TESL-EJ Teaching English as a Second or Foreign Language

The Electronic Journal for English as a Second Language

September 2009
Volume 13, Number 2

EFL Listeners' Task-based Strategies and Their Relationship with Listening Performance

Anna Ching-Shyang Chang
Hsing-Wu College, Taipei, Taiwan
<annachang@livemail.tw>

Abstract

This study examines 75 Chinese EFL learners' test-taking strategies and their relationship with listening performance. It further looks into how students adjust their strategies under four different task conditions. The participants completed a three-phase (before/during/after) test-taking questionnaire and were given a listening test comprising four subtests, each with different forms of support. After each subtest, students reported the strategies used based on a strategy list, and further "wrote in" their own strategies. The results show that all students, regardless of their listening proficiency, favor some strategies. The difference between high- and low-level students is not in the number of strategies used but in the preferential order and frequency of use. Students' listening performance had a strong correlation with the strategy used *before* the test-taking phase. Based on students' reported strategies it was found that: a) students were able to adjust their strategy use according to the change in task conditions, b) the same strategy may be used in different ways and for different purposes by different levels of students, c) some strategies are interrelated and are used concurrently, and d) test-taking strategy involves multiple dimensions, making it difficult to tease out one factor from another.

Introduction

Over the last thirty years, one popular topic in second language (L2) research has been the use and development of language learning strategies. Researchers have examined various strategies used by language learners of different levels, skills, cultures, fields of study, and different genders. Despite the large body of research that has been produced, Vann and Abraham (1990) argue that the way strategies are utilized by learners in actual tasks remains neglected. As a result, a new direction for task-based strategy assessment was suggested by Cohen (1998), and Hsiao and Oxford (2002). However, in 2004 Oxford et al. again made a similar comment, stating that, "a significant dearth of research exists concerning the relationship between tasks and strategy use" (p. 3). Macaro et al. (2007) claim that strategic

behaviour has not been explored in listening tasks and suggests this as a direction for future research. Obviously, the strategies used for specific assessment tasks represent a gap in our understanding that needs to be filled.

In the realm of L2 learning and instruction, language *strategy* has been defined in a number of different ways (see Chamot, 1987; Oxford, 1990, Cohen, 1998; Macaro, 2006), as has language *task* (Breen, 1987; Nunan, 1989; Skehan, 1996; Richards & Rodgers, 2001); therefore, I will not elaborate on these definitions here. However, to limit the scope of this study, *listening strategy* will refer to "conscious plans to manage incoming speech, particularly when the listener knows that he or she must compensate for incomplete input or partial understanding" (Rost, 2002, p. 236), and *task* will be defined as "an activity that requires learners to arrive at an outcome from given information through some processes of thought, and which allows teachers to control and regulate that process" (Prabhu, 1987, p. 17). In many cases, including the case here, a task often means a test, and the terms are often used interchangeably. Due to there being so many language strategies, for example, strategies for vocabulary learning, the four-skill learning strategies, and many task types as well (see Bygate et al., 2001), the scope of this study will be limited to listening test-taking strategies under varying task characteristics. A brief review of L2 listening strategies will be undertaken before focusing on a more contextualized situation, specifically testing.

Listening Strategies in Second Language Learning

Over the past two decades, listening comprehension skills have become an essential component of learning an additional language, and listening strategy use has been studied extensively (see Berne, 2004, for a comprehensive review). These studies have focused on identifying the relationship between strategy use and other variables, such as higher versus lower proficiency learners, quality and quantity, the effect of strategy instruction on listening performance, and most recently, strategy development over time. Research in this area has generally shown:

1. More advanced listeners use more and varying strategies than less advanced ones (Murphy, 1987; Chien & Li, 1998; Goh, 2002; Chao & Chien, 2005). [1]
2. The better a listener's proficiency, the more metacognitive strategies he/she uses (Vandergrift, 1997a, 1997b).
3. When encountering more difficult texts, listeners tend to use bottom-up strategies (Bacon, 1992; Vogely, 1995).
4. Successful learners are able to use both linguistic and background knowledge at the same time, however, poor learners may over rely on one kind of knowledge (Rost & Ross, 1991; Vandergrift, 1997b).
5. In the area of strategy instruction, no immediate effect on enhancement of listening comprehension was found in most studies (O'Malley et al., 1985; O'Malley, 1987; Thompson & Rubin, 1996; McGruddy, 1999; Ozeki, 2000) except for Goh and Taib (2006) where higher listening proficiency was assumed to be needed to make the instruction effective.

While these studies show a strong relationship between differences in strategy use and L2 listening proficiency, as Anderson (2005, p. 762) states, "there are no good or bad strategies; there is good or bad application of strategies." This means that the differences in strategy use between a more successful or less successful listener lies in how the strategies are executed not the strategies themselves. Therefore, to look into differences in strategy use amongst different levels of learners, it is important to use various methods–interviews, diaries, checklists, actual tasks, and so forth–to examine how students apply their strategies in specific situations and whether they change them in another context. Such an examination is one of the purposes of this study.

Listening Task in Relation to Task Performance and Strategy Use

Understanding the spoken form of a second language without difficulty is not easy; consequently, L2 instructors often include support in listening tasks in the hope that students will be able to perform better and not lose confidence in their listening skills. Some listening support may be embedded in the task design, such as multiple listening options or question preview, others may occur before a task begins with pre-listening activities. Some popular forms of pre-listening activities are pre-teaching vocabulary, providing topical knowledge, and contextual support. Although these types of support come in different forms, they all fall within three interrelated domains—teaching, consciousness-raising, and planning (Skehan, 1998). For example, pre-teaching vocabulary may not only provide learners with linguistic knowledge but also raise their consciousness regarding what they may hear, and thus, learners may plan how to cope with a task based on the vocabulary learned. However, the effects of these forms of listening support have not yet been conclusively reported on (see Berne, 1995; Teichert, 1996; Ruhe, 1996; Chung; 1999; Herron et al., 1998; Elkhafaifi, 2005; Chang, 2005; Chang & Read, 2006, 2007). Although its effectiveness varies according to learners' listening proficiency, text types, task types, and many other factors, few studies investigate how students utilize the information provided by their L2 instructors or test developers, through which it is anticipated that their comprehension is enhanced.

As mentioned, research into listening task-based strategy use is limited. A study by Ikeda and Takeuchi (2000) reports that reading task difficulty had some impact on the types and frequencies of strategy use. Students reported using more strategies when doing a difficult task, and high-proficiency students also reported using a wider range of strategies and more analytic types of strategy for difficult tasks. Another study by Oxford et al. (2004) using tests to elicit students' reading strategy use, found that reported reading strategies were not significantly influenced by task difficulty or proficiency alone, but when specific items were examined, it was found that high proficiency learners used top-down and holistic strategies, whereas low proficiency ones used more mechanical and bottom-up strategies.

Vogely (1995) studied listening comprehension strategies used and perceived by learners of Spanish on an authentic task. Vogely's students report using the following strategies (in order of importance): getting the overall meaning of the text, relating the background knowledge with the information in the text, understanding the meaning of each word, focusing on the

details, and mentally sounding out the words and phrases. However, it is of interest that strategies considered effective by listeners were not actually used because they did not know either when or how to use them. Another aspect of listening strategy use that has received little attention is the effect of text difficulty (topic familiarity) on strategy use. Bacon's (1992) research shows that university Spanish learners utilized more bottom-up strategies when encountering difficult input, such as faster speech and unfamiliar topics. This finding seems to confirm Vogely's results. The study also reveals that less successful listeners usually followed the same plan of attack for each task, and suggests that learners must adjust their strategies according to different tasks.

More recently, Chang (2008) investigated the test-taking strategies of Chinese college students with high and low levels of anxiety under four different task conditions—previewing test questions, repeated input, vocabulary instruction, and topical knowledge preparation. The data was gathered by immediate post-test interviews with 22 students. The results showed that different test tasks influenced test takers' listening strategies to varying degrees, with previewing test questions tending to have a greater impact on strategy use than other types of support. Previewing questions made some students more selective and helped learners focus on information necessary only for the answers. Repeated input gave students the chance to revise their comprehension, assisted the learners' strategy use, and allowed them time to reduce nervousness. With the provision of topical information, students tended to focus on the details because they had been exposed to the global background of the topics. Finally, with vocabulary instruction before the test, students tried to predict the topic or content by using the words in the vocabulary lists.

The types of listening support used in Chang's study apparently show an effect on listeners' strategy use. However, one limitation of the study was that the global differences in test-taking strategies between different levels of LP was not examined since students were divided into four groups, each receiving different support. This meant that the reported differences could not be detected by the variation of tasks. If students experience four different forms of a test task, it may be possible to detect whether they use different strategies to cope with different task conditions. Consequently, this study seeks answers to the following three questions:

1. What strategies are the most and the least frequently used by the learners when taking a test? How are students of varying listening proficiencies similar or different in their strategy use at the three different phases?
2. How does the use of test-taking strategies correlate with learners' listening performance?
3. Do students of different levels of listening proficiency use different strategies for different test tasks? If so, what are the strategies?

Methods

Participants

Seventy-five college students aged 18-19, at a college in Taipei, Taiwan participated in the study. These students had studied English formally in school for eight years. They were taking a required three-year course in English listening, and were in the final year of the course when this research was undertaken. Since this study took listening proficiency into account, the participants were classified into three different levels of proficiency: low, intermediate, and high, based on scores gained from a listening comprehension test (described below). This method of classifying language proficiency was also used in the study of Oxford et al. (2004) in a situation where students had no standardised listening test scores to refer to. The total score of the listening test was 40 and the mean for the whole sample was 25.67 (*SD* = 6.41). Those who obtained scores of 30 or above were grouped in the high proficiency level, those who scored between 21 and 29 were in the intermediate level, and the rest were in the low level. Excluding those who did not complete the questionnaire and one who did not take the test seriously, there was a total of 75 students–25 students in each level.[2]

The Instruments

Listening Test-Taking Strategy Questionnaire

The listening test-taking strategy questionnaire adopted was one developed by Chang (2008), who investigated Chinese students' strategies for taking a test (a Chinese version was used). Based on the findings of her study, two more items were added to the questionnaire; Strategy 6 (*I tell myself not to be nervous*) and Strategy 25 (*I try to find clues from reading the questions and options*). The questionnaire contained three subcategories (*before*, *during*, and *after* taking a test) with a total of 30 items rated on a five-point scale—always, usually, often, sometimes, and never. An example of the strategies listed in the questionnaire is: *I give up on the words I don't understand or miss so I can keep up with the speaker*. (See Table 2 for the complete questionnaire as well as students' responses to each item).

Listening Test

A 40-item listening test comprising four subtests was constructed based on four comparable levels of difficulty of different stories (*A Professional Thief, A Drunk Driver, The Lottery, and Marc Polo*) taken from an EFL listening materials text (Foley, 1994). The talks were limited to no more than three minutes each and each subtest had 10 questions spread evenly over the three test formats: 4 multiple-choice questions, 3 short answer questions, and 3 true-or-false questions.

Stimulated Written Report: Immediate Retrospective Account of Strategy Use

To uncover whether students knew how to adjust their listening strategies when test tasks were different, after each subtest every student had to choose the strategies used from a list (items taken from the questionnaire of listening test-taking strategy). Further, they were strongly encouraged to "write in" (Oxford et al., 2004, p. 34) any of their own strategies not shown on the list. They also explained the reasons why or how they used the listening support in their test. According to their responses in the questionnaire, MLP students' responses overlapped with HLP and LLP ones. The researcher decided to exclude the MLP students and chose only the top and bottom students who had recorded their strategies in great detail. Based on the details of their written reports, 30 students' strategy records were chosen to analyze, 15 from each level.

Study Materials

A vocabulary list: For the subtest involving vocabulary support, four key words and four key phrases were chosen to be taught before the test. Many students reflected that they were familiar with most of these words already, for example, *breath* and *test*, but when the two single words were formed into a phrase—a breath test, the students were not sure of its meaning. Apart from the equivalent Chinese meaning, pronunciation of these words and phrases was also demonstrated by their instructor.

Topical material: For the subtest involving topical knowledge support, an approximately 500-word handout in Chinese describing Marc Polo was prepared for the students. To ensure every student obtained the topical knowledge necessary for the subtest, the instructor led the whole class in reading through the material. The students reported that they were familiar with the name, Marco Polo, but knew very little about his details. The handout presented only very general information about Marco Polo's trip to China, providing no specific facts that were the basis for answers to the test items.

Procedure

To test the appropriateness of the listening test questions, three students from another class were recruited to simulate taking the test. Apart from the speech rate, no other major changes were made. The speech rates for all the texts were found a bit fast and were adjusted to 145 words per minute. All the texts were spoken at the same rate.

The listening test-taking strategies questionnaire was administered to the participants a week before the listening test. Before filling out the questionnaire, all students were informed of the purpose of the study. If they consented to participate, they signed a consent form and returned the questionnaire to the researcher. To elicit students' best performance, the test results counted for part of their course grade, as without this, student motivation and effort in the test could have been profoundly affected (Young, 1990; In'nama, 2006).

To decide which support type should come first was a difficult decision; however, according to previous research (Chang & Read, 2007, 2008), students showed a higher level of confidence with vocabulary support and repeated input than with background knowledge. Accordingly, students took the test with repeated input first, followed by vocabulary instruction, question preview only, and topical knowledge. Since repeated input and previewing question subtests involved no pre-listening activities, the students first listened to the stories included in their regular listening schedule.

Before the test began, students were instructed how to take the tests and how to write down the strategies they used. They were also advised that there were no good or bad strategies, as long as they felt comfortable with them. When the students finished each subtest, they spent 10 minutes writing down the strategies they used and if possible, the reasons for why they used these strategies. Those who wrote down their strategy use in great detail were rewarded by the researcher with a small gift.

The total running time for each subtest was around 45 minutes, for a total of 180 minutes. The procedure is summarized below.

Table 1. Summary of the Test Procedure

Week 1 Session 1	Week 1 Session 2	Week 2 Session 1	Week 2 Session 2
Repeated Input (A professional thief)	Vocabulary Instruction (A drunker driver)	Question Preview (The lottery)	Topical Inducement (Marc Polo)
Listening to stories	Vocabulary instruction	Listening to stories	Topical knowledge inducement
↓	↓	↓	↓
Preview questions	Preview questions	Preview questions	Preview questions
↓	↓	↓	↓
Take the test with 2 hearings	Take the test with 1 hearing	Take the test with 1 hearing	Take the test with 1 hearing
↓	↓	↓	↓
Record strategy use	Record strategy use	Record strategy use	Record strategy use

Data Analysis

The data used in this study were 75 students' responses on the questionnaire regarding listening test-taking strategy use and their listening test scores under four different test tasks, as well as 30 students' written reports regarding task-based listening strategy. SPSS Version 12.5 was used to analyze the data. In addition to descriptive statistics, the statistical procedure applied to the data analysis included Cronbach's Alpha reliabilities for the whole questionnaire and listening test, Pearson Product-Moment correlations, and Cohen's d test. The data from students' written reports regarding strategies used for four forms of listening

support was analyzed manually because students answered specifically about their strategy use.

Results and Discussion

Questionnaire Results

RQ1. What strategies are used the most and the least frequently by Chinese EFL learners when taking a test? How are students of varying listening proficiencies similar or different in their strategy use at the three different levels?

Table 2 presents the students' responses for each item of the questionnaire. The means show that students applied strategies more frequently while taking a test, and less so after the test. The most popular strategies rated on the basis of means above 3.0 across the three levels were:

Strategy 10: Guessing the meaning of unknown words by using context clues. (Rank order 1)

Strategy 7: Trying to hear every word clearly. (Rank order 2)

Strategy 9: Filling the gaps by guessing based on words and phrases understood. (Rank order 3)

Strategy 4: Preparing oneself in advance to pay full attention to the tasks. (Rank order 5)

Strategy 14: Giving up on words not understood or missed so as to keep up with the speaker. (Rank order 6)

Strategy 8 (focus on message, not every word) was ranked 4, but was less popular with LLP students and its mean was below 3. It is apparent that "guessing" based on any information available and "effort"—trying to hear every word and prepare oneself well—were the two most basic strategies under whatever listening test conditions.

There were also some strategies whose overall means mostly rated below 3, though not necessarily for all levels (e.g., Strategy 5). These were mainly *after* test-taking strategies (26, 27, 28, and 30) and some *during* test-taking strategies (13, 18, 21, and 24), but only one from *before* taking a test (5). Strategy 24 (*close eyes and listen*) was ranked last. This has to do with students' test-taking experiences because multiple choice and gap filling are the two most popular test methods in these students' learning experiences. Students have had little experience of such strategies as writing a summary based on what they heard, otherwise this strategy might be more popular. Obviously, the choice of strategy has something to do with task type and previous test experience.

With regard to the reason why most *after* test strategies were least employed, the best explanation was the nature of listening—fleeting and ephemeral. Chang's (2008) students reported that they did not remember what was said, particularly unfamiliar words or phrases, so they rarely took any remedial action to ask their instructor or classmates for answers. Another interesting finding from student responses to the questionnaire was that some very high proficiency students never discuss their problems with their classmates after a test, the main reason being that they were the best in class. Discussion with someone whose proficiency is lower than oneself is likely to be useless. From these considerations, it is likely that the means do not reveal much about the hidden reasons why a learner uses a certain strategy without looking at specific items or understanding respondents' backgrounds and experiences.

Table 2. Statistics for Participants Responding to Listening Test-taking Strategy Questionnaire

Item			Frequency of Rating					*M*	*SD*	Total Mean	Rank Order
Before taking the test		LP	1	2	3	4	5				
1	Before taking an English listening test, I think about the purpose of the test and then choose strategies to manage it.	1	3	6	5	8	3	3.08	1.26	2.85	19
		2	0	12	6	6	1	2.84	.94		
		3	2	11	8	2	2	2.64	1.04	(1.09)	
2	If I know the content that will be tested, I try to think of possible questions that I will have to answer.	1	3	5	7	8	2	3.04	1.72	2.69	21
		2	3	10	3	7	2	2.80	1.23		
		3	6	11	5	2	1	2.24	1.05	(1.19)	
3	Even though I don't know what will be tested, I will do my best to do the preparation, e.g., doing more listening practice, memorize more words.	1	1	5	6	7	6	3.48	1.19	2.92	16
		2	0	12	7	3	3	2.88	1.05		
		3	1	17	4	2	1	2.40	.87	(1.12)	
4	I prepare myself in advance to pay full attention to the tasks.	1	0	3	4	7	11	4.04	1.06	3.44	5
		2	0	8	6	6	5	3.32	1.15		
		3	2	7	9	4	3	2.96	1.14	(1.19)	
5	I tell myself that I am a good listener and I can do well on my listening tasks.	1	0	8	9	3	5	3.20	1.12	2.53	28
		2	5	10	6	2	2	2.44	1.16		
		3	9	10	4	2	0	1.96	.94	(1.18)	
6	I tell myself not to be nervous.	1	2	3	8	7	5	3.40	1.19	3.13	14
		2	2	5	6	7	5	3.32	1.25		
		3	4	8	7	4	2	2.68	1.18	(1.23)	
During the test											
7	I try to hear every word clearly.	1	0	2	6	6	11	3.92	1.89	3.76	2
		2	0	0	8	8	9	4.04	.84		
		3	0	6	9	6	4	3.32	1.03	(1.06)	
8	I focus on the message (main ideas and key words), not every word.	1	0	1	7	9	8	3.96	.91	3.45	4
		2	0	4	7	10	4	3.56	.96		
		3	2	6	11	6	0	2.84	.90	(1.02)	

Table 2. Continued

9	I fill the gaps by guessing based on words and phrases I understand.	1	0	1	6	7	12	4.16	.94	3.69	3
		2	0	2	6	11	6	3.84	.90	(1.05)	
		3	1	7	8	7	2	3.08	1.04		
10	I guess the meaning of unknown words by using context clues, such as the situation (e.g., a supermarket) and relationship between speakers (e.g., a salesperson and a customer).	1	0	0	2	9	14	4.48	.65	3.92	1
		2	0	2	6	10	7	3.88	.93		
		3	1	6	5	8	5	3.40	1.19	(1.04)	
11	I pay more attention to pronunciation, e.g., stressed words, and the variation of intonation.	1	1	8	7	5	4	3.12	1.17	2.85	18
		2	0	12	6	6	1	2.84	.94		
		3	5	7	7	5	1	2.60	1.16	(1.10)	
12	I pay particular attention to repeated words.	1	0	2	6	11	6	3.76	.97	3.37	7
		2	0	6	6	10	3	3.40	1.00		
		3	3	5	8	8	1	2.96	1.10	(1.06)	
13	I listen for grammatical structures, for example, the verb tenses, passive voice, etc.	1	1	11	6	5	2	2.80	1.08	2.68	22
		2	2	6	12	2	3	2.92	1.08		
		3	5	12	4	3	1	2.32	1.07	(1.09)	
14	I give up on words I don't understand or miss so I can keep up with the speaker.	1	1	2	9	10	3	3.44	.96	3.40	6
		2	0	4	8	9	4	3.52	.96		
		3	0	7	7	9	2	3.24	.97	(.96)	
15	I link what I know and my previous experience with what I hear.	1	0	2	6	14	3	3.68	.85	3.36	9
		2	1	4	9	6	5	3.40	1.12		
		3	3	4	10	6	2	3.00	1.11	(1.06)	
16	I imagine a picture of the context to help comprehend texts.	1	1	4	7	9	4	3.48	1.09	3.03	15
		2	4	7	5	6	3	2.88	1.30		
		3	3	10	5	5	2	2.72	1.17	(1.22)	
17	I have to mentally translate what I hear into Chinese, so I can understand what the speaker says.	1	2	8	8	6	1	2.76	1.01	2.87	17
		2	1	6	10	8	0	3.00	.87		
		3	2	8	9	4	2	2.84	1.07	(.98)	
18	I take notes.	1	3	6	8	5	3	2.88	1.27	2.67	23
		2	4	7	7	6	1	2.72	1.14		
		3	2	16	3	3	1	2.40	.96	(1.13)	
19	I use the title to predict what the speaker would say and listen to confirm my prediction.	1	0	2	7	11	5	3.64	1.04	3.36	8
		2	0	6	9	6	4	3.32	1.03		
		3	2	7	4	10	2	3.12	1.17	(1.09)	
20	I try to understand the topic first, then listen for details.	1	0	4	7	11	3	3.52	.92	3.28	10
		2	0	3	10	9	3	3.48	.87		
		3	3	7	8	5	2	2.84	1.14	(1.02)	
21	I repeat words or phrases softly or mentally.	1	2	11	8	3	1	2.56	1.00	2.61	25
		2	1	9	8	5	2	2.92	1.04		
		3	7	7	7	3	1	2.36	1.15	(1.08)	
22	I monitor my attention. If I am absent-minded, I will refocus immediately.	1	0	3	7	10	5	3.64	1.00	3.27	11
		2	0	7	7	8	3	3.28	1.02		
		3	1	9	9	4	2	2.88	1.03	(1.04)	

Table 2. Continued

23	I try to relax and keep telling myself it is useless to be anxious.	1	1	6	4	9	5	3.36	1.22	3.17	13
		2	1	5	9	5	5	3.32	1.15		
		3	4	6	8	4	3	2.84	1.25	(1.21)	
24	I like closing my eyes to listen.	1	9	8	5	1	2	2.16	1.21	2.13	30
		2	11	3	7	2	2	2.24	1.33		
		3	11	8	2	3	1	2.00	1.19	(1.23)	
25	I try to find some clues from the questions and options.	1	2	1	5	12	5	3.60	1.16	3.24	12
		2	1	6	6	9	3	3.28	1.10		
		3	3	8	6	6	2	2.84	1.18	(1.17)	
After taking a test											
26	I like to think about my problems or difficulties. For example: Was the task complicated? Was the accent difficult to understand?	1	2	8	10	2	3	2.80	1.24	2.60	26
		2	3	14	3	1	3	2.48	1.01		
		3	2	10	11	2	0	2.52	.77	(1.03)	
27	I like to check my comprehension by asking the teachers for repeated listening if possible.	1	2	10	9	2	2	2.68	1.03	2.63	24
		2	4	9	9	2	1	2.48	1.16		
		3	3	9	6	6	1	2.72	1.10	(1.04)	
28	I like to ask the instructor to explain the listening passages and find out my problems.	1	4	10	6	4	1	2.52	1.09	2.51	29
		2	3	12	4	5	1	2.56	1.08		
		3	5	10	2	6	1	2.44	1.23	(1.12)	
29	I like to discuss and check my answers with my classmates.	1	3	9	3	7	3	3.00	1.29	2.69	20
		2	1	17	5	2	0	2.32	.69		
		3	1	12	5	6	1	2.76	1.01	(1.05)	
30	I like to check my comprehension with dictionaries, textbooks, and previous work.	1	1	12	8	4	0	2.60	.82	2.57	27
		2	3	11	6	4	1	2.56	1.04		
		3	2	13	5	4	1	2.56	1.00	(.95)	

Note: 1. never; 2. sometimes; 3. often; 4. usually; 5. always

To answer the supplementary question regarding how students of varying LPs differ in their strategy use at the three stages, a comparison of the means of their differences in response to the questionnaire is needed. The means rated for *before*, *during*, and *after* test-taking listening strategies for all the 75 participants were 2.93 (*SD* = .78), 3.15 (*SD*=.67), and 2.59 (*SD* = .78), respectively, on a 5-point frequency scale (See Table 3). The reliability coefficient for the whole questionnaire (Cronbach α) was .94. Before taking a test, the HLP students used strategies significantly more frequently than the MLP (t_{48} = 2.18, p <.05; *d* = .61)[3] and LLP students (t_{48}=4.76, p <. 0005; *d* = 1.35), so did MLP to LLP (t_{48} = 2.21, p < .05, *d* =.63). For *during* a test, there was no significant difference in means between HLP and MLP but significant differences were found between HLP and LLP (t_{48} = 3.22, p < .01; *d* = .91), and between MLP and LLP (t_{48}=2.15, p < .05; *d* = .61). The frequency of strategies used *after* taking a test was obviously very comparable across the three levels, and much lower than during a test. The results for *during* and *before* strategy use in this study based on the quantitative data are consistent with Goh's (2002) qualitative findings that higher-ability listeners demonstrate more effective use of cognitive and metacognitive tactics.

Table 3. Statistics for Listening Test-taking Strategies for Whole Sample (N=75)

LP		Before	During	After
HLP	*M*	3.37	3.41	2.72
	SD	.63	.56	.78
	Range	2.17-4.50	2.21-4.47	1.60-4.20
MLP	*M*	2.94	3.22	2.45
	SD	.77	.58	.76
	Range	1.83-4.50	2.32-4.40	1.40-4.39
LLP	*M*	2.48	2.82	2.60
	SD	.69	.73	.81
	Range	1.33-4.33	1.32-4.42	1.20-4.20
Total	*M*	2.93	3.15	2.59
	SD	.78	.67	.78
	Range	1.33-4.50	1.32-4.47	1.20-4.40

Note: n = 25 in each LP level.

In the following, the top five most well-liked strategies by each LP group will be examined according to the mean ranking of each strategy. As shown in Table 4, Strategies 10, 9, and 7 were the top 5 most popular strategies, and another four (Strategies 4, 8, 14, and 19) were chosen by different LP levels. Strategy 4 was used by HLP students more often but less so by MLP and LLP ones. Strategy 14 was used more frequently by both MLP and LLP students but not by HLP ones. Strategy 19 was ranked as the fourth most popular strategy by LLP students but by neither MLP nor HLP ones. The overall picture shows that there are some basic strategies that all participants will use under whatever conditions, but the difference lies in their preference rankings and frequency of use. For example, trying to hear every word was used by students across all levels, but this is ranked the most frequently used strategy for MLP students with a mean of 4.04 but was ranked 2 by LLP students with only a mean of 3.32, a mean even lower than the HLP rated mean of 3.92. Therefore, looking at the frequency of applying a strategy can be a better means of distinguishing the difference between students of different LPs than counting the quantity of strategies being used. To sum up, the findings for this section are:

1. Most students employed strategies more often *during* the test. *After* the test, students used strategies much less when compared with *during* and *before* the test.
2. HLP students used strategies significantly more frequently *before* taking a test than those in the MLP and LLP level.
3. "Guessing" based on any sources available is the most popular strategy, followed by trying to hear every word.

4. Students of varying LPs employ similar strategies, but the differences lie in preferential order and frequency of use.

Table 4. The Most Frequently Used Strategies by Participants of Varying LP by Mean Ranking

Item	Strategy	HLP N = 25	MLP N = 25	LLP N = 25
10	I guess the meaning of unknown words by using context clues, such as the situation and relationship between speakers.	1 (*M* = 4.48)	2 (M =3.88)	1 (M = 3.40)
9	I fill the gaps by guessing based on words and phrases I understand.	2 (M =4.16)	3 (M = 3.84)	5 (M = 3.08)
4	I prepare myself in advance to pay full attention to the tasks.	3 (M= 4.04)	X	X
8	I focus on the message (main ideas and key words).	4 (M = 3.96)	4 (M = 3.56)	X
7	I try to hear every word clearly.	5 (M = 3.92)	1 (M =4.04)	2 (M = 3.32)
14	I give up the words I don't understand or miss so I can keep up with the speaker.	X	5 (M = 3.52)	3 M = 3.24)
19	I use the title to predict what the speaker would say and listen to confirm my prediction.	X	X	4 (M = 3.12)

The Listening Test Results

RQ2: How does the use of test-taking strategies correlate with learners' listening performances?

Students' listening test results are presented in Table 5. The mean score on the listening comprehension test for the whole sample was 25.67 out of 40 and the reliability coefficient (Cronbach α) was .83 for the whole test. The relationship between student listening performance and strategy use in the three stages was investigated using Pearson Product-Moment correlation coefficients. Table 6 shows that there was a strong correlation between students' test scores and the strategy used *before* the test ($r = .53$, N = 75, $p < .0005$),

followed by a mild correlation for strategies *during* the test (r = .44, N = 75, p < .0005). There was no significant correlation between the test scores and *after* test-taking strategy use. This finding further supports previous research (Vandergrift, 1997a, 1997b; Goh, 2002) that higher-level students used more metacognitive strategies than those in lower levels. Every item for the *before* test-taking strategy was rated above 3 by the HLP students, implying that HLP learners had used strategies actively *before* taking a test.

Table 5. Student Performance for Four Forms of Listening Support

	Repeated Input	Vocabulary Instruction	Previewing Questions	Topical Knowledge	Total
M	5.91	6.72	5.09	7.95	25.67
N	75	75	75	75	75
SD.	1.99	2.10	2.62	1.59	6.41
Min	1	1	0	4	9
Max	10	10	10	10	39
Range	9	9	10	6	30
Reliability (40 items Cronbach α)			.83		

Table 6. Pearson Product-Moment Correlations between Measures of Strategy Use Before, During, and After a Test and Listening Performance

Measures	Before	During	After
Before			
During	.82***		
After	.63***	.59***	
Test score	.53***	.44***	.13

Note: ** Correlation is significant at the 0.01 level (2-tailed). N = 75

Students' Strategy Use Under Different Test Tasks

RQ 3: Do students of different levels of listening proficiency use different strategies for different test tasks? If yes, what are the strategies?

To investigate whether different forms of listening support would affect strategy use by students of different levels of LP, this study examined 30 students' (15 top students and 15 bottom ones) immediate responses after each test with different types of support. As mentioned earlier, the number of strategies used explains little about how students process the auditory input, and here every strategy was in fact chosen for use by at least one student. To find out what strategies were used by the majority of the test-takers, the study examined only

those strategies on the list reported as being used by 8 or more students (meaning more than half of the total students in each level). Furthermore, to augment the questionnaire provided by the researcher, all those strategies written in by the students themselves were included. Tables 7 to 10 present this information.

Repeated Input

Five different strategies were documented by HLP students; three of these seemed to be influenced by repeated input. Several students stated that they tried to understand as much information as they could the first time, and the second time they confirmed their first comprehension or tried to fill in what they missed. Repeated input also seemed to allow EFL students more time to transfer from L1 to L2. Students wrote that when doing the short answer questions, they wrote in Chinese first, and then they constructed the answers in English. Although they were allowed to answer some questions in Chinese, many HLP students attempted to answer all questions in English, risking the spelling mistakes. Repeated input also has a positive psychological impact on students' anxiety, as several wrote they would tell themselves not to be nervous because they had two listening opportunities.

The way HLP and LLP students made use of the chance of two hearings apparently was different. The LLP students used a total of six strategies, but only two seemed to be relevant to repeated input. As they knew that they had two chances, they tried to understand the main ideas at the first hearing and listened for details at the second. Allowing a second hearing also influenced other strategies being use. For example, when trying to understand as much as they could, HLP students tried to hear every word in order not to miss any information and so to score higher, whereas LLP students paid attention to repeated words only. From students' documentation it was found that the same strategy may be used differently by students of different LP and some strategies are interrelated, which might be a so-called "strategy chain" (Oxford 2000, cited in Oxford et al., 2004), or "coupling strategies together like links in a fence" (Murphy, 1987, p. 38). Also, it is unlikely that a single strategy only would be used throughout the whole listening process.

Table 7. Students' Reported Strategy Use with Repeated Input

HLP	
	Use the title of the story and the words appearing in the test questions to create a picture.
* ◊	Try to understand as much as one can in the first hearing, and check one's comprehension and look for missing information.
* ◊	Use Chinese to answer the short answer questions first, and then try to construct the answer in English at the second hearing.
*	Try not to be nervous because there are two hearings.
	Try to hear every word to get a higher score.

Table 7. continued

LLP	
◊	Read the whole question first, then match the words heard in listening with those appearing in the test question, then chose the answers.
	Ignore irrelevant things and focus on the test.
	Skip the incomprehensible parts. Don't get stuck there.
◊	Read the questions carefully and choose the answer that appears in the options that match the ones heard in the listening.
*	Pay attention to repeated words.
*	Listen for the main ideas on the first hearing and then for details on the second.

Note: * Strategy likely stimulated by the treatment. ◊ Strategies reported by students.

Vocabulary Support

HLP students used six strategies; however, there was only one—*imagine a global picture of the content based on the words provided*—which seemed to be influenced by vocabulary instruction. The LLP students recorded seven strategies and three of them were obviously affected by the words taught before the test. These students tried to predict the content and the main ideas based on the list of words and phrases. To make the input process easier, some students wrote the Chinese equivalents next to the words appearing in the test questions. As one student commented: "When I was listening, I had no time to think hard about the meaning of the words in Chinese. If I write down the meaning of some words, it helps me listen more smoothly." [4] Even though the HLP students did not report using this strategy, the researcher found many of their test papers did have Chinese equivalents next to some words.

One interesting difference found between HLP and LLP students was that the former tried to hear every word for fear of missing any information, but the latter tried only to hear the words they had just learned. This seems to imply that vocabulary instruction might have drawn LLP students' attention to local cues. Some LLP students also complained that vocabulary taught before the test was of no use. One student wrote: "The talk went so fast; I do not remember that I heard any word that I just learned." An interesting phenomenon found in a few students' writing was that some LLP students made positive commentary about the treatment (vocabulary instruction), but scored only 20% or 30% in the subtest. Perhaps providing vocabulary support had a psychological impact on students but has a limited effect in enhancing comprehension (Chang, 2005; Chang & Read, 2007, 2008). Other possible reasons for the limited effect of vocabulary support are that learners need some time to be able to process new elements automatically (Buck, 2001, p. 7), or that students must possess a certain level of vocabulary knowledge to benefit from this treatment. Bonk (2000) showed that listeners need at least 95 percent lexical knowledge to achieve aural comprehension.

Table 8. Students' Reported Strategy Use with Vocabulary Support

HLP	
*	Imagine a global picture of the content based on the words provided.
	Use the known words to guess unknown words.
◊	Underline the question words, such as why, what, which before listening. When listening, pay particular attention to find the answers to those questions.
	Take notes, writing down some detailed information, e.g., dates, time, and numbers.
	Read each question very carefully, and try to find clues from the test questions.
	Try to hear every word to ensure no information is missed.
LLP	
* ◊	Use the words just learned to predict what the speaker might say.
* ◊	Use the words to predict the main ideas of the talk.
* ◊	Write down the Chinese meaning next to some words appearing in the test questions to help answer the questions faster.
	Focus on the content.
	Skip the incomprehensible parts immediately and move on.
	Try to hear the words that were just learned.
	Guess when not sure of the pronunciation of some words.

Note: * Strategy likely stimulated by the treatment. ◊ Strategies reported by students.

Previewing Questions

In this subtest, HLP students recorded many strategies that seem to have been influenced by the task characteristics. However, three striking differences were found in students' documentation. The first is that nearly all focused on paying attention to the task. Many wrote something similar to: "I paid full attention because there was only one chance." The second difference was that no student reported using *"Try to hear every word,"* which had been used in all the other subtests. Instead of hearing every word, they: "Guess or forget about the details," which was not reported being used in other test conditions. Obviously, listening only once and receiving no other support made students nervous, and HLP students used a wider range of strategies to do the task.

In contrast to HLP students, LLP students used five strategies but only two were likely to have had a connection with the test task. Like higher-level students, LLP students also told themselves not to be nervous. Due to receiving no other support, LLP students attempted to find clues from the test questions. However, apart from multiple-choice questions, students would find very limited clues from true-or-false and short answer questions. Unlike students in Buck (1991) and Chang and Read (2008), who considered question preview a great help in

enhancing comprehension and appreciated the test experience, and which profoundly affected their strategy use, the students here did not seem to consider question preview a kind of listening support, instead focusing on the restriction, "one hearing only." The most likely reason for this is the different research design. In this study, students had experienced two other test conditions before this subtest, so they could detect the difference.

Overall, from this test task, HLP students demonstrated their competence in adapting their strategy use to different task conditions, whereas LLP students seemed to utilize their usual strategies with no particular indication that the strategies used were affected by the change in test task.

Table 9. Students' Reported Strategy Use with Previewing Test Questions

HLP	
◊	Circle the question words in each question and read them carefully.
* ◊	Read the questions and options very carefully and find some words that might be heard in listening.
	Monitor one's attention all the time and eliminate irrelevancies.
*	Tell oneself not to be nervous just because there is only one chance.
*	Focus on the content. Guess or forget about detailed information.
* ◊	Answer the easier questions and guess the difficult ones.
* ◊	Attention! Attention! Attention! There is one chance only.
LLP	
	Guessing if content incomprehensible.
*	Tell oneself not to be nervous.
	Just listening and skipping incomprehensible parts.
◊	Choose the words for an answer if they are found in the test question and match those heard in the listening.
*	Try to find clues from test questions.

Note: * Strategy likely stimulated by the treatment. ◊ Strategies reported by students.

Topical Knowledge Stimulus

Stimulating students' knowledge of a topic before a test seems to have a great impact on strategy use. Five out of seven strategies HLP students reported using were relevant to the treatment they received. The students tried to link what they read about the topic with the clues they found in the test questions and formed a picture of the talk. Because the handout on the topical knowledge was written in Chinese, students had to translate mentally what they knew with what they heard. Though no students complained that they had to move back and forth between L1 and L2, it seems that the background knowledge caused some interference. However, students scored the highest with topical knowledge stimulus among the four

subtests, thus any interference caused may have been offset by obtaining a better focus for processing the input. When students heard the answer to the question, they answered in Chinese first and came back to write it in English when the talk was finished. "*Predicting the content*" based on background knowledge was also reported by several students.

Similar to the HLP students, LLP students were also profoundly affected by the introduction of topical knowledge. These students had to match the background knowledge they knew in Chinese with what they heard in English. Mental translation was apparently affected by their topical knowledge because very few LLP reported that they used this strategy in other test conditions. Despite students scoring highest with this topical stimulus, some students reported that providing topical background knowledge was not helpful to their comprehension. One student wrote: "The background knowledge was not useful and not helpful to my comprehension. The information provided in the handout had little to do with the test, and I could not find any answer to the questions." This student's report was consistent with Chang's (2006) study, which found that even being familiar with topical background knowledge, L2 listeners must attain a certain level of proficiency to understand some details of oral input or else what they comprehend is very shallow and superficial. A similar effect was reported by Young (1996, 1997), Bacon (1990) and Long (1990), that their less successful listeners over-extended their topical knowledge and made a poor connection between what they heard and what they knew.

Table 10. Students' Reported Strategy Use with Topical Knowledge Stimulus

HLP	
* ◊	Read the whole question carefully and quickly link the background knowledge with the test questions and form a global picture of the talk.
* ◊	Translate what one heard into Chinese to match what was studied about the background knowledge.
* ◊	Predict the content based on the background knowledge.
* ◊	Write the answer in Chinese first, so it will not be forgotten.
◊	Read the questions and options carefully, and write down the Chinese meaning next to the known words.
* ◊	Try to link what one knew in Chinese with what one heard in English.
	Pay attention to every word.
LLP	
* ◊	Try to match the background knowledge with what is heard in the recording.
*	Focus on the overall content, not every word.
◊	Guess, because the background knowledge did not reveal many details for answering the test questions.
	Read all the test questions and try to answer questions before listening to the recording.
*	Mentally translate what is heard into Chinese.
	Try to find clues from the test questions and options.

Note: * Strategy likely stimulated by the treatment. ◊ Strategies reported by students.

Conclusion

This study used a listening test-taking strategy questionnaire to explore listeners' general picture of test-taking strategies at three different stages—before, during, and after a test, then further investigated any correlation with listening test performances, and finally a student report was used to examine how HLP and LLP students adjusted their strategy use under different test task conditions. The findings can be summarized as follows:

- The overall pattern shows that students utilized strategies more frequently in the *during* stage, followed by the *before* and *after* stages. Regarding the differences in strategy use among students of two levels of LP at the three stages: *before* taking a test, HLP students employed strategies more often than those in the LLP level. In the *during* stage, HLP students also engaged in strategy use significantly more frequently than LLP ones. While *after* the test, no significant difference appeared between the two levels.
- There was a strong correlation between student performance and strategies for *before* taking a test and a mild correlation for *during* test taking, but no significant correlation with *after* taking a test.
- The most frequently used strategies by students, regardless of their LP, were guessing based on any information and clues available to them, trying to hear every word, and preparing oneself well to do the test task.
- The various test tasks had different degrees of impact on students' strategy use. When repeated input was given, students were able to confirm their comprehension and to manage their ways of listening. With vocabulary support, students were able to predict the content based on a word list, and write down Chinese meanings next to a word to facilitate processing. When students received no external support but only previewing of questions, they focused their attention and used a wider range of strategies to do the task, and they seemed to focus more on the main ideas rather than on details. When providing students with topical knowledge in their native language, students had to process the input between L1 and L2 and students often matched what they knew about the background knowledge with what they heard in English.
- Overall, strategies used by HLP and LLP students differed little in the quantity of strategies but greatly in the frequency that they were employed, the preferential order, and how they were utilized.

This study revealed that there are some strategies that are used under whatever test task condition. When a test task condition changes, EFL learners, regardless of their listening proficiency, are able to modify their strategy use to a varying degree. However, the degree of their adjustment lies in the extent that a test task differs from their usual task conditions. If a test task involves a greater variation than their normal listening mode, for example, providing background knowledge in their native language, students will adjust their strategy to a greater extent, otherwise their changes can be small, as with for example, repeated input and vocabulary instruction.

The most marked difference between HLP and LLP students is not in their strategic knowledge but in their strategic competence, meaning that they differ in *how* they use a strategy. For example, when repeated input was given, LLP students listened for the main ideas at the first hearing and then details the second time, whereas HLP students tried to understand as much as they could the first time and the second time was for confirmation only. In vocabulary support, students in both levels used the strategy "*trying to hear every word,"* but their purpose was different. HLP students tried to hear every word for fear of missing any information that might affect their scores, but LLP students tried to match the words they learned with the words they heard. This implies that students may use the same strategy but for a different purpose, and also differ in the way they use it. Therefore, to close the gap between HLP and LLP students in *how* strategies are used should be a major concern. As much research has shown, strategy instruction produces no immediate effect on enhancing learners' comprehension (O'Malley et al., 1985; McGruddy, 1995; Thompson & Rubin, 1996; Ozeki, 2000), this study does not suggest strategy instruction should be given independently of the teaching of listening skills, but rather integrated into regular classroom instruction.

There are some effective approaches that EFL teachers may use to improve their students' strategy use. For individual tasks, the teacher may provide students with a checklist of strategy use with a given task. As in the current study, at the stage "before listening" students can be allowed to look at the strategy checklist for a minute and to check off the strategies they have ready for the task. After listening, students should also spend a few minutes thinking about what strategies they used for the task. Students can also be provided with a script, so they can confirm what they hear with what they read. As aural-written verification was found to be extremely important for low-proficiency students to develop their auditory discrimination skills, and for high-proficiency learners to refine word recognition skills (Mareschal, 2007; Chang, 2008). Students should also be encouraged to listen to the texts as many times as they wish without looking at the script. Another method is assigning more or less successful students to groups after a task, so they can compare and discuss the strategies used for a certain task. Alternatively, the teacher may pick one or two students (without revealing these students' names) who perform the best and share their strategy use with the whole class. The purpose of these actions is to raise student awareness of their strategy use and to allow the less successful students to understand what strategies more successful students use as well as to understand their underlying problems. Although LLP students may not be able to deploy the strategies used by HLP students immediately, it is possible to help them to know that as their listening competence improves, they will be in a position to use these effective strategies.

Students' strategy use may develop over time (Graham et al., 2008), perhaps along with their linguistic knowledge advancement. As seen from student reports, some strategies may be difficult for LLP students to deploy. One of the major reasons is that their listening proficiency threshold short-circuits the employment of those strategies. As many scholars have pointed out, below a certain level of linguistic knowledge, the deployment of some strategies is not possible (Lee & Schallert, 1997; Taillefer, 1996). This research suggests that a focus on L2 listening development is required. To reach this end, EFL students need a

variety of channels to improve their listening competence. Such channels to better listening competence may involve language-focused teaching and developing listening fluency. The former includes formal instruction of listening subskills, for example, distinguishing confusing sounds, linking, thought groups, stress, and recognizing word boundaries, or listening for certain grammatical structures, such as plural forms, or deducing the meaning of words from context. According to Field (1998), these listening subskills are the competencies that non-native speakers lack and that are most required to be taught and practiced. The latter involves extensive listening and refers to learners accessing massive amounts of easy aural input by means of television, radio, video and Internet sources, or audio books and magazines, to improve listeners' automaticity in recognizing spoken text and enjoying listening. In a sense, extensive listening is to develop listening fluency. Other characteristics of extensive listening are that listeners can listen smoothly while not being constrained by pre-set questions or tasks, and above all, that the listening texts must be below one's fluent reading level (see Waring's personal website). Once listening competence improves, the gap between HLP and LLP students in terms of how strategies are used will certainly be lessened.

Finally, the difficulty of investigating task-based strategy assessment should be mentioned. It is not easy to tease out individual factors that influence students' choice of strategy use as listening processes interact with various knowledge sources, learner characteristics, and task types. In this study, students' strategy use was obviously affected not only by task but also by test type. For example, students wrote answers in Chinese first, and then translated them into English when the talk was finished (when doing short answer questions). This strategy was obviously influenced by test type and vocabulary instruction or topical knowledge stimulus. The choice of strategy use in fact involves multiple dimensions while some strategies are interrelated. As Field (2004) puts it, listening strategy is highly variable in nature. Considering that many scholars (Vann and Abraham, 1990; Cohen, 1998; Oxford, 2004; Macaro et al., 2007) have called for more studies in this sphere, the scope for future research is certainly extensive. For example, up to the present, it is still unclear how test types (e.g., short answers, true or false, multiple-choice items) affect test-takers' decisions as to strategy use. In addition, the current study involved only four paper and pencil task types. What strategy would learners have used if the four tasks were assessed through a computer? A current trend in listening instruction is promoting listening skills not only as a means of comprehension but also as a means of acquisition (Rost, 2002; Richards, 2005). Much previous research has focused on comprehending strategies; maybe it is time for researchers to study the strategies that EFL listeners use to acquire language from listening. These are issues future research may shed some light on.

Notes

[1] Readers may refer to Zhang (2003) for comprehensive review of strategy use by Chinese EFL learners.

[2] There were actually 89 students in the beginning; however, 14 students were excluded from the data analysis for not completing the questionnaire properly or for choosing the same response throughout the questionnaire.

[3] *d* here refers to Cohen's *d*, representing the difference between groups in terms of standard deviation units.

[4] The author's translation from students' reports written in Chinese.

About the Author

Anna Ching-Shyang Chang is a professor in the Department of Applied English at Hsing-Wu College, Taipei, Taiwan, where she teaches courses on English listening, vocabulary, and English testing and assessment. Her main research focuses on second language listening assessment and development.

References

Anderson, N. J. (2005). L2 learning strategies. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning*, (pp. 757-771). Mahwah, NJ: Lawrence Erlbaum.

Bacon, S. M. (1992). Authentic listening in Spanish: How learners adjust their strategies to the difficulty of the input. *Hispania,* 75, 398-412.

Berne, J. E. (1995). How does varying pre-listening activities affect second language listening comprehension? *Hispania*, 78, 316-329.

Bernie, J. E. (2004). Listening comprehension strategies: A review of the literature. *Foreign Language Annals*, 37, 521-533.

Bonk, W. J. (2000). Second language lexical knowledge and listening comprehension. *International Journal of Listening*, 14, 14-31.

Breen, M. (1987). Learner contributions to task design. In Candlin, C. & Murphy, D. (Eds.), *Language learning tasks,* (pp. 23-46). Englewood Cliffs, NJ: Prentice Hall.

Buck, G. (1991). The test of listening comprehension: An introspective study. *Language Testing,* 8, 67-91.

Buck, G. (2001). *Assessing listening*. Cambridge: Cambridge University Press.

Bygates, M., Skehan, P. & Swain, M. (2001). *Researching pedagogic tasks*. NY: Pearson.

Chamot, A. U. (1987). The learning strategies of ESL students. In A. Wenden & J. Rubin (Eds.), *learning strategies in language learning,* (pp. 71-83). London: Prentice-Hall.

Chamot, A. U. (1995). Learning strategies and listening comprehension. In D. J. Mendelsohn and J. Rubin (Eds.), *A Guide for the Teaching of Second Language Listening* (pp. 13-30). San Diego, CA: Dominie Press.

Chang,C-S. (2005). The effect of lexical support in EFL listening comprehension tests. *The proceedings of the 22nd International Conference on English Teaching and Learning in the Republic of China* (pp. 13-27). Taipei: Crane Publishing.

Chang, C-S. (2006). Thresholds of background knowledge effect on L2 listening comprehension. *Selected papers from the Fifteenth International Symposium on English Teaching* (pp.164-173). Crane: Taipei, Taiwan.

Chang, C-S. (2008). Listening strategies of L2 learners with varied test tasks. *TESL Canada Journal*, 25, 2, 1-26.

Chang, C-S (2008). *Enhancing second language listening competence through extensive listening activities: Its effectiveness, difficulties, and solutions*. Taipei, Taiwan: Bookman.

Chang, C-S. & Read, J. (2006). The effects of listening support on the listening performance of EFL learners, *TESOL Quarterly*, 40, 375-397.

Chang, C-S. & Read, J. (2007). Support for foreign language listeners: Its effectiveness and limitations. *RELC,* 38, 375-394.

Chang, C-S. & Read, J. (2008). Reducing listening test anxiety through various forms of listening support. *TESL-EJ*, 12.1, Available: http://tesl-ej.org/ej45/a1.html

Chao, Y-G. & Chien, L-Y. (2005). College English majors' listening strategies and difficulties while taking TOEFL, *Selected papers from the 14th International Symposium on English Teaching* (pp.292-301). Taipei: Crane Publishing.

Chien, C. N. & Li, W. (1998). The strategy use in listening comprehension for EFL learners in Taiwan. *RELC Journal,* 29, 66-91.

Chung, J. M. (1999). The effects of using video texts support with advance organizers and captions on Chinese college students' listening comprehension: An empirical study. *Foreign Language Annals,* 32, 295-307.

Cohen, A. D. (1998). *Strategies in learning and using a second language*. Reading, MA: Addison Wesley Longman.

Elkhafaifi, H. (2005). The effect of prelistening activities on listening comprehension in Arabic learners. *Foreign Language Annals,* 38, 505-513.

Field, J. (1998). Skills and strategies: Toward a new method for listening. *ELT Journal*, 52, 110-118.

Filed, J. (2004). An insight into listeners' problems: Too much bottom-up or too much top-down? *System,* 32, 363-377.

Foley, B. H. (1994). *Now hear this*. Boston: Heinle & Heinle.

Goh, C. (2002). Exploring listening comprehension tactics and their interaction patterns. *System*, 30, 185-200.

Goh, C., & Taib (2006). Y. Metacognitive instruction in listening for young learners, *ELT Journal,* 60, 222-232.

Graham, S., Santos, D., & Vanderplank, R. (2008). Listening comprehension and strategy use: A longitudinal exploration. *System,* 36, 52-68.

Herron, C., Cole, P., York, H. & Linden, P. (1998). A comparison study of student retention of foreign language video: Declarative versus interrogative advance organizer. *Modern Language Journal,* 82(2), 237-247.

Hsiao, T-Y. & Oxford, R. (2002). Comparing theories of language learning strategies: A confirmatory factor analysis. *Modern Language Learning,* 86, 368-383.

Ikeda, M. & Takeuchi, O. (2000). Tasks and strategy use: Empirical implications for questionnaire studies. *JACET Bulletin,* 31, 21-32.

In'nami, Y. (2006). The effects of test anxiety on listening performance. *System,* 34, 317-340.

Lee, J-W. & Schallert, D.L. (1997). The relative contribution of L2 language proficiency and L1 reading ability to L2 reading performance: A test of the threshold hypothesis in an EFL context. *TESOL Quarterly*, 31, 713-739.

Long, D. R. (1990). What you don't know can't help you: An exploratory study of background knowledge and second language listening comprehension. *Studies in Second Language Acquisition*, 12, 65-80.

Macaro, E. (2006). Strategies for learning and for language use: Revising the theoretical framework. *Modern Language Journal,* 90, 3, 320-337.

Macaro, E., Graham, S. & Vanderplank, R. (2007). A review of listening strategies: focus on sources of knowledge and on success. In Cohen, A. D., & Macaro, E. (Eds.), *Language learning strategies: 30 years of research and practice,* (pp. 165-185). Oxford: Oxford University Press.

Mareschal, C. (2007). Student Perceptions of a self-regulatory approach to second language listening comprehension development. Unpublished doctoral dissertation, University of Ottawa.

McGruddy, R. (1999). The effect of listening comprehension strategy training with advanced-level ESL Students. Unpublished doctoral dissertation, Georgetown University, Washington, DC.

Murphy, J. M. (1987). Investigation into the listening strategies of ESL college students. *Research and Teaching in Developmental Education*, 4, 27-46.

Nunan, D. (1989). *Designing tasks for the communicative classrooms*. Cambridge: Cambridge University Press.

O'Malley, J. M. (1987). The effects of training in the use of learning strategies on acquiring English as a second language. In Wenden J. & Rubin, J. (Eds). *Learner Strategy in Language Learning* (pp. 133-144). Eaglewood Cliffs: NJ: Prentice Hall International.

O'Malley, J.M., Chamot, A. U., Stewer-Manzanare, G., Russo, R.P., & Kupper, L. (1985). Learning strategy application with students of English as a second language. *TESOL Quarterly,* 19, 285-296.

Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.

Oxford, R., Cho, Y., Leung, S. & Kim, H-J. (2004). Effect of the presence and difficulty of task on strategy use: an exploratory study. *IRAL,* 42, 1-47.

Ozeki, N. (2000). Listening strategy instruction for female EFL college students in Japan. Unpublished PhD dissertation, Indiana University of Pennsylvania.

Prabhu, N.S. (1987). *Second language pedagogy*. Oxford: Oxford University Press.

Richard, J (2005). Second thoughts on teaching listening. *RELC*, 36, 1, 85-92.

Richards, J. & Rodgers, T. (2001). *Approaches and methods in language teaching*. Cambridge: Cambridge University Press.

Rost, M & Ross, S. (1991). Learner use of strategies in interaction: typology and teachability. *Language Learning*, 41, 235-273.

Rost, M. (2002). *Teaching and researching listening*. Harlow: Longman.

Ruhe, V. (1996). Graphics and listening comprehension. *TESL Canada Journal*, 14 (1), 45-60.

Skehan, P. (1996). A framework for implementing task-based instruction. *Applied Linguistics,* 17, 38-62.

Skehan, P. (1998). *A Cognitive Approach to Language Learning*. Oxford: Oxford University Press.

Teichert, H. U. (1996). A comparative study using illustration, brainstorming, and questions a advance organizers in intermediate college German conversation classes. *Modern Language Journal,* 84 (4), 509-517.

Teillefer, G.F. (1996). L2 reading ability: Further insight into the short-circuit hypothesis. *Modern Language Journal,* 80, 461-477.

Thompson, I. & Rubin, J. (1996). Can strategy instruction improve listening comprehension? *Foreign Language Annals*, 29, 331-342.

Vandergrift, L. (1997a). The Cinderella of communication strategies: reception strategies in interactive listening. *The Modern Language Journal*, 81, 494-505.

Vandergrift, L. (1997b). The comprehension strategies of second language French listeners: a descriptive study. *Foreign Language Annals*, 30, 3, 387-409.

Vann, R. & Abraham, R. (1990). Strategies of unsuccessful language learners. *TESOL Quarterly,* 24, 2, 177-198.

Vogely, A. (1995). Perceived strategy use during performance on three authentic listening comprehension tasks. *The Modern Language Journal*, 79, 41-56.

Young, D. J. (1990). An investigation of students' perspective on anxiety and speaking. *Foreign Language Annals,* 23, 539-563.

Young, Y. M. C. (1996). Listening comprehension strategies used by university level Chinese students learning English as a second language. Unpublished doctoral dissertation, University of Essex, UK.

Young, Y. M. C. (1997). A serial ordering of listening comprehension strategies used by advanced ESL learners in Hong Kong. *Asian Journal of English Language Teaching,* 7, 35-53.

Waring (n.d.). Starting extensive listening. Available: http://www.robwaring.org/er/ER_info/starting_extensive_listening.htm.

Zhang, L. J. (2003). Research into Chinese EFL learner strategies: Methods, findings and instructional issues. *RELC Journal*, 34, 284-322.