handsome man. He was studying in Mattayom five. I felt interest him very much because he is smart handsome and good at sport. He like to play football and table-tennis</u>. In my free time, I always look at him and tried not to be noticed. In the last day final exam, I felt very sad because I want to talk with him but I didn't have to anytime to talk him. I want a flower from him before I left from school. That day in the evening, I was going to come back home. He ran to me and gave a rose to me. I felt very glad and very shy. He told me, "I liked you for a long time and I want to be a boyfriend of you".   Wow, is it my dream? I answer to him, "OK I liked you for a long time too. After that we exchange mobile phone number. Finish story of mine.

//**1** <u>When</u> //**1** I /was /<u>fifteen</u> /years /<u>old</u> //**5** that /<u>time</u> //**1**ˌ I was /studying in

/Matta/yom /<u>three</u> //**1** at Wi/nitsuk/sa /<u>School</u>. //**1** <u>last</u> se/mester //**1**ˌ I /have

/found a /<u>hand</u>/some /man. //**2**ˌ he /was /studying in Matta/yom /<u>five</u>. //

//**1**ˌ I /felt /inte/<u>rest</u> /him /very /much //**3** be/<u>cause</u> //**3**ˌ he is /<u>smart</u> //**1** hand/<u>some</u>

//**1**ˌ and /good at /<u>sport</u> //**1**ˌ he /<u>like</u> to /play foot/ball /<u>and</u> //**3** ta/<u>ble</u>-ten/<u>nis</u>. //

EFL-H3

The most memorable in my life is in the past when I go to the city for sing a song in the Fish Festival in Sing Buri. I'm so very happy and excited because I…I never do that before in my life. When the music start and I wait for the lyrics to sing a song. I'm so excited because I…I can't remember the lyrics of the song. But when the time come I sing a song so it's very better end. And this is the good memory in my life.

//**3** I'm /<u>so</u> /very //**1** hap/<u>py</u> /<u>and</u> //**1** ex/<u>cited</u> //**1** be/<u>cause</u> // **1** <u>I</u> //**1**ˏ I /never

/do /<u>that</u> be/<u>fore</u> //**1**ˏ in /my /<u>life.</u> //**3** When the /<u>music</u> /start //**1** and I /<u>wait</u> /for

/the //**1** ly/<u>rics</u> /to //**1** sing a /<u>song</u>. //**1** I'm /so exci/<u>ted</u> //**1** be/<u>cause</u> /I //**1** <u>am</u> //

//**1** I /can't re/<u>mem</u>ber /the //…

EFL-H4

Well, after I've been thinking. One of the most memorable event in my life, er..happened when I was a second year student at Silapakorn University. At that time I had many friends. But one of my closest friend is a girl. We started as a friend. But when time passed by, I think there's something special happened, a special feeling, something more than friendship. She always run to me when she had any problems. She always asked me to go to everywhere with her. And then I started to feel that I love her but the problem is I can't talk to her. I can't confess with her that I love her because she thought of me just only a close friend. Then one day I can't stand it anymore, I can't keep it so I decided to confess my feeling to her. But the outcome is she wouldn't accept it. She said that, "Sorry we could be only friends". And thank you for my feelings. Then, I don't know what to do. It's really sad I couldn't do anything. I kept myself in the room. I won't go anywhere. I don't want to meet anyone. But when the time passed by I come to realize that it was a great memory. It's worth telling her my feeling and when I made up my mind, I rise and shine once again and keep it as one of best memorable event and I won't forget it in the rest of my life.

//**3** One of the /<u>most</u> //**5** memorable /<u>event</u> //**5**ˏ in /<u>my</u> /life //**5** uh../<u>happens</u>

//**3**ˏ when /<u>I</u> //**1** was a /<u>second</u> /year /<u>student</u> //**3** <u>at</u> //**5** Silapa/korn Uni/<u>ver</u>sity. //

//**5**ˏ At /<u>that</u> /time //**3** <u>I</u> //**1** had /many /<u>friends.</u> //**3** <u>but</u> //**1**ˏ one of /<u>my</u> //**1** <u>closest</u> //

//**1** <u>friend</u> /is a /girl //.

EFL-H5

Hi everybody. OK, so I would like to tell you about my secret. <u>Okay, I will tell you about someone I fell in love. Okay, let's begin. When I was sixteen years old, I went to travel at Chainat with my friends, don't have father, mother. It was my first trip for me.</u> In that time, I can went to every place if I want. It's very fun and I met someone. He was great. Ah..we can talk about every story, such as music, artist, sport and love. I think he's very first first love for me. But we can't go in boyfriend or girlfriend because he has girlfriend. And I think it doesn't matter because we can be best friends. And now I meet him, can talk to by MSN or facebook. OK, thank you.

> //**3** O/kay//**3** I will /<u>tell</u> /you a/bout //**3** ah..some/<u>one</u> I /fell in /<u>love.</u> //**1** O/kay
>
> /let's be/<u>gin.</u> //**1** When I /<u>was</u> //**1** six/<u>teen</u> /years /old //**1**͈ I /went to /travel /at
>
> /<u>Chai</u>nat //**1** <u>with</u> //**1** uh..my <u>friends.</u> //**3** <u>Don't</u> have //**3** <u>father</u> //**2** <u>mother.</u> //**1**͈ It
>
> /was my /<u>first</u> /trip //**1**͈ for /<u>me.</u> //**1**͈ In /<u>that</u> /time //…

EFL-H6

The most memorable event in my life. <u>The one woman in the world she is stronger than me. She give all her love to me. She is my mum. She is cancer. When I know her I sad and very confused, afraid to lose her. This make me know who I love. Then, I will take care her</u> and promise beside her forever. I will a good child and I don't make her tired and what she want I try to give her want.

> //**1**͈ The /<u>one</u> //**1** <u>wo</u>man in the /<u>world</u> //**1**͈ she /is /<u>stronger</u> /than /<u>me.</u> //**1** <u>She</u> //
>
> //**1** <u>give</u> /all /her /<u>love</u> /to /<u>me.</u> //**1**͈ She /<u>is</u> my /mum. //**1**͈ She /is /<u>can</u>cer. //
>
> //**1** When /I /know /<u>her</u> //**1**͈ I /<u>sad</u> //**1** and /<u>ve</u>ry /con/fused //**1** a/<u>fraid</u> /to /lose
>
> /<u>her.</u> //**1**͈ This /<u>make</u> /me /<u>know</u> //**3** who /I /<u>love.</u> //**1** <u>Then</u> //**1** I /will /take /care
>
> /<u>her</u> //…

EFL-H7

I'm going to tell you about memorable person. He is not my family. He is not my boyfriend but I love him because he is the great person of my life. Now this is his story. I'm very proud of being Thai live in the country which has the King who really love his citizens and we really love him as well. He is the great king of Thai people in Thailand. I love and respect him. No any king is greater than him. He is the king of the king. As Thailand is the peaceful country and peacefulness of Thai people. He..er he has dedicated himself to work hard for the well-being of all Thai people.

> //**1** He /is /<u>not</u> /my //**3** <u>fa</u>mily. //**1**ˎ He /is /not /my /boy/<u>friend</u> //**1** but /I /<u>love</u>
>
> /him. //**1** Be/<u>cause</u> he /is /the //**1** great /<u>person</u> //**3**ˎ of /my /<u>life</u>. //**1** <u>Now</u> //**1** this /is
>
> /his /<u>story</u>. //**1**ˎ I'm /very /<u>proud</u> /of be/ing /<u>Thai</u> //**3** live /in the /<u>coun</u>try //**1** which
>
> /<u>has</u> the /<u>King</u> //**3** who real/ly /<u>love</u> /his //**1** <u>citi</u>zens //**1** and //…

EFL-H8

I will tell you about this memorable. Three years ago, I have to go to some countries in Southeast Asia. That country is Korea. The Korea I think is very very fantastic for me and for my life because I go to stay there I can speak out about Thai culture, Thai traditions and Thai language. I can make some friendship, I can meet new friends. At that time I think that is very fantastic and very wonderful for my life. I can meet for some first time for to see the snow. I can play the ski. I can play the ski board. And I can do something the Korean guy do. That time I feel very very good.

> //**3** <u>Three</u> //**1** <u>years</u> //**3** a/<u>go</u> //**1** I /have to /<u>go</u> /to //**3** some /<u>coun</u>tries //
>
> //**3** in /Southeast /<u>A</u>sia. //**3** That coun/<u>try</u> /is //**1** Ko/<u>rea</u>. //**3**ˎ The Ko/<u>rea</u> //
>
> //**1**ˎ I /<u>think</u> //**1**ˎ is /<u>very</u> /very /<u>fan</u>/tastic /for /me //**1** and /for my /<u>life</u> //**1** be/<u>cause</u>
>
> //**3** I /go to /stay /<u>there</u> //**3** I /<u>can</u> /speak /<u>out</u> a/bout /Thai /<u>cul</u>ture //…

EFL-H9

Two months ago, I met a fantastic experience for me. <u>I met two guys. He's a foreigner and another guy he's Thai. Foreigner we love together around one month and we broke up three time. So bad and for Thai people, he's good take care, he's awesome.</u> Before I have a boyfriend I thought foreigner is maybe they will say….better than Thai people but not true. Thai people sincere and have a real love than a foreigner. And foreigner they can make love with anybody. They don't have a real love. I thought like that because I met by myself .

> //**2**ˇ I /met /two /<u>guys.</u> //**2** He's a /foreigner //**3**ˇ and a/nother /<u>guy</u> //**3**ˇ he's
>
> /<u>Thai</u>. //**2** Foreig/<u>ner</u> //**3** <u>we</u> //**3** <u>love</u> to/<u>ge</u>ther //**3** a/<u>round</u> //**3** <u>one</u> /month //**3** <u>and</u>
>
> //**3**ˇ we /<u>broke</u> /up /three /time. //**3** So /<u>bad</u> /and//**3** for /Thai /<u>people</u> //**3** he's /<u>good</u>
>
> /take /care // **3** he's /<u>awe</u>some. //

EFL-H10

The great memory I can remember is when I study in grade 12. <u>Me and my friend went to Chiang Mai. It's first time for me. We went to Chiang Mai for contact our study and for travel. First day, we go to Chiang Mai University for test but nobody pass the test. Uh..suddenly, we decided to go to the Doi Suthep</u> because for make a merit and for buy a souvenir. For the second day, we have to go back home. We left from Chiang Mai around 9 pm and we arrive at Lop Buri around 6 am. It's a good trip for me and my friend. And I have a lot of experience from Chiang Mai. The experience is I met the old man on the train and we talk together. The old man ask me a lot of question. And he tell me about how to use your life and how to success. We have a good conversation and he got off the train at Phitsanuloke.   And I can remember his words.

> //**3** Me and /my /friend /<u>went</u> //**1** to /<u>Chiang</u> /Mai. //**1**ˇ it's /<u>first</u> /time /for /me. //
>
> //**1** We /went to /Chiang /<u>Mai</u> //**1** for con/<u>tact</u> //**3** <u>our</u> //**3** <u>study</u> //**1** and
>
> /for tra/<u>vel</u>. //**3** First /<u>day</u> //**3** we /<u>go</u> //3ˇ to /Chiang /Mai Universi/<u>ty</u> //**3** for
>
> /<u>test</u> //**1** but /nobo/dy /pass the /<u>test</u>. //**3** Sudden/<u>ly</u> //**1** we de/cided to /go /to the
>
> /Doi Su/<u>thep</u> //…

EFL-H11

Everyone has both happiness and sadness during the life. <u>In my life, I am very sad to hear that my grandmother has cancer. I don't expect that happened in my family. Furthermore, the doctor told that my grandmother has cancer in the last step which cannot be cured.</u> Everyone /in /my /family try to find the best way cure, such as herb or a good thing to help her better..for prolonging because I have my single grandmother. She instructed me to be a good girl. So, I will follow her advice. The saddest day for me took place as a result of the death of my grandmother. So, I keep her in mind for my inspiration and I mean to study for success in my life. I will promise.

//**3**˅ In /<u>my</u> /life //**1**˅ I am /very /<u>sad</u> to /hear /that //**3**˅ my grand/<u>mother</u> //**1** has

/<u>cancer</u>. //**3**˅ I /<u>don't</u> ex/pect /that hap/<u>pened</u> //**1**˅ in /<u>my</u> /family. //**3** Further/<u>more</u>

//**3**˅ the /<u>doctor</u> //**1** told /<u>that</u> //**3** my grand/<u>mother</u> //**3** has /<u>cancer</u> //**3** uh.. /in the

/<u>last</u> //**1** <u>step</u> //**1**˅ which can/not /be /<u>cured</u>. //**3** <u>Everyone /in /my /family</u> //…

EFL-H12

When I was thirteen, my school had a poem contest. <u>All student need to contest because it is a part of Thai subject. I write my poem without hope that will be award. After that student who given prize go on the stage. I was very surprised when I know I was one of them. And I was very glad</u> when I was the winner of the contest. I get award. The director said, "Tell your mum, you can do it". That event make me very happy. Next year, my school had poem contest again. I enter that contest again. And I was the winner again. My family, my teacher and friend were very glad with me. That event make me very happy.

//**3** All /<u>student</u> //**3** <u>need</u> to /contest //**3** be/<u>cause</u> //**1**˅ it /is a /part of /<u>Thai</u>

sub/ject. //**3**˅ I /<u>write</u> my po/em //**3** with/out /<u>hope</u> //**1** that will /be a/<u>ward</u>. //

//**1** <u>After</u> /that //**3** <u>student</u> //**3** who /<u>given</u> /prize //**1** go /on the /<u>stage.</u> //

//**3**˅ I /was ve/ry sur/<u>prised</u> //**3** when /I /<u>know</u> //**1**˅ I /was /<u>one</u> of them //**3** and /I

/was /very /glad //…

EFL-H13

My most memorable of my life is I went to Koh Chang. <u>I had a great time there. I went with my aunt's family. I have…uh...Praewa is my aunt's niece. Uh…we played uh.. we swam together in the pool and in evening we go out for we went out for eating. The food was very delicious and</u> the sea at Koh Chang is very clear. When I went home, at the road on the mountain, I saw out. First, I thought it is the cloud, but it is the sea. I think that's a very beautiful scene in my life, I ever seen before. And that is very big experience for me, and we arrive home safely

> //**1**ˏ I /had a /<u>great</u> /time /there. //**1**ˏ I /went /with my /aunt's /<u>fa</u>mily. //
>
> //**1**ˏ I /<u>have</u>…//uh.. //**1** Prae/wa /is /<u>my</u> //**1** aunt's /<u>niece.</u> //**3** Uh..we /<u>played</u> //**1**
>
> uh.. we /swam to/<u>ge</u>ther //**3**ˏ in the /<u>pool</u> //**1**ˏ and in /<u>eve</u>ning /**1** <u>we</u> //**1** go /<u>out</u> /for
>
> //**1**ˏ we /went /out for /<u>eat</u>ing. //**1**ˏ The /<u>food</u> was /very //**1** de/<u>li</u>cious //**1** <u>and</u> //…

EFL-H14

I like to perform Thai dancing. <u>I have been practice since I was eighteen years old. I have a chance to perform Thai dancing with Center of Arts and Culture. I made application at the center myself. And I to go to several fair each other show</u> I give the money about 500 Baht. But all of several fair, I impress one place. This place is called Wang Narai in Lop Buri. Because this place is a hometown. And I have chance to perform show to a tourism. But almost important thing is to perform to show to my parents. Because my parents not to be agree with Thai dancing. But I can do it very well. After the show, my parents take a photograph and praise me.

> //**1** <u>I</u> have /been //**3** <u>prac</u>tice /since //**3** <u>I</u> was //**1** <u>eigh</u>teen /years /old. //
>
> //**3** I /have /<u>chance</u> //**3**ˏ to per/<u>form</u> //**3** Thai /<u>danc</u>ing //**1** <u>with</u> //**3** Cen/ter /of
>
> /<u>Arts</u> //**1**ˏ and Cul/<u>ture.</u> //**3** <u>I</u> /made //**3** appli/<u>ca</u>tion //**1** at the /center my/<u>self.</u> //
>
> //**1**ˏ and /I to /go /to /several /<u>fair</u> //**3** each /other /<u>show</u> //…

EFL-H15

The saddest of my life. The story that happened to me very sad. <u>I live with my mother. Yeah, she kind. She's good for me. She do everything for me. I love her so much. But for two years ago, I live with her in Song Kran Day. She…uh..happened something with her. She had a high blood pressure and she died in front of me</u>. I see her when her died. I try to help her but I can't. I shout my neighbor, "Help my mum, please. Help my mum!". But they don't help her. She died. When she in a hospital, I called her name all the time, "My mum, my mum. Please come back to me. Oh but it's so late. She died.

//**1**ˏ I /live with /my /<u>mo</u>ther. //**1**ˏ Yeah..she /<u>kind</u> //**1**ˏ She's /good for /me. //

//**1**ˏ She /do /everything for /<u>me</u>. //**1**ˏ I /love her /<u>so</u> /much. //**1** But for /two /years

a/<u>go</u> //**1**ˏ I /live with /her /in /Song /Kran /<u>Day.</u> //**3** <u>She</u> //**1** uh..//**1** <u>happened</u>

some/thing //**1** with /<u>her</u>. //**3** <u>She</u> //**1**ˏ had a /high /<u>blood</u> /<u>pres</u>sure //**1** <u>and</u> //

//**1**ˏ she /<u>died</u> //**1** front of /<u>me.</u> //

EFL-L1

I'm going to tell you about my house and happy family. <u>There are many kind of house which differ in their look features and lot of other thing. As for me, I like modern house. When I come back from Thepsatri Rajabhat University, it make me feel safe comfortable and settled. I live in a special</u> two-story house in Amphoe Thepsatit, Changwat Chaiyaphum. When people look at my house from the beautiful street, they see mango tree, guava tree, coconut tree, several fruit tree around my house. And father to plant by yourself. When I and my family have a free time, we will go to Pa Hin Ngam National Park, because near house. And it's good atmosphere. Then, we have a picnic and cook. It make me feel relax and happy. And it make my family will be happy together.

//**1** <u>There</u> /are //**3** many /kind /of /<u>house</u> //**1** which dif/<u>fer</u> //**1** in /their /<u>look</u> //

//**1** fea/<u>tures</u> //**1** and /lot /of o/ther /<u>thing.</u> //**1** As /for /<u>me</u> //**3** I /<u>like</u> //**3** mo/dern

/<u>house</u>. //**1** <u>When</u> //**1** I /come /<u>back</u> /from /Thepsa/tri /Raja/bhat Universi/<u>ty</u> //**3** it

/make /me /feel /<u>safe</u> //**1** com/<u>for</u>/ta<u>ble</u> //**1** and /<u>settled.</u> //**3** I /live /in /a spe/<u>cial</u> //…

EFL-L2

I very proud to study tour at Kura Prachasan School. <u>This school is ERIC Center in Chainat last Thursday. We are three teacher and forty student. We went by bus. This is first time for me to learn about English lesson plan. And the teacher talk about</u> history of ERIC Center and she gave us to activity. After that we have enjoy to have lunch. I can use this knowledge to apply in my teaching. At last, I went to Sam Chook Market in Suphan Buri. It took me thirty minute. I went to shopping and bought some food and drink. It was very hot and there were a lot of people. I went to toilet before. I was tired to go to back home.

//**3** This /<u>school</u> /is //**1** E/RIC Cen/<u>ter</u> //**1** in Chai/<u>nat</u> //**1** last /<u>Thurs</u>day. //

//**1**ˌ We /are /<u>three</u> //**3** tea/<u>cher</u> //**1** and for/<u>ty</u> //**3** <u>stu</u>dent. //**3** We /<u>went</u> //**3** by

/<u>bus.</u> //**1** This /is /<u>first</u> /time for /me //**3**ˌ to /learn a/<u>bout</u> //**1** Eng/lish /lesson

/<u>plan</u>. //**3** And the /<u>teacher</u> //**3** talk a/<u>bout</u> //…

EFL-L3

The most memorable in my life when I was young. <u>Uh..I live in Sing Buri Province and I must go to the camp about Mattayom three at Dong Phaya Yen at Sara Buri Province for three days. Uh…I happy. I happy and I have fun. One day, I opened the door, I see my parents</u>. He give donut, biscuit and another thing for me. I very surprised. They don't know this way for Dong Phaya Yen. They ask another people anywhere and they try for me. I feel good. I love my parent. Thank you.

//**1** Uh..I /<u>live</u> /in //**1** Sing Bu/ri Pro/<u>vince</u> //**1** <u>and</u> //**3** I /must /go /to the /<u>camp</u> //

//**3** a/<u>bout</u> //**1** Matta/yom /<u>three</u> //**1** at /Dong Pha/ya /<u>Yen</u> //**1** at Sa/ra Bu/ri

Pro/<u>vince</u> //**1** uh..for /three <u>days</u>. // **3** Uh..I hap/<u>py</u> //**3**ˌ I hap/<u>py</u> //**1** and /I /have

/<u>fun</u>. //**1** One /<u>day</u> //**1**ˌ I /<u>opened</u> the /door //**3** I /see /my pa/<u>rents</u>. //

EFL-L4

Every day me and my family went to the farm for work in my farm. <u>We help to plant papaya chili and vegetable. We make work hard. My father and my mother um…me and my sisiter, me and my sister will sell the vegetable. My father and my mother</u> will work hard for take care me. They work hard every day. They tired but they support a family. I think I feel happy when they work in my farm and they smile when they live together.

//**3** We /<u>help</u> //**1** to /<u>plant</u> //**1** <u>pa</u>paya //**1** <u>chi</u>li //**1** and ve/<u>ge</u>table. //**1** We /<u>make</u>

/work /hard. //**3** My /<u>fa</u>ther //**3** and /my /<u>mo</u>ther //**3** um../me /and /my sis/<u>ter</u> //

//**3** me /and /my sis/<u>ter</u> //**1** <u>will</u> //**1** <u>sell</u> //**1**ˌ the ve/<u>ge</u>table. //**1** My /<u>fa</u>ther //**3** and

/my /<u>mo</u>ther//…

EFL-L5

The most memorable event in my life happened in the last year. <u>I went to um…Pha Taem National Park in Ubon Ratchathanee Province. I went to with my family. Have my father, my brother, my grand, my sister, brother, and uh</u>…they are stay stay in the Pha Taem National Park. In the morning, I and my family see the sun rise. And the afternoon on day I and my family watch the waterfall in Pha Taem National Park and have lunch at the waterfall. I so happy very much. Um..when I travel with my family because I am study hard in university. I don't came home a long time.

//**1** I /<u>went</u> /to //**1** um..Pha /<u>Taem</u> //**1** Natio/<u>nal</u> //**3** <u>Park</u> //**1** in U/bon /Ratcha/<u>thanee</u> //**3** Pro/<u>vince</u>. //**1** I /<u>went</u> /to //**1** with /my /<u>fa</u>mily//

//**3** have /my /<u>fa</u>ther //**1** my //**3** <u>brother</u> //**1** my /grand //**3** my /<u>sister</u>//**1** <u>brother</u> //

//**1** and /uh…

EFL-L6

I travel to Khao Yai. <u>I go with my family. Had my mother, my father, my sister, and me. Go by father car. I meet the elephant on the way. I was frightten but it not dangerous. It go to forest. It not easy</u>. It made the elephant on the way. I sleep at two tent with my family and I walk in the wood at the Pha Gluay Mai Floral. Half the hour I go home. It is the most memorable event to my life because I love to travel Khao Yai and I go to my family and I met elephant on the way.

//**1** ˏI /go /with /my fami/<u>ly</u>. //**3** <u>Had</u> //**1** my mo/<u>ther</u> //**1** my fa/<u>ther</u> //**1** my

sis/<u>ter</u> //**1** and /<u>me</u>. //**1** Go /<u>by</u> //**1** fa/ther /<u>car</u> //**3** I /<u>meet</u> //**3** ˏthe ele/<u>phant</u> //

//**1** on the /<u>way.</u> //**1** ˏI /was /fright/<u>ten</u> //**1** but it /<u>not</u> /dange/<u>rous</u>. //**3** It /go

/to fo/<u>rest</u>. //**1** It /not ea/<u>sy.</u> //

EFL-L7

One my life at Tha Wung Wittayakarn School. <u>This day English week. I'm general agency my homeroom. My teacher come to realize give student use drama Loy Krathong.</u> <u>I play the role of sell Krathong explain how to make Krathong give</u> for foreigner. I get script from teacher. I don't accent English. I try practise with teacher two week. I pay attention make drama with my friend. Although I don't good speak accent but I proud to do it.

//**3** <u>This</u> //**1** <u>day</u> //**3** Eng/lish /<u>week.</u> //**1** I'm /gene/ral agen/<u>cy</u> //**1** my /home/<u>room.</u> //**1** My tea/<u>cher</u> /come /to //**3** rea/<u>lize</u> //**1** give stu/<u>dent</u> //**1** use dra/<u>ma</u> //**1** Loy Kra/<u>thong</u>. //**1** ˛I /play the /<u>role</u> //**1** of /<u>sell</u> Kra/thong //**3** ex/<u>plain</u> //**1** how /to //**1** <u>make</u> Kra/thong /<u>give</u> //…

EFL-L8

I have sister while I study Pratom five. <u>She is um…my first sister.</u> <u>She's lovely.</u> <u>My parents tell me about tell me about her give me take care, take care her.</u> <u>Um…now I'm twenty one years old and she's ten years old</u>. Um..she tell, she tell me in the future, she want to be a doctor. She wants studying doctor for take care my parents and me. I love you because you lovely. She lovely and she's inquisitive. She like me um..she want to see travel. She want travel to me.

//**1** She /<u>is</u> //**1** um…my /first sis/<u>ter</u>. //**1** She's /love/<u>ly</u>. //**3** My /pa/<u>rents</u> //
//**3** tell /me a/<u>bout</u> //**1** tell /me a/bout /<u>her</u> //**1** give /<u>me</u> //**1** take /<u>care</u> //**1** take /care /<u>her.</u> //**1** Um…/<u>now</u> //**1** <u>I'm</u> //1 <u>twenty</u> /one /<u>years</u> /old //**1** <u>and</u> //**1** <u>she's</u> //**1** and /she's /ten /years /<u>old</u>. //

EFL-L9

The most memorable event in my life happen six month ago. <u>I don't know why I walk into the woods. I walk until I go see the first house. I went into the house and I walk around to see who is in a house. And I found nobody in the house. So I walk out from a house and I walk around to find the way out of woods until I go see an old woman sitting under a tree</u>. She eat chicken is not dead. Then she look me. I frighten and I run away into the same house. Then I'm try to find my way home and the old woman pop out of a big jar in front of the house. Then I wake up. It was just a dream.

//**3**ˬI /<u>don't</u> //**1** know //**1** why I /<u>walk</u> /in/to the /woods //**1** I /walk /un/til /I /go /see the /first /<u>house.</u> //**3** I /went /in/to the /<u>house</u> //**1** and /I /walk a/<u>round</u> //**3**ˬto /see /who /is /in a /<u>house.</u> //**1** And /I /found no/<u>bo</u>/dy //**1** in the /<u>house.</u> //**1** <u>so</u> // //**3** I /walk /out /from a /<u>house</u> //**1** and /I /walk a/round to /<u>find</u> //**1**ˬthe /way /out /of /<u>woods</u>//**1** un/til /I /go /<u>see</u> an /old /wo/man //**1** sit/ting /un/der /a /<u>tree.</u> //

EFL-L10

Today I will speak about the impression of life. <u>Nowadays, the life a good happy. I feel will the various of life. I am happy get the study English Education. In the future, I want to be a good teacher. Uh…I hope that maybe</u> a life that's good. I impression with my parent because I have a good parent. They make I have today and I impression of my friend because I have a good smile friend. For that help eat together. Thanks for everybody the mind give me I will hide the feeling this give forever. Thank you very much.

//**3** Nowa/<u>days</u> //**3**ˬthe /<u>life</u> //**3** a /good hap/<u>py.</u> //**3** I /<u>feel</u> //**3** <u>will</u> //**1**ˬthe va/<u>rious</u> //**3** of /<u>life</u>. //**3** I /am hap/<u>py</u> //**3** get /the /<u>study</u> //**3** Eng/lish Edu/<u>cation</u>. // //**3** In the /<u>fu</u>/ture //**3** I /want to /be a /good /<u>teach</u>//**1** Uh..<u>I</u> //**1** /<u>hope</u> /that // //**3** may/<u>be</u> //…

EFL-L11

The most memorable for me is the New Year's Day in 2011. I and my friend go to the Sis Pub for countdown on the first January, two thousand eleven at the midnight. This pub is a karaoke and restaurant. There are many, there are many food and there are many kind of food and many drinks. It's the most memorable for me because this is the first time for me because I and my friend go to count down. This is the first time and I go to the Sis Pub in the first time too. I think it's very exciting for me for count down. It make me happy and I sing a song with my friend.

//**1** I /and //**1** my /friend //**1** go /to the /Sis /Pub //**1** for /count /down //**1** on //

//**3** the /first /Janua/ry //**1** two thou/sand ele/ven //**3** at the /mid/night. //**1** this

/pub /is /a //**1** karao/ke //**1** and /restau/rant. //**3** There /are /many //**3** there /are

ma/ny /food //**3** and /there /are ma/ny //**3** kind /of /food //…

EFL-L12

I never go to the beach and the sea. I want to go there very much. One day my friend invite me to go to the beach. I'm very happy and excited because this is the first time to the beach. When I arrive, I saw the beach and the sea very beautiful. The sea have a blue water. Then, I start to go to swimming. I'm very happy and fun. This is touching my heart. I never forget it the first time to the sea.

//**3** I /want to /go /there //**1** very /much. //**5** One /day //**5** my /friend //**3** in/vite

/me //**1** to /go /to the /beach. //**1** I'm /very /hap/py //**1** ˬand ex/cited //**3** be/cause

//**3** this /is the /first /time //**1** to the /beach. //**3** When /I ar/rive //**3** I /saw the

/beach //**3** and the /sea //**1** very /beautiful. //

EFL-L13

The most memorable event in my life. <u>I'm travel in many festival but this…this trip I went to cowboy night festival at Saraburi Province. I went to my close friend about seven person. I stay at home my friend. It's beauty home and comfortable for</u> everyone. In daytime at Book home…uh..have waterfall. It's so beautiful and I enjoy with me.

//**3** I'm /tra/<u>vel</u> /in /ma/ny //**1** festi/<u>val</u> //**3** <u>but</u> //**3** this //**3** this /<u>trip</u> //**3** I /<u>went</u>//

//**3** to cow/boy /<u>night</u> //**3** <u>festi</u>val//**1** at Sa/rabu/ri /<u>Prov</u>ince. //**3** I /went to /my

/close /<u>friend</u> //**1** a/bout /seven /<u>per</u>/son. //**1** I /stay /at /home /my /<u>friend</u>. //

//**3** It's /beauty /<u>home</u> //**3** <u>and</u> //**1** com/<u>fort</u>a/ble for //…

EFL-L14

Four years ago I have a poodle dog. <u>Um..her name is Taengmo. She is uh…intelligent. She is listen to me everything, such as, pick up a doll. I talk her to lie down but the memory is good. I to be impressed.</u> She give right lottery. I have the money fifty thousand. I very glad. I buy the motorcycle. When I go home she is waiting in front of my house. I love it very much.

// Um..//**1** her /name /<u>is</u> Taeng/mo. //**1** <u>She</u> //**3** is uh…//**3** intelli/<u>gent.</u> //

//**3** She /<u>is</u> //**1** lis/<u>ten</u> to /me //**1** eve/ry/<u>thing</u> //**3** such /<u>as</u> //**1** pick /up a /<u>doll</u>. //

//**1** I /talk /<u>her</u> //**1** to /<u>lie</u> /down //**1** <u>but</u> //**3** the /memo/<u>ry</u> /is /good //**1** to /<u>be</u> //

//**1** I to /be im/<u>pres</u>/<u>se</u>d. //

EFL-L15

The most memorable event in my life happen in third years. <u>I got…I got</u> <u>highest grade. It is three point seven zero. I'm so happy. It is the first time that I got</u> <u>this grade. I told my mother and my aunt. They so happy</u>. Then, I never got this grade but I will keep..I promise that I will attention foreign.

//**3** I /<u>got</u> //**1** I /got high/est /<u>grade.</u> //**3** It /<u>is</u> //**1** <u>three</u> //**3** <u>point</u> //**1** se/<u>ven</u> ze/ro. //

//**1** <u>I'm</u> //**1** ˌso /<u>happy</u>. //**3** It /is the /first /<u>time</u> //**1** <u>that</u> //**1** I /got /this /<u>grade</u>. //

//**1** I /<u>told</u> //**3** my /<u>mother</u> //**3** and /my /<u>aunt</u>. //**3** they /so /<u>hap</u>/py. //

Appendix K

Test Items in the Intelligibility Test and Expected Performance

<u>**Tonality**</u>

1 They've left the children. (Cruz-Ferreira, 1989)
a. They've left the children (neutral).   //**1** They've /left the /<u>child</u>ren. //
b. I can't believe that they've left the children.   //**1** They've//**1** left the /<u>child</u>ren. //
c. The children have left.   //**1** They've /<u>left</u> //**1** the /<u>child</u>ren. //
d. _____

2 He also translated the book. (Cruz-Ferreira, 1989)
a. He not only wrote the book but also translated it.   //**1** He /also trans/<u>lated</u> the /book. //
b. He was one of the people who translated the book. //**1** He //**1** <u>also</u> trans/lated the /book. //
c. He not only translated the magazine but also the book. //**1** He /also trans/lated //**1** the /<u>book</u>. //
d. _____

3 The man and the woman dressed in black are my friends. (adapted from Tench, 1996)
a. The man and that particular woman dressed in black are my friends.
   //**3** The <u>man</u>//**1** and the /<u>wo</u>man /dressed in /black//**1** are my /<u>friends</u>. //
b. Among several men and women, only the man and the woman dressed in black are my friends.
   //**1** The /man and the /woman /dressed in /<u>black</u>//**1** are my /<u>friends</u>. //
c. I know you have two friends. I know the woman, but who is the other?
   //**3** The /<u>man</u>//**1** and the /<u>wo</u>man /dressed in /black are my /friends. //
d. _____

<u>**Tonicity**</u>

4 She was trying to lose weight. (Wells, 2006)
a. She was trying without much success.   //**1** She was /<u>try</u>ing to /lose /weight. //
b. She was trying to lose weight (neutral).   //**1** She was /trying to /lose /<u>weight</u>. //
c. She wanted to lose weight, not to gain weight. //**1** She was /trying to /<u>lose</u> /weight. //
d. _____

5 I'm flying to London tomorrow. (Pongprairat, 2009)
a. I'm flying to London, not somewhere else. //**1** I'm /flying to /<u>Lon</u>don to/morrow. //
b. I'm flying tomorrow, not next week.   //**1** I'm /flying to /London to/<u>mor</u>row. //
c. I'm flying to London, not driving.   //**1** I'm /<u>fly</u>ing to /London to/morrow. //
d. _____

6 I saw your sister at the market. (Pongprairat, 2009)
a. I saw your sister, not my sister.   //**1** I /saw /<u>your</u> /sister at the /market. //
b. I saw your sister, but I didn't talk to her.   //**1** I /<u>saw</u> your /sister at the /market. //
c. I saw your sister at the market, not at work. //**1** I /saw your /sister at the /<u>market</u>. //
d. _____

Tune

7 **They'll soon be here.** (Halliday, 1970)
a. Don't worry. They're coming soon.   //**3** They'll /soon be /<u>here</u>. //
b. They'll soon be here (neutral).   //**1** They'll /soon be /<u>here</u>. //
c. Are they coming here soon?   //**2** They'll /soon be /<u>here</u>. //
d. _____

8 **Did you take the money?** (Wells, 2006)
a. I wonder if you took the money. (neutral)   //**2** Did you /<u>take</u> the /money? //
b. You'd better tell me now if you took that money. //**1** Did you /<u>take</u> the /money? //
c. Did you take the money…(and other things)?   //**3** Did you /take the /<u>mon</u>ey? //
d. _____

9 **Do you want to borrow my car?** (Pongprairat, 2009)
a. I don't expect you to borrow my car.
    //**1** Do you /want to /borrow my /<u>car?</u>//
b. I know that your car is broken. Do you want to borrow mine?
    //**2** Do you /want to /borrow my /<u>car?</u>//
c. Do you want to borrow my car (but it's not in good conditions)?
    //**4** Do you /want to /borrow my /<u>car?</u>//
d. _____

(Tune 1: falling; tune 2: high-rising; tune 3: low-rising; tune 4: falling-rising)

Appendix L

Test of Intelligibility and Comprehensibility

<u>**Part 1**</u>**: Intelligibility Test**

Instructions: You will hear some speakers saying some sentences. Please listen carefully to each speaker. After hearing each sentence, you are to choose one interpretation from the alternatives *a., b.,* or *c.* given. If you cannot find any choice that matches the meaning of the utterance, please write your own interpretation in the space in *d.* provided.

Now, you will hear one sample as a practice. What is the meaning of the utterance you hear? Choose from the alternatives *a., b.*, or *c.* or write your own interpretation in the space in *d.*

Sample speaker
  You hear: "I'm sorry."
  Question: *What does the speaker mean?*
      a. I apologise for what I've done.
      b. What did you say?
      c. I'm not sorry. I don't care.
      d. _____

      The intended meaning is b.

Now the recording will start.

Sentence 1
a. I don't expect you to borrow my car.
b. I know that your car is broken. Do you want to borrow mine?
c. Do you want to borrow my car (but it's not in good conditions)?
d. _____

Sentence 2
a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 3
a. He not only wrote the book but also translated it.
b. He was one of the people who translated the book.
c. He not only translated the magazine but also the book.
d. _____

Sentence 4
a. Among several men and women, only the man and the woman dressed in black are my friends.
b. The man and that particular woman dressed in black are my friends.
c. I know you have two friends. I know the woman, but who is the other?
d. _____

Sentence 5
a. They'll soon be here (neutral).
b. Are they coming here soon?
c. Don't worry. They're coming soon.
d. _____

Sentence 6
a. I'm flying tomorrow, not next week.
b. I'm flying to London, not somewhere else.
c. I'm flying to London, not driving.
d. _____

Sentence 7
a. I wonder if you took the money (neutral).
b. You'd better tell me now if you took that money.
c. Did you take the money…(and other things)?
d. _____

Sentence 8
a. They've left the children (neutral).
b. I can't believe that they've left the children.
c. The children have left.
d. _____

Sentence 9
a. I saw your sister, but I didn't talk to her.
b. I saw your sister, not my sister.
c. I saw your sister at the market, not at work.
d. _____

Sentence 10
a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 11
a. They'll soon be here (neutral).
b. Are they coming here soon?
c. Don't worry. They're coming soon.
d. _____

Sentence 12
a. I saw your sister, but I didn't talk to her.
b. I saw your sister, not my sister.
c. I saw your sister at the market, not at work.
d. _____

Sentence 13
a. I'm flying tomorrow, not next week.
b. I'm flying to London, not somewhere else.
c. I'm flying to London, not driving.
d. _____

Sentence 14
a. He not only wrote the book but also translated it.
b. He was one of the people who translated the book.
c. He not only translated the magazine but also the book.
d. _____

Sentence 15
a. I wonder if you took the money (neutral).
b. You'd better tell me now if you took that money.
c. Did you take the money…(and other things)?
d. _____

Sentence 16
a. I don't expect you to borrow my car.
b. I know that your car is broken. Do you want to borrow mine?
c. Do you want to borrow my car (but it's not in good conditions)?
d. _____

Sentence 17
a. They've left the children (neutral).
b. I can't believe that they've left the children.
c. The children have left.
d. _____

Sentence 18
a. Among several men and women, only the man and the woman dressed in black are my friends.
b. The man and that particular woman dressed in black are my friends.
c. I know you have two friends. I know the woman, but who is the other?
d. _____

Sentence 19
a. He not only wrote the book but also translated it.
b. He was one of the people who translated the book.
c. He not only translated the magazine but also the book.
d. _____

Sentence 20
a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 21
a. They've left the children (neutral).
b. I can't believe that they've left the children.
c. The children have left.
d. _____

Sentence 22
a. I'm flying tomorrow, not next week.
b. I'm flying to London, not somewhere else.
c. I'm flying to London, not driving.
d. _____

Sentence 23
a. Among several men and women, only the man and the woman dressed in black are my friends.
b. The man and that particular woman dressed in black are my friends.
c. I know you have two friends. I know the woman, but who is the other?
d. _____

Sentence 24
a. I don't expect you to borrow my car.
b. I know that your car is broken. Do you want to borrow mine?
c. Do you want to borrow my car (but it's not in good conditions)?
d. _____

Sentence 25
a. They'll soon be here (neutral).
b. Are they coming here soon?
c. Don't worry. They're coming soon.
d. _____

Sentence 26
a. I wonder if you took the money (neutral).
b. You'd better tell me now if you took that money.
c. Did you take the money…(and other things)?
d. _____

Sentence 27
a. I saw your sister, but I didn't talk to her.
b. I saw your sister, not my sister.
c. I saw your sister at the market, not at work.
d. _____

Sentence 28
a. They'll soon be here (neutral).
b. Are they coming here soon?
c. Don't worry. They're coming soon.
d. _____

Sentence 29
a. I'm flying tomorrow, not next week.
b. I'm flying to London, not somewhere else.
c. I'm flying to London, not driving.
d. _____

Sentence 30
a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 31
a. I don't expect you to borrow my car.
b. I know that your car is broken. Do you want to borrow mine?
c. Do you want to borrow my car (but it's not in good conditions)?
d. _____

Sentence 32
a. I saw your sister, but I didn't talk to her.
b. I saw your sister, not my sister.
c. I saw your sister at the market, not at work.
d. _____

Sentence 33
a. I wonder if you took the money (neutral).
b. You'd better tell me now if you took that money.
c. Did you take the money…(and other things)?
d. _____

Sentence 34
a. They've left the children (neutral).
b. I can't believe that they've left the children.
c. The children have left.
d. _____

Sentence 35

a. Among several men and women, only the man and the woman dressed in black are my friends.
b. The man and that particular woman dressed in black are my friends.
c. I know you have two friends. I know the woman, but who is the other?
d. _____

Sentence 36
a. He not only wrote the book but also translated it.
b. He was one of the people who translated the book.
c. He not only translated the magazine but also the book.
d. _____

Sentence 37
a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 38
a. Among several men and women, only the man and the woman dressed in black are my friends.
b. The man and that particular woman dressed in black are my friends.
c. I know you have two friends. I know the woman, but who is the other?
d. _____

Sentence 39
a. I'm flying tomorrow, not next week.
b. I'm flying to London, not somewhere else.
c. I'm flying to London, not driving.
d. _____

Sentence 40
a. I wonder if you took the money (neutral).
b. You'd better tell me now if you took that money.
c. Did you take the money…(and other things)?
d. _____

Sentence 41
a. He not only wrote the book but also translated it.
b. He was one of the people who translated the book.
c. He not only translated the magazine but also the book.
d. _____

Sentence 42
a. They'll soon be here (neutral).
b. Are they coming here soon?
c. Don't worry. They're coming soon.
d. _____

Sentence 43
a. I don't expect you to borrow my car.
b. I know that your car is broken. Do you want to borrow mine?
c. Do you want to borrow my car (but it's not in good conditions)?
d. _____

Sentence 44
a. They've left the children (neutral).
b. I can't believe that they've left the children.
c. The children have left.
d. _____

Sentence 45
a. I saw your sister, but I didn't talk to her.
b. I saw your sister, not my sister.
c. I saw your sister at the market, not at work.
d. _____

Sentence 46
a. He not only wrote the book but also translated it.
b. He was one of the people who translated the book.
c. He not only translated the magazine but also the book.
d. _____

Sentence 47
a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 48
a. They've left the children (neutral).
b. I can't believe that they've left the children.
c. The children have left.
d. _____

Sentence 49
a. I saw your sister, but I didn't talk to her.
b. I saw your sister, not my sister.
c. I saw your sister at the market, not at work.
d. _____

Sentence 50
a. I wonder if you took the money (neutral).
b. You'd better tell me now if you took that money.
c. Did you take the money…(and other things)?
d. _____

Sentence 51
a. I'm flying tomorrow, not next week.
b. I'm flying to London, not somewhere else.
c. I'm flying to London, not driving.
d. _____

Sentence 52
a. They'll soon be here (neutral).
b. Are they coming here soon?
c. Don't worry. They're coming soon.
d. _____

Sentence 53
a. I don't expect you to borrow my car.
b. I know that your car is broken. Do you want to borrow mine?
c. Do you want to borrow my car (but it's not in good conditions)?
d. _____

Sentence 54
a. Among several men and women, only the man and the woman dressed in black are my friends.
b. The man and that particular woman dressed in black are my friends.
c. I know you have two friends. I know the woman, but who is the other?
d. _____

Sentence 55
a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 56
a. They'll soon be here (neutral).
b. Are they coming here soon?
c. Don't worry. They're coming soon.
d. _____

Sentence 57
a. I saw your sister, but I didn't talk to her.
b. I saw your sister, not my sister.
c. I saw your sister at the market, not at work.
d. _____

Sentence 58
a. He not only wrote the book but also translated it.
b. He was one of the people who translated the book.
c. He not only translated the magazine but also the book.
d. _____

Sentence 59
a. I don't expect you to borrow my car.
b. I know that your car is broken. Do you want to borrow mine?
c. Do you want to borrow my car (but it's not in good conditions)?
d. _____

Sentence 60
a. Among several men and women, only the man and the woman dressed in black are my friends.
b. The man and that particular woman dressed in black are my friends.
c. I know you have two friends. I know the woman, but who is the other?
d. _____

Sentence 61
a. I wonder if you took the money (neutral).
b. You'd better tell me now if you took that money.
c. Did you take the money…(and other things)?
d. _____

Sentence 62
a. They've left the children (neutral).
b. I can't believe that they've left the children.
c. The children have left.
d. _____

Sentence 63
a. I'm flying tomorrow, not next week.
b. I'm flying to London, not somewhere else.
c. I'm flying to London, not driving.
d. _____

-- END OF PART 1--

Part 2: Comprehensibility Test

Instructions:

You will hear some speakers reading a paragraph. After listening to each of them, please rate the speaker for the degree of comprehensibility (how easy it is to understand) on a rating scale on the comprehensibility rating form by ticking in the box. Your rating should focus on how the speaker breaks the information into smaller units, the placement of sentence stress and the use of pitch.

One sample speaker is provided for you. What do you think of this speaker's speech? How easy is it to understand her? Please tick one box.

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Now the recording will start.

Comprehensibility Rating Form

Speaker 1

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 2

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 3

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 4

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 5

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 6

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 7

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 8

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 9

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 10

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 11

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 12

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 13

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 14

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 15

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 16

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 17

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 18

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 19

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 20

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 21

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 22

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 23

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 24

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 25

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 26

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 27

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 28

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 29

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 30

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

Speaker 31

1	2	3	4	5
Very difficult to understand	Difficult to understand	Neutral	Easy to understand	Very easy to understand
❑	❑	❑	❑	❑

-- END OF PART 2--

Appendix M

Summary of Answers from Intelligibility Test by Items

Tonality

Sentence 1: They've left the children.

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ- L4	NSJ -L5	Total	No. of correct answers
NS3	//1 They've /left the /children //	b	a	a	b	a	3	a	a	a	a	a	5	8
EFL-H4	//3 They've left //1 the /children //	a	a	a	a	b	4	c	a	a	a	b	3	7
EFL-H5	//1 They've /left the /children //	a	a	d	b	a	3	a	d	a	a	c	3	6
EFL-H8	//3 They've /left //1ˏ the /children //	a	a	a	a	a	5	b	a	b	a	a	3	8
EFL-L5	//3 They've //2 left//1the chil/dren //	a	a	a	a	a	5	d	a	a	b	a	3	8
EFL-L7	//3 They've /left//1 the//1 children //	a	b	a	b	a	3	b	b	a	a	a	3	6
EFL-L13	//3 They've /left //1 the /children //	a	a	b	b	a	3	d	a	a	a	c	3	6

Alternatives:

    a. They've left the children (neutral).
    b. I can't believe that they've left the children.
    c. The children have left.
    d. _____

Sentence 2: He also translated the book.

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Total	No. of correct answers
NS3	//1 He /also trans/lated the /book //	a	b	a	a	a	4	a	a	a	a	a	5	9
EFL-H4	//3 He /also //1 translated //1 �‸ the /book //	c	c	c	a	c	1	c	c	c	c	a	1	2
EFL-H5	//1 He /also trans/lated the /book //	a	a	a	a	a	5	a	a	a	a	a	5	10
EFL-H8	//3 He al/so //1 trans/lated //1 �‸ the /book //	c	a	c	a	c	2	a	b	a	c	a	3	5
EFL-L5	//1 He /also trans/lated //1 �‸ the /book //	a	a	c	b	c	2	c	c	c	c	c	0	2
EFL-L7	//1 He //1 also //1 translated //1 the //1 book //	b	c	d	d	b	0	c	a	b	b	d	1	1
EFL-L13	//3 He al/so //1 trans/lated //1 ˸ the /book //	b	a	c	a	c	2	b	a	b	b	b	1	3

Alternatives:

       a. He not only wrote the book but also translated it.

       b. He was one of the people who translated the book.

       c. He not only translated the magazine but also the book.

       d. _____

Sentence 3: The man and the woman dressed in black are my friends.

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Total	No. of correct answers
NS3	//1ˬ the /<u>man</u> //1ˬ and the /woman /dressed in /<u>black</u> //1ˬ are my <u>friends</u> //	a	b	b	b	b	4	b	b	b	b	b	5	9
EFL-H4	//1ˬ the /<u>man</u> //1 and the /<u>wo</u>man /dressed in /black //1 are /<u>my</u> /friends //	a	a	d	a	a	0	d	c	a	a	a	0	0
EFL-H5	//3 the /<u>man</u> //3 and the /<u>wo</u>man /<u>dressed</u> //1 in /black //1 are my /<u>friends</u> //	b	a	b	a	a	2	b	b	a	b	a	3	5
EFL-H8	//1ˬ the /man /and the /<u>wo</u>man //1 <u>dressed</u> //1 in /black //1 are /my /<u>friends</u> //	b	a	a	b	a	2	a	a	b	b	a	2	4
EFL-L5	//3ˬ the /<u>man</u> //1 and the /<u>wo</u>man //1 dressed /in /black //1 are /my /<u>friends</u> //	b	a	a	a	a	1	a	d	a	b	b	2	3
EFL-L7	//1 the /man /and /the /<u>wo</u>man //1 <u>dressed</u> /in /black //1 are /my /<u>friends</u> //	a	b	d	d	a	1	b	d	b	b	b	4	5
EFL-L13	//3ˬ the /<u>man</u> //3 and the /<u>wo</u>man //1 <u>dressed</u> /in /black //1 are my /<u>friends</u> //	b	b	a	a	b	3	b	a	b	a	b	3	6

Alternatives:

    a. Among several men and women, only the man and the woman dressed in black are my friends.

    b. The man and that particular woman dressed in black are my friends.

    c. I know you have two friends. I know the woman, but who is the other?

    d. _____

Tonicity

Sentence 4: She was trying to lose weight.

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Total	No. of correct answers
NS3	//3 she was /trying to /lose /weight //	b	b	b	b	b	5	b	b	b	b	b	5	10
EFL-H4	//1 she was /trying to /lose /weight //	a	b	b	b	b	4	b	b	b	a	b	4	8
EFL-H5	//1 she was /trying to /lose /weight //	b	c	c	b	c	2	a	a	a	c	c	0	2
EFL-H8	//3 she /was /trying //1 to /lose /weight //	a	b	a	b	a	2	c	a	c	c	a	0	2
EFL-L5	//3 she /was //3 try/ing to /lose //1 weight //	b	a	a	b	a	2	b	a	b	a	b	3	5
EFL-L7	//1 she /was //1 try/ing //1 to /lose //1 weight //	a	a	a	a	a	0	d	a	a	a	a	0	0
EFL-L13	//3 she /was //3 trying //3 to /lose //1 weight //	b	a	a	b	a	2	a	a	a	b	a	1	3

Alternatives:

a. She was trying to lose weight (neutral).
b. She was trying without much success.
c. She wanted to lose weight, not to gain weight.
d. _____

Sentence 5: I'm flying to London tomorrow

Speaker	Performance	NSJ-H1	NSJ-H2	NSJ-H3	NSJ-H4	NSJ-H5	Total	NSJ-L1	NSJ-L2	NSJ-L3	NSJ-L4	NSJ-L5	Total	No. of correct answers
NS3	//1 I'm /flying to /London to/morrow //	b	b	b	b	b	5	b	b	b	b	b	5	10
EFL-H4	//1 I'm /flying to /London to/morrow //	b	c	b	b	b	4	c	d	c	d	b	1	5
EFL-H5	//1 I'm /flying to /London to/morrow //	a	d	a	b	a	1	a	a	a	a	a	0	1
EFL-H8	//3 I'm //3 flying //3 to /London //1 to/morrow //	b	a	d	a	a	1	c	c	a	c	c	0	1
EFL-L5	//3 I'm /flying //1 to /London //1 to/morrow //	a	d	a	a	a	0	a	a	d	a	b	1	1
EFL-L7	//1 I'm fly/ing //1 to Lon/don //1 to/morrow //	a	a	d	b	a	1	a	d	c	a	a	0	1
EFL-L13	//3 I'm /flying //3 to /London //1 to/morrow //	a	a	a	b	a	1	b	a	a	a	c	1	2

Alternatives:

        a. I'm flying tomorrow, not next week.
        b. I'm flying to London, not somewhere else.
        c. I'm flying to London, not driving.
        d. _____

Sentence 6: I saw your sister at the market.

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Total	No. of correct answers
NS3	//3ˬ I /saw /<u>your</u> /sister at the /market //	b	b	b	b	b	5	b	b	b	b	b	5	10
EFL-H4	//1ˬ I /saw /<u>your</u> /sister at the /market //	b	b	b	b	b	5	b	b	b	b	b	5	10
EFL-H5	//1ˬ I /saw your /sister at the /<u>mar</u>ket //	c	c	c	a	c	0	c	d	c	c	c	0	0
EFL-H8	//1ˬ I /<u>saw</u> /your /sister //1ˬ at the /<u>market</u> //	c	c	c	a	c	0	c	d	c	c	c	0	0
EFL-L5	//1 <u>I</u> /<u>saw</u> /your /sister //1 at the /<u>mar</u>ket //	a	a	d	d	d	0	a	a	d	d	b	1	1
EFL-L7	//1 I /<u>saw</u> /your //1 sis/<u>ter</u> //1 at the /<u>market</u> //	c	a	c	a	c	0	a	d	a	c	c	0	0
EFL-L13	//3 I /<u>saw</u> //3 <u>your</u> sis/ter /at //1ˬ the /<u>market</u> //	c	a	d	a	c	0	b	d	c	c	b	2	2

Alternatives:

        a. I saw your sister, but I didn't talk to her.
        b. I saw your sister, not my sister.
        c. I saw your sister at the market, not at work.
        d. _____

Tune

Sentence 7: They'll soon be here.

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Total	No. of correct answers
NS3	//3 they'll /<u>soon</u> /be /here //	c	c	a	c	c	4	c	c	c	c	c	5	9
9EFL-H4	//1 they'll /soon /be /<u>here</u> //	c	c	d	c	a	3	d	c	b	b	b	1	4
EFL-H5	//1 they'll /soon /be /<u>here</u> //	a	c	a	c	a	2	a	a	c	c	a	2	4
EFL-H8	//3 <u>they'll</u> //1 soon /be /<u>here</u> //	c	c	c	a	a	3	d	a	c	a	a	1	4
EFL-L5	//3 <u>they'll</u> //1 soon /be /<u>here</u> //	c	c	a	c	a	3	a	d	c	c	c	3	6
EFL-L7	//3 <u>they'll</u> /soon //1 be /<u>here</u> //	a	a	a	a	a	0	c	a	a	a	a	1	1
EFL-L13	//1 they'll /soon /be /<u>here</u> //	a	c	c	c	a	3	d	d	b	a	b	0	3

Alternatives:

    a. They'll soon be here (neutral).
    b. Are they coming here soon?
    c. Don't worry. They're coming soon.
    d. _____

Sentence 8: Did you take the money?

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Total	No. of correct answers
NS3	//2 did you /take the /money //	a	a	a	a	b	4	a	a	a	a	a	5	9
EFL-H4	//2 did you /take the /money //	c	c	b	c	b	0	b	b	b	b	a	1	1
EFL-H5	//2 did you /take the /money //	c	a	c	c	a	2	c	a	a	a	a	4	6
EFL-H8	//2 did you /take the /money //	b	b	b	c	a	1	b	a	b	b	d	1	2
EFL-L5	//3 did /you /take //1 the /money //	c	a	b	c	a	2	b	b	c	c	c	0	2
EFL-L7	//3 did //1 you // 3 take //1 the /money //	c	a	a	b	a	3	b	b	b	a	b	1	4
EFL-L13	//3 did /you /take //1 the /money //	a	c	a	c	a	3	c	c	a	c	a	2	5

Alternatives:

    a. I wonder if you took the money (neutral).
    b. You'd better tell me now if you took that money.
    c. Did you take the money…(and other things)?
    d. _____

Sentence 9: Do you want to borrow my car?

Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	Total	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Total	No. of correct answers
NS3	//2 do you /want to /borrow my /car //	a	a	c	c	c	2	a	a	c	a	a	4	6
EFL-H4	//3 do you /want //2 to /borrow /my /car //	b	b	b	b	b	0	b	d	b	b	b	0	0
EFL-H5	//3 do you /want //2 to /borrow /my /car //	b	b	d	b	b	0	c	d	b	b	c	0	0
EFL-H8	//3 do you /want //3 to //1 borrow /my car //	b	c	a	c	a	2	b	d	a	a	a	3	5
EFL-L5	//1 do /you /want /to bor/row /my /car //	a	d	d	b	a	2	b	a	a	b	c	2	4
EFL-L7	//3 do /you /want //1 to /borrow //1 my /car //	a	c	d	d	a	2	a	d	b	a	a	3	5
EFL-L13	//3 do /you /want //3 to //1 borrow /my /car //	c	b	a	c	a	2	b	d	b	a	b	1	3

Alternatives:

    a. I don't expect you to borrow my car.
    b. I know that your car is broken. Do you want to borrow mine?
    c. Do you want to borrow my car (but it's not in good conditions)?
    d. _____

Appendix N

Answers from the Intelligibility Test by Participant

Native speaker

Item	Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Ans	Answers in d.
1	NS3	//1 They've /left the /children //	b	a	a	b	a	a	a	a	a	a	**a**	
2		//1 He /also trans/lated the /book //	a	b	a	a	a	a	a	a	a	a	**a**	
3		//1ˇ The /man //1ˇ and the /woman /dressed in /black //1ˇ are my friends //	a	b	b	b	b	b	b	b	b	b	**b**	
4		//3 She was /trying to /lose /weight //	b	b	b	b	b	b	b	b	b	b	**b**	
5		//1 I'm /flying to /London to/morrow //	b	b	b	b	b	b	b	b	b	b	**b**	
6		//3ˇ I /saw /your /sister at the /market //	b	b	b	b	b	b	b	b	b	b	**b**	
7		//3 They'll /soon /be /here //	c	c	a	c	c	c	c	c	c	c	**c**	
8		//2 Did you /take the /money //	a	a	a	a	b	a	a	a	a	a	**a**	
9		//2 Do you /want to /borrow my /car //	a	a	c	c	c	a	a	c	a	a	**a**	

EFL-H4

Item	Speaker	Performance	NSJ-H1	NSJ-H2	NSJ-H3	NSJ-H4	NSJ-H5	NSJ-L1	NSJ-L2	NSJ-L3	NSJ-L4	NSJ-L5	Ans	Answers in d.
1	H4	//3 <u>They've</u> left //1 <u>the</u> /children //	a	a	a	a	b	c	a	a	a	b	**a**	
2		//3 He /<u>al</u>so //1 <u>trans</u>lated //1ˬ the /<u>book</u> //	c	c	c	a	c	c	c	c	c	a	**a**	
3		//1ˬ The /<u>man</u> //1 and the /<u>wo</u>man /dressed in /black //1 are /<u>my</u> /friends //	a	a	d	a	a	d	c	a	a	a	**b**	JH3-They are my friends (not someone else's friends). JL1-They are my friends, no one else here's friends.
4		//1 She was /<u>try</u>ing to /lose /weight //	a	b	b	b	b	b	b	b	a	b	**b**	
5		//1 I'm /flying to /<u>Lon</u>don to/morrow //	b	c	b	b	b	c	d	c	d	b	**b**	JL2-Neutral
6		//1ˬ I /saw /<u>your</u> /sister at the /market //	b	b	b	b	b	b	b	b	b	b	**b**	
7		//1 They'll /soon /be /<u>here</u> //	c	c	d	c	a	d	c	b	b	b	**c**	JH3-They'll be here soon (not somewhere else). JL1-They'll soon be here (nowhere else).
8		//2 Did you /<u>take</u> the /money //	c	c	b	c	b	b	b	b	b	a	**a**	
9		//3 Do you /<u>want</u> //2 to /<u>bor</u>row /my /car //	b	b	b	b	b	b	d	b	b	b	**a**	JL2-Neutral question

EFL-H5

Item	Speaker	Performance	NSJ-H1	NSJ-H2	NSJ-H3	NSJ-H4	NSJ-H5	NSJ-L1	NSJ-L2	NSJ-L3	NSJ-L4	NSJ-L5	Ans	Answers in d.
1	H5	//1 They've /left the /children //	a	a	d	b	a	a	d	a	a	c	**a**	JH3-They've left the children (not left something else). JL2-Those particular people have left the children.
2		//1 He /also trans/lated the /book //	a	a	a	a	a	a	a	a	a	a	**a**	
3		//3 The /man //3 and the /woman /dressed //1 in /black //1 are my /friends //	b	a	b	a	a	b	b	a	b	a	**b**	
4		//1 She was /trying to /lose /weight //	b	c	c	b	c	a	a	a	c	c	**b**	
5		//1 I'm /flying to /London to/morrow //	a	d	a	b	a	a	a	a	a	a	**b**	JH2- I'm flying to London tomorrow.
6		//1ˏ I /saw your /sister at the /market //	c	c	c	a	c	c	d	c	c	c	**b**	JL2-Observation (neutral)
7		//1 They'll /soon /be /here //	a	c	a	c	a	a	a	c	c	a	**c**	
8		//2 Did you /take the /money //	c	a	c	c	a	c	a	a	a	a	**a**	
9		//3 Do you /want //2 to /borrow /my /car //	b	b	d	b	b	c	d	b	b	c	**a**	JH3-Do you want to borrow my car (not borrow sth. else)? JL2-Neutral question

EFL-H8

Item	Speaker	Performance	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	Ans	Answers in d.
1	H8	//3 <u>They've</u> /left //1 ˰ the /<u>chil</u>dren //	a	a	a	a	a	b	a	b	a	a	**a**	
2		//3 He al<u>so</u> //1 trans/<u>lat</u>ed //1 ˰ the /<u>book</u> //	c	a	c	a	c	a	b	a	c	a	**a**	
3		//1 ˰ The /man /and the /<u>wo</u>man //1 <u>dressed</u> //1 in /<u>black</u> //1 are /my /<u>friends</u> //	b	a	a	b	a	a	a	b	b	a	**b**	
4		//3 She /was /<u>try</u>ing //1 to /<u>lose</u> /weight //	a	b	a	b	a	c	a	c	c	a	**b**	
5		//3 <u>I'm</u> //3 <u>fly</u>ing //3 to /<u>Lon</u>don //1 to/<u>morrow</u> //	b	a	d	a	a	c	c	a	c	c	**b**	JH3- Neutral
6		//1 ˰ I /<u>saw</u> /your /<u>sister</u> //1 ˰ at the /<u>mar</u>ket //	c	c	c	a	c	c	d	c	c	c	**b**	JL2-Neutral
7		//3 <u>They'll</u> //1 soon /be /<u>here</u> //	c	c	c	a	a	d	a	c	a	a	**c**	JL1-They'll soon be here (no one else).
8		//2 Did you /<u>take</u> the /<u>money</u> //	b	b	b	c	a	b	a	b	b	d	**a**	JL5-Accusatory
9		//3 <u>Do</u> you /want //3 <u>to</u> //1 <u>bor</u>row /my car //	b	c	a	c	a	b	d	a	a	a	**a**	JL2-Neutral

EFL-L5

Item	Speaker	Performance	NSJ-H1	NSJ-H2	NSJ-H3	NSJ-H4	NSJ-H5	NSJ-L1	NSJ-L2	NSJ-L3	NSJ-L4	NSJ-L5	Ans	Answers in d.
1	L5	//3 They've //2 left//1ˎ the chil/dren //	a	a	a	a	a	d	a	a	b	a	**a**	JL1-They've left the children (no one else has).
2		//1 He /also trans/lated //1ˎ the /book //	a	a	c	b	c	c	c	c	c	c	**a**	
3		//3ˎ The /man //1 and the /woman // //1 dressed /in /black //1 are /my /friends //	b	a	a	a	a	a	d	a	b	b	**b**	JL2-They are not my enemies but my friends.
4		//3 She /was //3 try/ing to /lose //1 weight //	b	a	a	b	a	b	a	b	a	b	**b**	
5		//3 I'm /flying //1 to /London // 1 to/morrow //	a	d	a	a	a	a	a	d	a	b	**b**	JH2- I'm flying to London tomorrow. JL3-A neutral statement
6		//1 I /saw /your /sister //1 at the /market //	a	a	d	d	d	a	a	d	d	b	**b**	JH3-Neutral JH4-I saw your sister at the market and said hello. JH5-Neutral JL3-Neutral JL4-Neutral
7		//3 They'll //1 soon /be /here //	c	c	a	c	a	a	d	c	c	c	**c**	JL2-Not somewhere else, but here.
8		//3 Did /you /take //1 the /money //	c	a	b	c	a	b	b	c	c	c	**a**	
9		//1 Do /you /want /to bor/row /my /car //	a	d	d	b	a	b	a	a	b	c	**a**	JH2- Neutral question JH3-Do you want to borrow car (not something else)?

EFL-L7

Item	Speaker	Performance	NSJ-H1	NSJ-H2	NSJ-H3	NSJ-H4	NSJ-H5	NSJ-L1	NSJ-L2	NSJ-L3	NSJ-L4	NSJ-L5	Ans	Answers in d.
1	L7	//3 They've /left//1 the//1 children //	a	b	a	b	a	b	b	a	a	a	**a**	
2		//1 He //1 also //1 translated //1 the //1 book //	b	c	d	d	b	c	a	b	b	d	**a**	JH3-Neutral JH4-Read from text JL5-Neutral
3		//1 The /man /and /the /woman //1 dressed /in /black //1 are /my /friends //	a	b	d	d	a	b	d	b	b	b	**b**	JH3-Neutral JH4-Read from text JL2-Men and women not necessarily among several other men and women.
4		//1 She /was //1 try/ing //1 to /lose //1 weight //	a	a	a	a	a	d	a	a	a	a	**b**	JL1-She was trying, some time ago.
5		//1 I'm fly/ing //1 to Lon/don //1 to/morrow //	a	a	d	b	a	a	d	c	a	a	**b**	JH3-Neutral JL2-Neutral
6		//1 I /saw /your //1 sis/ter //1 at the /market //	c	a	c	a	c	a	d	a	c	c	**b**	JL2-Not your brother, but your sister.
7		//3 They'll /soon //1 be /here //	a	a	a	a	a	c	a	a	a	a	**c**	
8		//3 Did //1 you // 3 take //1 the /money //	c	a	a	b	a	b	b	b	a	b	**a**	
9		//3 Do /you /want //1 to /borrow //1 my /car //	a	c	d	d	a	a	d	b	a	a	**a**	JH4-Do you want to borrow my car ? (not bothered if he does or not) JL2-Not have my car, but borrow my car.

EFL-L13

Item	Speaker	Performance	NSJ-H1	NSJ-H2	NSJ-H3	NSJ-H4	NSJ-H5	NSJ-L1	NSJ-L2	NSJ-L3	NSJ-L4	NSJ-L5	Ans	Answers in d.
1	L13	//3 They've /left //1 the /children //	a	a	b	b	a	d	a	a	a	c	**a**	JL1-They've left the children (no one else has).
2		//3 He al/so //1 trans/lated //1˰ the /book //	b	a	c	a	c	b	a	b	b	b	**a**	
3		//3˰ The /man //3 and the /woman //1 dressed /in /black //1 are my /friends //	b	b	a	a	b	b	a	b	a	b	**b**	
4		//3 She /was //3 trying //3 to /lose //1 weight //	b	a	a	b	a	a	a	a	b	a	**b**	
5		//3 I'm /flying //3 to /London //1 to/morrow //	a	a	a	b	a	b	a	a	a	c	**b**	
6		//3 I /saw //3 your sis/ter /at //1˰ the /market //	c	a	d	a	c	b	d	c	c	b	**b**	JH3- Neutral JL2-Neutral
7		//1 They'll /soon /be /here //	a	c	c	c	a	d	d	b	a	b	**c**	JL1-They'll soon be here (not anywhere else). JL2-They'll soon be here and not somewhere else.
8		//3 Did /you /take //1 the /money //	a	c	a	c	a	c	c	a	c	a	**a**	
9		//3 Do /you /want //3 to //1 borrow /my /car //	c	b	a	c	a	b	d	b	a	b	**a**	JL2-Neutral question

Appendix O

Comprehensibility Ratings from NS Judges

Speaker	NSJ -H1	NSJ -H2	NSJ -H3	NSJ -H4	NSJ -H5	$\bar{x}$	SD	NSJ -L1	NSJ -L2	NSJ -L3	NSJ -L4	NSJ -L5	$\bar{x}$	SD
NS	5	5	5	5	5	5	0	5	5	5	5	5	5	0
EFL-H1	2	2	2	3	3	2.4	0.54	2	1	3	2	3	2.2	0.83
EFL-H2	4	3	5	4	4	4	0.70	3	3	3	4	5	3.6	0.89
EFL-H3	3	2	5	3	4	3.4	1.14	2	2	3	3	4	2.8	0.83
EFL-H4	5	5	5	5	5	5	0	5	4	5	4	4	4.4	0.54
EFL-H5	3	3	5	3	4	3.6	0.89	3	4	4	5	3	3.8	0.83
EFL-H6	3	3	4	4	4	3.6	0.54	2	2	4	2	4	2.8	1.09
EFL-H7	3	2	1	3	4	2.6	1.14	3	2	3	2	3	2.6	0.54
EFL-H8	2	4	4	4	4	3.6	0.89	2	1	2	1	3	1.8	0.83
EFL-H9	2	3	4	3	3	3	0.70	3	2	3	1	4	2.6	1.14
EFL-H10	3	4	5	4	4	4	0.70	3	3	4	4	5	3.8	0.83
EFL-H11	3	4	4	2	3	3.2	0.83	2	1	2	1	1	1.4	0.54
EFL-H12	4	3	5	3	4	3.8	0.83	4	2	5	2	5	3.6	1.51
EFL-H13	2	5	4	4	4	3.8	1.09	4	2	4	2	2	2.8	1.09
EFL-H14	4	3	5	3	2	3.4	1.14	3	4	4	3	4	3.6	0.54
EFL-H15	4	2	4	4	4	3.6	0.89	4	1	4	3	4	3.2	1.30
EFL-L1	3	2	3	2	3	2.6	0.54	2	1	3	2	1	1.8	0.83
EFL-L2	3	3	4	3	3	3.2	0.44	3	2	3	1	3	2.4	0.89
EFL-L3	3	3	4	2	4	3.2	0.83	3	3	3	2	2	2.6	0.54
EFL-L4	2	2	2	2	2	2	0	2	2	2	1	1	1.6	0.54
EFL-L5	3	2	4	2	3	2.8	0.83	4	2	3	1	3	2.6	1.14
EFL-L6	2	2	4	2	3	2.6	0.89	1	1	2	2	3	1.8	0.83
EFL-L7	3	3	4	2	3	3	0.70	2	1	3	2	1	1.8	0.83
EFL-L8	2	3	2	2	3	2.4	0.54	1	2	2	2	3	2	0.70
EFL-L9	2	2	3	2	3	2.4	0.54	2	4	2	2	2	2.4	0.89
EFL-L10	3	2	4	2	3	2.8	0.83	2	1	3	3	1	2	1
EFL-L11	3	4	4	4	4	3.8	0.44	3	3	3	1	2	2.4	0.89
EFL-L12	3	3	3	2	3	2.8	0.44	2	1	4	1	3	2.2	1.30
EFL-L13	2	2	4	2	2	2.4	0.89	1	1	1	1	4	1.6	1.34
EFL-L14	4	4	5	4	4	4.2	0.44	3	3	3	3	5	3.4	0.89
EFL-L15	3	4	4	3	4	3.6	0.54	3	2	4	4	2	3	1

Appendix P

Tonality Scores

Speaker	Tone group (50)	Rhythmic group (50)	Tonality score (100)
EFL-H1	31	25	**56**
EFL-H2	48	14.66	**62.66**
EFL-H3	47	23.28	**70.28**
EFL-H4	49	44.83	**93.83**
EFL-H5	49	27.59	**76.59**
EFL-H6	41	18.1	**59.1**
EFL-H7	34	6.9	**40.9**
EFL-H8	30	23.28	**53.28**
EFL-H9	47	28.45	**75.45**
EFL-H10	48	13.79	**61.79**
EFL-H11	35	14.66	**49.66**
EFL-H12	38	28.45	**66.45**
EFL-H13	47	34.48	**81.48**
EFL-H14	42	33.62	**75.62**
EFL-H15	47	31.03	**78.03**
EFL-L1	43	-12.07	**30.93**
EFL-L2	23	-16.38	**6.62**
EFL-L3	42	-17.24	**24.76**
EFL-L4	21	-7.76	**13.24**
EFL-L5	30	-6.9	**23.1**
EFL-L6	21	-18.1	**2.9**
EFL-L7	29	-17.24	**11.76**
EFL-L8	25	-13.79	**11.21**
EFL-L9	35	-12.93	**22.07**
EFL-L10	23	-5.17	**17.83**
EFL-L11	37	17.24	**54.24**
EFL-L12	31	11.21	**42.21**
EFL-L13	28	0	**28**
EFL-L14	29	-8.62	**20.38**
EFL-L15	30	-13.79	**16.21**

Appendix Q

Scores for Tonality, Tonicity and Tunes

Speaker	Tonality	Tonicity	Tune	Total
EFL-H1	56	50	57.78	**163.78**
EFL-H2	62.66	66.67	68.89	**198.22**
EFL-H3	70.28	66.67	48.89	**185.84**
EFL-H4	93.83	66.67	51.11	**211.61**
EFL-H5	76.59	75	48.89	**200.48**
EFL-H6	59.1	62.5	57.78	**179.38**
EFL-H7	40.9	45.83	48.89	**135.62**
EFL-H8	53.28	37.5	44.44	**135.22**
EFL-H9	75.45	62.5	55.56	**193.51**
EFL-H10	61.79	50	53.33	**165.12**
EFL-H11	49.66	25	62.22	**136.88**
EFL-H12	66.45	50	40	**156.45**
EFL-H13	81.48	83.33	53.33	**218.14**
EFL-H14	75.62	41.67	75.56	**192.85**
EFL-H15	78.03	70.83	66.67	**215.53**
EFL-L1	30.93	25	42.22	**98.15**
EFL-L2	6.62	41.67	22.22	**70.51**
EFL-L3	24.76	45.83	46.67	**117.26**
EFL-L4	13.24	41.67	26.67	**81.58**
EFL-L5	23.1	37.5	55.56	**116.16**
EFL-L6	2.9	16.67	57.78	**77.35**
EFL-L7	11.76	37.5	51.11	**100.37**
EFL-L8	11.21	37.5	48.89	**97.6**
EFL-L9	22.07	41.67	46.67	**110.41**
EFL-L10	17.83	29.83	24.44	**72.1**
EFL-L11	54.24	50	73.33	**177.57**
EFL-L12	42.21	37.5	37.78	**117.49**
EFL-L13	28	62.5	60	**150.5**
EFL-L14	20.38	37.5	33.33	**91.21**
EFL-L15	16.21	54.17	62.22	**132.6**

Appendix R

Score Ranking for Total Scores of Tonality, Tonicity and Tune

Speaker	Tonality	Tonicity	Tune	Total
EFL-H13	81.48	83.33	53.33	**218.14**
EFL-H15	78.03	70.83	66.67	**215.53**
EFL-H4	93.83	66.67	51.11	**211.61**
EFL-H5	76.59	75	48.89	**200.48**
EFL-H2	62.66	66.67	68.89	**198.22**
EFL-H9	75.45	62.5	55.56	**193.51**
EFL-H14	75.62	41.67	75.56	**192.85**
EFL-H3	70.28	66.67	48.89	**185.84**
EFL-H6	59.1	62.5	57.78	**179.38**
EFL-L11	54.24	50	73.33	**177.57**
EFL-H10	61.79	50	53.33	**165.12**
EFL-H1	56	50	57.78	**163.78**
EFL-H12	66.45	50	40	**156.45**
EFL-L13	28	62.5	60	**150.5**
EFL-H11	49.66	25	62.22	**136.88**
EFL-H7	40.9	45.83	48.89	**135.62**
EFL-H8	53.28	37.5	44.44	**135.22**
EFL-L15	16.21	54.17	62.22	**132.6**
EFL-L12	42.21	37.5	37.78	**117.49**
EFL-L3	24.76	45.83	46.67	**117.26**
EFL-L5	23.1	37.5	55.56	**116.16**
EFL-L9	22.07	41.67	46.67	**110.41**
EFL-L7	11.76	37.5	51.11	**100.37**
EFL-L1	30.93	25	42.22	**98.15**
EFL-L8	11.21	37.5	48.89	**97.6**
EFL-L14	20.38	37.5	33.33	**91.21**
EFL-L4	13.24	41.67	26.67	**81.58**
EFL-L6	2.9	16.67	57.78	**77.35**
EFL-L10	17.83	29.83	24.44	**72.1**
EFL-L2	6.62	41.67	22.22	**70.51**

Appendix S

Intonation Scores, Intelligibility Scores and Comprehensibility Ratings

Speaker	Percentage of Intonation scores	Intelligibility scores	Comprehensibility ratings
EFL-H1	56.26		46
EFL-H2	66.07		76
EFL-H3	61.95		62
EFL-H4	70.54	41.11	94
EFL-H5	66.83	37.78	74
EFL-H6	59.79		64
EFL-H7	45.21		52
EFL-H8	45.07	34.44	54
EFL-H9	64.50		56
EFL-H10	55.04		78
EFL-H11	45.63		46
EFL-H12	52.15		74
EFL-H13	72.71		66
EFL-H14	64.28		70
EFL-H15	71.84		68
EFL-L1	32.72		44
EFL-L2	23.50		56
EFL-L3	39.09		58
EFL-L4	27.19		36
EFL-L5	38.72	35.56	54
EFL-L6	25.78	25.56	44
EFL-L7	33.46	36.67	48
EFL-L8	32.53		44
EFL-L9	36.80		48
EFL-L10	24.03		48
EFL-L11	59.19		62
EFL-L12	39.16		50
EFL-L13	50.17		40
EFL-L14	30.40		76
EFL-L15	44.2		66

Biography

Miss Rachada Pongprairat was born on 16 April 1973 in Bangkok. She graduated with a BA in English from Thammasat University in 1994. After her graduation, she worked for an investment and securities company in Bangkok in the secretarial unit. Her job was very well paid, but after a year, she felt that she had a greater yearning for the teaching profession than for business. Therefore, she moved to Nakhon Pathom to teach English at the Demonstration School of Silpakorn University.

In 1996, she was granted a scholarship from the Royal Thai Government to pursue her MA in Applied Linguistics at the University of Essex, United Kingdom. By the scholarship contract, she returned to Thailand to teach at Thepsatri Rajabhat University, Lop Buri, and has been working there since 1998. In 2008, she received a scholarship from Commission on Higher Education, Thailand, to do a PhD in English as an International Language (EIL) at Chulalongkorn University.