

The University of San Francisco

THE EFFECTS OF EXPLICIT LISTENING STRATEGY INSTRUCTION ON
THE LISTENING COMPREHENSION OF ENGLISH AS SECOND LANGUAGE
(ESL) COMMUNITY COLLEGE STUDENTS

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Yi Guan
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Dissertation Abstract

The Effects of Explicit Listening Strategy Instruction on the
Listening Comprehension of English as Second Language (ESL)
Community College Students

This mixed methods study explored the effects of explicit listening strategy instruction on the beginning-level ESL learner's listening comprehension at a community college in Northern California. Most previous studies measured the effectiveness of listening strategy instruction by comparing students' test scores, but little research explored the students' listening strategy development and their perceptions of the strategy instruction. Furthermore, no prior research exists on the effects of listening strategy instruction among community college students.

The researcher employed the concurrent triangulation approach, collecting and analyzing both quantitative and qualitative data simultaneously. Data sources included interviews, a listening test, background surveys, and classroom observations. A total of 52 students participated in the research, including 30 in the treatment group and 22 in the control group. Based on the initial findings, the researcher provided explicit instruction of listening strategies to the treatment group.

The qualitative findings of the present study showed positive changes in students' listening strategy use after the strategy instruction. In addition, the findings revealed that students noticed improvement in their listening abilities and other areas as a result of efficiently utilizing the listening strategies. The quantitative findings resulting from the independent sample *t*-test revealed a statistically significant difference in gain score

means between the control and treatment groups. Thus, the qualitative and quantitative findings converged and suggested that the explicit teaching of listening strategies did have positive effects on community college ESL students' listening comprehension.

This study has implications for the fields of research methods, language teaching pedagogy, listening strategies, strategy instruction, and strategy assessment among ESL and EFL learners. More research on explicit listening strategy instruction in adult education would further expand the current understanding of the effects of strategy instruction and to identify curricular implications.

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

Yi Guan
Candidate

April 30, 2014
Date

Dissertation Committee

Dr. Susan Katz
Chairperson

April 30, 2014

Dr. Yvonne Bui

April 30, 2014

Dr. Sedique Popal

April 30, 2014

DEDICATION

This dissertation is dedicated to my loving parents Yue Guan and Yuhua Yang,
and my beloved husband Edward Yoon.

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

If speaking is silver, then listening is gold.

(Turkish Proverb)

Listening comprehension has historically received only minimal treatment in the teaching of English as a Second/Foreign Language (ESL/EFL); however, it remains one of the most important skills in language learning (Berne, 1998; Clement, 2007; Oxford, 1993; Rubin, 1994). For non-native English speakers (NNES), listening is the first encounter with the target language in their language learning journey (Berne, 2004). Also, mastering listening comprehension is the first step towards fully acquiring a second language (L2) or foreign language (FL) (Liu, 2009). However, in spite of the importance of developing listening comprehension abilities, L2 learners are rarely taught how to listen effectively (Berne, 2004; Vandergrift, 2007).

In ESL and EFL fields in early decades, the focus of research and pedagogy on listening was primarily on testing learners' abilities to listen to oral discourse and then answer comprehension questions based upon the information, without instruction in skills or strategies for completing such tasks (Field, 1998). Even until the 1970s, there were no textbooks particularly for teaching listening skills in a second language. It was assumed that learners' abilities to comprehend spoken language would automatically improve in an inductive way, through practice. In other words, learners would develop listening skills with exposure to the oral discourse through repetition and imitation (Clement, 2007). In recent years, however, a growing body of literature indicates that the focus has

shifted to the use and development of language learning strategies (Berne, 2004; Carrier, 2003; Chamot, 2004; Clement, 2007; Graham, Santos, & Vanderplank, 2011; Liu, 2009).

According to Chamot (2004), learning strategies are the conscious thoughts and actions that learners take to accomplish a learning goal. Depending on the level or type of processing involved, learning strategies used in listening comprehension can be classified into three categories: metacognitive strategies, cognitive strategies, and socio-affective strategies. According to O'Malley and Chamot (1990), metacognitive strategies refer to higher order executive skills that involve planning for, monitoring, or evaluating the process of learning activities. Cognitive strategies are mental activities that operate directly on incoming information, manipulate the language to enhance learning. Socio-affective strategies represent a broad range of activities that involve either interaction with another person or affective control in language learning. Strategic learners have sufficient metacognitive knowledge about one's own learning approaches, a good understanding of what a task involves, and the outstanding ability to orchestrate the strategies that meet both their learning strengths and the task demands. The growing interest in learning strategies reflects a public awareness that language learners can and need to develop tools to become more effective and autonomous (Vandergrift, 1997).

Statement of the Problem

Given the importance of listening in second language learning and teaching, there has been a growing body of literature on how listening strategy instruction impacts L2 learners' listening performance, particularly focusing on the effectiveness of explicit teaching of listening strategies (e.g. Carrier, 2003; Chen, 2009; Clement, 2007; Ozeki, 2000; Siegel, 2012). Participants in these studies included both ESL and EFL learners at

either the high school or college level, and the research took place in the United States, Japan, and Taiwan. As suggested by O'Malley and Chamot (1990), the advantage of implementing explicit instruction was that by informing students about the purpose and importance of the strategies to be learned, this type of instruction can help students maintain strategy use over time and transfer the strategies to new tasks beyond the classroom.

Although previous studies have supported the impact of explicitly teaching listening strategy on improving learners' listening proficiency across a range of settings, most studies were conducted quantitatively and based on pre- and post-test designs in order to examine the outcome of the strategy instruction. Little empirical research has been done to explore language learners' listening strategy use and the perceptions of the strategy instruction. This study aims to fill the gap in the literature by employing both qualitative and quantitative approaches to examine the effects of explicit instruction of listening strategies on ESL students' listening comprehension and to explore the perceived usefulness of the instructed strategies. More research on the explicit instruction of listening strategies will assist ESL students to overcome academic listening difficulties and guide them to strengthen their listening ability. ESL teachers may also benefit from this research in terms of better understanding their students' language background and learning styles and equipping themselves to provide students with more comprehensive guidance.

Background and Need for the Study

ESL Learners in Community Colleges

A "typical" adult ESL student in community colleges does not exist (Crandall & Sheppard, 2004). Adult ESL learners differ in their language and cultural backgrounds,

previous educational experiences, English proficiency, and reasons for enrolling in the ESL classes. They may include nurses from Indonesia and engineers from Russia studying English to pass job-related proficiency exams; Central American or Eastern European immigrants seeking access to better employment; refugees from Haiti learning basic English and literacy; permanent residents from around the world seeking U.S. citizenship; and U.S. citizens from Puerto Rico improving their academic English to enter a postsecondary program. Since it is extremely difficult to design programs that can accommodate the specific needs of each group of learners in the above example, adult ESL learners with very different learning profiles and needs often find themselves in the same program.

Indeed, community colleges are among the largest providers of adult education ESL services in many states and communities. Today, 24% of the total 6.5 million students in community colleges come from an immigrant background, according to a report conducted by Community College Consortium for Immigrant Education (2013). While the majority of adult ESL learners in community colleges are immigrants, international students seeking English instruction in community college programs also have been increasing recently, due to the fact that community colleges are less expensive than commercial English language schools or universities (Crandall & Sheppard, 2004). According to the Open Doors report (Institute of International Education, 2012), the number of international students who came to the United States pursuing Associate's degrees reached 64,516 during the 2011-2012 academic year, including 87.5% at F-1 student visa status. Also a total number of 35,108 international students enrolled in non-degree intensive English programs during the same academic year.

In California, in particular, adult ESL learners tend to belong to one of three very broadly defined populations despite the diversity in their ethnic, cultural, and linguistic backgrounds (Intersegmental Committee of Academic Senates, 2006). The first group consists of long-term immigrants who came to the United States before or during their early teens. These learners, sometimes referred as generation 1.5 students, had much of their education in the United States and graduated from U.S. high schools. Their English language proficiency is very advanced, yet they still need assistance to reach college-level oral and written academic work (Crandall & Sheppard, 2004). The second population group comprises more recently arrived immigrants, who may have completed several years of education in the United States. The first two groups make up the majority of students enrolled in community college ESL programs. The third group, the size of which varies remarkably on different campuses, consists of international students from all over the world. These students represent a wide range of different cultural backgrounds and first languages and generally have developed first language literacy skills. Although these three groups typically have different needs, they are often placed together in ESL classes on the basis of placement examinations (Intersegmental Committee of Academic Senates, 2006).

Teaching ESL Listening Strategies in Community Colleges

The above demographic data of adult ESL learners indicates a critical need for community colleges to find effective ways of educating the rapidly increasing population of ESL students in order to help them achieve a wide range of educational, professional, and career goals (Intersegmental Committee of Academic Senates, 2006). While most international students and some immigrants are seeking academic preparation for college-

level work, a considerable number of immigrants and refugees need extensive ESL, literacy, and academic instruction in order to obtain employment opportunities (Blumenthal, 2002).

Among all the current pedagogical approaches in the ESL field, learning strategy instruction has been proven to be effective in helping less successful students improve their performance (Chamot, 2004), including community college ESL learners.

According to Chamot and O'Malley (1994),

ESL students in community college can profit from learning strategy instruction that provides know-how and strategic approaches for understanding and learning the curriculum topics and procedures for the content area being studied. For example, students in many vocational programs can profit from strategies for reading and understanding technical manuals and strategies for performing the procedures for carrying out typical tasks required by the particular vocational area. Students pursuing academic courses also need to learn strategies for listening, reading, and writing about different academic content areas. (p. 182)

O'Malley and Chamot (1990) elaborated three classifications of strategies that were often utilized by ESL students and provided definitions of individual strategy types in another study on learning strategies used by ESL students. This ESL version of learning strategy classification included seven metacognitive strategies, 14 cognitive strategies, and two socio-affective strategies. Under the metacognitive category were the subcategories of planning, monitoring, and evaluation. The planning activities of learning included advance organizers, directed attention, functional planning, selective attention, and self-management. Typical strategies discussed in the cognitive category for ESL learning were inferencing, transferring, elaboration, note-taking, summarizing, translation, repetition, resourcing, and grouping, etc. Socio-affective strategies utilized by ESL learners referred to questioning for clarification and cooperation.

For adult ESL learners in community colleges, mastering listening comprehension is their first step towards fully acquiring the English language (Liu, 2009). However, according to Goh (2000), most learners are not well aware of their own approaches of listening and comprehending the oral input, nor are they aware of the actual problems occurring during information processing. These listening problems often remain unresolved in traditional ESL listening classes, which normally involve practicing listening comprehension through tests. Thus, researchers suggest that one of the most efficient approaches that might help ESL learners overcome their listening problems is to teach and assist students to utilize listening strategies effectively (Flowerdew & Miller, 1992; Goh, 2000; Graham, 2006).

The general findings of recent studies on listening strategy instruction indicated that strategy training mostly provided positive impact on learners' understanding and use of listening strategies, as well as improvement on the listening comprehension performance. However, most previous studies investigating the effects of listening strategy instruction measured the impact mainly by using a pre- and post-test design. There is an urgent need for future research to examine the impact of strategy instruction through different assessment methods, including exploring learners' perceptions of strategy instruction and the perceived usefulness of listening strategies.

Purpose Statement

The purpose of this three-phase mixed methods study was to explore community college ESL students' current uses of listening strategies and to develop strategy instruction that fits students' needs in listening comprehension. The researcher employed the concurrent triangulation approach and collected and analyzed both quantitative and

qualitative data at the first stage of the research. Based on the findings in Phase One, the researcher provided explicit instruction of listening strategies in the second phase, and administered pre- and post-tests to examine whether explicit teaching of listening strategies had an impact on ESL learners' listening comprehension in one community college in Northern California.

Research Questions

The research questions of this study were:

1. How do community college ESL students change their listening strategies use throughout the intervention?
2. After the intervention, how do community college ESL students describe the usefulness of those strategies?
3. How does the explicit teaching of listening strategy affect students' listening comprehension performance as measured by a listening comprehension test?

Theoretical Framework

The theoretical framework for this research study was based on Anderson's (1996, 2005) cognitive theory, particularly the model of production systems and three stages of skill acquisition. Anderson (1996) argued that all complex cognitive skills can be represented as production systems, and the acquisition process of the skill can be described as three empirically derived stages. In Anderson's view, learning strategies, as any cognitive skills, are complex procedures that individuals apply to tasks; consequently, they may be represented as procedural knowledge which may be acquired through cognitive, associative, and autonomous stages of learning (O'Malley & Chamot, 1990).

Anderson's (1996; 2005) theory was chosen here because it integrates concepts and principles that are particularly useful in examining learning strategies in second

language acquisition. Also, it is the theoretical foundation of the instructional model, the Cognitive Academic Language Learning Approach (CALLA) model, of the present study. The CALLA approach targets advanced beginning and intermediate level ESL students, who either have acquired academic language skills in their native language but need assistance in transferring language skills to English, or have developed social communicative skills but not yet academic language skills in English. According to Chamot and O'Malley (1994), the CALLA Model has been influenced and supported by cognitive theory, empirical research, and ongoing classroom use." In the present study, the researcher planned and implemented the listening strategy intervention following the CALLA Model. She assessed students' English learning background and prior knowledge, identified listening strategy objectives, developed content-based lesson plans, and organized activities into a five-phase instructional sequence: preparation, presentation, practice, evaluation and expansion. The procedures of designing and teaching the listening strategies were discussed in Chapter III.

Cognitive Theory

As a major component of his cognitive theory, Anderson (1996, 2005) described cognitive skills acquisition as a "three-stage" process, using a "production systems" notation to specify the transformation of knowledge representations during the skill acquisition process.

Representation in Memory

Anderson (1996) distinguished two types of knowledge: declarative and procedural knowledge. Declarative knowledge is what we know about things, such as the definition of words, facts, and rules. Our memory for images and sequences of events

also counts as declarative knowledge. Since declarative knowledge can usually be expressed verbally, one can easily describe the content of declarative knowledge. On the other hand, procedural knowledge refers to knowledge about how to do things, or “perform tasks” (Anderson, 1996). Examples of procedural knowledge include our ability to generate language, make decisions, apply rules to solve mathematical problems, and write source code of computer programs. Whereas acquiring declarative knowledge may be fast, acquiring procedural knowledge, such as learning a foreign language, is gradual and only with considerable amount of time and practice.

In Anderson’s (1996) cognitive theory, procedural knowledge is represented in memory by production systems, which are the basis for explaining how complex cognitive skills are acquired and represented in human memory. Production systems are rule-based conditional actions, which come as an “IF-THEN” pair. The condition contains a clause beginning with “IF,” and the action includes a clause beginning with “THEN.” One of the examples of the “IF-THEN” form is Anderson’s (1982) description of the rule of pluralization:

IF the goal is to generate the plural of a noun, and the noun ends in a hard consonant,

THEN generate the noun + /s/.

In the example above, the condition-action pair, or production, is initially represented like declarative knowledge. However, through extensive practice, the production can be gradually fine-tuned to the level of automatic execution.

In his production systems theory, Anderson (1996) argued for a unitary position of mind, where the language faculty is truly the “whole cognitive system.” (p. 3) During

the evolution history, people have developed certain features to facilitate language; however, once being developed, these features have been used for both linguistic and nonlinguistic activities. He claimed that it is then implausible to propose specific “faculties” or “human organs” for specific abilities, such as mathematics, computer programming, or sculpture, simply because some of the activities people master these days are beyond the evolutionary anticipation. This argument is directly against opinions of many other theorists, including Chomsky (1972), who proposed the existence of the language acquisition device (LAD), a brain organ that is specialized in detecting and learning the rules of language in his nativist theory of language.

One big question that follows the description of production systems and distinction between declarative and procedural knowledge is: “How does one transfer the rule-based declarative knowledge to the more automatic procedural knowledge when acquiring a complex skill?” Anderson (1996, 2005) described the general characteristics of skill acquisition with a three-stage model: the cognitive, associative, and autonomous stages.

Three Stages of Skill Acquisition

The acquisition of a skill typically comprises three stages, and the sequence of the stages in Anderson’s (1996, 2005) model corresponds to the sequence that Fitts (1964) suggested generally characterized the development of a skill. In Fitts’ and Anderson’s views, skill learning begins with the cognitive stage. During this stage, learners acquire declarative knowledge of a skill by memorizing a set of facts related to the skill. Later, they rehearse these facts when they perform the skill. Although this knowledge enables learners to verbally describe how to perform a complex task, it is still inadequate for

skilled performance. In other words, learning at this stage is deliberate, rule based, and often laden with error.

During the second or associative stage, two major changes occur in relation to the development of skill proficiency. First, errors in the performance from the first stage are gradually detected and eliminated. Second, the connections among the various components of the acquired skill are strengthened. Basically, the performance of the skill should be successful at the end of this stage, and the declarative knowledge transforms into its procedural form. However, sometimes the two forms of knowledge can coexist, as language learners still remember many rules of grammar after they can speak the language fluently (Anderson, 2005).

The third stage of skill acquisition is called the autonomous stage, where improvement of the skill continues and the performance becomes increasingly fine-tuned. After the first and second stages, learners have practiced the central cognitive component of a task enough that they no longer need to pay much attention. Anderson (2005) explained the concept of automaticity with an example of driving. Under normal unchallenging traffic conditions, an experienced driver can carry on a conversation while driving with little difficulty because driving has become so automatic to them and the demands on central cognition are minimal in normal driving. It is worth mentioning that skilled performance requires gradual and continued improvement, and mastering a skill demands a relatively long period of practice.

Delimitations and Limitations

The scope of the study was narrowed down to include only ESL students who were enrolled in listening and speaking classes in the Fall 2013 semester at the College of

Alameda. The English proficiency of the students was restricted to high-beginning level in this study due to class availability and instructors' permission. Furthermore, the participants' perceptions concerned only strategies for academic listening and were gathered primarily from interviews.

Certain limitations of this study related to the selection of participants. First, the participants were high-beginning level ESL students at a community college in Northern California. While this provided insights into the strategy use of that particular population group, it could lead to issues in generalizing the results to students at all proficiency levels. In addition, since this study needed to be conducted as a component of regularly scheduled ESL classes, it was impossible to follow the standard procedure to randomly select participants during class meeting time. Thus, the researcher employed limited randomization in the selection of the control and treatment groups between the two participating classes.

Secondly, participants' prior exposure to listening strategy instruction as well as their listening activities outside of class time was another area that could have impacted results of the study. Although students did provide such information in the background questionnaire, during interventions and tests, students might still consciously or unconsciously use strategies that they had learned previously or transferred from listening skills in their first language.

Another limitation related to the extraneous factors in the research is that the control and treatment classes had different instructors and meeting schedules. Although both instructors had extensive teaching experiences, they might have come from different teaching backgrounds and developed their own teaching styles. It was also possible that

one or both the instructors taught listening strategies in class without intentionally planning to do so. In addition, the two groups having different class schedules could also have impacted students' learning during the intervention.

Significance of the Study

The present study adds to the growing body of research investigating the effects of explicit strategy instruction on ESL students' listening comprehension. By utilizing both quantitative and qualitative methods, this study examined the impact of strategy instruction more thoroughly. This study provides empirical evidence that ESL learners should be able to actively and selectively choose the strategies most appropriate for successful completion of a listening task. With a particular focus on community college students, this study provides in-depth information about how adult ESL learners may benefit from efficient utilization of listening strategies.

This study also provides valuable insights into community college students' perceptions and practices of listening strategies in the ESL classroom. By exploring students' listening strategy use, this study may provide the ESL program professional a better understanding of how ESL students in community colleges process listening input. The findings of this study may offer suggestions that enable second language teachers to apply certain listening strategy training to assist students in improving their target language skills in order to handle the language demands in their life and academic work.

Definition of Terms

Adult ESL students: For purposes of this study, adult ESL students are learners aged 18 or older who are enrolled in ESL programs offered by community colleges and a wide range of other service providers. The program may have a variety of instructional purposes, including survival, employment, citizenship, high school equivalency, and

further education. The students may include immigrants, international students, permanent residents, citizens, or refugees (Crandall & Sheppard, 2004).

English as a Second Language (ESL): English is learned so that the learner can comprehend and speak the language in an English speaking culture to conduct routine activities and business (Clement, 2007).

English as a Foreign Language (EFL): English is learned as a language that will not be used on a daily basis. The learner probably will not have the need to use English within an English speaking culture (Clement, 2007).

L1: One's first/ native language.

L2: A second language. Participants in this study may have more than one language learning experience. For the purpose of this study, L2 refers to any language other than their native language.

Learning Strategies: The special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information (O'Malley & Chamot, 1990). Some of these strategies may be known to teachers as study skills. Study skills describe overt behavior, such as taking notes, writing summaries, or using reference materials. Learning strategies, on the other hand, generally refer to mental processes which are not generally observable (Chamot & O'Malley, 1987).

Listening Strategies: A conscious plan to deal with incoming speech, particularly when the listener experiences problems due to incomplete understanding, such as using a clarification strategy in listening comprehension (Richards & Schmidt, 2010).

Secondary Level English Proficiency Test (SLEP): The SLEP test is used primarily in secondary schools as well as institutions and other organizations worldwide.

The SLEP test can be used for assignment to ESL classes, placement in a regular English-medium program, and exiting an ESL program (Educational Testing Service, 2012).

Summary

The topic of learning strategies has become essential in research on second language listening, referring to the conscious thoughts and actions that individuals use in order to accomplish a learning goal. In the early stages of the ESL and EFL fields, much research on listening focused on testing students' ability to listen and answer comprehension questions. Recently, however, a growing number of studies indicate that the focus has shifted to the use and development of learning strategies for listening comprehension. The results of these studies have highlighted the necessity of promoting the acquisition of listening strategies and providing learners with sufficient training in those strategies.

The purpose of this mixed-methods study was to explore community college ESL students' current practices of listening strategies and to develop strategy instruction that fits students' needs in academic listening. Based on the findings of the first stage, explicit instruction of listening strategies was provided for ESL learners. Pre- and post-tests were used to examine whether the explicit teaching of listening strategies had an impact on listening comprehension. The participants in the study were ESL students in one community college in Northern California.

The research questions for this study sought to explore community college ESL students' current uses of listening strategies in an academic setting. It also sought to discover students' perceptions of the usefulness of explicit listening strategy instruction.

Lastly, this work sought to examine how the explicit teaching of listening strategy might affect students' listening comprehension performance.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Over the past 25 years, listening comprehension strategy has become one of the most important topics in second language acquisition research. Researchers, such as O'Malley and Chamot (1990), Oxford (1990), Thompson and Rubin (1996), and Vandergrift (1997, 2003), along with many others, have examined a wide variety of issues related to L2 listening strategies. Most discussion has focused on differences between more and less effective listeners, listening strategy instruction, and assessment of listening strategies.

Although the effectiveness of explicit teaching listening strategy on improving learners' listening proficiency has been proven across a range of settings (e.g., Carrier, 2003; Clement, 2007; O'Malley & Chamot, 1990; Ozeki, 2000; Thompson & Rubin, 1996), most studies have concentrated on examining the outcome of the strategy instruction, based on pre- and post-test designs. Very few studies have addressed L2 listeners' perceptions of listening strategies and strategy instruction. In addition, little empirical research has been done to develop appropriate strategy instruction based on learners' listening needs.

Overview

This chapter focuses on the body of literature in the primary subject areas applicable to this dissertation and is divided into five sections. The first section discusses two types of listening processes—bottom-up process and top-down process. The second section addresses the differences in learning strategy use between more and less effective

listeners. The third section covers the teaching of listening strategy, including the advocacy of explicit and integrated strategy instruction, strategy instruction in foreign language and ESL contexts, different strategy instruction models, and the language used for strategy instruction. The fourth section discusses assessment methods used to identify students' listening strategy uses. The last section illustrates students' perceptions of listening strategy instruction.

Listening Processes

Both terms “bottom-up processing” and “top-down processing” originally came from computer science, and were later introduced to the linguistic field. Bottom-up processing carries the meaning of “data-driven”, and top-down processing is known as “knowledge driven” in computer science (Field, 1999). In the second language acquisition field, the terms bottom-up processing and top-down processing are used to describe the cognitive processes of second language listening or reading (Clement, 2007). Vandergrift (2007) commented that listeners favored bottom-up processes when they relied on their linguistic knowledge to recognize linguistic elements—phonemes, syllables, words, phrases, sentences to construct meaning. On the contrary, top-down processes work in the opposite direction, and listeners used context and prior knowledge (topic, genre, culture and other schema knowledge stored in long-term memory) to build meaning.

A set of alternative terms for bottom-up processing and top-down processing are decoding and meaning building, as suggested by Field (2008). The decoding process starts from the sound elements of the target language, such as phonemes and syllables, and then progresses into words, phrases, and sentences. In contrast, the meaning building process requires external information, such as world knowledge, personal experiences, or

prior knowledge gained in academic situations. Field explained the reason why he suggested a new set of terms was that the words “bottom-up” and “top-down” might cause misinterpretations by implying opposite stances on comprehension. However, research suggested that L2 listeners need to learn both types of processes in order to successfully complete a comprehension task, depending on the purpose for listening (Mendelsohn, 2001; Vandergrift, 2004).

Bottom-up Processing

In listening comprehension, bottom-up processing occurs when listeners attend to linguistic features and decode each sound and word for semantic meaning (Siegel, 2011). According to Clement (2007), in bottom-up processing, the language learners heavily rely on sound input in listening comprehension. In order to guess what a word might be in the listening text, a listener might try to match initial sounds to various lexicons that he/she knows and eliminate more and more possibilities until he/she finds the most accurate match to the input sounds (Clement, 2007).

Clement (2007) provided a comprehensible example of how a learner might encounter the new word “founder.” When the learner initially hears the first phoneme /f/, he/she activates the memory of possible words that sound familiar, such as *find*, *fact*, *fan*, *found*, etc. As the learner receives the next sound, he/she then eliminates the words *find*, *fact*, and *fan*, as these words do not match the received sounds anymore. *Found* seems a good match, until the final sound /er/ occurs. Depending on language proficiency, the learner may infer the meaning of the word based on the link between *found* and *founder*. Such an elimination process usually takes no more than .25 second, according to Field

(1999). Also, the processes of analyzing first phonemes, then progressing into syllables, words, phrases, and even sentences can all occur simultaneously.

Top-down Processing

If learners encounter listening input for which they have no prior knowledge, they may need to resort to top-down processing to compensate for the insufficient knowledge of the language (Wilson, 2003). In top-down processing, the listeners draw upon background knowledge and expectations of the upcoming oral text and then infer what the true meaning of the speaker may have been (Clement, 2007). The representation of such prior knowledge or a generic concept of the subject is also referred as a schema. According to Rost (2005), schemata (plural of schema) are frequently being developed and updated, and listeners refer to a variety types of schemata that help them interpret the text and predict the outcomes. This knowledge could also assist learners to make sense of the oral text and fill in missing information. In the case of a cultural or intellectual disconnection, learners are able to adjust or incorporate a new schema to facilitate their comprehension.

It is worth mentioning that listeners may not always correctly interpret the meaning of the oral text by applying the top-down process. In their systematic review of the role of prior knowledge in listening comprehension, Macaro, Vanderplank, and Graham (2005) pointed out that listeners' use of prior knowledge could lead to inaccurate comprehension especially when their interpretation lacked supporting evidence later in the text. However, as Vandergrift (2003) argued, this is the procedure underlying the strategy of questioning elaboration, which involves a combination of questions and world

knowledge to brainstorm and evaluate logical possibilities as the interpretation of the listening text continues.

As discussed above, learners use top-down processing when they activate their own background knowledge of the listening text, and they rely on bottom-up to help them decode the sounds and grammatical patterns of English. However, listening comprehension is not either top-down or bottom-up processing. Recent research suggested that the two cognitive processes combined to facilitate listening comprehension because listeners use both prior knowledge and linguistic knowledge in understanding messages (Graham & Macaro, 2008; Vandergrift, 2004). Thus, the present study took into account the complex cognitive processes and included listening strategies required both bottom-up and top-down processing.

Differences between More and Less Effective Listeners

Although both bottom-up and top-down processing are necessary in listening comprehension, listeners may favor one process over the other depending on the purpose of the listening, the context of the listening task, and learners' language proficiency. When learners need to verify specific details in the listening text, they will engage in more bottom-up processing. On the contrary, when learners try to comprehend the gist of a listening text, they tend to rely on more top-down processing (Vandergrift, 2007). Students' language proficiency also impacts their listening process tendencies. The less proficient a learner, the more likely he/she tends to rely on bottom-up processing (Vandergrift, 2007).

Clement (2007) noted that in the early stages of second language learning, learners spent great concentration to decode the sounds of the language. Since they paid

so much attention to the incoming stream of listening text, they might not be able to remain top-down processing. However, “as the learner practice and rehearse this skills and become more proficient with the new language, comprehension of isolated sounds will become more automatic, giving the student more opportunity to activate top-down processing” (Clement, 2007, p. 46). At an advanced proficiency level, these two processes finally interacted in a compensatory manner, and what was missed from one process could be compensated for from the other process. As Vandergrift (2004) claimed, awareness of the two processes in listening comprehension could help second language students learn how to apply both processes to their advantages.

In addition to listening process tendencies, research studies also revealed differences in listening strategy use between effective and less effective ESL learners. For instance, Berne (2004) examined how language learners listened in the target language and summarized the listening process and strategy use tendencies for both less proficient and more proficient students. Less proficient listeners showed the following tendencies: (a) processing input at the word level; (b) heavily relying on surface-processing strategies such as translation and key words; (c) being negatively affected by linguistic and attentional obstacles; (d) focusing on definitions or pronunciation of words; (e) making fewer inferences or elaborations in listening comprehension; (f) rarely verifying their predictions and assumptions; (g) seldom activating their prior knowledge for listening comprehension. On the other hand, more advanced listeners displayed these tendencies: (a) using strategies more frequently; (b) using a wide range of strategies; (c) using strategies interactively; (d) focusing on the overall organization and meaning of the listening text; (e) attending to larger chunks of oral input; (f) constantly planning, monitor,

and evaluating their strategy use; (g) relating what they hear to previous experiences; (h) using existing linguistic knowledge to facilitate comprehension.

Murphy (1985) investigated the differences between more and less proficient college level students using a think-aloud procedure. In this study, Murphy classified more and less proficient listeners based on the frequency of the strategies they used and the sequential patterns of strategies they followed. The results indicated that more proficient listeners were more open and flexible with the utilization of listening strategies, both in frequency and variety. Less proficient listeners, on the other hand, tended to orient themselves to more details in the text or on their own world knowledge. They also appeared to respond to the text information much more slowly in the listening process. Murphy concluded that comparing to less effective listeners, effective listeners were able to utilize a greater variety of strategies and interact with the text more actively. One limitation of this study was that although Murphy classified 17 categories related to listening strategies, he could not precisely name or classify many of the strategies that he had identified. The reason was because a systematic taxonomy of language learning strategies had not yet been developed. Accordingly, the distinctions between metacognitive strategies and cognitive strategies had not been identified in the literature by that time.

As reviewed in the previous section, O'Malley and Chamot (1990) identified and validated a well-known three-category classification of learning comprehension strategies, which was later refined by Vandergrift (1996). Guided by this classification scheme, Vandergrift (1997, 2003) examined the relationship between listening strategy use and language proficiency among French learners. In his 1997 study, Vandergrift recruited 36

high school French learners from four different course levels for retrospective interviews. Later he selected 21 participants for individual think-aloud sessions, with 10 successful and 11 less successful listeners involved. The think-aloud procedure included two phases: a training phase and a data collection phase. In a training session, students used mathematical problems or verbal reasoning tasks and oral French texts to understand and practice how to think aloud. Each data collection session lasted from 30 to 40 minutes and took place within a week after the training session. All data were verbatim transcribed and then later analyzed using the predefined taxonomy of listening comprehension strategies. The findings showed that among the three categories, cognitive strategies were reported the most by all participants, followed by metacognitive strategies and a few socio-affective strategies. Vandergrift claimed that an important distinction between more and less proficient listeners was the depth of processing in strategy use. Whereas less effective listeners reported more surface-processing cognitive strategies, such as translation, transferring, and repetition, more effective listeners reported more use of in-depth processing metacognitive strategies, such as comprehension monitoring and problem identification.

Also investigating French learners' listening strategy application, Vandergrift (2003) conducted a similar study focusing on junior high school students. The participants of this study were 36 7th grade Canadian students. The same think-aloud procedure and data analysis method from his previous study (Vandergrift, 1997) were employed, and all data were analyzed both quantitatively and qualitatively. The researcher conducted an analysis of variance (ANOVA) to examine the statistical significance in differences between the means of more and less effective listeners for

each strategy category. In addition, Vandergrift also performed a qualitative analysis on the think-aloud protocols in order to capture how more and less skilled listeners used a given strategy differently. The results from the qualitative analysis were also compared with the quantitative results. The findings showed that both groups utilized cognitive strategies mostly, followed by metacognitive strategies and then little use of socio-affective strategies. The main difference between the two groups was that more skilled listeners used more metacognitive strategies, primarily comprehension monitoring. In addition, students in the two groups also preferred different cognitive strategies. Whereas more skilled learners reported using questioning elaboration more frequently, less skilled learners appeared to use more translation strategy.

Similar results were also found in Goh's (1998) small-scale study comparing ESL listening strategy use between high and low ability students. Although the study was conducted at a six-month intensive English program in a Singaporean university, all participants (N=16) were from China, with an average age of 19. The author identified the cognitive and metacognitive strategies and tactics used by the 16 ESL learners and compared the way high and low ability listeners applied them, with a closer examination at the frequency and the types of strategies and tactics used. In order to find evidence of these cognitive processes, the researcher chose retrospective verbal report as the data source and collected data through interviews and weekly journals. The results indicated that the high ability listeners used more strategies and tactics and processed input in the top-down manner comparing to the low ability students. All participants tended to use more cognitive strategies and tactics than metacognitive ones, but the low ability listeners

were particularly lacking knowledge of metacognitive strategies, including planning, monitoring and evaluating.

Liu (2009) conducted a more recent study investigating the utilization of listening strategies among more and less skilled Chinese and Korean students at the college level. The participants were 166 first or second year undergraduate and graduate students, including 91 females and 75 males, from three public universities in the southwest of the United States. All participants were native speakers of either Chinese or Korean. The classification of more and less skilled listeners was determined by students' TOEFL scores. The researcher evaluated students' strategies use with a Likert-scale questionnaire adapted from Oxford's (1990) Strategy Inventory for Language Learning (SILL) and Kao's (2006) Strategy Inventory for EFL Listening Comprehension. Data were analyzed using SPSS, and three statistical tests, including Spearman's rho rank correlation, t test, and ANOVA, were conducted in order to answer different research questions. The results from the quantitative analysis confirmed differences in the use of listening strategies between skilled and less skilled non-native English speakers (NNES). Both groups reported using memory strategy the most and socio-affective strategy the least in listening comprehension, but more effective listeners were able to employ more memory strategy components in comparison to less effective listeners. Due to students' limited second language proficiency, cognitive and metacognitive strategies were not reported regularly in the current study. However, the statistics indicated that more skilled listeners utilized certain cognitive strategies, such as note-taking and previous knowledge, and metacognitive strategies, such as directed attention, more frequently than less skilled learners.

These studies, while having been conducted in different contexts, provided a general picture of listening strategies used by L2 learners. They also highlighted the main differences in strategy use between more and less skilled listeners. The general findings of these studies suggested that the utilization of metacognitive strategies actually distinguished the two groups. More effective listeners reported using a variety of deep processing strategies, such as self-monitoring, selective attention, and elaboration, while less effective listeners tended to use surface processing strategies, primarily translation strategy. Although the purpose of the present study was not distinguishing more and less skilled listeners, the researcher still took into account the strategy use characteristics described above when examining participants' listening strategy change before and after the intervention.

These studies also suggested providing students with comprehensive, step-by-step strategy instruction. Vandergrift (1997) proposed that a pedagogical sequence that guided students through the listening process during the first two years of language learning might be most suitable for developing students' metacognitive ability. However, none of these researchers examined the effectiveness of his proposed approach empirically. Thus, one essential question sorely needs to be answered: how to provide listening strategy instruction in order to bridge the gap between more and less effective listeners?

Listening Strategy Instruction

Explicit and Integrated Strategy Instruction

O'Malley and Chamot (1990) addressed two methodological issues in the instruction of learning strategies. The first issue was whether instruction should be embedded or explicit. In explicit or direct instruction, the teacher informs students about the value and purpose of a particular strategy and then provides explicit instruction on

how to apply the strategy. However, in embedded instruction, the teacher guides students through activities and materials that are associated with the strategy but does not tell students of the benefits and applications of the strategy.

The second issue was whether strategy instruction should be separated or integrated with classroom instruction in the language or content subject. Researchers in favor of integrated strategy instruction argued that integrating strategy instruction into regular classes provided students with opportunities to practice strategies in an authentic language learning environment and to transfer the strategies to other language tasks (Chamot, et al., 1999; Kendall & Khuon, 2006; Oxford, 2002; Zhang, 2008). On the other hand, researchers in favor of separated instruction raised their concerns that students would be less likely to transfer strategies to other tasks after receiving integrated instruction, and it might be unrealistic to train all language teachers to teach strategies in regular language classes (Gu, 1996).

While there was less agreement on the issue of integrated versus separate instruction, more researchers recommended explicit instruction in learning strategies (Cohen, 1998; O'Malley & Chamot, 1990; Oxford, 2002). O'Malley and Chamot (1990) noted that "early research on training learning strategies following the embedded approach found little transfer of training to new tasks" (p.153). Meanwhile, more recent studies (e.g., Carrier, 2003; Clement, 2007; Shen, 2003; Ozeki, 2000) on learning strategy instruction that informed students about the purpose and value of the strategies to be trained have proven to be helpful in maintaining strategy use over time and transferring strategies to new tasks. Thus, Chamot (2004) claimed that language teachers should teach learning strategies explicitly and integrate instruction into their regular

course work, rather than providing a separate strategy course. The present study also employed the explicit instruction approach and integrated listening strategy instruction into a regular ESL listening class.

Strategy Instruction for Foreign Language Learners

Thompson and Rubin (1996) conducted a longitudinal study to examine the impact of both cognitive and metacognitive strategy instruction on college level L2 learners' listening comprehension performance. The study took place at a private university in Washington, D.C., and participants were students enrolled in a Russian language course. A total of 36 participants were randomly assigned to a control and experimental group, and both groups received approximately 15 hours of video instruction in total in an academic year. However, the content of the lesson plan was different. While the control group only used the videos as a basis for speaking and writing activities, the experimental group focused on developing various metacognitive and cognitive strategies. Two different tests were administered as measures of listening comprehension, including the listening portion of the Comprehensive Russian Proficiency Test that contained 22 multiple-choice questions and a researcher-developed video comprehension test which consisted of 29 open-ended and guided recall questions.

Analysis of the pre- and post-test scores on the video test revealed that the treatment group scored significantly higher than the control group. However, there was no difference between the two groups with regard to the audio test. The two researchers later explained the reason why such results occurred: (1) the audio test did not parallel the type of instruction provided to the learners, and (2) some participants had demonstrated

high listening skills prior to the instruction, so there was little difference in the pre- and post-test scores.

Despite the short research period and relatively insufficient results, this study was the first longitudinal, classroom-based strategy instruction that demonstrated the positive effect of listening strategy training. In order to validate these results, the researchers also called for more studies considering other languages, larger samples, a longer instruction period, and a better match between the instruction and assessment test.

A more recent study conducted by Chen (2009) investigated the impact of strategy instruction in a regular college EFL class in Taiwan. Rather than examining a causal-effect relationship, this study focused on exploring learners' listening strategy development over a 14-week span. The participants were 31 non-English major students enrolled in an EFL listening course, and their language proficiency levels varied. The instruction was integrated as an extension of the listening curriculum, and metacognitive, cognitive, and social-affective listening strategies were taught in the strategy instruction. Within each strategy category, the researcher demonstrated selective strategies that had been proven effective in the literature. Participants were required to keep reflective journals where they reflected and evaluated how they had tried to comprehend the input and what they had understood right after completing their listening tasks. Journal entries were analyzed both quantitatively and qualitatively. The results showed that overall students reported greater awareness and control of their listening strategies. For individual strategy use in cognitive category, the most common strategies reported by students included inferencing, understanding each word, and replay. In the metacognitive category, despite the fact that different strategies were used predominantly at different

stages over the course, the whole range of all strategies were used fairly equally. The quantitative results also indicated that the utilization of affective strategies increased dramatically, mostly by low and medium proficiency students.

In general, Chen's (2009) study demonstrated that strategy instruction could be integrated in the EFL listening classroom and might lead to positive effects for learners' understanding and use of listening strategies. However, some limitations of the study, including the small sample size and no existing comparison group, might cause problems in generalizing the findings to a broader population. Also this study only employed one type of instrument, which was the reflective journal. Thus, in order to elicit more objective and comprehensive findings, the current study utilized multiple instruments for data triangulation.

Strategy Instruction for ESL Students

The above studies, while very important, focused on listening strategy instruction for foreign language learners. As Carrier (2003) argued, since foreign language learners typically studied language as a subject area, they were not often required to use the target language beyond the language classroom, and were even less commonly required to study other academic subjects in that language. Thus, the consequence of their failing to comprehend oral input in the foreign language was limited to lower grades in that particular language course. However, this was not the case for ESL students in the United States, who not only learned English as a subject area but also studied other academic content courses in English. If they failed to comprehend the oral input in class, they would face more serious consequences, such as failing courses or dropping out of school.

Thus more attention should be focused on the effectiveness of listening strategy instruction in the ESL classroom.

Carrier (2003) conducted a small scale study on explicit instruction of listening strategies with seven intermediate level ESL students at a high school in the Midwestern United States. Two different pre-tests were administered to measure participants' bottom-up/discrete listening skills and top-down/video listening skills. After the pre-tests, intervention training was provided in ESL classroom over 15 class sessions within six weeks. The training consisted of listening strategies for discrete sounds, listening for specific information, processing information delivered via video, and taking notes. After the 15-session strategy instruction, the researcher administered two post-tests that followed the same pattern as the pre-tests. The results indicated that students had significantly improved in listening comprehension by using both bottom-up skills, such as distinguishing difference in sound, and top-down skills, such as selective attention. Note-taking strategies taught during the instruction sessions were also proven to be helpful to students in terms of constructing meaning from key words and developing their own note-taking systems.

Limitations of Carrier's (2003) study were centered in the research design of sampling and sample size. Since the researcher selected all participants because they were willing to participate in the research, this convenient sampling affected the generalizability of the findings. Also due to the small sample size (N=7) in this study, the researcher used a nonparametric test to examine pre-test and post-test scores for significance, which in turn resulted in less robust findings. In addition, the absence of a

control group decreased internal validity of the study and limited the generalizability of the results.

Despite the limitations, Carrier's (2003) study had at least two implications for the current study. First, the research findings suggested that strategy instructions should be explicit by defining each target strategy for the students, explaining specifically how they would comprehend the listening texts better using the strategy, and demonstrating the use of the strategy by doing a think-aloud. Second, the study suggested that the two types of listening processing—bottom-up and top-down processing complemented each other and should be combined and balanced in listening classes. Thus, both bottom-up and top-down listening strategies should be included in the intervention.

Clement (2007) conducted another empirical study focused on ESL students' listening strategy instruction, which investigated the impact of teaching explicit listening strategies to adult ESL students. Participants were 64 intermediate to advanced level international students at two universities in the Eastern United States. Data were collected using three instruments, the Strategies Inventory for Language Learning (SILL) (Oxford, 1990), researcher-designed post-intervention surveys, and a researcher-designed post-study survey. Data analysis was conducted through frequency studies and analyses of variance (ANOVA) and covariance (ANCOVA). A statistically significant difference was found for total scores from pre- to post-SILL for participants' level of instruction. The findings also indicated participants' high levels of approval of the web-based interventions and their beliefs that this type of training would help them in future listening tasks.

Carrier's (2003) and Clement's (2007) studies employed a quantitative approach, using a pre- and post-test design. The researchers examined the impact of explicit listening strategy instruction only on ESL students' listening comprehension performance measured by listening tests. Neither of the studies examined students' development on listening strategy use as a result of the strategy instruction. It was also unclear whether researchers of the previous studies took into account students' listening problems when planning the strategy instruction. The current study aimed to fill in the gap in the literature and develop strategy instruction that targeted students' listening problems. In order to explore students' strategy development throughout the intervention, this study employed interviews as the primary instrument, supplemented by classroom observations.

Strategy Instruction Models

Researchers like Rubin (1975) claimed that the learning strategies of "good language learners," once identified and successfully taught to less effective learners, could benefit numerous L2 students in developing their second language skills. Nevertheless, second language teachers were also interested in professional development in effective learning strategy instruction, such as teaching students how to apply learning strategies to varied language activities and transfer strategies to new tasks (Liu, 2010). In this case, instructional models and materials would bridge the research findings into practical classroom activities. With the development of strategy training, researchers have developed various models for strategy instructions to both first and second language contexts.

Oxford's Model

Oxford (1990) provided the following rationale for strategy training: “Strategy training is most effective when students learn why and when specific strategies are important, how to use these strategies, and how to transfer those to new situations” (p. 12). Thus, Oxford’s Model (Oxford et al., 1990) emphasizes the importance of raising students’ strategy awareness and becoming self-directed learner. It is illustrated step-by-step in the following procedure:

- 1) Learners first complete a task without any strategy training; they discuss how they finish the task and reflect how their strategies may facilitate their language learning
- 2) The teacher demonstrates other useful learning strategies, explains the potential benefits of these strategies, and ensures that students understand the rationale for strategy use.
- 3) Students have opportunities to practice the new strategies with language tasks and learn how the strategies can be transferred to other tasks.
- 4) The teacher provides learners with further tasks to practice the strategies; learners make choices about the strategies they will use to complete the language tasks.
- 5) The teacher helps students evaluate their own strategy use and become more responsible and self-directed learners.

In general, Oxford’s (1990) model is flexible in terms of procedure. In other words, the order of the steps can be modified or rearranged to meet different needs. This model also provides students with additional practice opportunities such as in Step 3 and 4. However, the drawback of this model is that it doesn’t provide any guidance on

assessing students' prior knowledge and use of learning strategies. Oxford's model assumes that teachers already know what learning strategies the students use even though the reality in the ESL classes is that students' prior knowledge on learning strategies varies depending on their educational backgrounds (O'Malley & Chamot, 1990). Thus, teachers need to refer to other useful assessment techniques elsewhere if they decide to use this model.

Style and Strategies-Based Model

Cohen's (1998) Styles and Strategies-Based Instruction Model (SSBI) is a learner-centered approach, which combines styles and strategy training activities with everyday classroom language instruction. This approach includes both explicit and implicit integration of strategies into the course content and composed of the following five phases:

- 1) Strategy preparation. In this phase, the teacher evaluates students' knowledge of and ability to use learning strategies. According to Cohen (1998), students most likely have developed some strategies from previous learning experiences, though they may not be able to use these strategies systematically. Hence, teachers should not assume that students are a blank slate in regard to strategy use.
- 2) Strategy awareness-raising. In this phase, the teacher exposes students to strategies they might never have thought about or may have never used by engaging them through SSBI tasks. In the SSBI Model, these tasks are explicitly used to raise the students' general awareness about what the learning process may consist of, their learning style preferences or general approaches to learning, and

the kinds of strategies that they already employ, as well as those suggested by the teacher or classmates, etc.

- 3) Strategy training. The teacher explicitly instructs students how, when, and why certain strategies can be used to facilitate language learning. In a typical classroom strategy-training unit, the teacher first describes, models, and gives examples of useful strategies. Then, he or she encourages students to share some examples from their own learning experience. The teacher also leads small-group or whole-class discussions on learning strategies.
- 4) Strategy practice. Students have opportunities to practice a variety of strategies and reinforce their use of these strategies. After the practice, students debrief their use of strategies and evaluate their relative success.
- 5) Personalization of strategies. In this phase, the teacher assists learners to personalize what they have learned about these strategies and evaluate how they use the strategies. The teacher also encourages students to transfer these strategies to other tasks.

Compared to Oxford's (1990) model, Cohen's (1998) model provides teachers with guidance for assessing students' prior strategy knowledge. This SSBI model also provides more flexibility for teachers to explicitly and implicitly integrate the language strategies training into regular classroom programs. However, the SSBI model simply relies on students' self-evaluation as the post-training assessment method. Compared to the CALLA model where evaluation can be individual, cooperative, or teacher-centered, the SSBI model fails to provide alternative assessment options. Also, without evaluating

students' learning at the end of the strategy training, instructors might not be able to measure immediately the impact of the strategy instruction on students' performance.

Cognitive Academic Language Learning Approach

The Cognitive Academic Language Learning Approach (CALLA) is developed by Chamot and O'Malley (1990). It is designed to assist Limited English proficient (LEP) students in upper elementary and secondary levels who are being prepared to participate in the mainstream content to build essential academic language skills. The CALLA model mainly addresses the needs of LEP students who have mastered social interactive language skills after studying in an ESL program for one or two years or who have acquired academic language skills in their L1 but need assistance in transferring such skills to English. These types of students usually encounter tremendous difficulties in mainstream academic classrooms due to the lack of appropriate grade-level academic language skills in English. Hence, the most essential feature in the CALLA model is the identification and training of learning strategies and effective use of learning strategies.

The CALLA model includes three major components in the curricular and instructional design: the content-based curriculum, development of academic language skills, and most important, explicit teaching of learning strategy. The content topics taught in CALLA lessons are suggested to be aligned with an "all-English curriculum" (O'Malley & Chamot, 1990, p.194) so that students start encountering actual topics in the mainstream classes early. The sequence of the topics introduced into CALLA lessons are recommended as: science, mathematics, social studies, and finally language arts. For most ESL students, academic language skills, such as listening to lectures and reading for new information, may or may not have been developed in their L1. Thus, the CALLA

model provides instruction on either how to transfer previously developed academic language skills to English or how to learn academic language skills in English for the first time. Such study skills, or often referred as “learning strategies” in the CALLA program, include metacognitive strategies, such as selective attention on oral or written text (scanning key words, phrases, linguistic markers, or type of information); cognitive strategies, such as note-taking (recording key words and concepts in abbreviated verbal, graphic, or numerical form); and social and affective strategies, such as questioning for clarification (eliciting explanation, examples, or verification from instructors or peers).

O’Malley and Chamot’s (1990) CALLA lesson plan framework includes five steps:

- 1) Preparation. In this phase, the teacher identifies what students already know about learning strategies and how students have been taught to approach learning activities or content areas.
- 2) Presentation. The teacher provides the names and definitions of the strategies and then demonstrates each strategy. The teacher needs to ensure that students comprehend the new information so that they can practice the strategies in the next phase.
- 3) Practice. This is a learner-centered phase where the teacher plays the role of facilitator and creates opportunities for students to practice new strategies in different contexts with a variety of materials.
- 4) Evaluation. With the teacher’s assistance, students evaluate their performance and reflect on their practice of the strategies in this phase. Evaluation activities can be individual, cooperative, or teacher-centered.

- 5) Expansion activities. In this phase, students have a variety of opportunities to transfer the strategies to new tasks, integrate them into their existing knowledge frameworks, and make real world applications. The teacher should ensure that students should continue to practice these strategies and develop academic language skills.

Comparatively speaking, the CALLA model provides plenty of opportunities for both teachers and students to evaluate students' strategy use before and after the strategy training stage. Thus, the impact of the strategy training on students' performance can be easily assessed. Also it is recursive rather than linear so that teachers and students always have the option of revisiting prior instructional phases as needed (Chamot, 2005). In addition, it is useful for language learners of different levels, considered as a guide for implementing a whole-language or language-across-curriculum approach to instruction, and undoubtedly has been applied in the EFL classroom program.

Language of Instruction

Although extensive research has investigated various issues of strategy instruction, few researchers have addressed the issue of language used for instruction in teaching learning strategies (Chamot, 2004). In first language contexts, strategies are taught in the students' native language, thus the language of instruction is not an issue. However, this is not the case in second and foreign language contexts, where students do not have the L2 proficiency to understand explanations in the target language, such as why and how to use learning strategies. Chamot (2004) suggested that if all students and the teacher share the same first language, strategy instruction may be provided in the first language.

However, Chamot also recognized the drawback of teaching strategy in L1 as students could lose exposure to and practice in the target language.

As a result, other researchers recommended staying within the target language as much as possible or considering using a combination of the native and target language for strategy instruction if possible (Grenfell & Harris, 1999; Ozeki, 2000). Ozeki's (2000) study was a demonstration of utilizing both first and foreign languages in strategy instruction. In order to investigate the effectiveness of listening strategy instruction on Japanese EFL college students, Ozeki conducted a mixed methods research with 45 students in two classes at a female junior college in Japan. Due to students' limited English proficiency, the researcher designed the actual strategy instruction in English, but collected various types of data in both languages. Whereas participant interviews were conducted in only Japanese, other data collection instruments, such as questionnaires, journal prompts, and self-evaluation checklists, were written in simple English, and students could answer in either English or Japanese. Since a language barrier no longer existed, students could freely express their perceptions on the strategy instruction and evaluate their own listening strategy use.

The above studies took place in foreign language contexts, where all students and teachers speak the same L1. In second language contexts, such as ESL class, it is very common that learners' language background varies and the teacher doesn't know learners' first language. In this case, teachers are advised to name the strategy in the target language, explain how to use it in simple language, and demonstrate the strategy repeatedly (Chamot et al., 1999).

In sum, the language of strategy instruction should depend on the proficiency of the learners (Graham, 1997). If all students and the teacher in a language class share the same native language, initial strategy instruction can be provided in the native language, particularly with beginning level students, or taught in a combination of the native and target languages. In second language contexts, in which students and teachers do not share the same L1, strategy instruction should be taught in the simple target language, with teachers' modeling the strategy repeatedly. Since the current study took place in an ESL program where students' language background varied, the researcher chose English as the instructional language in the intervention.

Assessment of Listening Strategy Use

According to Chamot (2005), although learning strategies are for the most part unobservable, some strategies may be associated with an observable behavior. For example, a student listens to new information using selective attention strategy to focus on the main ideas. Although the strategy itself is unobservable, this student's strategy use may be associated with note-taking behavior, which is observable. Up to date, the best way to identify learners' strategy use is through a self-reporting approach. Previous studies have demonstrated several assessment methods using self-reports, including interviews, think-aloud protocols, questionnaires, and diaries and journals.

Interview

Two types of interviews are used to identify learners' strategies: retrospective interviews and stimulate recall interviews. In retrospective interviews, learners are guided to recall a recently completed listening task and describe what they did to complete it (Chamot, 2005). In Vandergrift's study (1997), before conducting the think-aloud

protocols, he employed a semi-structured interview method to uncover the types of strategies students used in different situations, such as listening to the teacher, classroom listening activities, and listening to television in French. Compared to the retrospective interview, a stimulated recall interview is considered to be able to reveal students' actual strategies use more accurately because it is conducted immediately after a listening task (Chamot, 2005). Again, in Vandergrift's study, following the retrospective interview, the researcher conducted a stimulated recall procedure to uncover the types of strategies students used to understand their interlocutor. The listening task was videotaped, and each individual participant was invited to watch the video together with the researcher immediately after the actual task. The researcher could stop the video at any time for the participant to describe his or her thoughts at specific moments during the listening task.

Think-Aloud Protocols

A think-aloud protocol can be used in individual interviews where the learner is required to perform a target language task and then to describe his or her thoughts while working on the task. Sessions of think-aloud protocols are usually recorded and later analyzed for evidence of learning strategies (Chamot, 2005). Because think-aloud protocols can provide first-hand and rich insights on language-learning strategies, they are commonly utilized by researchers to build understanding of learners' mental processing (O'Malley & Chamot, 1990; Vandergrift, 1997, 2003).

As mentioned in the previous section, the think-aloud procedure in Vandergrift's study (1997, 2003) included two phases: a training phase and a data collection phase. The training session aimed to help participants develop a good understanding of how to think aloud and provide them with practice opportunities before the data collection. The data

collection sessions lasted 30-40 minutes and were audio recorded for transcription and analysis. Each session consisted of three stages: warm-up, transition, and verbal report. The warm-up stage aimed to create a welcoming and relaxing environment and establish a good working relationship with the participants. The transition stage provided participants with materials to practice think-aloud through a trial run. Only during the verbal report stage, think-aloud data were recorded for analysis.

Questionnaire

Questionnaire is the most frequently used assessment method for identifying students' listening strategies. Some researchers have developed questionnaires based on the actual tasks students completed. For example, Ozeki (2000) developed an open-ended questionnaire in order to investigate female Japanese ESL learners' strategy use during listening comprehension. Question 1 to 6 provided six different listening scenarios, and each scenario included one to three open-ended questions eliciting students' strategy choice. Questions 7 and 8 concerned students' listening strategy use for general listening tasks, and Question 9 aimed to identify students' listening problems and needs.

However, most studies on listening strategies have relied on Oxford's (1990) Strategy Inventory for Language Learning (SILL). The SILL is a standardized measure to assess the use of language learning strategies. Using the five-point Likert-scale, the SILL allows individuals to respond to strategy-related statements by rating their agreements from "never" or "almost never true" to "always" or "almost always true." Since the SILL also has versions for students of a variety of language, including ESL, this instrument has been used extensively to collect data on large numbers of language learners (Oxford, 1990; Oxford & Burry-Stock, 1995; Clement, 2007).

Clement (2007) employed a slightly modified ESL/EFL version of the SILL to investigate adult ESL learners' strategy use during the listening tasks. The ESL/EFL version of the inventory consisted of 50 Likert-scale items, and the only modification made was on the language in selected inventory statements to focus on listening tasks rather than general learning strategies. Participants were provided instructions with a sample item for illustration purposes, the modified SILL, a worksheet designed to walk students through the self-scoring process, and a summary profile that aimed to assist students to interpret their results.

Diaries and Journals

Diaries and journals have also been used to identify and assess learners' listening strategies. Research has suggested that keeping a reflective journal is a useful learning strategy in itself, as it encourages learners to reflect on their strategy as well as to develop metacognition awareness of L2 listening (Chen, 2005; Chen, 2009; Goh, 2008).

In Chen's study (2009), participants were required to keep reflective journals about their ESL listening activities and strategy use over the 14-week intervention period. In their journals, students not only reflected on what they had understood from completing their listening tasks but also evaluated what methods they used to comprehend the input. In order to collect consistent data from the journals objectively, the researcher assigned participants to complete the same listening task and only collected each student's first, middle, and last journal entries.

Students' Perceptions of Listening Strategy Instruction

Much of the research on learning strategy instruction has focused on making students more effective learners, while few studies on learning strategy instruction actually have explored students' perceptions of the strategy instruction. In her study on

explicit listening strategy instruction, Clement (2007) designed a series of lesson surveys and a final survey to collect students' perceptions of the listening strategy instruction. Participants completed a three-item lesson survey after each instruction session and a 10-item final survey at the end of the research to reflect upon the four intervention sessions. In each survey, students responded to statements related to strategy instruction by choosing answers from "agree," "somewhat agree," "somewhat disagree," and "disagree." The purpose of collecting these survey responses was to gain participant feedback on the effects of the listening strategy instruction.

For example, in one of the lesson surveys, students were asked to respond to the following statement: "Viewing the video about predicting will help me to use this strategy when I listen to new lectures." More than 80% respondents indicated that they "agreed" or "somewhat agreed" with this statement, particularly on the transferability of the strategies they learned. Similarly, on one of the final survey items: "Discussing the content of the videos with my classmates was helpful for me," 73% of the participants responded as "usually," "almost always," or "always true to me." Since all the instructional sessions were technology-integrated, the researcher believed that students' positive feedback on the strategy instruction reflected their great interest in learning and using listening strategies and their enjoyment of electronic presentation of strategy use.

Another recent study was conducted by Siegel (2012). Using interviews and questionnaires as primary instruments, Siegel investigated EFL learners' perceptions of listening strategy instruction at a private university in Japan. A total of 54 intermediate level students received the strategy instruction and completed online questionnaires at the end of the study, and seven students participated in the group interviews.

The questionnaire consisted of 24 statements related to students' English listening background, integrated listening strategy instruction, and perceived listening strategy use. Students responded to these statements on a scale from "strongly disagree" to "strongly agree." The researcher administered the questionnaire in both English and Japanese in order to receive more valid responses. However, since all participants completed the questionnaire online, the researcher had no opportunity to provide any explanation or clarification while participants were responding to the statements.

The researcher-designed interview protocol consisted of 15 main guiding questions, which were thematically organized. The researcher conducted the group interview in a semi-structured format, thus the order of the questions were flexible in response to participants' answers. The researcher conducted the interviews in English to assess participants' listening comprehension as well as to provide them with additional English conversation opportunities.

Both the quantitative and qualitative data showed that participants held positive perceptions of the listening strategy training. Results indicated that explicit listening strategy instruction along with modified listening materials and in-class activities could effectively help students develop their listening ability. Many participants noticed improvement on their listening abilities as a result of the strategy course, yet some students still reported a lack of confidence in their listening skill.

Summary

Over the past two decades, learning strategy has been one of the most important topics in ESL listening. The literature review focused on previous research findings related to five particular areas: listening processes, differences between more and less

effective listeners, listening strategy instruction, assessment of listening strategies, and students' perceptions of strategy instruction. General findings along with critiques of individual studies in each area were presented.

Bottom-up and top-down processes are the two cognitive processes that combine during listening. The bottom-up processing begins with sound elements and gradually combines increasing larger units of meaning to construct meaning. Listeners focus on linguistic features and decode each sound and word for semantic meaning (Siegel, 2011). In contrast, the top-down processing begins with a holistic view and moves from the whole to the individual parts. In other words, listeners process the context of the listening situation by activating their prior knowledge and building up expectations of the upcoming listening text (Clement, 2007).

Studies that examined differences between more and less effective L2 listeners identified a number of differences in how the two groups of learners use strategies, such as flexibility with listening strategies, amount of utilized strategies, and depth of processing in strategy use (Goh, 1998; Liu, 2009; Vandergrift, 1997, 2003). Among all the differences, the depth of processing in strategy use actually distinguished the two groups. In other words, more effective listeners were able to use a variety of metacognitive strategies that were considered in-depth processing, while less effective listeners tended to use surface processing strategies.

Since most learning strategies are unobservable, the best way to find out whether students are using certain strategies during a listening comprehension task is through a self-reporting approach (Chamot, 2005). Previous studies have demonstrated several assessment methods using self-reports, including interviews, think-aloud protocols,

questionnaires, and diaries and journals (e.g. Clement, 2007; Chen, 2009; Goh, 2008; Oxford, 1990; Ozeki, 2000; Vandergrift, 1997, 2003).

With respect to listening strategy instruction, research has suggested that explicit instruction would help L2 learners maintain strategy use over time and transfer strategies to new tasks by informing students of the purpose and value of the strategies (Clement, 2007; O'Malley & Chamot, 1990; Oxford, 2002; Shen, 2003). Also, the choice of languages used for the instruction should be made based on learners' L2 proficiency. For beginning level students, in particular, instruction should be provided in learners' L1 or a combination of L1 and L2 in foreign language classrooms, or in the simple target language in second language contexts, such as the ESL class.

Recent studies on listening strategy instruction were conducted in a variety of contexts, from high school students to adult learners, and from foreign language contexts to ESL contexts. Despite the relatively small sample size and short research period in some studies, the general findings of these studies indicated that strategy instruction might lead to positive effects on learners' understanding and use of listening strategies, as well as improvement on the listening comprehension performance. However, most previous studies investigating the effects of listening strategy instruction employed a quantitative method and measured the impact of strategy instruction mainly by using a pre- and post-test design. Future research needs to examine the impact of strategy instruction from different angles, including exploring learners' perceptions of strategy instruction and the perceived usefulness of listening strategies.

From this summary, it is clear that research related to listening strategy has examined a wide variety of issues and provided a great amount of information. However,

issues such as the generalizability and the reliability of a self-reporting approach have also been raised. In addition, much of the research on listening strategy instruction has been quantitative in nature; thus a more in-depth understanding of students' perceptions is needed. Many issues remain unsolved and, as a result, listening comprehension strategy will remain a vital topic for researchers to explore.

CHAPTER III

METHODOLOGY

Introduction

This chapter consists of eight sections. The first section restates the purpose of the present study. Second, the research design section provides brief explanation of the selected approaches for data collection and analysis. Third, the research setting section describes the site that this research took place in. Forth, the section of participants presents the demographic information of the participating students and the sampling process. Fifth, protection of human subjects discloses the process followed to carry out this objective. Sixth, the section of sources of data collection describes the instruments used for collecting qualitative and quantitative data. Seventh, the procedures section delineates the steps used to conduct the study, including pre-intervention observations and interviews, pre-tests, interventions, and post-test. Finally, the data analysis subsection provides the type of statistical tests and qualitative evaluation methods used for data analysis.

The research questions for this study were as follows:

1. How do community college ESL students change their listening strategies use throughout the intervention?
2. After the intervention, how do community college ESL students describe the usefulness of those strategies?
3. How does the explicit teaching of listening strategy affect students' listening comprehension performance as measured by a listening comprehension test?

Restatement of Purpose

The purpose of this three-phase mixed methods study was to explore community college ESL students' current practices of listening strategies and to develop strategy instruction that fitted students' needs in listening comprehension. Both qualitative and quantitative data were collected simultaneously by utilizing concurrent triangulation approach. Based on the findings in the first phase, the researcher developed and provided explicit instruction of listening strategies following the Cognitive Academic Language Learning Approach (CALLA) lesson plan model. Pre- and post-tests were administered to examine the hypothesis that explicit instruction of listening strategies has an impact on ESL learners' listening comprehension.

Research Design

In order to accomplish the purpose of this study, a concurrent triangulation approach was employed in this mixed methods study. According to Creswell (2009), concurrent triangulation is when quantitative and qualitative data are collected at the same time, and then the two databases will be compared to determine if they converge. The advantage of mixing both quantitative and qualitative methods is to offset the weakness of one method with the strength of the other, resulting in well-validated and substantiated findings. In addition, as compared to the sequential approach, the concurrent data collection strategy can shorten the data collection time period since both qualitative and quantitative data will be gathered around the same time.

Research Setting

The proposed study took place in the ESL Program of the College of Alameda, located in Alameda, California. The ESL program is staffed entirely by trained instructors with Master's degrees in TESOL (Teaching English as a Second Language), and one with

a doctorate. Students enrolled in the ESL program are non-native English speakers who need to learn sufficient English to communicate effectively and overcome their academic language difficulties. As part of the admission process, the College of Alameda requires all ESL applicants to take the assessment test, Combined English Language Skills Assessment (CELSA), to evaluate their English skills. Then, students are advised to enroll in various levels of ESL courses based on their learning objectives and placement test results.

ESL courses are offered at levels of high-beginning, intermediate, high-intermediate, and advanced. Subject areas include listening, speaking, reading, writing, and grammar, etc. For listening and speaking courses, students with a CELSA placement score of 20 -34 are placed at high-beginning level, students with 35-47 are advised to enroll in intermediate level classes, students with 48-59 should register for courses at high-intermediate level, and students with 60-75 are placed in advanced level courses.

The ESL program currently offers a 4-8 level A/B acceleration model, and each proficiency level has A and B sections. Based on their individual learning progress, students can choose to repeat the same level by taking the B section, move up to the next level, or move down to a lower level after each semester. For example, after a student has completed the intermediate listening/speaking class (Intermediate A) in the first semester, depends on how fast he/she advances, the student can choose to continue enrolling in the current level listening/speaking class (Intermediate B), move up to the high-intermediate level (High-intermediate A), or move down to the high-beginning level (High-beginning A).

Participants

All participants in the proposed study were ESL students from two high-beginning level listening and speaking classes at the College of Alameda. 49 students enrolled in the morning class, and 34 students enrolled in the evening class. Both classes were comprised of students who were newly registered into the ESL program and those who repeated the same level after the previous semester. The learning environment for the two classes was the same, and both classes met in smart classrooms equipped with laptop connections, data projectors, speakers, overhead transparency projectors, etc. Although they had the same total instructional time for 180 minutes per week, the two classes had different meeting schedules. While the morning class met four times per week, 45 minutes per class, the evening class met twice per week, 90 minutes per class. Also the two classes were taught by two different instructors, both with extensive ESL teaching experience.

The reason why the researcher decided to limit the study to high-beginning level students was that: 1) although strategies in the CALLA model are designed to be taught to students at all proficiency levels, learning strategies are particularly vital for less proficient and beginning-level students (Chamot et al., 1999); 2) fewer students enrolled in higher level classes resulting in only one class for each level; thus it was unrealistic to separate any class into control and treatment groups during class time.

The original sample was composed of 72 high-beginning level students, including 42 students in the treatment group and 30 in the control group. The sample total was reduced to 52, with 30 in the treatment group and 22 in the control group, due to absences on the days of the pre-test or post-test. Demographic data collected for the student sample by each class included age, gender, race/ethnicity, first language, and previous English

learning experience, etc. Among the 30 students in the treatment group, the ages range from 19 to 56, and the male and female ratio was 1:2. Students' first languages included: Arabic, Chinese, Dari, Japanese, Korean, Mongolian, Pashto, Punjabi, Spanish, and Vietnamese. On the other hand, there were 22 students in the control group, including 10 male and 12 female students. Students' ages range from 18 to 60 and their first languages also vary, including Arabic, Chinese, Filipino, Japanese, Korean, Mongolian, Thai, Tigrinya, and Vietnamese.

Protection of Human Subjects

Prior to visiting the ESL classes in the College of Alameda and collecting data, the researcher submitted an application for approval to conduct this research to the Institutional Review Board for the Protection of Human Subjects (IRBPHS). The application was submitted after formal approval of the proposal was obtained from the dissertation committee. After the application was approved and prior to the commencement of the study, a school site meeting the study requirements was located and a signed permission letter from the institution was obtained. The research kept all data and records confidential. No individual identities would be used in any reports or publications resulting from the study. Participation in the study was voluntary, and signed consent forms from all participants were acquired. A copy of the consent form is located in Appendix C.

Sources of Data Collection

The present study collected data from four different sources. Since the main focus of this study was the impact of listening strategy instruction on students' listening comprehension performance, students' notes taken during the listening comprehension activities, and other study materials were not collected and analyzed.

The main source for qualitative data was semi-structured, one-on-one interviews concerning students' understanding and practice of listening strategies. The purpose of conducting one-on-one interviews was to record in-depth individual opinions on listening strategies. The interviews were guided conversations using questions in an open-ended format, and the questions and responses were tape-recorded. Prior to conducting the study, the researcher invited experienced ESL educators and scholars to review the interview questions and provide feedback. The interview protocol can be found in Appendix D, and three validation letters regarding the interview protocol can be found in Appendix E.

The source of quantitative data was the listening comprehension portion of the Secondary Level English Proficiency Test (SLEP test, Form 1), developed by Educational Testing Service (ETS). The SLEP test was designed for evaluating students' English proficiency and making placement decisions and was made available to secondary schools and community colleges worldwide (English Testing Service, 2008). Although the current version of the SLEP test has been discontinued as of June 30, 2012, the effectiveness of the test on examining students' English proficiency has been proven. As a result, it was still utilized in the ESL program at the community college where the present research took place. The reliability of the test has been established using an internal-consistency measure. The average reliability score on the total test is 0.96 and on the listening portion is 0.95 (Educational Testing Service, 2003, 2008). The listening comprehension portion of the SLEP test contains 75 multiple-choice questions and testing time requires approximately 45 minutes. In the current study, the SLEP listening test was administered at both the beginning and end of the study to determine the

listening comprehension proficiency levels of participants before and after strategy instruction.

In addition, the researcher administered a background survey aiming to collect participants' demographic information. Participants responded to survey questions concerning age, gender, native language, and previous ESL learning experience. In order to maintain the confidentiality of students' participation, every participant's name was paired with a code number by the researcher. This code number appeared on all written materials. The list pairing the subject's name to the assigned code number has been kept separately from all research materials and available only to the researcher.

Lastly, the researcher conducted classroom observations to gain a more holistic understanding of students' learning in the classroom. The researcher visited both ESL classes during the regular class meetings for three weeks. During the classroom observations, the researcher observed and recorded students' activities related to listening practice in the form of field notes in order to better understand students' English proficiency and learning processes.

Procedures

Prior to the initiation of the research, the researcher randomly assigned the evening class as the control group and the morning class as the treatment group. The researcher also met with the instructor of the morning class and discussed the research timeline and delivery of the intervention.

Pre-Intervention Observations and Interviews

During the first week of Research Phase One, the researcher attended both classes and was introduced to student participants. Students were informed that the purpose of

the study was not to test them but rather to help them improve their listening comprehension abilities. The researcher explained to students that their participation would be completely voluntary and they could withdraw from the research at any time. Students were also instructed to fill out a background survey including questions on their age, gender, native language, and previous ESL learning experience. During the second week, the researcher continued observing the classes and started recruiting interviewees. All student interviews were conducted in a private setting and with students' permissions for audio taping. A total of eight students participated in the pre-intervention interviews, and two of them failed to provide valid responses due to limited language proficiency. Thus, only six students participated in the pre- and post-intervention interviews.

Pre-test

During the third week, which was also the last week of research Phase One, the Secondary Level English Proficiency Test (SLEP Test) was administered to both groups. The test took approximately 40 minutes in each group and was delivered via computers and external speakers in the classrooms. Students were reassured that the test results would not affect their grades for the class.

Before starting the second phase of the research, the researcher spent a week and half transcribing the observation field notes and interviews, grading the listening tests, and organizing and analyzing the data collected during the first phase.

Intervention

The intervention officially started in the fifth week of the research and was conducted by the researcher over a seven-week period. The strategy instruction sessions were conducted in the ESL classroom during the regular class time, and each session

lasted between 20 to 30 minutes long. The researcher decided which listening strategies to teach to the participants based on the findings of Phase One, in particular, students' listening problems.

Students' Listening Problems

During the pre-intervention interviews, the six interviewees described listening problems in their own words as they reflected on specific situations when they were listening in English. The researcher also kept written notes focusing on students' performance during listening activities in class before and during the intervention. A number of listening problems were identified by the interviewees and supported by researchers' observations. The three most common listening problems were: small vocabulary size, underdeveloped listening vocabulary, and fast speech rate. Other listening problems included inability to identify key words, a lack of background knowledge on specific topics, and taking notes on specific information.

Small vocabulary size. More than half of the students complained about their small vocabulary and how it affected their listening comprehension and communication in English. The quotes below from two interviews highlighted this point of view:

“The most difficult thing is the vocabulary, you know, the big words.”

“I got confused if there are a lot of words I don't know.”

Some students also provided possible reasons for this listening problem, as the following example showed:

...vocabulary. I don't know enough words to understand a listening passage. When I read something, I need dictionary most of the time, but it is hard to use dictionary while you are listening. Again, I think it is because I didn't like memorizing vocabulary.

Underdeveloped listening vocabulary. The second most common listening problem was that students could not recognize some words that they knew while they were listening. According to Goh (2000), the reason why some students knew certain words by sight but could not recognize them by sound was that the students could not match the sounds they heard with any script in their long-term memory. In other words, their listening vocabulary was underdeveloped.

In the study, two interviewees reported that they were unable to recall the meanings of some words immediately even though they understood the words when they read them. Consequently, they were unable to process the listening texts with those words. The followings are two excerpts illustrated this listening problem:

(when I am listening), I can understand a little bit here, a little bit there... See I understand the words, I know them when I see them, but if you put them in listening together, I don't know, I am confused then."

Y: Can you tell me what the most difficult thing is when you are listening in English?

M: Hmmmm, the pronunciation.

Y: Can you explain?

M: Because I have to listen twice and I have to see the words to know it. When I hear the word the first time without seeing it, I can't understand it.

Fast speech rate. Another common listening problem identified by the students was fast speech rate, either of pre-recorded listening materials or of an in-class "live" listening practice. For example, during the pretest, the researcher noticed that many students, in both control and treatment classes, complained about the fast speech rate of some of the listening passages. The following vignette illustrated how the control class students reacted to the fast speech rate of pre-recorded listening materials during the pretest:

Right after the third section (of the listening test) ended, most students immediately looked up, and their facial expression seemed frustrated and confused. Many of them dropped their pencils and sighed. A few students continued working on the answers, and they turned the test back and forth to read the map and the questions. Some students turned to their neighbors and murmured against the listening passages to each other. One male student looked at the researcher and said “what did he say? I don’t get it!” Without getting any answer from the researcher, he turned to another student on his left side and asked about her answers. Another female student looked at the researcher with unnatural smile, and she seemed a bit embarrassed about not being able to understand everything in the listening test.

Students’ responses in the interviews also confirmed that the fast speech rate could negatively impact students’ listening comprehension. The following are two reports describing this issue: “When everybody talks fast, I don’t understand.”

...oh and she (the teacher) sometimes speaks very fast and asks us to write down what she says, for example, some key words, or a sentence. Oh my god, it is so hard! I don’t ever understand what she says.

Other listening problems. The six students also identified other factors that challenged their listening comprehension, such as inability to identify key words, a lack of background knowledge on a specific topic, and taking notes on specific information. The following comments from two interviewees explained how these factors affected their listening comprehension:

“I know I should look for the key words, but sometimes it is hard to even tell which words are the key words in listening.”

“Usually I understand everything in daily conversation, but if it is about some other topics, like academic topics, I don’t understand. I only get 40% out of it.”

“Numbers are very difficult to listen to...the phone numbers, the address, they are hard to understand and write down”

Listening Strategy Instruction Preparation

Research has shown that one of the most efficient approaches to teach listening is by identifying listening problems and helping learners overcome such difficulties (Field

1998; Goh, 2000). However, previous research implemented listening strategy instruction without identifying students' listening problems (i.e. Carrier, 2003; Clement, 2007). In the present study, the researcher took into consideration learners' listening problems and designed a series of lessons targeting the listening problems that students identified prior to the intervention.

Since most students have identified a small vocabulary as one of their major listening problems, the researcher decided to designate a part of each lesson to vocabulary introduction and review. Also, since participants were at the beginning level, visual illustrations of the vocabulary were always provided. For example, during the first teaching session, the researcher presented through Powerpoint slides a list of common emotion words with matching facial expressions before letting students practice the target listening strategy.

Also, it is believed that learners who repeatedly complain about unfamiliar words were likely unaware of the importance of monitoring and directing their attention so that they could continue to listen to other parts which might provide context clues or clarifications (Goh, 2000). Thus, the researcher dedicated several lessons to metacognitive strategies, such as directed attention and selective attention, and emphasized the benefits of efficiently using these metacognitive strategies.

According to Goh (2000, p. 69), since "words are not heard in isolation but in specific contexts," listeners can utilize top-down processing strategies, such as inferencing and elaboration, to interpret or predict even when they do not recognize every word in the input. Thus, the researcher decided to include such cognitive strategies in the intervention to help students who heavily rely on bottom-up processing in listening

comprehension. Specific sub-strategies included voice and paralinguistic inferencing, kinesics inferencing, world elaboration and personal elaboration.

The researcher also included more complex cognitive strategies, such as note-taking strategy, to help students develop abilities to identify key words in a conversation or speech and take notes and reinforce the top-down process in listening.

Following the CALLA model, the researcher considered the lesson content as an essential component of the intervention. In order to integrate the strategy instruction into existing course curriculum, the researcher discussed the course content with the listening class instructors first and took textbook and other teaching material into consideration. In addition, during the strategy instruction design phase, the researcher also connected the content of the listening strategy instruction with the content of the SLEP test in order to provide test validity. A brief description of the instructed listening strategies and content for each lesson can be found in Appendix G.

Each lesson consisted of five steps: preparation, presentation, practice, evaluation, and extension. A typical teaching session started with preparation of the targeted listening strategies, such as discussion on the topic and introduction of new vocabulary.

Powerpoint slides were usually utilized as the medium for visually presenting the specific strategies and vocabulary. Following the researcher's explicit presentation of the strategies and the usefulness, participants practiced the listening strategies by working individually or in groups to complete a listening comprehension activity. Such comprehension activity could take the form of audio exercise, role play, group work, etc. Then students evaluated their strategy learning by presenting their work and discussing

what they had learned. Lastly, the researcher reminded students of strategies they had just learned and encouraged participants to apply those strategies to new tasks.

Post-test

During the twelfth week, which was also the week of research Phase Three, the researcher administered the post-test in both control and treatment groups. The students took the same form of the SLEP Test again, following the same test procedure. The researcher also reassured that the test results would not affect their grades for the class. Both the pre-test and the post-test were scored by the researcher and an independent scorer.

Post-Intervention Interviews

Individual student interviews were the means of collecting data from the participants to reflect their perspectives regarding the development of listening skills and their experience of listening strategy training. The researcher interviewed the same group of students again in order to compare individual's changes in listening strategy use and development of listening comprehension skills. The researcher scheduled each interview between 15 to 20 minutes long at the conclusion of the intervention and within a week after the administration of the posttest. The interview questions are entailed in Appendix D. Sample questions included, Question 2: "Do you feel your listening skills have stayed the same/gone down/gone up during this semester? Why?" Question 7: "In the last several weeks, you learned these listening skills. (Remind participants of a full list of strategies.) Which skills do you think are the most useful? Why?" Question 9: "Will you be able to use these listening skills in the future?"

Data Analysis

The research questions for this study were as follows:

1. How do community college ESL students change their listening strategies use throughout the intervention?
2. After the intervention, how do community college ESL students describe the usefulness of those strategies?
3. How does the explicit teaching of listening strategy affect students' listening comprehension performance as measured by a listening comprehension test?

Qualitative Data

The researcher first analyzed qualitative and quantitative data sets separately. The initial process of the qualitative data analysis involved transcribing interviews and organizing field notes. Then the researcher established a coding process to generate a description of the participants and recurring themes or categories. In order to identify listening strategies that students reported in the interviews, the researcher analyzed data using a predefined taxonomy of listening comprehension strategies identified, validated, and refined by O'Malley and Chamot (1990) and Vandergrift (1997) (Appendix A). The results of qualitative data analysis could answer the first and second research questions.

Quantitative Data

Concurrently, quantitative data were gathered and analyzed with Statistical Package for Social Sciences (SPSS). Demographic data included participants' gender, age, and first language in addition to previous English language study experience. In order to determine whether a treatment effect was associated with the interventions, the researcher examined the differences on the SLEP test scores between control and

treatment groups with an independent t test procedure. Each student's gain score (post-test minus pre-test) was computed, and an independent t test on the mean gain scores for the two groups was conducted. The analysis of quantitative data could answer the third research question.

The researcher then merged the qualitative and quantitative results during the interpretation. By directly comparing two different types of results, the researcher then discussed whether findings from one method agreed to or contradicted the other and determined the impacts of the explicit strategy instruction.

Background of the Researcher

The researcher has been working as a passionate language teacher for nearly 10 years. Prior to studying in the United States, she taught Mandarin to international students in China and accumulated a great deal of language teaching experience. Since 2007, the researcher has been actively working with children and adult ESL and Mandarin learners in a variety of settings in the San Francisco Bay Area: elementary after-school programs, private dual language immersion schools, community colleges, and universities.

The researcher obtained her Master's Degree in Teaching English as a Second Language from the School of Education, University of San Francisco, where her research led to developing a practical guide in helping Chinese students overcome academic language difficulties. Her current research interests include: effective learning strategies, bilingual and bicultural development, and technology-integrated curriculum.

CHAPTER IV

FINDINGS

Overview

This chapter reports the results of the data analysis for the three research questions set forth in this mixed methods study. The qualitative data were collected primarily through interviews and supplemented with class observations and background surveys. The qualitative interviews allowed the researcher and participants to engage in one-on-one dialogues. During the dialogues, participants shared their experiences using listening strategies in ESL classes as well as their perceptions of these strategies. The quantitative data were derived from the SLEP test, which measured students' listening comprehension proficiencies. The quantitative research enabled the researcher to examine the effects of listening strategy instruction on students' English listening comprehension performances. Research Questions One and Two were addressed from the collection of qualitative data. Research Question Three was addressed through findings from the quantitative analysis. These findings are presented below.

Qualitative Findings

The following section presents qualitative findings from interviews, observations, and background surveys that were relevant for answering the first two research questions. Six students who received interventions participated in the individual interviews, ranging in length from 15 to 30 minutes. The researcher observed the treatment class twice a week, for a total of three weeks prior to the intervention. She also observed both groups of students during the pre- and post-tests. In the background surveys, students responded to questions related to their cultural backgrounds, previous English learning experiences,

perceived listening abilities, etc. To convey the findings, recurring themes emerging from the coding and data analysis are highlighted along with selected quotations from participant interviews.

Interviewees' Background Information

The interview participants in the study were six community college ESL students at the beginning level. Participants' ages ranged from late 20s to early 50s. Their language backgrounds also varied: both Donna and Melisa speak Arabic; Ginni and Nina came from Spanish speaking countries; Jim's first language is Mongolian; and Ted's first language is Chinese. Although these students were placed at the same level, their previous exposure to English education ranged from zero to seven years. The six interviewees' background information is presented in the following section, with a pseudonym assigned to each participant by the researcher. Table 1 summarizes the demographic information of the interviewees.

Table 1

Demographic Characteristics of Six Interviewees

Name	Age	Gender	Other Language	Ethnicity	Years of Previous English Education
Donna	42	F	Arabic	Arab	1
Ginni	28	F	Spanish	Hispanic/Latino	0
Jim	50	M	Mongolian	Asian	2
Melisa	30	F	Arabic	Arab	3
Nina	37	F	Spanish	Hispanic/Latino	0
Ted	36	M	Chinese	Asian	7

Donna was from Yemen and had been living in the United States for 15 years. However, she had never received any formal English education until she enrolled in this community college one year ago. This was her third semester studying in the ESL program, and she thought that her listening ability was improved in the past year but still at the average level. She preferred learning English by talking to native speakers and watching TV shows and movies. According to Donna, she attended the ESL classes to improve her English skills so she could start working and have a better life.

Ginni came from Peru eight years ago. Before she moved to Northern California, she lived in Georgia for seven years with her husband and two children. This was her first semester attending this ESL program, and she had never taken any English class before, either in Peru or in Georgia. She explained that the reason was she was always busy working and taking care of her family. When she finally found time for herself, she decided to go to school to study English. She thought that her listening ability was very poor because she started from zero knowledge. She also felt a need for help in English speaking, particularly the social situations.

Jim was from Mongolia and a recent immigrant to the United States. He did not have any previous English learning experience in Mongolia. Although he had been attending this ESL program for two year, he stated that he did not see much improvement because he missed a lot of classes due to his work schedule. Thus, he identified his listening ability as poor. He preferred learning English by studying grammar, listening to audiobooks, and watching movies and TV shows. He took this class because he wanted to improve his English listening and speaking skills for the workplace. His long term goal

was to be able to listen to more audiobooks in basic electrical engineering and learn more technical terms in English.

Melisa was from Sudan, and this was her second semester attending the ESL program in this community college. She enrolled in the same listening class last semester, but she was advised to stay at the same level for one more semester because she was not ready to move up to the next level. Before she came to the United States, she learned English in Sudan for three years; however, she still thought that her listening skill was poor. She preferred learning English by studying grammar and translating English into her first language of Arabic instead of speaking with native speakers.

Nina came from Mexico two years ago and had been living in the San Francisco Bay Area with her whole family. Before she came to the United States, she had never taken any English class in Mexico. This was her first semester attending the ESL program where the research took place. She is a visual learner who said that she would understand the listening materials better if she could read the text in written form. In the background survey, she identified her listening ability as “average”. She preferred learning English by studying vocabulary and translating unknown words into Spanish. She wanted to get a major in the community college after she improved her English skills.

Ted was from China, attending this college as an international student. This was his first time studying in the United States, and he had only been in Northern California for one month when he first enrolled in the ESL listening class. Although he learned English in high school and college in China, he said that he did not build a good language foundation. He concluded that he “had no interest in learning English” because he had majored in Chinese language and most English classes were just about memorizing and

repeating. He answered that his listening ability was poor in the background survey. He also expressed the urgency of improving his listening skills because he wanted to apply to a graduate program in journalism and the deadline was in six months.

Listening Strategies and the Coding Process

The researcher identified the listening strategies in the verbal reports using a predefined taxonomy of listening comprehension strategies (Appendix A), which was identified, validated, and refined by O'Malley and Chamot (1990) and Vandergrift (1997). Each participant reported his/her listening strategy use in ESL listening twice-- before and after the intervention. When coding was completed, the researcher grouped together the reported strategy use for all participants by major categories in the taxonomy: metacognitive strategies, cognitive strategies, and socio-affective strategies. The next section describes the listening strategies by each category with representative examples to provide a framework for better understanding the findings of the study.

Metacognitive Strategies

Metacognitive strategies involve mental activities for directing language learning. In other words, it means processes designed for students to “think” about their “thinking”. There are three sub-categories metacognitive strategies: planning, monitoring, and evaluation.

Planning. The strategies of planning help learners develop an awareness of what needs to be done to accomplish a listening task and make appropriate action plan to overcome possible difficulties in the anticipated listening task. Four sub-strategies are included in this category: advanced organization, directed attention, selective attention,

and self-management. In the present study, participants reported using all four planning strategies after the intervention.

Advanced organization refers to clarifying the objects of a listening task and proposing strategies for successful completion of the task. Based on the definition and representative examples in the taxonomy, the utilization of this strategy may be evident in comments like “I read over what we have to do” or “I try to think of questions that teacher is going to ask.” The researcher, however, discovered that this strategy could be combined with other listening strategies. For example, when using advance organization together with selective attention, a learner’s report could include key phrases such as “I read the (listening comprehension) questions first,” which indicated an awareness of what needed to be done to accomplish a listening task.

Selective attention refers to deciding to attend to specific aspects of listening input or situational details that help comprehend the text and/or complete the task. Through the coding process, the researcher discovered that typical responses of using this strategy in student interviews included “I listen for the key words” or “I look for the words or phrases that...”

Directed attention has been defined as “deciding in advance to attend in general to the listening task and to maintaining attention while listening” (Vandergrift, 1997, p.392). According to Vandergrift, the utilization of this strategy is evident in learners’ comments like “I listen really hard” or “I focus on the listening carefully.” Similarly, in the current study, students reported using this strategy by stating “I listen very hard” or “I just listen to the teacher, try to focus.”

Self-management strategy includes understanding the conditions that help one complete the listening task successfully and managing oneself for the existence of those conditions. The representations of using this strategy could be very similar to those of directed attention. Evident comments are often like “I try to get in the frame of mind to understand the listening” or “I put everything aside and concentrate on what they are saying.” In the present study, students provided representative examples such as “I tell myself...not to think of anything else, and focus on the listening.”

Monitoring. The strategies of monitoring serve to assist learners to check, verify, or correct their listening comprehension or performance for a listening task. There are three types of monitoring strategies: comprehension monitoring, double-check monitoring, and auditory monitoring.

Comprehension monitoring refers to checking, verifying, or correcting one’s comprehension of the listening text at the local level. The taxonomy provided a representative example: “I just try to put everything together, understanding one thing lead to understanding another.” After the first round of coding process, the researcher couldn’t find any evidence indicating students’ utilization of this strategy. However, after further studying the taxonomy and carefully examining the data again, she found that one student actually reported using this strategy. The student commented that “I just listen and try to makes sense of it (the text), even though I don’t understand every word.”

Double-check monitoring, very similar to comprehension monitoring, refers to checking, verifying, or correcting own understanding of the listening task. However, the monitoring process maintains across the task or during the second time of the oral text.

The utilization of this strategy may be evident in comments like “I might catch it at the end and then I’d go back.”

Auditory Monitoring has been defined as “using one’s ‘ear’ for the language to make decisions” (Vandergrift, 1997, p.392). A typical representative example in students’ oral reports might be: “I use the sound of words to relate to other words I know.”

Evaluation. Using the strategies of evaluation, learners check the “outcomes of their listening comprehension against an internal measure of completeness and accuracy” (Vandergrift, 1997, p. 392). There are also three types of monitoring strategies: performance evaluation, strategy evaluation, and problem identification. Performance evaluation refers to judging one’s overall execution of the task; strategy evaluation means judging one’s strategy use; and problem identification refers to explicitly identifying the most significant aspect or resolution in a listening task. In the present study, the category of evaluation was the least reported among all the metacognitive strategies. Only strategy evaluation was reported by one student once.

Cognitive Strategies

Cognitive strategies involve the mental activities for manipulating the language to accomplish a listening task. Unlike metacognitive strategies, cognitive strategies directly deal with the incoming listening input. Based on Vandergrift’s taxonomy (1997), common cognitive strategies in second language listening included: inferencing, elaboration, summarization, translation, transfer, repetition, resourcing, grouping, note-taking, deduction/induction, and substitution. Only the cognitive strategies that were reported by participants in this study are discussed in this section.

Inferencing refers to using information within the listening text to guess the meanings of unfamiliar words or phrases associated with a listening task, to predict outcomes, or to fill in missing information. Within the strategy of inferencing, there are also different types of sub-strategies: linguistic inferencing, voice and paralinguistic inferencing, kinesic inferencing, extralinguistic inferencing, and between parts inferencing. The interview data indicated that the students utilized two inferencing strategies, namely, voice inferencing and kinesic inferencing.

Voice inferencing refers to using tones of voice to guess the meaning of unknown words or phrases in the listening. In this study, students' responses like "focus on the tones of voice" indicated their use of this strategy for listening comprehension.

Using kinesic inferencing, learners focus on facial expressions, body language, and even hand gestures to guess the meaning of unknown language items in the listening. The students' utilization of this strategy was evident in comments such as "the teacher's face just tells all" or "look at a speaker's body language and facial expression and guess that person's feelings and true meanings."

With the assistance of the elaboration strategy, learners use prior knowledge or conversational context and connect it with information gained from the listening text in order to predict outcomes or fill in missing information. Vandergrift's taxonomy (1997) included six sub-strategies in elaboration: personal elaboration, world elaboration, academic elaboration, questioning elaboration, creative elaboration, and imagery. In the current study, students reported the strategies of personal elaboration, world elaboration, and imagery.

Personal elaboration and world elaboration have very similar definitions. While world elaboration refers to using knowledge gained from experience in the world in general, personal elaboration focuses more on referring to previous personal experience. Representative comments from the students are “looking for context clues” and “hearing a familiar name of the (football) player.”

Imagery refers to using mental or actual images to represent information. Although it is often coded as a separate strategy category in related research studies, researchers (O'Malley & Chamot, 1990; Vandergrift, 1997) actually have viewed it as a form of elaboration. In this study, the researcher also coded it as an individual cognitive strategy category that was separated from other elaboration strategies. Students' utilization of this strategy is evident in comments such as “I picture the words in my mind” or “I relate the word that I heard to the picture of the thing.”

Translation strategy serves as “rendering ideas from one language to another in a relatively verbatim manner” (Vandergrift, 1997, p. 394). Quotes from students' interviews such as “I translate” or “I repeat what the teacher says in my head, but in Arabic” indicated the use of this strategy.

Transfer strategy involves using the knowledge of one language, such as cognates, to facilitate listening comprehension in another language. In the present study, one student utilized this strategy to relate English words to her first language, and her response was “sometimes I relate the words to Spanish, and sometimes it helps.”

Resourcing strategy refers to using available references of information about the target language, including dictionaries, textbooks, and listening transcripts. Students' comments such as “I look up the words in the dictionary” or “I look in the back of the

book” indicated their use of this strategy. Also, the observation data suggested that students using this strategy evidenced their extensive use of electronic translators during listening practice.

Note-taking strategy has been defined as “writing down key words and concepts in abbreviated verbal, graphic, or numerical form to assist performance of a listening task” (Vandergrift, 1997, p. 395). A representative example in students’ oral reports was “I only wrote down the main ideas with bullet points.”

Socio-affective Strategies

Socio-affective strategies concern interacting with other people or managing one’s own affections. Five sub-strategies fall into this category: questioning for clarification, cooperation, lowering anxiety, self-encouragement, and taking emotional temperature. In the current study, the students tended to use socio-affective strategies the least among all the strategies and only reported using the strategies of questioning for clarification and lowering anxiety to facilitate their listening comprehension.

Questioning for clarification involves asking for explanation, verification, or repetition about the unknown language items in the tasks. Quotes from students’ interviews, like “I’ll ask that person to repeat,” illustrated their utilization of this strategy.

Lowering anxiety serves to reduce anxiety through the use of mental techniques that make one feel more comfortable to perform a listening task. Students responded to this strategy as “I try not to rush my mind,” “I try to calm me down” or “I take deep breaths.”

Research Question One:

How Do Community College ESL Students Change Their Listening

Strategy Use throughout the Intervention?

Regarding the ESL students' listening strategy use before and after the intervention, the findings revealed that, in general, positive changes appeared in students' strategy use. These changes were: 1) improvement on metacognitive strategy use, 2) positive change in cognitive strategy use, 3) appearance of socio-affective strategy use, and 4) emergence of combined strategy use.

Improvement on Metacognitive Strategy Use

In general, the qualitative data revealed that students in the treatment class improved their use of metacognitive strategies after the intervention. Participants did not only broaden the range of their metacognitive strategy use, but also employed these strategies at a more sophisticated level. Furthermore, when examining the post-intervention strategy use within the metacognitive category, the data indicated a pattern that planning was most employed as compared to the other two categories. Participants reported using all four strategies of planning: advance organization, directed attention, selective attention, and self-management. Two monitoring strategies and one evaluation strategy were reported after the intervention.

From basics to a wider range. In the metacognitive strategy category, the strategies of planning, particularly direct attention and selective attention, were used predominately by all the interviewees. On the other hand, the reported strategy use of monitoring and evaluation was absent at the beginning but emerged remarkably after participants received the intervention.

Before the intervention, students had little knowledge of metacognitive strategies, and most of them simply employed strategies of directed attention and selective attention, or what they described as “listen carefully” and “pay attention to key words.” For example, in the initial interview with Ginni, the researcher first asked: “Do you use any methods or tricks to help you understand listening in English class?” Ginni looked puzzled and then shook her head. So the researcher changed the question and asked: “What do you have in your mind when you are doing listening practice?” Then Ginni answered: “I just listen. I listen very hard.” (First interview with Ginni, September 17, 2013)

Similarly, Jim could not identify any listening strategies during the initial interview; instead, he tried to describe his mental activities during listening practices in class. He said: “Hmmm, I don’t know. I just listen to the teacher, try to focus” (First interview with Jim, September 12, 2013).

As for Donna, she mentioned that she would pay attention to specific parts of the listening, or “the key words” as she described. She said:

...when I m listening to the teacher, or something he plays on the computer, I try to focus on the key words... like, like the big words, the vocabulary, I try to think of them, and also some words repeat a lot. (First interview with Donna, September 12, 2013)

The quotation above, however, suggested that by ‘key words,’ the students did not mean items that led to the meaning of the text, but rather words that they recognized, which might or might not be essential for understanding the text.

The other three participants either did not mention any metacognitive strategies at all or failed to provide valid answers to the researcher’s questions. Nina and Ted reported mostly cognitive strategies in the first interview. Melisa, on the other hand, failed to

understand the interview questions due to a lack of strategy knowledge. During the initial interview, the researcher first asked: “Do you use any methods or tricks to help you understand listening in English class?” Melisa answered: “I try to watch more TVs and listen to the radio.” Since Melisa’s answer was not related to any listening strategies, the researcher then changed the question and asked: “What are you thinking in your mind when you are listening in English?” Melisa looked at the researcher and she seemed confused. The researcher asked the question again by explaining it: “When you are doing listening activity in class, like the video clip your teacher played last week. What do you do to help you understand the listening better? Do you have any method? For example, do you focus on some parts of the listening text more? Or do you keep notes while you are listening?” Melisa looked embarrassed as she did not know the answer. After a few seconds of thinking, she said: “I don’t know. Yeah, I...” and she turned on a shy smile again (First interview with Melisa, September 17, 2013).

The data from the initial interviews illustrated that beginning-level students had not developed strategy awareness but learned to manage some basic level of strategies through previous language learning experience. However, students’ metacognitive strategy use at this stage was extremely limited, and their approaches to an anticipated task could be inaccurate, such as focusing on the wrong “key words.” Moreover, none of these students were aware of their own mental processes or cognizant of the demands of their learning tasks.

In the post-intervention interviews, participants described using various metacognitive strategies in English listening. In the planning strategies, students reported using self-management and advance organization in addition to the earlier identified

direct attention and selective attention. For instance, when asked again if she had any strategies to help her understand the listening text, Nina responded that she recently began to use the strategy of self-management to mentally prepare herself for a listening text. She stated that: “I tell myself... not to think of anything else, and focus on the listening.” She believed that using self-management helped her “get in the frame of mind to understand English listening better” (Second interview with Nina, November 18, 2013).

Jim also responded positively to using more metacognitive strategies for listening. He stated that he was able to apply advance organization together with selective attention when he took the posttest in the study. Jim said:

...when I take the (listening) test, I read the questions first. If a question starts with “where”, for example, I know, okay, it is a question about location, and I will try to look for information about a location in the listening. Or if it is a “when” question, then I will focus on information about the time or date. (Second interview with Jim, November 20, 2013)

What Jim described in the above quotation was a good example of using different listening strategies together for a single listening task. By reading over the questions in the test, he was able to predict the main ideas of the listening text to some extent. Also, thinking of these questions while he was listening helped him naturally focus on specific aspects of the language input. To sum up, by employing the strategy of advance organization, Jim developed an awareness of what needed to be done to accomplish an upcoming listening task and proposed appropriate strategies in advance.

Unlike most of the participants, Ted held mixed feelings about his metacognitive strategy use after the intervention. On one hand, he recognized the improvement on his listening skills and admitted that he learned to pay more attention in general to the listening text and not to be distracted by unfamiliar words. Also he learned that attending

to specific parts in a listening text could be more effective in terms of capturing useful details. As a result, his listening ability in academic situations has improved. He stated,

Last weekend, I went to a lecture, and I was very surprised that I understood most of it. At the beginning of this semester, I didn't understand much when I listened. I mean, there were still some words I didn't understand in that lecture, but I felt that these words didn't cause big problems. (Second interview with Ted, November 18, 2013)

On the other hand, he also felt frustrated that he still had not found THE listening strategy that helped him “tune his ear” overnight so he could understand the English he heard on the TV or the VOA radio station. The researcher explained that there was no magic way in improving English listening ability, and even if such a magic strategy existed, it would still take some practice time to master this strategy. Then, Ted said: “Yeah, then I just wish that we could have had more practice after each lesson.”

The interview data showed that planning was the most employed subcategory among all the metacognitive strategies. By the end of the intervention, students were able to utilize all four planning strategies. On the other hand, monitoring and evaluation strategies were much less utilized. Only two monitoring strategies and one evaluation strategy were reported in the second interview.

Better quality of strategy use. In addition to the use of a wider range of metacognitive strategies, positive changes in the quality of students' metacognitive strategy use throughout the intervention also occurred. Participants were able to better articulate their strategies and be more accurate about what specific aspects they should attend to during listening. In addition, students reported using various metacognitive strategies that were not even included in the strategy instruction.

Before the intervention, students had not developed the concept of listening strategy, and most of them merely employed basic level metacognitive strategies like

directed attention and selective attention. For example, the strategy of selective attention was described as the “key words” strategy by the students during the first round of interviews. However, the students did not mean to describe items that led to the meaning of the text; instead, they referred “key words” only to words that they recognized, which might or might not be important for comprehending the listening text.

As discussed earlier, the strategies of directed attention and selective attention were used predominately by all participants throughout the intervention. After comparing students’ comments on the strategy of selective attention before and after the intervention, the researcher found that although students continued using the same strategy after the intervention, they improved the quality of their strategy use as a result of the intervention. More specifically, the students were able to better articulate the strategy and were more accurate about what specific aspects they should attend to during listening after the intervention. For instance, Ginni shared how she utilized this strategy to facilitate her listening comprehension after she learned it from the intervention:

... and just like what you taught us, focusing on the key words, like the stressed words, or the order words—first, second, third, next, last, etc., and I put these key words together, and it really helps me understand the main ideas of the whole speech. (Second interview with Ginni, November 20, 2013)

Through the strategy instruction, Ginni learned that ‘key words’ were not just fancy vocabulary that she kept hearing in a listening text; rather, key words or key phrases were the items that contained essential information for comprehending the text. By using the strategy of selective attention effectively, students could gain more control of the listening process and approach the listening task more accurately.

The researcher decided not to include more complex strategies in the intervention due to students’ limited English language proficiency. However, several participants,

including Donna, Melisa, and Nina, reported using these strategies in the second interview, and they were better able to address how they approached the listening tasks using these strategies.

Double-check monitoring has been defined as checking, verifying, or correcting one's own understanding during the second time through the oral text (Vandergrift, 1997). The researcher did not design any specific lesson on double-check monitoring but only briefly mentioned this strategy in some of the listening practices during intervention. However, one student, Donna, reported how she employed this strategy to facilitate her understanding of the listening materials. According to Donna, she was able to utilize this strategy together with other strategies to help her understand the listening materials. She said:

I would write down the parts that I understand in my language, and I try to write down as much as I can. Then later, when I listen for the second time, I just check if my notes make sense, you know, after I put everything together, to see if it sounds right. (Second interview with Donna, November 18, 2013)

As illustrated in the above quotation, Donna utilized double-check monitoring during the second time of the oral input to check and verify her understanding of the listening text. In the meantime, she also used two cognitive strategies, note-taking and translation, to facilitate her comprehension during the listening task.

For Melisa, after the intervention, she not only understood the researcher's questions in the second interview but also successfully provided valuable information on her metacognitive strategy use. She reported two metacognitive strategies that were not taught in the intervention, namely, self-management and comprehension monitoring. The excerpt below shows how Melisa utilized self-management and comprehension monitoring to facilitate her listening comprehension:

- Interviewer: Can you tell me when you are listening to a lecture or conversation in class, do you have any strategies or methods to help you understand the listening better?
- Melisa: Yes, I do. I try to listen closely.
- Interviewer: Okay, great. Can you tell me a little bit more?
- Melisa: Hmm, I put all other thoughts away and just focus, focus my mind on the what the people (in the listening) are saying.
- Interviewer: Excellent! Any other strategy or method?
- Melisa: Hmm...yea, sometimes I just listen and try to makes sense of it (the text), even though I don't understand every word (Second interview with Melisa, November 18, 2013)

As illustrated in the above quotes, Melisa employed the strategy of self-management to develop an understanding of what needed to be done to accomplish a listening task and make appropriate plan to overcome potential difficulties in the task. The utilization of a self-management strategy was evident in her comments of “I try to listen closely” and “I put all other thoughts away and just focus my mind on what the people are saying.” In addition, she also used the strategy of comprehension monitoring to check and verify her comprehension of the listening text at the local level. Her utilization of the comprehension monitoring strategy was evident in the response “I just listen and try to makes sense of it (the text), even though I don't understand every word.”

Nina also reported a metacognitive strategy, namely, strategy evaluation, which was not included in the training. By employing strategy evaluation, she judged her own listening strategy use during listening practices. Nina stated,

When I listen, I don't try to focus too much to the individual word, especially the big fancy vocabulary. I used to pay too much attention to them. Because then you just have all the words here and there but don't make any sense if you put them together (Second interview with Nina, November 18, 2013).

Positive Changes in Cognitive Strategy Use

Regarding the cognitive strategy category, the results from the interviews and observations indicated that students made positive changes by shifting their strategy use

from a bottom-up to top-down level. The data from the initial interviews showed that the strategies of resourcing and imagery, followed by transfer, were highly utilized by the participants. These results suggested that most students predominantly relied on bottom-up strategies, such as transfer, for detailed comprehension. A few students reported that they occasionally employed top-down strategies, such as imagery, to visualize the context of the listening texts. After the strategy intervention, the tendency of heavily relying on bottom-up strategies decreased dramatically; while top-down (e.g., elaboration and inferencing) or more sophisticated strategies (e.g., note-taking) emerged.

Less bottom-up strategies. Before the intervention, participants tended to resort to bottom-up strategies, such as transfer, translation, and resourcing. However, these strategies were more surface-processing and only facilitated comprehension on the word level. Thus, when students failed to understand or missed chunks of information, they simply relied on replaying the listening materials.

For example, in the initial interview with Ginni, she reported that sometimes she used her knowledge of Spanish, primarily cognates, to understand English. The following excerpt illustrates how Ginni utilized transfer strategy to relate some English words to her first language, Spanish:

Ginni: ...sometimes I relate the words to Spanish, and sometimes it helps.

Interviewer: How do you do that? Can you give an example?

Ginni: Hmm...I, sometimes, I hear a word that I don't know, and I listen to it more carefully in the second time, and I say, ah, I know a similar word in Spanish.

Interviewer: Okay, great. Can you think of an example? What English word for example?

Ginni: Hmm...oh, today the teacher told us a word—private. And at first I don't know what the meaning is, but I guessed it because it sounded like “privada” in Spanish. (First interview with Ginni,

September17, 2013)

According to Ginni, this method only worked well if there happened to be cognates in the listening text; however, she also admitted that sometimes she found that her initial guesses were actually incorrect. She commented: “Then, I have to turn to my Spanish/English dictionary for help.”

Using translation strategy, students rendered ideas from the English language to their first languages in a relatively verbatim manner (Vandergrift, 1997). Both Jim and Melisa reported using this strategy for listening comprehension before the intervention. In the initial interview, when asked if he used any methods to help understand the listening better, Jim answered directly that “I translate.” According to him, he had to translate what he heard in English to Mongolian in order to comprehend the meaning of the speaker. He stated that he have been heavily relying on translation strategy for years (First interview with Jim, September12, 2013). Similarly, Melisa also reported using translation extensively. She stated: “I repeat what he (the teacher) says in my head, but in Arabic.”(First interview with Melisa, September17, 2013)

Resourcing strategy referred to using available reference sources of information about the target language, including dictionaries, textbooks, and prior work (Vandergrift, 1997). During the pre-intervention classroom observation, the researcher noticed that more than 10 students used dictionaries or electronic translators in class, especially during the listening and speaking practices. In the initial interviews, two students identified using reference sources, including dictionaries and textbooks, when they had trouble understanding the listening materials. For instance, Ted stated that he often listened to the Voice of America (VOA) Radio Station to practice listening; if he did not

know a word in the listening, he would write it down phonetically and go back to it later. He would then look up this word in the dictionary.

Similarly, Nina also reported using the resourcing strategy extensively for listening comprehension. She said: “I have to listen two times and I have to see the words to know it.” According to her, she was a visual learner so seeing an English word in the written form, either from the dictionary or transcript, helped her understand the meaning. She stated,

I didn't understand much the first time. The second time, I understand better. Because the first time, I don't know the words, many words. But the second time, I looked up these words (from the provided transcript) in the dictionary and I understand what they are talking about. (First interview with Ted, September 19, 2013)

After the intervention, students decreased their use of bottom-up strategies dramatically. Only one student, Donna, reported using resourcing strategy in her second interview. As Donna explained, she would still use electronic translator sometimes, but it was only because that she needed to translate some of the “big words” to her first language. According to her, otherwise she did not feel that she had any difficulties during listening practices in class (Second interview with Donna, November 18, 2013).

More top-down strategies. Before the intervention, students occasionally utilized one top-down strategy, namely imagery, to wildly guess the meaning of listening passages. Imagery referred to using mental or actual pictures to represent information (Vandergrift, 1997). Students who reported using this strategy could “picture the words in their mind” and used these mental images to facilitate their understanding of the listening tasks.

At the beginning of the research, Nina shared her use of imagery strategy in ESL listening practices. She stated that “I picture what I hear in my mind. I can make the

relationship between the word I heard and the picture of the thing.” (First interview with Nina, September 19, 2013) Similarly, Donna said: “I make a picture in my mind about the people who are talking in the listening, and I try to get an idea of what they are talking about there” (First interview with Donna, September 12, 2013).

After the intervention, in general students reported using more top-down strategies, such as inferencing and elaboration, and other complex strategies like note-taking. For example, Jim reported that he had been utilizing the strategies of voice inferencing and kinesic inferencing in English listening. He stated that he would focus on the tones of voice, such as “the happy tone or the angry tone,” when he was doing listening practices in class. When he was in a face-to-face conversation with someone, instead of asking “pardon” repeatedly, Jim felt that now he could look at one’s body language and facial expression and guess his or her true meanings (Second interview with Jim, November 20, 2013).

Ted had a similar experience with regard to utilizing inferencing strategies for listening comprehension. He expressed that he resorted to the kinesic inferencing strategy to widely guess the meanings of a speaker. After he learned and practiced this strategy in the intervention, he also applied this strategy in his daily oral communication outside of the classroom. He stated: “Yeah, just like what you taught us, looking at a speaker’s body language and facial expression and guess that person’s feelings and true meanings” (Second interview with Ted, November 18, 2013).

Elaboration was another top-down cognitive sub-category that participants reported after the intervention. It has been defined as using prior knowledge from outside the listening text and relating it to information received from the listening text in order to

predict outcomes or fill in missing information (Vandergrift, 1997). As discussed in the previous section, six types of elaboration strategies have been identified: personal elaboration, world elaboration, academic elaboration, questioning elaboration, creative elaboration, and imagery. The strategies of personal elaboration and world elaboration were taught in the intervention, and students' responses in the second interviews indicated that they had applied these two strategies to practice. As Donna described, after she learned this strategy in class, she started looking for context clues in different listening practices, whether a conversation or a short speech. According to her, knowing where a conversation happened could help her better understand the main ideas of the listening text (Second interview with Donna, November 18, 2013).

Jim also shared the similar experience of using elaboration strategy after the intervention. He reported that he utilized the world elaboration strategy to fill in the missing information in a recent real-life listening situation. He said,

It (world elaboration) actually helps me in some unexpected ways. For example, the other day I turned on the radio while I was driving, and it was about some sports game. Because I missed most of the beginning part, I didn't know what game it was right away. Then, I heard a familiar name of the players, and I knew immediately that this was a football game" (Second interview with Jim, November 20, 2013).

Other sophisticated strategies that emerged after the intervention included note-taking and imagery. Two students reported on utilizing the note-taking strategy. Melisa stated that she used the note-taking strategy during academic listening practices in class. According to her, she was most impressed by the note-taking strategy in the intervention. Before the intervention, her understanding of "note-taking" was just following the instructor and copying down whatever he/she wrote on the white board. However, as she complained, "the instructor didn't always write down the important points appeared in

the tests.” During the listening strategy instruction, Melisa learned how to take notes effectively during listening and how to write down key words in abbreviated verbal or bulletin form. She expressed that her notes were much more organized and informative since she “only wrote down the main ideas with bullet points” (Second interview with Melisa, November 18, 2013).

Nina’s experience was similar to Melisa. She reflected on how she utilized the note-taking strategy differently by comparing with her note-taking practice before the intervention:

...I also take notes during listening. Before I could never do that because the speaker is too fast and I just couldn’t keep up with the speed. I ended up having a word here and a word there. They don’t make sense. Now I know that I shouldn’t write down everything I hear but just focus on important things, like topics, nouns, and verbs... (Second interview with Nina, November 18, 2013)

Appearance of Socio-Affective Strategy Use

With respect to the socio-affective category, fewer strategies were reported in general. This could be due to the nature of the data collection source. According to Vandergrift (1997), the nature of verbal reports is not conducive to eliciting learners’ responses regarding socio-affective strategies. Thus, no data indicated participants’ use of socio-affective strategies at the beginning of the study.

When examining the strategy changes after the intervention, the researcher noted that the participants from the treatment class widely utilized one socio-affective strategy, namely, lowering anxiety. More than five students were observed that taking a deep breath before the post-intervention listening test. Or as Nina described, she would try not to rush her mind and keep calm during the listening. On the other hand, no data indicated that students in the control group employed the strategy of lowering anxiety during the post listening test.

Other reported strategy in this category included cooperation and questioning for clarification. During the intervention, the researcher tried to engage students in peer or group activities in each instructional unit. The classroom instructor also helped group together students from different language backgrounds so they could have more opportunities to speak English in class. The researcher clearly noticed that students started asking questions and sharing information with each other to complete the group task. For instance, when teaching the inferencing strategy, the researcher assigned students to work in pairs and express different emotions with different tones of voice. At the beginning of the practice, one student did not know how to express the feeling of excitement with only her voice, so she and her partner discussed the differences between “excited tone” and “happy tone.” During the practice, students constantly asked each other “What did you just say?” or “What does that mean?” for repetition and clarification.

The data from the second interviews also indicated this trend. Half of the participants mentioned that they would ask the interlocutor to repeat what he/she just said. For example, Melisa stated that: “I will ask that person to repeat, I will say ‘pardon?’ or ‘would you say it again?’ till I can understand” (Second interview with Melisa, November 18, 2013). Similarly, Ted expressed he felt more comfortable to ask questions especially for clarification during the listening class. He said: “I will raise hand and ask the teacher to repeat what he said” (Second interview with Ted, November 18, 2013).

As for Ginni, she reported that she used questioning for clarification together with other strategies, such kinesic inferencing and selective attention, to facilitate her understanding of English listening. She shared her recent parent-teacher meeting experience as an example. She expressed that before she participated in the strategy

intervention, she was always too embarrassed to ask for any repetition or clarification when she was having a conversation in English. She explained that she was very self-conscious in front of her son's teachers because of her limited English proficiency.

However, after Ginni learned the strategies in the intervention, she realized that she could employ some of the strategies to help her understand the teacher. She stated that although she still felt shy to speak English in the recent parent-teacher meeting, she tried to ask more questions or request explanation from the teacher (Second interview with Ginni, November 20, 2013).

Emergence of Combined Strategy Use

Another positive change in the reported listening strategy use was the emergence of using strategies in combination. As shown in the previous sections, before the intervention, participants reported using a variety of listening strategies of each main category; however, the tendency was to employ a single strategy at each time. Interestingly, after the intervention, participants seemed to be able to combine multiple strategies, either within the same category or from different categories, and apply them together in a listening task.

For instance, Jim reported using two metacognitive strategies together in a recent listening test. Before each listening passage, he utilized advance organization strategy to clarify the objectives of the listening task and propose appropriate strategies for test taking purpose. He emphasized that combining listening strategies helped him complete the task successfully.

Nina also shared that she employed two strategies before the listening practice to help her listen in English. A little differently from Jim, Nina combined two types of

strategies, one from the socio-affective category and another from the metacognitive category. According to Nina, she utilized the socio-affective strategy of lowering anxiety to make her feel more competent and reduce listening anxiety. Also, she employed self-management, a metacognitive strategy, to develop appropriate action plan to overcome difficulties in the listening task. She stated: “Before I listen, I try not to rush my mind. I tell myself to calm down, not to think of anything else, and focus on the listening.”

(Second interview with Nina, November 18, 2013)

Similarly, Donna mentioned using multiple listening strategies from different categories. As quoted earlier, she would employ note-taking, a cognitive strategy, when she listened to a speech, and she would write down the main ideas and other important information as much as she could in her first language. Then during the replay, she utilized double-check monitoring, a metacognitive strategy, to check and correct her understanding of the speech.

Research Question Two:

After the Intervention, How Do Community College ESL Students

Describe the Usefulness of Those Strategies?

All students participating in the post interview recognized the positive effects of using the listening strategies. In addition, they also described their views of these strategies and the usefulness of the strategies. Their responses could be categorized into the following aspects: their perceived listening improvement in academic listening and real world listening situations, raising strategy awareness, and increasing confidence in English listening abilities.

Perceived Listening Improvement

In general, participants' responses indicated that they had observed improvement in their listening skills after the strategy instruction. During the second interviews, when asked if their listening skills stayed the same, went up, or went down as a result of the strategy instruction, all six participants responded that their skills had gone up. While participants like Donna, Jim, and Ginni expressed that their listening skills had improved a lot, Ted thought that he had made some improvement in English listening, and Melisa and Nina felt that they had only improved a little. Students reported their perceived improvements on listening comprehension by emphasizing their increased test scores and better performance in academic listening and daily listening situations.

Academic listening. Students who effectively utilized strategies could overcome their weaknesses in academic listening to some extent. These weaknesses might include being anxious during the listening, or being distracted when they heard unfamiliar words, thus losing track of the material (Ozeki, 2000). In the present study, students believed that they had made much progress in terms of overcoming these weaknesses and enhancing their academic listening abilities.

For instance, both Donna and Melisa described how listening strategies helped them attend to the listening tasks and increase their academic listening performance. In the second interview with her, Donna expressed that she learned to pay attention in general and not to be distracted by unfamiliar words. She believed that she had made much progress on improving her listening comprehension during listening practices in class. At the end, Donna proudly announced: "I can pretty much pick up everything."

Although Melisa did not rate her listening improvement as very high, she also commented that she better comprehended the listening text in class. She expressed that before the intervention, she could not focus on the listening well and always got distracted by unfamiliar words. She stated: “I got confused easily if there are a lot of words I don’t know.” After the strategy instruction, she was able to efficiently utilize various listening strategies to overcome her listening difficulties and successfully accomplished the listening tasks.

Ted’s case was not different from the previous two participants. He stated that before he learned the listening strategies, he thought that he could not complete a listening task unless he understood every word in the listening text. As a result, when he encountered unknown words or phrases, he tried to spell the words phonetically so he could look them up later. The distraction usually caused his losing track of the listening text and missing the subsequent parts. His method did not help him understand the listening materials, and his frustration kept building up as he tried to practice listening more and more. During the strategy instruction, he learned to pay attention in general and not to be distracted by unfamiliar words. Also he realized that attending to specific parts in a listening text could be more effective in terms of capturing useful details. Consequently, he became more attentive to listening practice and his listening ability in academic situations has improved. He stated that he no longer felt uncomfortable with the new words in listening text based on his recent experience of attending a lecture.

Some students noticed their improvement in academic listening from their enhanced test performances. For example, in the second interview with Ginni, she mentioned twice that her score for the latest monthly listening test was much higher than

the previous ones. She attributed the success to the strategies of directed attention and selective attention. She said that “I listen carefully to the teacher or listening materials, and pay more attention to the key words” (Second interview with Ginni, November 20, 2013). She reported that she put the key words together and comprehended the oral input much better than before.

Jim also shared that his recent performance in the listening test had improved and he thought that “it was because I learned these strategies.” He stated that he did not know how to answer listening comprehension questions before the intervention. At the beginning of the research, he identified his listening ability as poor in the background survey because he often felt aimless when he was doing listening practice in class. He said: “I don’t know how and where to get answers” (First interview with Jim, September 12, 2013). After he learned different listening strategies and practiced listening during the two-month intervention, he became more aware of his listening problems and started utilizing appropriate strategies to overcome the obstacles. He expressed that he would scan all the questions quickly before a listening text started, so he could use the obtained information to clarify the objectives of this listening task. By employing the strategy of advance organization, Jim proposed to use selective attention to pay attention to the specific parts of the text that contained the answers to the listening comprehension questions.

Real world listening. Participants used the listening strategies they had learned not only in class but also in other situations. For example, Melisa exercised the strategy of elaboration when listening to radio stations during her daily commute. She also mentioned that she used inferencing with non-linguistic clues when she was watching

movies and TV shows with her children. She admitted that it was difficult to employ these strategies at the beginning because she was “so used to enjoying the movies and shows in Arabic.” However, she realized that she “really needed to work on the listening” for many practical reasons, especially in order to spend quality time with her children. She said: “My kids start to speak English more and more at home, and I want to understand them just like other mothers. I want to help them do homework too. I need to learn English!” (Second interview with Melisa, November 18, 2013) As she practiced them, she became more and more accurate at guessing the meanings of a listening text. She also found that thinking while listening could be more enjoyable than just listening.

As for Ginni, she reported that she benefitted from the listening strategies in social situations outside of the classroom. She mentioned that she used the strategies of kinesic inferencing, selective attention, and questioning for clarification when she was in a parent-teacher meeting recently. She expressed that she always had a difficult time communicating with her son’s teacher because the teacher talked too fast, but Ginni was too embarrassed to ask for any repetition or clarification. She said that because of her limited English proficiency, she felt that she could not be actively involved in her son’s schooling. However, after Ginni learned the strategies in the intervention, she realized that she could employ some of the strategies to help her understand the teacher. She said that she used kinesic inferencing strategy to guess whether her son’s school performance lately was good or bad because “the teacher’s face just tells all!” Also, she stated that though sometimes she still felt shy to speak English, she tried to ask more questions or request explanation when she was in a meeting with the teacher. According to Ginni, she

felt so happy and motivated now because she finally saw some improvement in her English listening (second interview with Ginna, November 20, 2013).

Raising Metacognitive Awareness

Before the intervention, students did not know the existence of listening strategies which would help improve their listening skills in various ways. Through receiving the listening strategy instruction, students became aware of which strategies they should use, when to use them, and how to use them in order to successfully complete a listening task.

For instance, as illustrated in the earlier section, Ginni became aware of her weakness in listening by reflecting where she made mistakes in a real world situation task—communicating with her son’s teacher. This awareness led her to make efforts to overcome the weakness. Instead of receiving oral input passively, Ginni started to utilize various listening strategies, including inferencing, selective attention, and questioning for clarification.

It also seemed that the all participants tended to utilize different strategies in combination in order to maximize the effectiveness of the listening strategies. In addition, they employed overarching metacognitive strategies to plan in advance and monitor through the listening process.

As mentioned earlier, Jim reported using two metacognitive strategies together in order to achieve a higher score in the post listening test. He stated that before each listening passage, he would read the questions first and then try to find useful information in the listening text based on the questions. Thus, he utilized the strategy of advance organization to clarify the objectives of an anticipated listening task. Then, he proposed to use selective attention strategy to successfully complete the listening task. Similarly,

Donna mentioned that she used two cognitive strategies together, note-taking and translation, to facilitate her comprehension during a listening task. In the meantime, she also employed double-checking monitoring to check and verify her understanding during the second time through the listening text.

Increasing Confidence in Listening Abilities

Data also showed that students perceived themselves as more confident listeners as a result of utilizing the listening strategies. As evidenced in the background surveys, students reported a lack of confidence in their listening abilities before the intervention. Over 60% of the participants reported their listening abilities as either “poor” or “very poor”. About 25% of the students rated their listening abilities as “average”, and less than 15% of the students viewed themselves as “good” or “very good” listeners. Among the six interviewees, Ginni thought that her listening skill was very poor; Jim, Ted, and Melisa identified their listening abilities as poor; and Nina and Donna only thought of their listening skills as average.

The data from the initial interviews also indicated students’ lack of confidence in English listening. For instance, Ted stated that he was nervous and not sure if he could meet the minimum requirement on the English proficiency test for applying to the graduate program. Ted was lacking confidence because according to him, he had been studying and practicing listening at least eight hours a day but still could not understand a short speech in English (First interview with Ted, September 12, 2013). Similarly, Jim also expressed a lack of confidence in his listening ability during the first interview. After he told the researcher that his score on the recent listening quiz went down, he asked:

“Do you think it is my problem? I did all the homework and I practice and practice, but why is my score getting lower?” (First interview with Jim, September 12, 2013)

However, after the intervention, although students expressed that some more sophisticated strategies demanded more mental processing, they recognized the benefits of using these listening strategies. As illustrated in the previous sections, such benefits included improving their communication skills, enhancing their listening comprehension performances, and increasing listening test scores. In fact, students stated that as they practiced the listening strategies, they advanced the utilizations of the strategies in a more systematic way and gained more confidence in listening. For instance, Ginni stated that she became more comfortable communicating in English after the intervention because somehow these strategies provided her with more confidence. Similarly, when asked whether her listening skills had increased, decreased, or maintained at the same level this semester, Donna immediately responded that her listening skills had increased because she can “pretty much pick up everything” (Second interview with Donna, November 18, 2013). Also when talking about her listening comprehension performance in class, Donna again expressed her confidence by saying “I don’t have any difficulty in listening”. Despite the gap between her perceived and actual listening skills, Donna’s responses indicated that she had gained a great amount of self-confidence in English listening.

Summary of Qualitative Findings

The qualitative data from the interviews, observations, and background surveys provided in-depth information on the effects of explicit listening strategy instruction. These effects included students’ positive changes in their listening strategy use after the intervention and the benefits that students received by utilizing these listening strategies.

Regarding the changes in listening strategy use, the qualitative findings revealed some patterns in the community college ESL students' listening strategy development throughout the intervention. First, students reported using metacognitive strategies to a greater extent and at a more advanced level. Also, students tended to articulate their strategies better after the intervention. Second, a positive change appeared in students' cognitive strategy use. As the total reported cognitive strategy use increased, the use of certain surface-processing cognitive strategies, such as translation, decreased sharply. Students resorted to top-down and more sophisticated strategies, such as inferencing and note-taking. Third, comparing to the other two categories, students reported using socio-affective strategies the least due to some practical reasons. However, there appeared to be a trend of using these strategies to lower listening anxiety and asking for clarification. Finally, with respect to the use of strategies in combination, students seemed to employ listening strategies more systematically and to become more efficient in using multiple strategies to assist listening comprehension. These findings regarding the changes in students' cognitive strategy use indicated that strategy instruction did guide beginning-level ESL listeners to advance their strategy utilization. By incorporating various strategies at a more advanced level, students learned to cope with the listening input more effectively.

The qualitative results also revealed that students perceived the listening strategies as helpful in their English learning. First, students observed improvements in their listening abilities in both classroom and real world situations. After receiving the strategy instruction, they enhanced their listening comprehension abilities, including test performances. They also apply these strategies beyond the classroom and improved their

oral communication skills in the real world. Second, students raised their metacognitive awareness as a result of the strategy instruction. They became more aware of their weakness in English listening and more purposeful in using different strategies for a listening task. Finally, students increased their self-confidence in English listening after the strategy instruction. As they advanced the utilization of the listening strategies, they became more comfortable listening and speaking English, thus felt more confident with their listening abilities.

Quantitative Analysis

Research Question Three:

How Does the Explicit Teaching of Listening Strategy Affect Students' Listening Comprehension Performance as Measured by a Listening Comprehension Test?

Before conducting an independent sample t test, the researcher tested several assumptions using SPSS, including no significant outliers, normal distribution of scores, and homogeneity of variances.

In order to detect any outliers, the researcher first converted the raw data to z-scores. According to Mertler and Vannatta (2009), univariate outliers could be detected by transforming the raw data to z-scores. With the sample size between 10 and 100, any z value in excess of ± 3.00 should be considered an outlier. The researcher found that no z value greater than +3.00 or less than -3.00 and concluded that no significant outlier existed in the data.

In order to test whether the data were normally distributed, the researcher first set a null hypothesis and an alternative hypothesis. In this case, the null hypothesis was that the data was normally distributed, and the alternative hypothesis was that the data was

not normally distributed. Since the dataset was small than 2000 elements, the researcher chose to employ the Shapiro-Wilk test in SPSS. As shown on the first right column (Sig.) in Table 2, the p-values were .589 and .708. As a result, the researcher rejected the alternative hypothesis and concluded that the data came from a normal distribution.

Table 2

Results from the Shapiro-Wilk Test

	Group	Shapiro-Wilk		
		Statistic	df	Sig.
gainscore	1	.972	30	.589
	2	.970	22	.708

The last assumption that the researcher tested was that there were homogeneity of variances. The null hypothesis was that the variances of the two groups were equal. Since the p-value from Levene's Test was .420, which was higher than the critical value of 0.05, the equal variances could be assumed. Thus, the null hypothesis of equal variances was accepted. In other words, the assumption of homogeneity of variances was met.

The SLEP Test Manual provides conversion table to convert raw scores (number of correct responses) on different forms to scaled scores. For the listening sections of SLEP Test Form 1, 2, and 3, the scaled scores ranged from a low of 10 to a maximum of 40. The reasons why the researcher chose to use raw scores instead of scale scores to determine differences between the treatment and control groups were: 1) the gain scores for both groups were normally distributed based on the Shapiro-Wilk test results (Table 2); 2) the same test, SLEP Test Form 1, was administered as both pre- and posttest in the present study, so there was no need to compare scores from different test forms on a scale;

3) since a range of raw scores were converted to the same scale score according to the SLEP Test Conversion Table, the computed gain scores (posttest scores minus pretest scores) would be more accurate when raw scores were utilized.

In order to answer the third research question, which was that how the explicit teaching of listening strategy affected students' listening comprehension performance as measured by a listening comprehension test, a null hypothesis and an alternative hypothesis was developed:

Null Hypothesis: there is no statistically significant difference on the mean gain scores of the SLEP Test between the two groups of students.

Alternative Hypothesis: there is a statistically significant difference on the mean gain scores of the SLEP Test between the two groups of students.

Furthermore, a two-tailed independent sample t test ($\alpha=.05$) was conducted to compare students' gain scores between treatment group who received listening strategy teaching interventions and control group who did not receive any teaching intervention. Table 3 reported both groups' mean scores on the SLEP Test Listening Comprehension Section. The purpose of administering the SLEP Listening Test was to investigate how well each student in the treatment group achieved in listening comprehension compared to students in the control group. There was a significant difference in the scores of the treatment group ($M=7.967$, $SD=5.696$) and control group ($M=3.409$, $SD=6.829$); $t(50) = 2.620$, $p= 0.012$. The effect size is 0.74. Since the p -value is less than the critical value of 0.05, the null hypothesis was rejected, and the alternative hypothesis was supported. The researcher then concluded that there was difference on the mean gain scores of the SLEP Test between students in the treatment group and control group. In other words, the

explicit teaching of listening strategies did have an effect on students' listening comprehension performance measured by the SLEP Test listening section. More specifically, the findings suggested that on average, students who received listening strategy instruction improved their listening and outperformed the students in the control group class.

Table 3

Mean Pre- and Post-test Scores by Group

Group	N	Pre-test Mean	Standard Deviation	Post-test Mean	Standard Deviation
1	30	31.667	11.457	39.567	10.972
2	22	34.455	9.965	37.864	10.265

Note. Group 1= Treatment group; Group2= Control group

Summary of Quantitative Findings

The quantitative analysis indicated that students' listening comprehension performance increased as a result of the teaching intervention. In order to answer the Research Question Three, an independent t-test was performed on each student's gain score (post-test score minus pre-test score) from the SLEP test, which measured students' listening comprehension abilities. The findings also revealed a significant difference in the means of gain scores between the control ($M=3.409$, $SD=6.829$) and treatment groups ($M=7.967$, $SD=5.696$) resulting in statistical difference at the .05 level of significance ($t=2.620$, $p=.012$). In summary, statistical analyses indicated that the explicit teaching of the listening strategies did have a positive effect on community college ESL student's listening comprehension performance.

CHAPTER V

DISCUSSION, RECOMMENDATIONS, IMPLICATIONS, AND CONCLUSION

Overview

This chapter consists of six main sections. The first section presents an initial summary of the study including the needs of the study, the purpose, theoretical rationale, methodology, and research questions. The second section provides a summary of the distinct qualitative and quantitative findings. The third section presents a discussion of the research findings, including a comparison of the qualitative and quantitative findings, as well as of the results of the present study as compared to prior research. The fourth section includes recommendations for future research, and the fifth section suggests implications for practice. The last section offers conclusions drawn from the study.

Summary of the Study

The image of second language listening has changed significantly over the past five decades (Vandergrift, 2007). In the early stages of the ESL and EFL fields, much research on listening focused on testing students' ability to listen and answer comprehension questions. Recently, however, a growing number of studies indicate that the focus has shifted to the use and development of learning strategies for listening comprehension (Chen, 2009; Field, 2008; Siegel, 2011, 2012; Ozeki, 2000; Vandergrift, 2004, 2007). The results of these studies have highlighted the necessity of promoting the acquisition of listening strategies and providing learners with sufficient training in those strategies. Moreover, a wide range of strategies have been recognized as necessary in teaching second language listening, including helping students to listen for gist, making predictions and inferences, and activating prior knowledge in pre-listening (Hinkel, 2006).

For adult ESL learners in community colleges, listening is the first encounter with English in their language learning journey (Berne, 2004), and mastering listening comprehension is their first step towards fully acquiring the English language (Liu, 2009). However, according to Goh (2000), most language learners are not well aware of their own approaches of listening and comprehending the oral input, neither are they aware of the actual problems occurred during information processing. These listening problems often remain unresolved in traditional ESL listening class, which normally involves practicing listening comprehension through tests. Thus, researchers suggested that one of the most efficient approaches that might help ESL learners overcome their listening problems is to teach and assist students to utilize listening strategies effectively (Flowerdew & Miller, 1992; Goh, 2000; Graham, 2006).

The general findings of recent studies (i.e. Carrier, 2003; Chen, 2009; Clement, 2007; Ozeki, 2000; Siegel, 2012) on listening strategy instruction indicated that strategy training mostly provided positive impact on learners' understanding and use of listening strategies, as well as improvement on the listening comprehension performance. However, most previous studies investigating the effects of listening strategy instruction measured the impact mainly by using a pre- and post-test design. Little empirical research has been done to explore community college learners' listening strategy use and their perceptions of the strategy instruction. Thus, there is a strong need for future research to examine the impact of strategy instruction through different assessment methods, including exploring learners' perceptions of strategy instruction and the perceived usefulness of listening strategies.

For the purposes of this study, cognitive theory, particularly the model of production systems and three stages of skill acquisition, provided the theoretical rationale (Anderson, 1996; 2005). This theory posits that learning strategies, as any cognitive skills, are complex procedures that individuals apply to tasks. Consequently, these strategies may be represented as procedural knowledge which may be acquired through cognitive, associative, and autonomous stages of learning. Anderson's theory (1996; 2005) is chosen here because of two reasons: first, it integrates concepts and principles that are particularly useful in examining learning strategies in second language acquisition. Second, it is also the theoretical foundation of the instructional model in the present study --the Cognitive Academic Language Learning Approach (CALLA) model. The CALLA approach targets advanced beginning and intermediate level ESL students, who either have acquired academic language skills in their native language but need assistance in transferring language skills to English, or have developed social communicative skills but not yet academic language skills in English.

The purpose of this three-phase mixed methods study was to explore community college ESL students' current use of listening strategies and to develop strategy instruction that fits students' needs in listening comprehension. The researcher employed the concurrent triangulation approach, collecting and analyzing both quantitative and qualitative data simultaneously. Based on the initial findings in Phase One, the researcher provided explicit instruction of listening strategies to the treatment group students in the second phase. Classroom observations and interviews were utilized to explore the changes in students' strategy use and their perceived usefulness of these strategies. Pre- and post-tests were administered to examine whether explicit teaching of listening

strategies had an impact on ESL learners' listening comprehension in one community college in Northern California.

The research questions of this study were:

1. How do community college ESL students change their listening strategy use throughout the intervention?
2. After the intervention, how do community college ESL students describe the usefulness of those strategies?
3. How does the explicit teaching of listening strategy affect students' listening comprehension performance as measured by a listening comprehension test?

Summary of Findings

Qualitative Findings

Overall, the qualitative findings of the present study showed an appearance of positive changes in students' listening strategy use after the strategy instruction. In addition, the results revealed that students observed improvement in their listening abilities and other areas as a result of efficiently utilizing the listening strategies.

Individual interviews and classroom observations were employed to answer Research Question One. Reported changes in strategy use were examined for the metacognitive, cognitive and socio-affective strategy categories. The data analysis of student' changes in listening strategy use throughout the intervention disclosed four main themes from the treatment group. To begin with, students' use of metacognitive strategies improved dramatically after the intervention, including a wider range and a better quality of strategy use. Next, regarding the cognitive strategy use, the tendency shifted from heavily relying on bottom-up strategies to utilizing more top-down and sophisticated

strategies. Then, the students began to employ socio-affective strategies in order to successfully complete a listening task. Finally, utilizing strategies in combination emerged after the intervention.

To answer Research Question Two, students' perceived usefulness of the listening strategies was explored through one-on-one interviews. Results of the analysis included three primary themes. First, students reported enhanced listening abilities in both classroom and real life situations. Second, the utilization of listening strategies helped raise students' metacognitive awareness. Finally, students increased self-confidence in English listening after the strategy instruction.

Quantitative Findings

The results from the statistical analysis showed that students' listening comprehension performance enhanced after the strategy training. In order to answer the quantitative research question, a two-tailed independent t-test ($\alpha=.05$) was performed on each students' gain scores (post-test score minus pre-test score) from the SLEP listening test. The data analysis revealed a great difference in gain score means between the control ($M=3.409$, $SD=6.829$) and treatment groups ($M=7.967$, $SD=5.696$) resulting in statistical difference at the .05 level of significance ($t=2.620$, $p=.012$). Thus, the statistical analyses indicated that the explicit teaching of the listening strategies did have a positive effect on community college ESL student's listening comprehension performance.

Discussion

This section presents the discussion of the research findings. First is a comparison of the findings between the qualitative and quantitative data analysis. Then, the

researcher relates the current findings to the results of previous research on the effects of explicit listening strategy instruction in order to determine if they are consistent.

Findings of Quantitative and Qualitative Data Analysis

The effects of explicit listening strategy instruction in the current study were mainly examined based on two criteria: 1) the development of listening comprehension ability of the students; and 2) the improvement of their listening strategy use.

The development of listening comprehension was first examined by comparing the score differences from the SLEP test between the control and treatment groups. The quantitative analysis resulting from the independent t-test indicated that there was a statistically significant difference ($t=2.620$, $p<.05$) on the pre and posttest results between the two groups. Thus, the findings suggested that explicit teaching of the listening strategies improved beginning-level ESL students' listening comprehension performance on average.

The qualitative results converged with the findings of the quantitative analysis and provided more personal perspectives. In general students reported an increase in their listening comprehension abilities after the strategy instruction. Donna, Jim, and Ginni commented that their listening skills had improved a great deal, and Ted stated that he had observed some improvement in English listening. On the other hand, Nina and Melisa thought that they had only made a little improvement. It is worth mentioning that these students perceived their listening improvement so differently which might be due to different standards to evaluate their listening development. In other words, students with similar degrees of improvement might rate themselves diversely. In addition, as Siegel (2012) pointed out, "listening improvement often occurs incrementally and is not

immediately or clearly perceptible” (p.13). Thus, students who perceived themselves with less development in listening might be lacking noticeable evidence of listening success.

Two participants also shared details on how they employed the listening strategies during the listening tests and increased their test scores. For instance, in the second interview, Jim expressed that his listening skills had gone up to a great extent and further explained why he thought this had occurred based on his post-test experience. According to Jim, he employed the strategy of advance organization to quickly scan all the questions in the listening test to capture main ideas and other useful information of the listening text. Based on the types of questions asked in the test, he then planned appropriate approaches for the listening task, such as utilizing selective attention to focus on specific information in the listening text. Because Jim employed multiple strategies effectively during the listening, he felt that he did much better in the post-test as compared to his performance in the pre-test.

Similarly, Ginni also stated that her listening skills had improved considerably and attributed the success to the listening strategies. She mentioned that her score for the recent listening quiz was much higher than the previous ones. Her strategies included listening carefully to the listening materials and paying more attention to the key words. By utilizing direct attention and selective attention, she comprehended the oral input in the quiz much better than before.

In addition to supporting and deepening the quantitative results, the qualitative analysis also successfully captured students’ positive changes in strategy use throughout the intervention, as well as their perceptions on the usefulness of the listening strategies. The improvement in students’ strategy use could be summarized as follow:

1) The students broadened the range of their metacognitive strategy use and advanced the use of these strategies.

2) The students resorted to more sophisticated cognitive strategies, which required top-down processing during the listening.

3) The students started to employ listening strategies in combination in order to best facilitate their listening.

4) The students utilized the socio-affective strategies the least; however, the utilization of these strategies appeared after the intervention, particularly on lowering listening anxiety and asking for clarification.

The above characteristics of strategy use behavior by the beginning-level students in this study seemed to match those by intermediate listeners in the literature. Vandergrift (1997) claimed that a shift in depth of processing might help distinguish between beginning and intermediate listeners. While beginning-level students relied on surface-processing strategies such as translation, transfer, and repetition, intermediate-level students utilized more metacognitive strategies which required more deep-processing. In the present study, although students in the treatment group only received strategy training for two months, they changed the strategy use towards a positive direction dramatically, including utilizing more metacognitive strategies and complex cognitive strategies. Such strategy use behavior indicated that most participants' listening abilities were already above the beginning-level. These results from the qualitative analysis also supported the quantitative finding in this study that the explicit teaching of the listening strategies improved beginning-level ESL students' listening skills.

The qualitative analysis also revealed students' perceptions on the usefulness of the listening strategies. Besides improving their listening comprehension abilities, as students advanced their listening strategy use through practice, they also gained a great amount of self-confidence in English listening. Moreover, the effective utilization of listening strategies also raised students' metacognitive awareness. As a result, students became more purposeful when they planned, monitored, and evaluated the strategies for the listening tasks.

The present study did not examine the correlation between students' metacognitive awareness and their test performance. However, recent research showed that learners' metacognitive knowledge on listening influenced the outcome of their listening comprehension (Goh, 2008; Vandergrift, 2002, 2007). One interpretation was that metacognitive knowledge affected how learners approached a listening task and learned to listen. Students who had appropriate task knowledge about listening were able to plan, monitor and evaluate their listening, compared with those who had no metacognitive knowledge usually approached listening tasks in a random manner (Goh, 2008). Furthermore, Zhang and Goh (2006) argued that language learners who were aware of the benefits of the listening strategies might also use these strategies to improve their listening comprehension. Thus, in the present study, students' raised metacognitive awareness could be an important factor that contributed to the enhancement of their listening abilities. Again, the qualitative and quantitative findings converged on that explicit listening strategy instruction improved ESL students' listening comprehension abilities.

Current Findings and Previous Studies

The current study examined community college ESL students' listening strategy use and the effects of explicit strategy instruction on students' listening comprehension performance. Some of the findings in this study supported those of previous studies in the following ways:

First, both qualitative and quantitative analysis indicated that students' listening comprehension abilities had improved as a result of the explicit strategy instruction. These results were consistent with the findings in the literature. Siegel (2012) pointed out that explicit teaching of the strategies along with well-designed listening materials, practices, and activities was effective in development of student listening ability. In his study of EFL learners' perceptions of listening strategy training, Siegel integrated listening strategy teaching into a semester-long English class targeting intermediate Japanese students in college. Both the quantitative and qualitative data showed that participants held positive perceptions of the listening strategy training and reported improvement on their listening abilities as a result of the strategy course. Similarly, Clement (2007) conducted a quantitative research study and investigated how explicit teaching of the listening strategies would impact college ESL students' listening comprehension. The results indicated that participants favored web-based teaching interventions, and a majority of students believed that strategy training would help them in future listening tasks.

Second, the qualitative findings in this study indicated that students developed metacognitive awareness throughout the intervention. Before the intervention, students had little awareness of the listening strategies and simply employed basic level strategies.

In the metacognitive category, they were only familiar with the strategies of directed attention and selective attention. Through learning listening strategies, students developed metacognitive awareness and became more purposeful in their approaches to the listening tasks and more aware of the appropriate strategies they should employ. Thus, after the intervention, students did not only report a wider range of strategies in each category but also noted improvement in the quality of their strategy use. As Vandergrift (2003) suggested, once learners developed strategy awareness, they became “more purposeful in their approach to the task, monitoring their comprehension for overall meaning, and effectively used prior and linguistic knowledge while listening” (p. 466).

In the current study, the interview data showed that planning was the most employed subcategory among all the metacognitive strategies. By the end of the intervention, students were able to utilize all four planning strategies, while only two monitoring strategies and one evaluation strategy were reported in the second interview. These findings correlate to Chen’s (2009) study, suggesting that the strategy of planning was the most favored by less proficient students, while the strategies of monitoring and evaluation were generally more often used by advanced students.

The findings of the current study on how participants developed metacognitive awareness and improved their strategy use supported those in the previous studies. Ozeki (2000) found that many female college students in Japan either did not know the existence of listening strategies or used the strategies unconsciously before they received the strategy training. However, after 12 lessons of strategy instruction, students in the treatment group began to utilize metacognitive strategies, such as directed attention and selective attention, and more sophisticated cognitive strategies, such as inferencing and

note-taking, more frequently comparing to their peers in the control group. The findings of this study also showed that students were able to employ some advanced strategies that were not taught in the intervention. For instance, the advanced organization and double-check monitoring were among these sophisticated strategies that students discovered on their own. The tendency of utilizing strategies beyond the strategy instruction confirmed the results in Ozeki's (2000) study, that "learning the strategies explicitly helped the students activate their thinking processes and become conscious of other listening strategies which would improve their listening ability" (p.167).

Similarly, in Vandergrift's (2002) study of beginning-level learners of French, the researcher designed multiple listening tasks and accompanying instruments, which aimed to help students develop metacognitive awareness. In particular, these tasks required students to: capture specific details in the text, understand the vocabulary related to the main topic, and predict answers based on background knowledge. Following each task and accompanying reflective exercise, students completed an oral questionnaire reflecting on: 1) what they had learned; b) what they had discovered about their abilities in French; and c) what they would do to improve future listening performance.

The results in this study suggested that the use of these instruments helped prepare students to the processes involved in successful listening comprehension and develop their metacognitive knowledge. Students' comments from the questionnaire indicated that they were aware of the importance of metacognitive strategies in all three categories: planning, monitoring, and evaluation. Students' responses were mostly related to planning strategies, and they demonstrated a strong awareness of what needed to be done to successfully complete a listening task and overcome obstacles. While strategies

like selective attention and directed attention were widely utilized by all students, more complex metacognitive strategies such as self-management and advance organization appeared to be a little more challenging to students at the beginning level.

In addition, students' comments also suggested an awareness of strategies of monitoring and evaluation such as comprehension monitoring and performance evaluation and the role of these strategies in successful accomplishing listening comprehension tasks. The researcher concluded that the introduction and reflection on the listening processes and strategy use could help students develop metacognitive knowledge, which in turn would facilitate the improvement of their listening abilities.

Third, students' cognitive strategy use shifted from a bottom-up level to a top-down level. In the present study, students habitually relied on bottom-up cognitive strategies, such as resourcing and translation, before the intervention. However, after the intervention, students tended to decrease their use of bottom-up strategies and utilize more top-down strategies, such as inferencing and elaboration. Similarly, Chen's (2009) study on Taiwanese English learners' listening strategy development also revealed a similar trend in the use of cognitive strategies. Before the strategy instruction, most students tended to utilize bottom-up strategies for detail comprehension. Students relied on bottom-up processing to decode the oral input word by word. Thus, most of them responded to strategy use during listening as "quickly guess the answer" or "understand word meanings carefully" (p. 67). After the training, generally students decreased their use of bottom-up strategies and increased the use of top-down strategies, such as elaboration, prediction, summarization, and note-taking.

The results in Ozeki's (2000) study also revealed this shift and provided more in-depth information. Before the intervention, the Japanese female students in the study seldom utilized top-down cognitive strategies such as inferencing and note-taking. They had never tried to guess the meanings of unfamiliar words by affixes or suffixes without referring to the dictionary. The concept of note-taking skill was also completely new to the students. They used to just write down the words or phrases randomly, and their notes had not been arranged according to any organization. After the students had learned and practiced these strategies, they found them very helpful and efficient in listening comprehension activities. For example, for the strategy of inferencing, students learned to guess the meanings of new words or phrases from the context or non-linguistic clues. They learned to capture additional useful information by paying attention to the titles of the listening materials. In addition, some of the students would quickly scan the listening comprehension questions prior to the listening and plan what part of the text they should attend to during listening.

Fourth, the effective use of listening strategies helped increase students' self-confidence in listening. Before they received the intervention, many students perceived themselves with poor or very poor listening abilities. According to Field (2008), students generally felt more insecure about their listening abilities than any other major language skills. The insecurity might be caused by the time pressure of understanding the oral input as it occurred. However, the data from the post-intervention interviews indicated that students gained a great amount of self-confidence in English listening. These results were consistent with other findings in the literature. Chamot et al. (1993) stated that beginning level students who reported using strategies more frequently tended to perceive

themselves as more confident language learners. Graham (2006) suggested students' abilities to employ listening strategies effectively might boost their self-confidence in language learning.

As Siegel (2012) pointed out, measuring the feelings of confidence precisely could be very challenging since students with similar level of self-confidence might rate themselves differently through the oral reports. Thus, it is worth mentioning that the students in the present study reported their boosted self-confidence shortly after the strategy training. In fact, half of the interviews were conducted immediately after the post-test. It is possible that students associated their enhanced listening abilities mainly with their performance in the listening test. That is, they might have felt more confident after correctly answering most of the questions in the test. As one participant responded: "Yeah, I think it (my listening skills) has gone up, cos now I can pretty much pick up everything," students showed more self-confidence after they were able to comprehend every word in a listening text. However, as Siegel commented, failure to meet such standards, in turn, might result in students' low confidence. In fact, the Japanese college students in his study reported a lack of confidence in their listening abilities at the end of the study even though many of them believed that their listening abilities improved as a result of the strategy training (Siegel, 2012).

Recommendations for Future Research

To examine the effectiveness of explicit teaching of listening strategies more precisely, four recommendations for future research are presented below.

The first recommendation concerns the duration of the strategy instruction. The current study took place during a semester of 15 weeks, with the actual data collection

occurring about 12-13 weeks to avoid time conflicts with holidays and the final examination period. The structure of the ESL program allows beginning-level students to either stay at the same level or move up to the next level after each semester. Thus, it was impossible to follow any class of the students longer than one semester. However, as Vandergrift (2002) pointed out, research that aims to examine the effects of listening strategy training needs to expose the participants to the instructional instruments and activities for a substantial period of time. Students would more likely demonstrate superior achievement in listening comprehension when they receive strategy instruction over a longer period of time, such as an academic year.

Second, to gain a better understanding of how students change their listening strategy use at all stages of the intervention, future research should consider instruments that can monitor continuous improvement in students' strategy use. As the results of the present study indicated, although students who received the strategy training were at a similar proficiency level, different students progressed at different rates in their developing listening skills and learning of strategies. Research has suggested that learner diaries or reflective journals have been used extensively to capture individual student's changes in their strategy use (Chen 2009; Graham, 1997). As Chen (2009) commented, students who kept reflective journals were able to reflect and evaluate how they approached oral input, what strategies they tried to employ, and how much they had understood immediately after completing their listening tasks. Also, according to Goh (2000), keeping a reflective journal was a useful learning strategy by itself since it encouraged learners to reflect on the problems that they encountered and the strategies

utilized during the listening tasks. In addition, as students evaluated their strategy use in the journal, they also developed metacognition of L2 listening (Goh, 2008).

Third, future research should consider taking place in a setting where the control and treatment classes are taught by the same instructor and follow the same class schedule. Before starting data collection, the researcher met with the instructors of both the control and treatment classes and learned their professional experiences and teaching styles. Both instructors have extensive ESL teaching experiences and have been teaching the beginning-level listening classes at the community college for a very long time. However, the instructors' influence on students' listening skills throughout the semester should not be overlooked. In addition, the different meeting schedules for the two classes might also have affected the outcome of the intervention. Thus, future research should exclude these extraneous variables in the treatment of strategy instruction.

Finally, future research could also explore ESL teachers' awareness and understanding of second language listening and strategy instruction. As Graham et al. (2011) claimed, in order to provide effective strategy training, teachers need to first understand what their students' listening needs are and then plan how to address these needs. Thus, developing such understanding seems to be essential for improving teachers' classroom practice. Less research has been conducted in this area, and one way to promote teachers' awareness of strategy instruction is through classroom-based collaborative research project. As reported in Lawes and Santos' (2007) study, the university researchers and teachers collaborated in a two-year long investigation into French learners' listening and writing strategy development. While implementing the

strategy training, the French language teachers also developed professional knowledge as a by-product of their participation in the research project.

Implications for Practice

There have been two major pedagogical issues concerning the types of strategy instruction, as previously discussed in the literature review. The first issue is whether strategy instruction should be explicit or embedded. In explicit instruction, the teacher explains the value and purpose of a particular strategy to the students and then provides explicit instruction on how to apply the strategy. On the contrary, in embedded instruction, the teacher guides students through activities and materials that are associated with a particular strategy without informing its benefits and applications. In recent years, more researchers have been advocating explicit instruction in learning strategies (Carrier, 2003; Clement, 2007; Ozeki, 2000; Siegel, 2012). The findings of their studies suggested that the students developed metacognitive awareness by receiving information about what the strategies are, why they are important, and when and where they can be used.

The present study adopted the CALLA model where each strategy was named, demonstrated, taught, practiced, and encouraged to apply to new tasks. Students who received the intervention were made aware of all the strategies and their potential benefits in academic and real-life listening. As a result of the explicit instruction of the listening strategies, the students in the present study developed metacognitive awareness and became more motivated and purposeful using the strategies in listening tasks.

The second issue is whether strategy instruction should be integrated into or separated from the content-area learning. Researchers in favor of integrated strategy instruction argued that integrating strategy instruction into regular classes provided

students with opportunities to practice strategies in an authentic language learning environment and to transfer the strategies to other language tasks (Chamot, et al., 1999; Kendall & Khuon, 2006; Oxford, 2002; Siegel, 2012; Zhang, 2008). On the other hand, researchers in favor of separated instruction argued that students would be more likely to transfer strategies to other tasks after receiving general strategy instruction (Rubin and Thompson, 1994), and it might be unrealistic to train all language teachers to teach strategies in regular language classes (Gu, 1996).

The present study suggested that explicit strategy instruction should be integrated into the listening instruction curriculum. Researchers in favor of integrated strategy instruction argued that integrating strategy instruction into regular classes would provide students with opportunities to practice strategies in an authentic language learning environment and to transfer the strategies to other language tasks (Chamot, et al., 1999; Kendall & Khuon, 2006; Oxford, 2002; Siegel, 2012; Zhang, 2008). The results of the present study suggest that ESL teachers should play more active roles in implementing strategy instruction by addressing the shortcomings of the existing course materials, making modifications of the listening materials, and adapting the systematic strategy training procedures, such as the CALLA model used in this study. When modifying the listening components in a course, teachers should keep in mind that the underlying notion of the strategy intervention was for students to apply those strategies in and out of the classroom (Siegel, 2012). Thus, it is essential for the teachers to make connections between listening strategies and real-life context in the strategy instruction, so students could transfer the listening skills and strategies that they developed during the training to new and future situations beyond the classroom context (Field, 2008).

As concluded in the present study, strategy instruction appeared to have positive effects on the listening comprehension performance and strategy use of community college ESL students at the beginning level. Following strategy instruction, treatment group students in this study were able to select appropriate strategies for a listening task and to orchestrate their strategy use according to the demands of the tasks. As Chamot et al. (1999) argued, although strategies in the CALLA model are designed to be taught to students at all proficiency levels, providing instruction of these strategies is particularly essential for beginning-level students. The findings of this study together with other research (Chen, 2009; Clement, 2007) have provided convincing evidence that strategy instruction could help beginning-level listeners achieve both short- and long-term goals in listening comprehension. In the present study, students in the treatment group significantly outperformed those in the control group study, as immediately reflected in the post-tests. Moreover, listening strategy instruction helped students raise metacognitive awareness and develop into more autonomous listeners, which in turn can facilitate their listening outside the classroom.

Furthermore, English as the instructional language is strongly recommended for explicit and integrated strategy instruction. Because of students' diverse L1 backgrounds, it was necessary that the strategy instruction be conducted in English, despite the students' limited English proficiency. Thus the researcher employed multiple techniques for presenting the strategies after discussing with the class instructors. Such techniques included extensive body languages, slower speech rate, and visual aids that helped her to explain the strategies in English. With all the supporting techniques, she was able to break down the strategies to their component parts and explain how to apply the

strategies step by step. Therefore, the strategy instruction in the current study also provided students with more English input and exercise opportunities in addition to the listening strategy content. As a result, using English as the instructional language in the strategy training contributed to the students' development of their English listening abilities, rather than taking time away from their English content learning.

Conclusions

The objectives of the study were accomplished through three research phases. In Phase One, the researcher explored the beginning-level ESL students' listening difficulties and strategy use by means of classroom observations and interviews. A pre-test was also administered during this phase. In Phase Two, the researcher designed and provided explicit instruction of listening strategies targeted these students' listening problems. In the last phase, the researcher administered the post-test and conducted post-intervention interviews. By comparing the test results and interview data collected before and after the strategy training, the researcher examined whether the explicit teaching of listening strategies had positive effects on community college ESL students' listening comprehension performance.

As a result of this study, the following conclusions can be drawn regarding the effects of explicit instruction of listening strategies on community college ESL students' listening comprehension performance:

First, this study concludes that explicit listening strategy instruction improved beginning-level ESL students' listening strategy use. In general, the students broadened the range of their strategy use in all strategy categories: metacognitive, cognitive, and socio-affective. In particular, students resorted to more metacognitive strategies and

sophisticated cognitive strategies that required top-down processing during listening. The students also started to employ socio-affective strategies to facilitate the listening comprehension after the intervention. Moreover, the students utilized the listening strategies beyond the strategy training by employing various strategies in combination or those not included in the intervention.

Second, this study concludes that the explicit teaching of listening strategies could help enhance the listening comprehension performance of beginning-level ESL students in community colleges. The quantitative analysis of the SLEP test scores indicated that there was a statistically significant difference ($t=2.620$, $p<.05$) on the pre- and post-test results between the control and treatment groups. Thus, the quantitative findings suggested that explicit teaching of the listening strategies had a positive effect on beginning-level ESL students' listening comprehension performance on average. The qualitative findings from the interviews also revealed that students from the treatment group perceived an increase in their listening test scores as a result of the strategy instruction. In addition, the students also reported their improved listening skills in the classroom and in real-life situation.

Finally, this study reveals ESL students' perceptions on the usefulness of the listening strategies. In addition to improving their listening comprehension performance, the students also developed their metacognitive awareness through effectively utilizing the listening strategies. They became more purposeful approaching the listening tasks and planning appropriate listening strategies. As a result, the students maximized the effectiveness of the listening strategies and thus successfully completed the listening tasks. The findings of the study also showed that students gained a great amount of self-

confidence as a result of utilizing the listening strategies. As Chamot et al. (1993) explained, beginning-level students who reported using strategies more frequently tended to perceived themselves as more confident listeners.

Perhaps, the most impressive effect of the listening strategy instruction in this study was revealed in a student's comment that "I finally see some (listening) improvement!" Indeed, listening strategy instruction is more than simply a teaching intervention; it is a powerful student-centered approach that can guide learners to become responsible to learn and use the target language. It also aims to help learners develop efficiency by individualizing the language learning experience (Cohen, 2000). This study should alert language teachers that it is time to start "teaching" listening rather than just testing students and exposing them to listening texts.

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APPENDICES

APPENDIX A

IRB APPROVAL LETTER FROM COLLEGE OF ALAMEDA



College of Alameda

555 Atlantic Avenue · Alameda, California 94501 · (510) 522-7221 · FAX (510) 769-6019

PERMISSION LETTER FROM INSTITUTIONAL MANAGEMENT

23 October 2012

Institutional Review Board for the Protection of Human Subjects
University of San Francisco
2130 Fulton Street
San Francisco, CA 94117

Dear Members of the Committee:

On behalf of the College of Alameda, I am writing to formally indicate our awareness of the research proposed by Ms. Yi Guan, a student at USF. We are aware that Ms. Guan intends to conduct her research by observing and interviewing students in our ESL program.

I am responsible for enrollment and other academic support services in College of Alameda. I give Ms. Guan permission to conduct her research in our school.

If you have any questions or concerns, please feel free to contact my office at (510) 748-2288.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Alexis S. Montevirgen', written over a horizontal line.

Alexis S. Montevirgen, Ed.D.
Dean of Enrollment Services
College of Alameda

APPENDIX B

IRB APPROVAL LETTER FROM THE UNIVERSITY OF SAN FRANCISCO

To: Yi Guan
From: Terence Patterson, IRB Chair
Subject: Protocol #41
Date: 03/06/2013

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your project (IRB Protocol #41) with the title **Effects of Explicit Listening Strategy Instruction on the Listening Comprehension of English as Second Language (ESL) College Students** has been approved by the University of San Francisco IRBPHS as **Exempt** according to 45CFR46.101(b). Your application for exemption has been verified because your application for exemption has been verified because your project involves minimal risk to subjects as reviewed by the IRB on 03/06/2013.

Please note that changes to your protocol may affect its exempt status. Please submit a modification application within ten working days, indicating any changes to your research. Please include the Protocol number assigned to your application in your correspondence.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Terence Patterson,
Chair, Institutional Review Board for the Protection of Human Subjects
IRBPHS - Univeristy of San Francisco
Counseling Psychology Department
Education Building - Room 017
2130 Fulton Street

APPENDIX C
INFORMED CONSENT FORM
UNIVERSITY OF SAN FRANCISCO
CONSENT TO BE A RESEARCH SUBJECT

Purpose and Background

Yi Guan, a doctoral student in the School of Education at the University of San Francisco is conducting a study on English as Second Language (ESL) students who is current enrolled in high-beginning level courses at a Northern California community college. The researcher will explore these students' practice of listening strategies in the ESL class and then provide appropriate strategy instruction. This study will also investigate the effects of listening strategy instruction on ESL students' listening comprehension and explore students' perceived usefulness of instructed strategies.

I am being asked to participate because I currently enroll in a high-beginning level ESL listening class at a Northern California community college, and I am over 18 years old.

Procedures

If I agree to participate in this study, the following will happen:

1. The researcher will be present in the classroom twice a week for a minimum eight weeks.
2. I will be observed by classroom observations twice a week for a minimum three weeks during the listening class.
3. The researcher will provide me with strategy instruction twice a week for a minimum four weeks during the listening class.
4. I will process, reflect on, and answer the interview questions.
5. If I agree, audio recordings will be made of these conversations.
6. I will complete an English listening test before and after the study.
7. I will complete a background survey.

Risks/Discomforts

1. It is possible that some of the questions asked during the interviews may make me feel uncomfortable or upset, but I am free to decline to answer any questions I do not wish to or to stop the conversation at any time.
2. Confidentiality: Participation in research may mean a loss of confidentiality. Study records will be kept as confidential as is possible. No individual identities will be used in any reports or publications resulting from the study. Pseudonyms will be used to protect the participants. All interview recording, transcripts,

surveys, and tests results will be kept in a locked and secure location at the researcher's home office. By law, the researcher is considered to be mandated reporters of child abuse and elder abuse, should reasonable suspicion of such behavior arise during the course of collecting data, the researcher is obligated to report suspicion of neglect or abuse.

Benefits

The direct benefit to me for participating in this research study will be the learning of listening strategies and possible improvement on ESL listening comprehension performance, but this cannot be guaranteed.

Costs/Financial Considerations

There will be no financial costs to be charged for my participation in this study.

Reimbursement

I will not be reimbursed or paid for my participation in this study.

Questions

I have talked to Yi Guan about this study, and have had my questions answered. If I have any further questions about the study, I may call her at 415-990-0799 or e-mail her at yguan@usfca.edu.

If I have any questions or comments about participation in this study, I should first talk to the researcher. If for some reason I do not wish to do this, I may contact IRBPHS, which is concerned with the protection of volunteers in research projects. I may reach the IRBPHS office by calling 415-422-6091 and leaving a voicemail message, by e-mailing IRBPHS@usfca.edu. Or by writing to the IRBPHS, Department of Counseling Psychology, Education Bldg., University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

I have been given a copy of this signed consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to be in this study, or to withdraw from it at any point. My decision as to whether or not to participate in this study will have no influence on my present or future status as a student at the College of Alameda. My signature below indicates that I agree to participate in this study.

My signature below indicates that I agree to participate in this study.

Participant's Signature

Date of Signature

Signature of Person Obtaining Consent

Date of Signature

APPENDIX D

INTERVIEW QUESTIONS

Previous English learning experience:

1. How long have you been studying English here in this program? What classes are you currently taking?
2. Did you learn English before you came to the United States? In what country? For how long?
3. What listening activities did you do in your other English classes to improve your listening skills?
4. What is the most difficult thing for you when doing listening practice?

Students' use of listening strategies:

5. Have any teachers taught you any methods to better understand English listening?
 - If yes, what do you remember? How did they teach you?
 - If not, do you wish they had taught you that?
6. What are you thinking in your mind when you are doing listening practices in class?
 - do you have any methods/tricks to help you understand better?
 - do you have any methods/tricks to help you answer the listening comprehension questions?
 - if you don't understand or remember what you just heard, what do you do?

Students' perceptions of listening strategy instruction:

7. *Do you feel your listening skills have gone up/gone down/stayed the same during this semester? Why?
8. Do the listening strategies I taught you help you improve your listening skills?
 - if yes, how much did it help? What improvement do you see? Can you give me an example?
 - if no, can you tell me what you wish that I had taught you? Or what would be a better way to teach you?
9. *In the last several weeks, you learned these listening strategies. (Remind participants of a full list of strategies.) Which ones do you think are the most useful? Why?

10. *Which strategies do you think are the least useful? Why?
11. *Will you be able to use these listening strategies in the future?
--Why or why not?

--If yes, can you give an example?

Note. *Questions 7, 9, 10, 11 were adapted from Siegel (2012).

APPENDIX E
INTERVIEW PROTOCOL VALIDATION LETTERS

7 August 2013

RE: Research instrument validation for Yi Guan

To whom it may concern,

Yi Guan has asked me to review interview questions to be used for Ed.D research to be in a community college in the San Francisco area. These interviews will be on the topic of L2 listening pedagogy. They will be conducted in English using a semi-structured interview format. I have reviewed the interview questions and made some suggestions, which will be incorporated into a final set of items. My suggestions mainly involved adding appropriate follow-up questions in order to probe interviewees for more substantial details.

I believe that the set of interview questions is appropriate for this research project.

If there is any further information I can provide, please contact me at:

siegel@obirin.ac.jp or +81 090 5706 7699.

Best regards,

Joseph Siegel
Assistant Professor
J. F. Oberlin University
Tokyo, Japan

September 20, 2013

Re: Research Instrument Validation

To whom it may concern,

Miss Yi Guan has asked me to review interview questions to be used for Ed.D research to be in a community college in the San Francisco area. These interviews will be on the topic of L2 listening strategy. I have reviewed the interview questions and made some suggestions, which will be incorporated into a final set of items. My suggestions mainly involved some minor clarifications and specifications.

I believe that the set of interview questions is appropriate for this research project.

If there is any further information I can provide, please contact me at:

corrigan@usfca.edu

415-710-9245

Best regards,

A handwritten signature in cursive script that reads "Shelwyn Corrigan".

Shelwyn Corrigan
Adjunct Professor
Academic English for Multilingual Students
College of Arts & Sciences

Also:

MA TESOL Online Degree Program
School of Education
University of San Francisco



College of Alameda

555 Atlantic Avenue · Alameda, California 94501 · (510) 522-7221 · FAX (510) 769-6019

September 20, 2013

Re: Research Instrument Validation

To whom it may concern,

Miss Yi Guan has asked me to review interview questions to be used for Ed.D research to be in a community college in the San Francisco area. These interviews will be on the topic of L2 listening strategy. I have reviewed the interview questions and made some suggestions, which will be incorporated into a final set of items. My suggestions mainly involved clarification of the questions.

I believe that the set of interview questions is appropriate for this research project.

If there is any further information I can provide, please contact me at:

cferrero@peralta.edu

(510) 748-5246

Best regards,

A handwritten signature in cursive script that reads 'Christa Ferrero-Castaneda'.

Christa Ferrero-Castaneda
ESL Instructor, College of Alameda

Peralta Community College District

333 East Eighth Street · Oakland, California 94606 · (510) 466-7200

APPENDIX F

VANDERGRIFT'S LISTENING STRATEGY TAXONOMY

Learning Strategy	Definition	Examples
Metacognitive Strategies		
Planning: developing an awareness of what needs to be done to accomplish a listening task, developing an appropriate action plan and/or appropriate contingency plans to overcome difficulties that may interfere with successful completion of the task.		
Advanced Organization	Clarifying the objectives of an anticipated listening task and/or proposing strategies for handling it.	I read over what we have to do. I try to think of questions the teacher is going to ask
Directed Attention	Deciding in advance to attend in general to the listening task and to maintaining attention while listening	I listen really hard.
Selective Attention	Deciding to attend to specific aspects of language input or situational details that assist in understanding and/or task completion.	I listen to the key words.
Self-Management	Understanding the conditions that help one successfully accomplish listening tasks and arranging for the presence of those conditions.	I put everything aside and concentrate on what she is saying.
Monitoring: Checking verifying, or correcting one's comprehension or performance in the course of a listening task.		
Comprehension Monitoring	Checking, verifying, or correcting one's understanding at the local level	I just try to put everything together, understanding one thing lead to understanding another.
Auditory Monitoring	Using one's "ear" for the language to make decisions	I use the sound of words to relate to other words I know.
Double-Check Monitoring	Checking, verifying, or correcting own understanding across the task or during the second time of the oral text.	I might catch it at the end and then I'd go back.

Evaluation: Checking the outcomes of one’s listening comprehension against an internal measure of completeness and accuracy.		
Performance Evaluation	Judging one’s overall execution of the task.	How close was I? (at the end of a think-aloud report)
Strategy Evaluation	Judging one’s strategy use.	I don’t concentrate too much to the point of translation of individual words because then you just have a whole lot of words and not how they’re strung together into some kind of meaning.
Problem Identification	Explicitly identifying the central point needing resolution in a task or identifying an aspect of the task that hinders its successful completion.	Music, there is something ... “des jeux,” I don’t know what that is.
Cognitive Strategies		
Inferencing: Using information within the text or conversational context to guess the meanings of unfamiliar language items associated with a listening task, to predict outcomes, or to fill in missing information.		
Linguistic Inferencing	Using known words in an utterance to guess the meaning of unknown words.	I use other words in the sentence. I try to think of it in context and guess.
Voice and Paralinguistic Inferencing	Using tone of voice and/or paralinguistics to guess the meaning of unknown words in an utterance.	I guess, using tone of voice as a clue.
Kinesthetic Inferencing	Using facial expressions, body language, and hand movements to guess the meaning of unknown words used by a speaker.	I try to read her body language/ face/ hand gestures.
Extralinguistic Inferencing	Using background sounds and relationships between speakers in an oral text, material in the response sheet, or concrete situational referents to guess the meaning of unknown words.	I comprehend what the teacher chooses to write on the board to clarify what she is saying.
Between Parts Inferencing	Using information beyond the local sentential level to guess at meaning.	You pick out things you do know and in the whole situation piece it together so that you do know what it does mean.

Elaboration: Using prior knowledge from outside the text or conversational context and relating it to knowledge gained from the text or conversation in order to predict outcomes or fill in missing information		
Personal Elaboration	Referring to prior experience personally.	You know ... maybe they missed each other, because that happens to me lots we just miss accidentally and then you call up and say, "Well, what happened?"
World Elaboration	Using knowledge gained from experience in the world	Recognizing the names in sports helps you to know what sport they are talking about.
Academic Elaboration	Using knowledge gained in academic settings	I relate the word to a topic we've studied.
Questioning Elaboration	Using a combination of questions and world knowledge to brainstorm logical possibilities.	Um, he said he started, probably fixing up his apartment, something about his apartment. Probably just moved in, um, because they're fixing it up.
Creative Elaboration	Making up a story line, or adopting a clever perspective.	I guess there is a trip to the Carnival in Quebec so maybe it is like something for them to enter a date, to write, or draw...
Imagery	Using mental or actual pictures or visuals to represent information; coded as a separate category but viewed as a form of elaboration.	I can picture the words in my mind.
Summarization	Making a mental or written summary of language and information presented in a listening task.	I remember the key points and run them through my head, "what happened here and what happened here" and get everything organized in order to answer the questions.
Translation	Rendering ideas from one language to another in a relatively verbatim manner.	I translate. I'll say what she says in my mind, but in English.
Transfer	Using knowledge of one language to facilitate listening in another	I try to relate the words to English.
Repetition	Repeating a chunk of language in the course of performing a listening task.	I sound out the words. I say the words to myself.

Resourcing	Using available reference sources of information about the target language, including dictionaries, textbooks, and prior work.	I look it up in a dictionary. I look in the back of the book.
Grouping	Recalling information based on grouping according to common attributes.	I try to relate the words that sound the same.
Note-taking	Writing down key words and concepts in abbreviated verbal, graphic, or numerical form to assist performance of a listening task.	When I write it down, it comes to my mind what it means.
Deduction/ Induction	Consciously applying learned or self-developed rules to understand the target language.	I use knowledge of the kinds of words such as parts of speech.
Substitution	Selecting alternative approaches, revised plans, or different words or phrases to accomplish a listening task.	I substitute words, translate and see if it sounds right (in combination with translation and comprehension monitoring).
Socio-affective Strategies		
Questioning for Clarification	Asking for explanation, verification, rephrasing, or examples about the language and/or task; posing questions to the self.	I'll ask the teacher. I'll ask for a repeat.
Cooperation	Working together with someone other than an interlocutor to solve a problem, pool information, check a learning task, model a language activity, or get feedback on oral or written performance.	I ask someone who knows the word. I ask the person next to me.
Lowering Anxiety	Reducing anxiety through the use of mental techniques that make one feel more competent to perform a listening task.	I think of something funny to calm me down. I take deep breaths.
Self-Encouragement	Providing personal motivation through positive self-talk and/or arranging rewards for oneself during a listening activity or upon its completion.	OK ... my hunch was right. I tell myself that everyone else is probably having some kind of problem as well.

Taking Emotional Temperature	Becoming aware of, and getting in touch with one's emotions while listening, in order to avert negative ones and make the most of positive ones.	I take it home and take it out on my family.
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APPENDIX G
STRATEGY INSTRUCTION CONTENT

Unit No.	Focused Strategies	Topic/Content	Specific Elements
1	Selective Attention	Emotions/Feelings	Describing feelings
2-3	Inferencing	Emotions/Feelings	Using tone of voice and facial expression to guess the meaning of the passage
4	Elaboration	Describing occupations	Using world knowledge to fill missing information
5	Elaboration & Note-taking	Neighborhood/Community	Getting the context clue Taking notes on key words
6-7	Directed Attention Selective Attention	Describing Abilities	Attending to sentence stress patterns
8-9	Note-taking on main ideas	Academic Speech	Listening for verbal cues for main ideas Taking notes in bulletin style
10-11	Selective Attention Lowling Anxiety	Asking& Following Directions	Listening for details