

台灣大學生主要的聽力問題及可能解決之道

Taiwanese EFL University Students' Major Listening Difficulties and Possible Solutions

郭宜湘

Yihsiang Kuo

國防大學通識教育中心

General Education Center, National Defense University

Abstract

This study first probed Taiwanese EFL university students' major listening difficulties and then evaluated overall effectiveness of seven listening activities serving as solutions to identified primary listening difficulties, as well as participants' attitudes towards them. Participants include 64 university students enrolled in either a Freshman English (49) or English Listening and Reading course (15) in the spring semester of 2010 at a university in northern Taiwan. On the first day of each class, a 30-minute Listening Part of TOEIC simulation was conducted as a pre-test, immediately followed by Questionnaire 1 exploring listening difficulties encountered while taking this listening test. In the 15th week, the same test and questionnaire were administered to participants again as post-test and post-questionnaire. In Week 16, Questionnaire 2, a post-course questionnaire, was administered to collect data on students' attitudes towards seven teaching activities designed by the researcher in terms of effectiveness, difficulty level, and preference. Results of Questionnaire 1 indicated the top three listening difficulties as (a) word activation, (b) forgetting, and (c) lexical segmentation; this reaffirms word recognition (including word activation and lexical segmentation) remains the most serious and pervasive listening impediment for Taiwanese EFL university students. Results of paired-samples t tests of scores on the listening pre-test and post-test demonstrated both Freshman and Post-Freshman Groups made significant improvement on post-test, suggesting the listening program containing seven listening activities can significantly enhance most Taiwanese EFL university learners' listening comprehension. Statistical analyses of Questionnaire 2 (post-course questionnaire) showed most participants held positive attitudes towards seven listening activities implemented to solve word recognition related problems. Furthermore, among these seven activities, English song teaching ranked as most liked activity and most effective to increase motivation, small-scale dictation as most effective to enhance listening comprehension, ICRT news teaching as most difficult listening activity, and partial dictation of English radio programs as the easiest one. Based on results of this study, these seven activities are strongly recommended to boost EFL learners' listening ability, especially word recognition.

Keywords: listening difficulty, word recognition, word activation, lexical segmentation, decoding

摘 要

此研究的首要目的在探究台灣大學生主要的聽力問題，並接著評估為了解決這些問題而設計的七項聽力活動之整體成效，以及學生對這些活動的看法。本研究對象為 64 名北台灣的大學生於 98 學年度第二學期修習「大一英文」(49 人)及「英文聽力與閱讀」(15 人)。於上課的第一天施測一份 30 分鐘的部份「多益」(TOEIC)聽力模擬測驗做為前測，並在測驗結束後立即給予填寫「問卷一」，以探究學生的聽力問題。在第 15 週時，對學生施測相同的聽力測驗及問卷作為後測與後測問卷。在第 16 週時，會給予填寫問卷二(課程結束後之問卷, post-course questionnaire)以收集學生對本研究研究者所設計的七項聽力活動的態度與看法，其中包括：有效度(effectiveness)、難易度(difficulty)及喜愛度(likeness)。「問卷一」的統計分析結果指出聽力困難的前三名為:(a)單字辨認 (word activation) (b)易遺忘 (forgetting) (c)單字分割 (lexical segmentation)；此結果證實單字辨認與單字分割對台灣大學生而言仍舊是最嚴重的及普遍的聽力障礙。此外，這兩組學生之聽力後測成績都顯著的比前測成績高，這顯示此七項聽力活動能顯著地提高台灣大學生的聽力。而「問卷二」的統計分析結果顯示大多數的學生對這七項聽力活動在其成效及難易度上持有正面的看法。而在這七項聽力活動中，「英文歌曲教學」為最受喜愛的活動，也被 87.6% 的研究對象認為可有效提昇其學習動機，而「小型聽寫」 (small-scale dictation)為提昇聽力最有效的活動，「ICRT 新聞教學」的困難度最高，而「部份聽寫英語廣播教學」為難度最低的聽力活動。根據此研究的結果，本研究研究者強力推薦此七項聽力活動可用來增強英文學習者的聽力，尤其是在單字辨認及單字分割上特別有其成效。

關鍵字：聽力問題、單字辨識、單字分割、單字辨認、解碼

1. Introduction

Based on this researcher's prior studies and literature review, most Taiwanese/Chinese EFL learners have word activation problem (i.e., cannot immediately recall the meanings of known or familiar words by sound) and/or lexical segmentation problem (i.e., cannot segment connected expressions into single words) when hearing connected speech at normal speed with English word variations (Chao & Cheng, 2004; Chao & Chien, 2005; Chang, Chang, & Kuo, 1995; Chen, 2002; Goh, 2000; Katchen, 1996b; Huang, 1999; Kuo, 2010a, 2010b; Kuo & Yang 2009; Lin, 2003; Sun, 2002; Tsai, 2004; Tsui & Fullilove, 1998; Wu, 1998; Yen 1988; Yuan, 2009). For example, 43.6-44.7% of Taiwanese EFL university students in Chang, et al.'s (1995) study, 67.5% in Sun's (2002) study, and 93% in Kuo's (2010b) study, and 55% of Chinese EFL university students in Goh's (2000) study self-reported they could not immediately recall meanings of familiar-sounding words. Also, 49.2-52.7% in Chang, et al.'s study, 30.0% in Sun's study and 51.6% in Kuo's study self-reported they could not segment or understand connected expressions.

The above findings support the viewpoint that word recognition is the most salient difficulty in FL/EFL listening (Broersma & Cutler, 2008; Goh, 2000; Kuo, 2010a, 2010b; Kuo & Yang, 2009; Sun, 2002; Rost, 2005). Word recognition is an important part of decoding operation which includes processing phonemes, syllables, and words as well as using grammar and intonation (Field, 2008). It contains two interwoven processes: (a) "identification of words" and (b) "immediate activation of lexical knowledge linked to words that have been recognized" (Rost, 2005, p. 507). Cross (2009a) named these two word recognition processes as (a) "lexical segmentation" and (b) "word activation" (p. 33), similar to Field's (2008) (a) "lexical segmentation" (p.177) and (b) "activation and automatic processes" (p.181). Field (2008) defined lexical segmentation as determining "where in a piece of continuous speech one word ends and the next begins" (p.178). This study adopts Field's lexical segmentation definition and defines word activation as immediately recalling or activating the meanings of known or familiar words by sound to better specify the pervasive word recognition problems among Taiwanese/Chinese EFL listeners.

According to the researcher's English teaching and learning experience and EFL listening literature review, most Taiwanese/Chinese EFL learners' listening difficulties mainly result from word recognition problems or underdeveloped listening vocabulary (knowing many words by sight but unable to recognize them by sound) (Chang & Read, 2006; Chao & Chien, 2005; Chang et al., 1995; Chen, 2002; Goh, 2000; Kuo, 2010a, 2010b; Kuo & Yang, 2009; Sun, 2002; Tsui & Fullilove, 1998; Yang, 2006; Yen, 1988) due to (a) rare exposure to authentic or connected English speech at normal speed (Chang, 2009; Chang & Read, 2006; Chao & Cheng, 2004; Kuo, 2010a, 2010b; Yang, 2006; Yen, 1988; Yen & Shiue, 2004), and (b) inadequate and undervalued decoding skill (Field, 2000, 2003, 2004, 2008; Ridgway, 2000; Wilson, 2003) thanks to lack of knowledge and practice of English word/phoneme variations like assimilation, resyllabification [linking or liaison], reduction, or elision seldom occurring in the first language (L1).

Although many local studies appraised Taiwanese EFL learners' listening problems or difficulties (Chang & Teng, 2005; Chao & Chien, 2005; Chang et al., 1995; Chen, 2002; Goh, 2000; Kuo, 2010a, 2010b; Kuo & Yang, 2009; Lin, 2003; Sun, 2002; Teng, 2002; Tsui & Fullilove, 1998; Yang, 2006; Yen, 1988; Yuan, 2009), most proposed or investigated solutions resorted to teaching top-down or metacognitive listening strategies for general meaning building (Chan & Teng, 2005; Chen, 2002; Chen, 2009; Teng 2002, 2003, 2008; Yuan, 2009) to solve identified or

detected listening problems, such as speaking too fast or unable to understand connected speech which causes word recognition breakdowns. Very few local empirical studies were conducted to find effective solutions to pervasive and persistent listening problems of lexical segmentation and word activation (Chang, 2009; Kuo, 2010a, 2010b; Kuo & Yang, 2009; Lin, 2003), leaving such problems unsolved and continuously impeding Taiwanese EFL listeners' comprehension. Such a weird phenomenon of ignoring or undervaluing word recognition ability seems to occur all over the world. For example, Field (2000, 2003, 2004, 2008) persistently asserts approaches to enhancing listeners' decoding skill (including word recognition) have been comparatively undervalued or overlooked. Echoing Field's assertion, Broersma & Cutler (2008) point out quite little research attention has been given to word recognition which is the linchpin of spoken-language processing because without words there is no sentence. Hence, there is urgent need for much more research on developing EFL/FL learners' word recognition ability. This study aims at [1] testing whether word recognition related problems still seriously impede Taiwanese EFL university students' listening comprehension and then [2] providing empirically effective listening activities to solve these problems and/or improve listening comprehension. The research questions include:

1. What are Taiwanese EFL university students' top three listening difficulties?
2. Can the listening program comprising seven activities designed by the researcher significantly improve Taiwanese EFL university students' listening comprehension?
3. What are participants' attitudes toward the seven listening activities in terms of effectiveness and difficulty level?

2. Methodology

2.1 Participants

Participants include 49 freshmen and 15 post-freshmen enrolled in Freshman English course and English Listening and Reading course in the spring semester of 2010 at a university in northern Taiwan. Both courses met 100 minutes per week, focusing on listening and reading enhancement. Most freshmen in this study showed intermediate English proficiency, most post-freshmen high-intermediate.

2.2 Instruments

One TOEIC simulation listening test and two short questionnaires were adopted to collect necessary data. The TOEIC simulation listening test was made by adopting the first half items of each section from a simulated TOEIC, yielding a total of 50 items (5, 15, 15, 15 for Sections I, II, III, and IV). This half set of TOEIC simulation listening test served as pre- and post-test assessing participants' listening comprehension.

Questionnaire 1 was short and collected data on participants' listening difficulties while taking listening pre- and post-test. Most listening difficulty options were created mainly based on Chinese/Taiwanese EFL learners' listening difficulties identified by both Goh's (2000) and Sun's (2002) studies.

Questionnaire 2, given after a course, contained three sections with a total of 16 items exploring participants' attitudes toward seven listening activities: (a) Section I, composed of Items 1-8 assessing participants' attitudes toward effectiveness of seven listening activities with a five-point Likert-type scale; (b) Section II, containing Items

9-15 to rate individual difficulty in seven listening activities; and (c) Section III, Item 15, an open-ended question exploring participants' most and least liked activities and reasons for their choices. Sections I and II amassed quantitative data, Section III both quantitative and qualitative, as supplementary explanations for statistical analysis.

2.3 Seven listening activities

Seven listening activities were designed by the researcher before this study started to solve participants' predicted listening problems (mainly word recognition and word segmentation) based on her listening studies (Kuo, 2010a, 2010b; Kuo & Yang, 2009), literature review, as well as teaching and learning experience. The following subsections briefly explain these seven activities in terms of content, purpose, and in-class instructional time.

2.3.1 English word/phoneme variation teaching

English word /phoneme variations (EWV) often occurring in connected speech such as resyllabification, reduction, and assimilation (Field, 2008; Nation & Newton, 2009) are problematic for EFL learners because they rarely occur in their first language (L1) and thus warrant explicit teaching to arouse their awareness of such unfamiliar variations and conscious practice to internalize such problematic variations (Brown & Hilferty, 2006; Brown & Kondo-Brown, 2006; Cahill, 2006; Fan, 2003; Field, 2008; Ito, 2006a, 2006b; Matsuzawa, 2006; Rogerson, 2006). A serial of EWV adopted from Lee's (2008) *Power Listening*, was edited into handouts. The researcher spent fifteen minutes per week explicitly teaching one or two new EWV besides reviewing some taught previously. The main purpose of this word variation teaching was to equip participants with sufficient EWV knowledge to segment connected expressions accurately into individual words and then augment their listening comprehension. This activity was conducted 11 weeks, six before midterm exam and five after midterm exam.

2.3.2 Partial dictation of studio classroom (PD of SC)

This activity was designed primarily to enhance word activation ability and develop listening vocabulary by connecting familiar sounds to known words and secondarily to introduce English word/phoneme variations, thus enhancing word activation ability (Kuo, 2010a, 2010b; Kuo & Yang, 2009). It took 50 minutes of instructional time to (a) guide students to listen for the topic of designated SC daily program (5 minutes), (b) explain EWV, grammatical points, or idioms occurring in the normal-speed SC program (15 minutes), and (c) administer, grade, and explain the weekly listening quiz on the designated SC program (30 minutes). Outside the classroom, participants must carefully and intensively listen to a designated SC daily program (about 25 minutes) saved in an MP3 CD per week and fill in blanks in the partial transcript of a designated SC daily program to make it a complete transcript of about 3000 running words. This listening homework entailed two tasks: (a) listening while reading and (b) partial dictation. The former was strongly recommended by some listening researchers to augment word activation and boost listening vocabulary (Brown, Waring, and Donkaewbua, 2008; Chang, 2009; Chang & Read 2006; Goh, 1999, 2000; Hulstijn, 2001; Tsai, 2004); the latter was similar to Field's (1998, 2000, 2003, 2008) proposed small-scale dictation and Lin's (2003) cloze test to increase FL learners' listening comprehension, especially word activation and lexical segmentation. This activity was implemented for five consecutive weeks before the midterm exam and accounted for 25% of the final grade, since it consisted of teaching,

listening quiz, and homework.

2.3.3 *Small-scale dictation*

Small-scale dictation was constantly recommended by Field (1998, 2000, 2003, 2008) to enhance FL learners' decoding skill (including word recognition) or listening comprehension, which was evidenced by Rahimi's (2008) empirical study. This activity was implemented as a testing and teaching tool to arouse awareness of EWV and lend opportunities to apply or practice previously taught EWV. This activity was conducted after the midterm exam, when participants were expected to have better word activation ability and larger listening vocabulary due to five weeks of PD of SC and English word/phoneme variation teaching. This activity served as testing and thus accounted for 10 percent of the final grade. It took 15 minutes each time to return graded small-scale dictation administered during the previous week (2-3 minutes), explain EWV (5-8 minutes) that occurred in graded dictation, and then administer new dictation containing 4-5 short sentences (5 minutes).

2.3.4 *ICRT news teaching*

Some EFL teachers and/or researchers claimed news broadcasting teaching as effective or useful to improve advanced EFL learners' listening comprehension of authentic material or connected speech (Cross, 2009b; Katchen, 1996a; Tsai, 1996). One or two short pieces of ICRT news were edited by the researcher into listening and reading material, with sub-activities of (a) listening for main idea or topic of the news at its initial or first two plays; (b) listening for its more detailed information at its second, third, or fourth play; (c) teaching vocabulary, grammar, and the (news) text. It took about 50 minutes to go through these three sub-activities for one news reporting with 150-220 words. The purposes of ICRT news teaching were to (a) associate English learning with participants' daily life news, which was expected to make English learning useful and meaningful; (b) expose participants to authentic material spoken faster than normal speed, which in turn may improve listening comprehension; and (c) expand their vocabulary and review grammatical knowledge by intensively studying news texts with more difficult vocabulary and grammar (Cross, 2009b). This activity was implemented across eight weeks with five weeks before and three weeks after the midterm exam. The introduced news was tested in both midterm and final exams, accounting for 15% of the final grade.

2.3.5 *Film watching*

Two English films and two short clips (about two minutes long) related to reading or listening topics were selected to facilitate these topics' teaching and learning. Due to time limitation, only a small part of the film (about 20-25 minutes) was played to students in class. Some specific (American) cultures were explained by pausing a film or a clip at its first play. As soon as participants watched a short clip or a part of a film, they were guided to listen for and transcribe several phrases with known words but also with EWV. At times, two or three new words were selected for the instructor to model how to transcribe them and guess their meanings from context with the help of an electronic dictionary (Dr. eye). If time allowed, extra credit was given to any one that gave his/her personal viewpoints to one of several opinion questions designed by the researcher. The main purposes were to (a) expose participants to authentic material, (b) provide opportunities for them to apply English word variation knowledge by listening for and transcribing expressions with such word variations, (c) facilitate teaching and learning with the help of animation, (d) add

varieties or spices to serious learning, and (e) make students feel learning English is fun and useful. The time for conducting a film watching activity was about 50 minutes and 30 minutes for a short clip watching activity. Some expressions and vocabulary in the films and clips were chosen to be tested in the midterm and final exams and accounted for 10% of the final grade.

2.3.6 *English song teaching*

Two English songs related to reading topics and with some word variations were played in class for participants to appreciate their singers' talents or good looking, melody and lyrics. Besides, several expressions with EWV were deleted for participants to listen for and transcribe. Purposes of this activity were similar to Purposes (a)-(e) of film watching described above. The song teaching activity required 30~50 minutes.

2.3.7 *Extra credit listening activity*

Clips or MP 3 files with authentic materials shorter than three minutes and related to reading or listening topics were edited or selected for high achievers to transcribe after class to provide more opportunities to apply English word variation knowledge to overcome listening challenges or difficulties. They were usually played once in class to introduce their main ideas and then were available online for participants to download. Those considering PD of SC too easy were encouraged to do the extra credit activity outside the classroom. Those who correctly transcribed more than 80% of the text got 2 extra credit points for their final grade, while 1 extra credit point for 50%-79% of correct transcription. Since this activity was difficult for participants' independent transcription, it was optional and those who did not do so lost nothing. The main purpose was to provide more opportunities to listen for and transcribe authentic material with more word variations than SC and more appropriate to high achievers' listening level as well as more effective to improve their listening comprehension than SC, which might be too easy for them to make significant improvement in listening.

In conclusion, among these seven listening activities, extra credit activity was designed for high-level and some intermediate-level learners, PD of SC for low- and intermediate-level listeners, the rest (the other five activities) for all levels of listeners.

2.4 *Procedure*

Table 1 lists procedure of this study, including duration and total instructional time allocated for each listening activity. The unit for instructional time is minute, the total instructional time for each week 100 minutes. The study started from Week 2 and ended at Week 15 with a duration of 14 weeks. Non-listening related activities like course overview (Week 1), word part (prefix, root, and suffix) teaching (Weeks 11-15), review for midterm exam (Week 8), and midterm exam (Week 9) were also listed on the last row. Among these seven listening activities, ICRT News teaching took the most instructional time (400 minutes),

Table 1: Procedure: Duration and Total Amount of Instructional Time for Each Activity

Activity	W1	W2	W3	W4	W5	W6	W7	8	W9	10	11	12	13	14	15	16	Time
Pre-test + Questionnaire 1	✓							re-view mid-term exam									40
Analyzing Questionnaire 1	✓																
PD of SC		✓	✓		✓	✓	✓										250
W. Variations		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓			165
ICRT News		✓	✓	✓		✓	✓					✓		✓	✓		400
Extra Credit				✓	✓	✓				✓	✓	✓					20
Film watching				✓	✓					✓	✓						160
Small-scale dictation										✓	✓	✓	✓	✓			75
Song teaching												✓	✓				80
Post-test + Questionnaire 1															✓		40
Questionnaire 2																✓	10
non-listening activities	✓							✓	✓		✓	✓	✓	✓	✓	✓	400
Time	100	100	100	100	100	100	100	100	80	100	100	100	100	100	100	100	

the extra credit activity the least (20 minutes). English word variation teaching was the most frequent in-class activity (11 times) with six times before and five times after midterm exam, song teaching the least frequent, with two times after midterm exam to add a relaxing atmosphere to the formal classroom. Because both PD of SC and small-scale dictation contained a weekly listening quiz, they were mutually exclusive to avoid two quizzes at a time, with the former five times before and the latter five times after the midterm exam. Small-scale dictation was designed to help instructor and students clarify if they could apply English word variation knowledge taught before the midterm exam or currently taught. Film watching was scheduled two times before and after the midterm exam to add entertainment or animation variety to formal teaching.

2.5 Data analysis

A serial of Crosstabs tests with Chi-square tests were conducted to analyze quantitative data collected from Questionnaire 1 exploring listening difficulties to probe significant differences between Freshman and Post-Freshman Groups in several listening difficulties. A series of paired-samples t tests were run to ascertain (a) if participants significantly changed attitudes toward some listening difficulties after intervention and (b) if they markedly improved their listening comprehension after this study. Frequency and number were adopted to analyze and report participants' attitudes toward seven listening activities in terms of effectiveness and difficulty, as well as most and least liked activities. Qualitative data on reasons for most and least liked activities were organized, analyzed, and categorized to supplement explanations for statistical analyses.

3. Results and Discussion

3.1 Research Question 1: What are Taiwanese EFL university students' top three

listening difficulties?

Table 2 shows numbers, percentages, and Chi-square p-values of several listening difficulties for two groups: Freshman vs. Post-Freshman. Non-significant Chi-square p-values, larger than .05, suggest both the intermediate and high-intermediate groups held similar attitudes toward these listening difficulties. The top six listening difficulties ranking in order before intervention were: (1) failure to recall immediately the meanings of familiar-sounding words (67%); (2) vocabulary size too small to understand test items (56%); (3) quickly forgetting what is heard (52%); (4) neglecting next part when thinking about word meaning (50%); (5) speaking speed too fast (48%); (6) difficulty understanding words linking together (47%). The word activation problem, failure to immediately recall the meanings of familiar-sounding words ranked the first (67%) in difficulty, outnumbering the other five difficulties by more than 11% points, while any discrepancy among the latter was very slight, between 2% and 9% points. This result suggested most participants still needed more practice with associating sounds with their word forms and word meanings to augment listening vocabulary. Some FL teachers and/or researchers proposed *listening while reading* (Goh, 2000; Tsai, 2004) or *small-scale dictation* (Field, 1998, 2000, 2003, 2008; Rahimi, 2008) as effective to develop EFL learners' listening vocabulary and comprehension.

Table 2: Number, Percentage, and Chi-square p-value for each Difficulty on Two Occasions

Group	n	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2
F	49	33	28	24	18	27	25	4	2	26	20	26	19	11	9	28	25
Post-F	15	10	9	8	9	6	9	1	0	4	4	5	3	5	3	8	9
Total	64	43	37	32	27	33	34	5	2	30	24	31	22	16	12	36	34
%	100	67%	58%	50%	42%	52%	53%	8%	3%	47%	38%	48%	35%	25%	19%	56%	53%
Rank		1-pre	1-post	4-pre	4-post	3-pre	2-post	8-pre	8-post	6-pre	5-post	5-pre	6-post	7-pre	7-post	2-pre	3-post
p-value		.961	.845	.768	.110	.306	.542	.850	.427	.073	.322	.181	.180	.394	.887	.795	.542

Note 1: "F" Group stands for Freshman Group; "Post-F" Group means Post-Freshman Group.

Note 2: Letters A-H stand for listening difficulties listed in Questionnaire 1; numbers 1 and 2 following the letters stand for Questionnaire 1 administered the first time (right after the listening pre-test) and the second time (right after the listening post-test). For instance, A stands for Difficulty A: I can't immediately recall the meanings of the words sounding familiar to me, B for Difficulty B: I neglect the next part when thinking about a word meaning, ..., and H for Difficulty H: My vocabulary size is too small to understand the test items (Please refer to Appendix A: Questionnaire 1).

Note 3: A1 stands for Difficulty A in Questionnaire 1 administered the first time right after the listening pre-test, A2 for Difficulty A in Questionnaire 1 administered the second time right after the listening post-test. The rest pairs, B1 vs. B2, C1 vs. C2, D1 vs. D2 ... H1 vs. H2, follow the same logic.

The top second difficulty (56%) was insufficient vocabulary for two possible co-existing reasons: partly underdeveloped listening vocabulary (or word activation problem) and partly lexical deficiency. Goh (2000) and Sun (2002) hypothesized that the underdeveloped listening vocabulary problem (i.e., inability to link sounds with known words or immediately recall the meanings of familiar or known words) might mislead many Chinese/Taiwanese EFL learners to think their listening difficulty was mainly due to insufficient vocabulary and believe if they were to memorize more English words, their listening would significantly improve. To verify their hypothesis, the difficulty due to vocabulary size too small to understand test items, was added to Questionnaire 1. Moreover, based on results of vocabulary levels test designed by

Schmitt (2000) and results of text coverage analysis of the listening test conducted by *Range*, a vocabulary analysis tool designed by Nation (available at http://www.vuw.ac.nz/lals/staff/Paul_Nation website), about 93% of running words on this listening test should be known to most participants. Students with equally developed reading vocabulary and listening vocabulary should comprehend about 93% of words in the listening text and should not view their vocabulary as too small to understand the test items. If they regard their vocabulary as too small, it supports Goh's (2000) and Sun's (2002) hypothesis that underdeveloped listening vocabulary or word activation problem may mislead many Chinese/Taiwanese EFL learners to think one of their main listening difficulties arises from insufficient vocabulary. Obviously, results of this study evidence their hypothesis.

The second possible reason for 56% of participants seeing insufficient vocabulary as one of their major listening difficulties might directly result from lexical deficiency. Based on aforementioned participants' vocabulary size and an estimated 93% of running words occurring in the listening test known to most participants, 7% of running words on the listening test might still be unknown to most participants and thus cause comprehension breakdowns. For example, Wu (1998) reported two out of his four Chinese EFL participants failed to choose the correct answer because they might not know the word "tolerate" or the phrase "put up with." Wu further attributed lexical segmentation problem and lexical deficiency "as direct causes of comprehension breakdowns." Wu's findings and claims support the explanation of co-existing underdeveloped listening vocabulary (due to word activation and lexical segmentation problems) and lexical deficiency. Such a pervasive phenomenon of mixing unfamiliar words with inability to recall, recognize, and/or segment familiar words also occurred in several listening studies (Chang et al., 1995; Goh, 2000; Katchen, 1996b; Sun, 2002; Yen, 1988; Yuan, 2009). EFL teachers are strongly urged to remind or caution students that developing listening vocabulary is no less important than memorizing more English words.

The third difficulty (52%), quickly forgetting what is heard, relates to memory problem rather than listening problem, but it exists among most EFL learners. This result concurs with Yuan's (2009) study reporting memory problem (defined by Yuan as "trouble remembering the definition of the word after being taught, difficulty in recalling the meaning of familiar words, and immediately forgetting the word after being said" [pp. 50-51]) was ranked as the third among 22 listening difficulties mentioned by her 10 Taiwanese senior high school participants.

The fourth difficulty (50%), neglecting the next part when thinking about word meaning, is associated with word activation problem because many listeners who could not immediately recall the meanings of familiar or known words spent time recalling them and thus failed to listen to information that followed. This phenomenon also occurs in some local studies of Taiwanese EFL learners' listening difficulties (Chen, 2002; Chang & Read, 2006; Kuo, 2010b; Sun, 2002; Yen, 1988). For example, in Chang & Read's (2006) study, one interviewee from Vocabulary Instruction Group reported he was not quick enough to recall meanings of some familiar words and thus missed some of the speech when recalling the word meanings.

The fifth and sixth difficulties are tightly connected with lexical segmentation problem because the fifth difficulty (48%), fast speed, is the main reason for linking in English speech, which ranks the sixth difficulty (47%) and in turn causes the lexical segmentation problem. Results of Questionnaire 1 with so subtle a discrepancy (1% point difference) between fast speed and linking problem illustrate such a close connection between them and indicate lexical segmentation as a main listening

difficulty for participants. This interpretation is compatible with Lin's (2003) and Chang et al.'s (1995) results indicating fast speed and linkage as major listening difficulties for the former's 41 senior high school participants when listening to authentic English broadcast programs and the latter's 264 college freshmen when listening to normal-speed recordings. Table 2 also lists the results of listening difficulties participants encountered when taking the listening post-test at the end of this study. Although the percentage of each difficulty in taking the listening post-test was smaller than that in taking the pre-test, none of the differences reached the significance level ($p = 0.05$), which suggests these listening difficulties become less serious but were not significantly solved. It may need to take longer time, such as one or two academic years, to significantly reduced listening difficulties. The ranking of listening difficulties encountered in the post-test slightly differed from that in the pre-test. For instance, the second and the third exchanged ranking and so did the fifth and the sixth.

In conclusion the above top six listening difficulties can be grouped into three categories: (a) word activation problem composed of three closed related difficulties including (1) failure to immediately recall the meanings of familiar-sounding words (67%), (2) vocabulary size too small to understand test items (56%), and (4) neglecting next part when thinking about word meaning (50%); (b) memory problem, like (3) quickly forgetting what is heard (52%); (c) lexical segmentation problem consisting of two connected difficulties including (5) fast speed (48%) and (6) difficulty understanding words linking together (47%). In short, the primary top three listening difficulties for taking the listening pre- and post-test were (a) word activation, (b) forgetting, and (c) lexical segmentation. The overall results of Questionnaire 1 verify that word recognition (word activation and lexical segmentation) remains the most salient and pervasive listening difficulty seriously impeding participants' listening comprehension.

3.2 Research Question 2: Can the listening program containing seven activities designed by the researcher significantly improve Taiwanese EFL university students' listening comprehension?

Table 3 lists results of a series of paired-samples and independent-samples t tests, including mean, mean difference, and p-value. Results of three paired-samples t tests indicate that both groups obtained significantly higher mean scores on the post-test than on the pre-test, suggesting that both groups made significant progress in listening comprehension. Results of

Table 3: Results of Paired-Samples and Independent-Samples t Tests

Group	n	Pre-test	Post-test	Progress	p-value 1
Freshman	49	29.69	32.84	3.14	.000
Post-Freshman	15	33.33	38.07	4.73	.000
Mean Difference		3.64	5.23	1.59	
Total	64	30.55	34.06	3.52	.000
p-value 2		.069	.013	.250	.000

Note: p-value 1 = p-value of paired-samples t test;
p-value 2 = p-value of independent-samples t test.

paired-samples t tests evidence that listening programs containing these seven activities could significantly improve Taiwanese EFL university students' listening comprehension.

3.3 Research Question 3: What are participants' attitudes toward these seven listening activities in terms of effectiveness and difficulty level?

Results of independent-samples *t* tests show that Post-Freshman Group obtained higher mean scores on both pre-test and post-test than Freshman Group, suggesting the former possessed better listening ability than the latter. Although *p*-value of the pre-test (.069) did not reach significant level ($p = .05$), *p*-value of the post test (.013) did, implying the Post-Freshman Group possessed (non-significantly) better listening ability than the Freshman Group before the experiment and developed significantly better listening ability than Freshman Group after the experiment. These results imply that the listening program is more effective for the Post-Freshman Group. One possible reason for such a result may be that the Post-Freshman Group had higher motivation than the Freshman Group because the English Listening and Reading course taken by the former group was an elective course while the Freshman English course taken by the latter group was a required course. Based on the researcher's teaching experience at the participants' university, most students have higher motivation for and better attitudes toward the elective English courses than the required Freshman English course because they can drop the former once uninteresting to them while few students drop the latter even if it is uninteresting since the latter is a required course and students have to take it whether they like it or not.

Before presenting results and discussion, the researcher want to emphasize that among seven listening activities, extra credit activity was designed for high-level listeners and some at the intermediate level, PD of SC for low and intermediate, the remainder for all levels. With this information regarding target listeners for each activity in mind, readers will better understand the following results and discussion.

3.3.1 Students' attitudes toward seven listening activities regarding effectiveness

Table 4 lists number, percentage, mean, and ranking of effectiveness for each listening activity. Effectiveness was ranked by the mean score obtained from a five-point Likert-type scale with 1 for extremely disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for extremely agree. Results in Table 4 indicate five out of seven listening activities were considered effective by more than 85% of the participants to improve listening ability, English proficiency, or motivation for learning English, with English song teaching ranked as the most effective to increase motivation for learning English (mean = 4.22), followed by small-scale dictation to enhance listening ability (mean = 4.17), trailed by ICRT news teaching to improve English proficiency (mean = 4.14), immediately tailed by English word variation teaching to improve listening ability (mean = 4.11), heeled in order by English song teaching (mean = 4.09) and PD of SC (mean = 4.05) to boost listening ability. Among these effective listening activities, English song teaching was ranked as the most effective to increase motivation for learning English and as the fifth most effective to enhance listening ability. These results concur with previous research findings that song related activities can effectively increase FL learners' motivation, vocabulary, grammar, listening, speaking, reading, and/or writing (Abbot, 2002; Chu, 2009; Kuo, 2008; Kuo & Chen, 2006; Lems, 2001; Maley, 1987; Murphey, 1992; Saricoban & Metin, 2000). Based on results of this and previous studies, English song teaching was strongly recommended for EFL curriculum, especially in listening and speaking.

Table 4: Number (Percentage), Mean, and Ranking of Effectiveness for Each Listening Activity

Item	ED	Disagree	Neutral	Agree	EA	Sub-Total (Agree + EE)	Mean	Rk
4. Eng. songs (motivation)	3 (4.7)	2 (3.1)	3 (4.7)	26 (40.6)	30 (46.9)	56 (87.6)	4.22	1
5. Small-scale dictation	0	4 (6.3)	0	41 (64.1)	19 (29.7)	60 (93.8)	4.17	2
6. ICRT News	0	5 (7.8)	4 (6.3)	32 (50.0)	23 (35.9)	55 (85.9)	4.14	3
1. Eng. word variations	2 (3.1)	3 (4.7)	1 (1.6)	38 (59.4)	20 (31.3)	58 (90.7)	4.11	4
3. English song teaching	1(1.6)	4(6.3)	3 (4.7)	36(56.3)	20 (31.3)	56 (87.6)	4.09	5
2. PD of SC	1 (1.6)	3 (4.7)	2 (3.1)	44 (68.8)	14 (21.9)	58 (90.7)	4.05	6
7. Film watching	0	10(15.6)	7 (10.9)	35 (54.7)	12 (18.8)	47 (73.5)	3.77	7
8. Extra credit	1 (1.6)	11(17.2)	20(31.3)	25 (39.1)	7 (10.9)	32 (50.0)	3.41	8

Note 1: ED = Extremely Disagree; EE = Extremely Agree;

Note 2: Rk = Ranking based on the mean score of effectiveness

Although film watching (mean = 3.77) ranked seventh, still most (73.5%) of participants regarded it as effective to increase English proficiency. However, the effectiveness of extra credit activity (mean = 3.41) fell far behind the aforementioned activities and ranked the last, with 50% of participants considering it effective to augment their listening comprehension, 18.8% deeming it ineffective, and 31.3% holding a neutral attitude toward its effectiveness. There are two possible reasons for its lower percentage of effectiveness and higher percentage of neutral attitude than other activities. One is because extra credit activity was an optional activity aiming at high- and some intermediate-level listeners; many participants might not even bother to try it, hence holding a neutral attitude toward its effectiveness. The other reason is that low and some intermediate achievers tried this activity, finding it too difficult and thus gave it up. When doing the post-course questionnaire, they rated it as ineffective due to being too difficult or gave a neutral attitude toward it. This explanation is evidenced by the result that 28.2% of participants rated extra credit activity either difficult or too difficult and 21.9% reported “uncertain” when rating its difficulty level. Nevertheless, these results met the researchers’ expectations of extra credit activity which used authentic material at normal speed with much more EWV than SC, and aimed at high achievers and some intermediate ones with strong determination to overcome their listening difficulties. Therefore, this researcher expected it to be considered difficult and ineffective for low achievers and some intermediate ones who did not want to spend extra time and effort on such a challenging task.

3.3.2 Students’ attitudes toward seven listening activities regarding difficulty level

Table 5 presents number and percentage of difficulty level and ranking of appropriateness for each listening activity. Results of difficulty level for both English word variation teaching and small-scale dictation were similar. Although most participants (60.9% - 70.3%) rated them as appropriate in terms of difficulty level, almost 30% rated them as difficult or extremely difficult. These results suggested EWV were not easy for almost all (more than 90% of) participants and thus merited explicit teaching and sufficient practice. Since EWV were well edited into many small sections with each taking about 15 minutes to

teach and practice per week, such arrangement might reduce their difficulty, resulting in 70% of participants rating it as appropriate in terms difficulty level, the highest percentage of “appropriate” among seven listening activities. Also, after midterm exam, a small-scale dictation following word variation teaching was administered to lend an opportunity for participants to apply word variation knowledge while taking

the dictation quiz. Moreover, because each small-scale dictation lasted less than 3 minutes and contained only 4-5 sentences with 99% known words, which was easy for quick learners to apply taught EWV to transcribe them. This might explain why 9.4% of participants rated small-scale dictation as easy but none rated English word variation teaching as easy.

Table 5: Number (Percentage) of Difficulty Level and Ranking of Appropriateness for Each Listening Activity

	EE	Easy	Difficult	ED	Uncertain	Proper	Ranking
1. PD of SC	2 (3.1)	17 (26.6)	7 (10.9)	0	0	38 (59.4)	4
2. ICRT news	0	1 (1.6)	31 (48.4)	4 (6.3)	0	28 (43.8)	7
3. Eng. word variations	0	0	18 (28.1)	1 (1.6)	0	45 (70.3)	1
4. Small-scale dictation	0	6 (9.4)	17 (26.6)	2 (3.1)	0	39 (60.9)	3
5. Film watching	1 (1.6)	8 (12.5)	13 (20.3)	2 (3.1)	2 (3.1)	38 (59.4)	4
6. Eng. song teaching	0	14 (21.9)	7 (10.9)	0	0	43 (67.2)	2
7. Extra credit	0	3 (4.7)	14 (21.9)	4 (6.3)	14 (21.9)	29 (45.3)	6

Note 1: EE = Extremely Easy; ED = Extremely Difficult

Note 2: Ranking based on percentage of appropriateness.

Both English song teaching and PD of SC obtained similar results in difficulty level rating. For example, both gained the lowest percentage (10.9%) of being difficult among the seven listening activities. However, almost 30% rated PD of SC as easy or too easy while 21.9% rated English song teaching as easy. These results suggested PD of SC as the easiest among the seven activities and song teaching ranking the second easiest. Such results also met the researchers' expectation: PD of SC was designed for low- and intermediate-level listeners and should be considered easy or too easy by high-level listeners and some studious intermediate-level listeners who made tremendous progress in listening by the end of the study. Moreover, English song teaching obtained the second highest percentage (67.2%) of "appropriate" in terms of difficulty level and PD of SC gained the third highest percentage (59.4%). Although both activities obtained similar results in difficulty level rating, the percentage (58%) of participants choosing English song teaching activity as the most liked was far more exceeding than that (16%) for PD of SC because the former contained animation, melody, and famous or fancy singers that participants liked, all of which added a relaxing atmosphere and entertainment variety to formal language teaching. Such interpretation was compatible with Kuo's (2008) claim that using English songs in EFL classrooms is rewarding and can bring new and exciting perspectives to language teaching.

Those activities with more word variations such as English word variation teaching, small-scale dictation and extra credit activity with a faster speed and more difficult words like ICRT news teaching deemed appropriate in terms of difficulty level by high achievers were considered (too) difficult by low and some intermediate ones. Therefore, 54.7% of the participants rated ICRT news teaching difficult or extremely

difficult, followed by 29.8% for small-scale diction, 28.2% for extra credit activity, and 27.7% for English word variation teaching. These results suggested ICRT news reporting was difficult for most participants; they needed more time, practice, and teacher's guidance to enhance their listening ability and enrich their vocabulary knowledge to better comprehend news reporting. This finding is compatible with Cross (2009b): English news reporting was very difficult for EFL university students to comprehend and they needed more time on and practice with it. Because knowing in advance that authentic news reporting would be very difficult for participants, the researcher designed three sub-activities to teach a piece of news reporting and to guide participants through three stages of (a) listening for main idea or topic, (b) listening for details, and (c) studying important, new, or more difficult words and grammar occurring in the news to acclimate themselves to a faster speed and retain more difficult vocabulary and grammar in news reporting. These three sub-activities used to present and teach a piece of ICRT news with 150-220 words altogether needed 50 minutes of instructional time. The total instructional time for ICRT news teaching in this study was about 400 minutes and ranked the highest among seven listening activities. It is considered fair and reasonable to allocate such large amount of instructional time to the most difficult activity. Although ICRT news teaching obtained the highest percentage (54.7%) as difficult or extremely difficult, 85.9% of participants considered it effective to improve their English proficiency, and 26.5% chose it as their favorite activity. These results suggest difficult listening material like ICRT news reporting can be considered effective for most listeners and even liked by some if it is well organized and presented.

Contrast to ICRT news teaching, extra credit activity took the least instructional time (20 minutes) because it targeted mainly high-level and some studious intermediate-level listeners. The short authentic clips or MP3 files (less than 3 minutes) were played once in class to introduce their main ideas or topics and to arouse high-level and some intermediate-level listeners' interest or motivation for them. Although words in films and clips were not as difficult as those in ICRT news, their normal speed slightly slower than ICRT news reporting, more EWV than ICRT news reporting, and lack of extra help like vocabulary handouts made extra credit activity almost as difficult as ICRT news teaching, leading to results of their difficulty-level rating very close in the percentages of "appropriate" (43.8% vs. 45.3%) and "easy." (0.0% vs. 4.3%). Since extra credit activity was designed for high-level and some studious intermediate-level listeners and thus optional, it is reasonable that 28.2% rated it as difficult or extremely difficult, while 21.9% not doing it reported uncertain. Its total percentage of "difficult" (28.2%) and "uncertain" (21.9%) amounts to 50.1%, very close to that of "difficult" (54.7%) for ICRT news teaching. In conclusion, both ICRT news teaching and extra credit activity were difficult for most participants and respectively obtained lowest (43.8%) and second lowest percentage (45.3%) of "appropriate" in difficulty level rating.

Film watching scored the third lowest percentage (59.4%) of "appropriate" in difficulty level rating among seven activities, with 14.1% rating it easy, 23.4% difficult, and 3.1% uncertain. Although both film watching and English song teaching used authentic animated materials, the former appeared slightly more difficult for two reasons. First, a 30-minute film viewed only once (some parts twice) contained much more information and EWV than 3- or 5-minute English songs heard and watched several times. Second, some expressions and vocabulary in films and clips were designated to be tested in the midterm and final exams while no quiz or test followed song teaching. Whenever an activity is followed by a quiz or test, it is

usually considered more difficult and/or less interesting than the one without any following quiz or test. This might be another reason why film watching obtained a higher percentage of “difficult” than song teaching.

4. Conclusions, Suggestions and Limitations

This study first explored 64 Taiwanese EFL university students’ major listening difficulties and then rated the overall effectiveness of seven listening activities implemented to solve these problems, especially word activation and lexical segmentation. Results indicated: (1) word activation and lexical segmentation respectively ranked as the first and the third top listening difficulties while forgetting (memory problem) ranked as the second; (2) the listening program with seven listening activities could significantly enhance participants’ listening comprehension; (3) most participants held positive attitudes towards these seven listening activities in terms of effectiveness and difficulty level.

Nunan (2001, 2002) claims both bottom-up¹ processing (decoding) and top-down² processing (meaning building) are highly interdependent and equally vital for successful L2 listening. We all know that sentence meaning is derived from combination of words comprising it, whereas word meaning can be decided or confirmed from its context or the sentence containing it. Studies also show that FL listeners’ non-linguistic knowledge (general knowledge and beliefs about the world) is often used to compensate for their inadequate linguistic knowledge, such as lexical, phonological, syntactic, and semantic knowledge (Broersma & Cutler, 2008; Wu, 1998). Thus, both types of activities that develop decoding and meaning building should be introduced to EFL learners. However, the solutions to listening difficulties proposed and investigated in this study mainly focused on enhancing EFL learners’ word activation and lexical segmentation (i.e., word recognition operation belonging to decoding skill or bottom-up processing) and excluded activities of teaching listening strategies for two reasons. First, listening strategies are more useful for meaning building and have been overwhelmingly studied in the past two decades, while word recognition or decoding skill has been undervalued or overlooked by most researchers (Broersma & Cutler, 2008; Field, 2000, 2003, 2004, 2008; Ridgway, 2000; Wilson, 2003). Second, word recognition (word activation and lexical segmentation) problems have been consistently detected as pervasive listening difficulties severely impeding most Taiwanese EFL learners’ listening comprehension. Thanks to the aforementioned two reasons, this study mainly explored activities that develop word activation and lexical segmentation abilities. Nevertheless, this does not mean activities for meaning building or top-down processing such as teaching listening strategies are not important. If instructional time allows, EFL listening teachers are strongly recommended to include both types of activities to develop learners’ both decoding and meaning building skills which are interdependent and equally important.

Moreover, this study lacked a control group to validate how much improvement on the listening post-test might be attributed to positive effects of these seven listening activities instead of other factors such as testing effect, other out-of-class practice unrelated to these seven activities, and obtaining more linguistic knowledge in terms of vocabulary and grammar. In addition, the generalizability of the study results is limited due to the small sample size (n=64). There exists a need for a similar study with a much larger sample and a control group to gauge enhancement of word recognition or listening comprehension attributable to these seven listening activities.

Note 1: Decoding and bottom-up processing are interchangeable in this study.

Note 2: Meaning building and top-down processing are interchangeable in this study.

References

1. Abbott, M. (2002). Using music to promote L2 learning among adult learners. *TESOL Quarterly*, 11(1), 10-17
2. Brown, J. D., & Hilferty, A. (2006). The effectiveness of teaching reduced forms for listening comprehension. In J. D. Brown, & K. Kondo-Brown, (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 51-58). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
3. Brown, J. D., & Kondo-Brown, K. (2006a). Introducing connected speech. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 1-16). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
4. Brown, J. D., & Kondo-Brown, K. (2006b). The effectiveness of teaching reduced forms for listening comprehension. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 51-58). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
5. Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign Language*, 20(2), 10-17.
6. Broersma, M., & Cutler, A. (2008). Phantom word activation in L2. *System*, 36, 22-34.
7. Cahill, R. (2006). Teaching reduced interrogative forms to low-level EFL students in Japan. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 99-126). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
8. Chao, Y. G., & Cheng, Y. P. (2004). Listening difficulties of Taiwanese EFL students in senior high schools. *Proceedings of Selected Papers from the Thirteenth International Symposium on English Teaching* (pp. 250-258). Taipei: The Crane Publishing Co.,
9. Chao, Y. G., & Chien, L. Y. (2005). College English majors' listening strategies and difficulties while taking TOEFL. *Proceedings of Selected Papers from the Fourteenth International Symposium on English Teaching* (pp. 292-301). Taipei: The Crane Publishing Co., LTD.
10. Chan, C. Y. & Teng, H. C. (2005). A study of metacognitive strategies in EFL listening comprehension. *Proceedings of the Twenty-Second Conference on English Teaching and Learning in the Republic of China* (pp. 1-12). Taipei: The Crane Publishing Co., LTD.
11. Chang, A. C. S. (2009). Gains to L2 listeners from reading while listening vs. listening only in comprehending short stories. *System*, 37, 652-663.
12. Chang, A. C. S., & Read, J. (2006). The effects of listening support on the listening performance of EFL learners. *TESOL Quarterly*, 40(2), 375-397.
13. Chang, Y. L., Chang, T. S., & Kuo, C. H. (1995). Listening difficulties and learner strategies of non-native speakers. *Proceedings of Selected Papers from the Ninth Conference on English Teaching and Learning in the Republic of China* (pp. 145-158). Taipei: The Crane Publishing Co., LTD.
14. Chen, A. H. (2009). Listening strategy instruction: Exploring Taiwanese college students' strategy development. *Asian EFL Journal*, 11(2), 54-85.
15. Chen, S. W. (2002). Problems in listening comprehension for learners of EFL. *Studies in English Language and Literature*, 10, 57-70.
16. Chu, P. H. (2009). Enhancing Taiwanese EFL students' vocabulary learning via

- translated Chinese songs. *Proceedings of Selected Papers from the Eighteenth International Symposium on English Teaching* (pp. 249-259). Taipei: The Crane Publishing Co., LTD.
17. Cross, J. (2009a). Diagnosing the process, text, and intrusion problems responsible for L2 listeners' decoding errors. *The Asian EFL Journal*, 11(2), 31-53.
18. Cross, J. (2009b). Effects of listening strategy instruction on news videotext comprehension. *Language Teaching Research* 13(2), 151-176.
19. Fan, J. Y. (2003). The effect of teaching connected speech rules on English listening comprehension. *Selected Papers from the Twelfth International Symposium on English Teaching* (Vol. 2, pp. 64-72). Taipei, Taiwan: Crane Publishing Company.
20. *Journal*, 52(2), 110-118.
21. Field, J. (2000). Not waving but drowning: a reply to Tony Ridgway. *ELT Journal*, 54(2), 186-195.
22. Field, J. (2003). Promoting perception: lexical segmentation in L2 listening. *ELT Journal*, 57(4), 325-334.
23. Field J. (2004). An insight into listeners' problems: too much bottom-up or too much top-down? *System*, 32, 363-377.
24. Field, J. (2008). *Listening in the language classroom*. Cambridge: Cambridge University Press.
25. Goh, C. M. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28, 55-75.
26. Goh, C. M. (1999). How much do learners know about the factors that influence their listening comprehension. *Hong Kong Journal of Applied Linguistics*, 4 (1), 17-40.
27. Huang, L. A. (1999). Promoting English listening proficiency through summary and dictation methods. *Proceedings of the Sixteenth Conference on English Teaching and Learning in the Republic of China* (pp. 453-463). Taipei: The Crane Publishing Co., LTD.
28. Hulstijn, J. H. (2001). Intentional and incidental second language vocabulary learning: A reappraisal of elaboration, rehearsal and automaticity. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 258-286). Cambridge, MA: Cambridge University Press.
29. Ito, Y. (2006a). The Significance of reduced forms in L2 pedagogy. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 17-26). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
30. Ito, Y. (2006b). The comprehension of English reduced forms by second language learners and its effect on input-intake process. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 67-84). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
31. Jolly, Y. S. (1975). Songs in teaching a foreign language. *The Modern Language Journal*, 59, 11-14.
32. Katchen, J. (1996a). Techniques for using satellite TV news programs in the English language classroom. *Papers from the Eleventh Conference on English Teaching and Learning in the Republic of China* (pp. 193-209). Taipei: The Crane Publishing Co., LTD.
33. Katchen, J. (1996b). Listening journals: A way to enhance students' listening strategies. *Papers from the Twelfth Conference on English Teaching and Learning*

- in the Republic of China* (pp. 352-362). Taipei: Crane Publishing Co., Ltd.
34. Kuo, J. M. (2008). English songs as effective activities for English learning. *Studies in English Language and Literature*, 22, 11-21.
35. Kuo, J. M., & Chen, C. Y. (2006). He was a skater boy: Integrating pop music into process writing. *English Teaching & Culture*, 2, 57-70.
36. Kuo, Y. (2010a). How to use partial dictation of English radio programs to improve Taiwanese EFL listeners' comprehension. *Proceedings of 2010 International Conference and Workshop on TEFL & Applied Linguistics* (pp. 259-268). Taipei: Crane Publishing Company Ltd.
37. Kuo, Y. (2010b). Using partial dictation of an English teaching radio program to enhance EFL learners' listening comprehension. *Asian EFL Journal, Professional Teaching Articles*, vol. 47, pp. 1-26.
38. Kuo, Y., & Yang, C. (2009). Using spot dictation of English radio programs to improve EFL learners' English listening comprehension. *Proceedings of Selected Papers from the Eighteenth International Symposium on English Teaching* (pp. 96-107). Taipei, Taiwan: Crane Publishing Company Ltd.
39. Lee, S. C. (2008). *Power Listening*. Globalmate Co., LTD. Taipei, Taiwan.
40. Lems, K. (2001). Using music in the adult ESL classroom. Retrieved Jan. 22, 2011, from <http://www.ericdigests.org/2002-3/music.htm>.
41. Lin, Y. J. (2003). *A case study on the effects of applying authentic materials as listening comprehension supplements for EFL senior high school students*. Unpublished master's thesis, National Chengchi University, Taipei, Taiwan.
42. Maley, A. (1987). Poetry and song as effective language-learning activities. In W. M. Rivers (Ed.), *Interactive Language Teaching* (pp. 93-109). New York, NY: Cambridge University Press.
43. Matsuzawa, T. (2006). Comprehension of English reduced forms by Japanese business people and the effectiveness of instruction. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 59-66). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
44. Murphey, T. (1992). *Music & Song*. New York: Oxford University Press.
45. Nation, I. S. P., & Newton, J. (2009). *Teaching ESL/EFL listening and speaking*. New York: Routledge Publisher.
46. Nunan, D. (2002). Listening in a second language. *Proceedings of Selected Papers from the Eleventh International Symposium on English Teaching/Fourth Pan Asian Conference* (pp. 120-129). Taipei: The Crane Publishing Co., LTD.
47. Nunan, D. (2001). Listening in language learning. In R. Carter & D. Nunan (Eds.), *The Cambridge Guide to Teaching English to Speakers of Other Languages*. Cambridge University: New York, pp. 238-241.
48. Rahimi, M. (2008). Using dictation to improve language proficiency. *The Asian EFL Journal*, 10, 33-47.
49. Ridgway, T. (2000). Listening strategies—I beg your pardon? *ELT Journal*, 54(2), 179-185.
50. Rogerson, M. (2006). Don'tcha know? A survey of EFL teachers' perspective on reduced forms instruction. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on Teaching Connected Speech to Second Language Speakers* (pp. 85-98). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
51. Rost, M. (2005). L2 listening. In Hinkel, E. (Ed.), *Handbook of Research in Second Language Teaching and Learning*. Mahwah, NJ: Lawrence Erlbaum

Associates.

- 52.Saricoban, A., & Metin, E. (2000). Songs, verse and games for teaching grammar. *The Internet TESL Journal*, Vol. VI, No. 10. Retrieved on Jan. 23, 2011 at : <http://iteslj.org/Techniques/Saricoban-Songs.html>
- 53.Schimtt, N. (2000). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.
- 54.Sun, K. (2002). Investigation of English listening difficulties of Taiwan students. *Proceedings of Selected Papers from the Eleventh International Symposium on English Teaching/Fourth Pan Asian Conference* (pp. 185-195). Taipei: The Crane Publishing Co., LTD.
- 55.Teng, H. C. (2008). A study of Listening style preference and EFL listening proficiency. *Studies in English Language and Literature*, 21, 1-9.
- 56.Teng, H. C. (2003). Teaching EFL listening strategies to college students in Taiwan . *Proceedings of the Twentieth Conference on English Teaching and Learning in the Republic of China* (pp. 485-394). Taipei: The Crane Publishing Co., LTD.
- 57.Teng, H. C. (2002). An investigation of EFL listening difficulties for Taiwanese college students. *Selected Papers from the Eleventh International Symposium on English Teaching/Fourth Pan Asian Conference* (pp. 526-533). Taipei: The Crane Publishing Co., LTD.
- 58.Tsai, S. (1996). Applying authentic materials in the language lab—Using ICRT programs to develop listening comprehension and speaking skills. *Papers from the Eleventh Conference on English Teaching and Learning in the Republic of China* (pp. 211-231). Taipei: The Crane Publishing Co., LTD.
- 59.Tsai, Y. (2004). Diagnostic analysis of listening comprehension problems. *Studies in English Language and Literature*, 14, 1-10.
- 60.Tsui, B. M., & Fullilove, J. (1998). Bottom-up or top-down processing as a discriminator of L2 listening performance. *Applied Linguistics*, 19(4), 432-451.
- 61.Wilson, M. (2003). Discovery listening—Improving perceptual processing. *ELT Journal*, 57(4), 335-343.
- 62.Wu, Y. (1998). What do tests of listening comprehension test?—A retrospection study of EFL test-takers performing in multiple-choice task. *Language Testing*, 15(1), 21-44.
- 63.Yang, M. N. (2006). An investigation on students learning problems in English-learning programs on the radio. *Proceedings of Selected Papers from the Fifteenth International Symposium on English Teaching* (pp. 292 -301). Taipei: The Crane Publishing Co., LTD.
- 64.Yen, A. L., & Shiue, S. M. (2004). A study on English listening difficulties encountered by FHK students. *Proceedings of Selected Papers from the Thirteenth International Symposium on English Teaching* (pp. 699-707). Taipei: The Crane Publishing Co., LTD.
- 65.Yen, I. C. (1988). Listening difficulties encountered by college students in Taiwan. *English Teaching & Learning*, 12(4), 62-72.
- 66.Yuan, H. L. (2009). A study of EFL listening difficulties and strategies of senior high school students. Unpublished master's thesis, National Taiwan University of Technology, Taipei, Taiwan.

Appendix A

Questionnaire 1 (English Version)

Dear Students:

The following short questionnaire pertains to difficulties you confronted on the listening test just administered. Your responses are vital for the instructor to detect problems and thereby design specific activities to surmount listening obstacles. Your answers will be confidential and not affect your course grade. Please rest assured when answering these questions. Thanks for your cooperation!

1. The listening test I just took is _____ for me.
(A. too difficult B. difficult C. neither too difficult nor too easy D. easy E. too easy)
2. Please check difficulties you encountered while taking the listening test just administered. Put a check to the right of a difficulty. You can check more than one difficulty.

Statement of Listening Difficulty/Problem	
(a) I can't immediately recall the meanings of the words sounding familiar to me.	
(b) I neglect the next part when thinking about a word meaning.	
(c) I quickly forget what is heard.	
(d) I understand every word but not the intended message.	
(e) I have difficulties understanding words linking together.	
(f) The speaking speed is too fast.	
(g) The pause for reading the four choices for each item is too short.	
(h) My vocabulary size is too small to understand the test items.	
(i) I cannot concentrate in listening because _____.	
(j) Other(s) (Please briefly describe it/them) _____.	

Appendix B

Questionnaire 1 (Chinese Version)

英文聽力測驗問卷調查

親愛的同學:

以下是一份有關英文聽力測驗的問卷調查，其目的在了解同學在英文聽力方面的困難，以便老師針對同學的問題來設計教學，以期有效的提昇同學的英文聽力。你的答案絕不會影響你的英文成績，請放心、認真作答此份問卷。謝謝你的合作！

姓名：_____ 科系：_____ 學號：_____

1. 此份聽力測驗對你來說 _____
(A.非常困難 B.困難了點 C.不算太難也但不算太容易 D.簡單了點 E.太簡單了)
2. 在考剛剛的聽力測驗時，下列那些選項影響你聽懂的能力(可複選)：

(A. 有些字聽起來很熟悉，但無法立即法想出其意思。
(B. 為了想某個單字的意思，而忽略了下面的句子。
(C. 剛剛才聽過的內容很快就忘記了。
(D. 我幾乎都了解每個單字的意思，但卻無法連貫整句話的意思。
(E. 使用連音，使單字或片語常都連在一起說，因此較難聽懂。
(F. 說話速度太快，因此較難聽懂。
(G. 作答的時間太短，來不及看完選項，下一題就出現了。
(H. 自己的單字量太少，試題中不認識的單字太多，因此無法聽懂試題。
(I. 無 法 專 心 聆 聽 ， 因
為：_____
(J. 其 他 (請 簡 略 說
明)：_____

謝謝你的幫忙與合作！