ABSTRACT

Title of dissertation: ACADEMIC SPOKEN ENGLISH STRATEGY USE
                                OF NON-NATIVE ENGLISH SPEAKING
                                GRADUATE STUDENTS

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        Currently there is a lack of investigation into the language learning and

language use strategies of non-native English speaking students at the graduate level.

Existing literature of the strategy use of the "more successful" language learners are

predominantly based on student data at the secondary school or college levels. This

dissertation research project will use a combination of quantitative and qualitative

methods ("mixed-methods" research) to examine academic English listening and

speaking strategy use patterns of non-native English speaking (NNES) graduate students

and also to investigate those students' relevant metacognitive thinking[1] and its impact on

their strategy use. First, this research project will investigate what kinds of strategies are

being employed and how they are being employed to help those students achieve

communicative competence in oral academic English. Descriptive statistics based on a

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[1] Specifically for this project, metacognitive thinking is a concept denoting students' perceptions of, knowledge of, and attitudes towards three fundamental factors that affect academic English listening and speaking strategy use: academic English listening and speaking and its importance, students' own competence in terms of academic English listening and speaking, strategies and strategy use. This concept is based on Paris and Winograd's framework (Cited in Graham, 2006).

large-scale database of questionnaire responses will be provided. Secondly, this project will investigate what factors have significant effects on the strategy use of this particular student group. Statistical tools such as the multiple regressions and path analysis are used to determine the effects of gender, academic fields, regions of origin, degree level, and other factors. Thirdly, this project examines students' metacognitive thinking and how it impacts their strategy use. The guiding theory related to this line of investigation is that students' metacognitive thinking is closely related to their strategy use patterns. Finally, this project also aims to validate a new assessment tool (a questionnaire) for investigating non-native graduate students' academic English listening and speaking strategy use. Results of the study are expected to eventually help build a descriptive model of listening and speaking strategy use of NNES graduate students and will inform learner-centered instructional design and curriculum development. The ultimate benefit will also be to help many NNES graduate students achieve at a much higher level in graduate school because of their improved English listening and speaking skills.

ACADEMIC SPOKEN ENGLISH STRATEGY USE OF
NON-NATIVE ENGLISH SPEAKING GRADUATE STUDNTS

By

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Dissertation submitted to the Faculty of the Graduate School of the
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Dedication

I dedicate this dissertation to my Lord and Savior, Jesus Christ.

May this world be filled with His love and peace.

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Chapter 1: Introduction

As a graduate student, I keenly appreciate the precious learning opportunity presented to me in the form of several years of graduate studies. An important part of those learning opportunities during the graduate study period include classes and conferences, whereby knowledge and ideas are exchanged in the form of oral academic English. I have a strong interest in the topic of oral academic English proficiency of non-native English speaking (NNES) students as a group. I am also very interested in investigating what kinds of strategies NNES students use to cope with problems pertaining to oral academic English. During the year of 2009, I conducted three small-scale studies to examine those two issues. The first project was based on my academic English learning journal. I recorded my experience of trying to understand and also contribute to class discussions over the course of a 14-week semester. I wrote down challenges I faced, the strategies (specific steps or procedures) I took to deal with those challenges, and the metacognitive thinking that led to my strategy use choices. The second project was a pilot study conducted to test my strategy questionnaire. I analyzed statistically the questionnaire data collected from 25 students, and found out that their listening and speaking strategy use share some common patterns with that of the more "successful" language learners identified by the literature. The third project was also a pilot study whereby I interviewed six fellow NNES graduate students and also observed them in their graduate level classes. I asked my interviewees about their perceptions of academic English listening and speaking, their attitudes towards class participation, and strategies they were using to help them with listening and speaking, etc. Those three studies, together with what I read from literature, and my daily observations of fellow NNES graduate students, have suggested the following to me:

- Quite a number of NNES graduate students think that spoken academic English (i.e., both listening and speaking) is important to them.

- Quite a number of NNES graduate students need to improve their spoken academic English proficiency (i.e. both listening and speaking).

- Quite a number of NNES graduate students do not take full advantage of their classes, presentations, or conferences, therefore they bypass potential opportunities to learn and to grow as future scholars and professionals.

- Some NNES graduate students use strategies quite frequently and efficiently.

- NNES graduate students may not know enough about strategies that can help them listen and speak academic English better. Or even if they do, quite a number of them do not deliberately seek to expand their strategy repertoire. Neither do they deliberately select an optimal combination of strategies to reach a certain goal.

- There are deeper reasons behind those phenomena; they are rooted in some fundamental perceptions.

The list above has led to the researcher's curiosity, which is the shaping force behind this study. I decided to investigate NNES graduate students' current situation regarding academic English listening and speaking, the strategies they are using for coping with the demands, and the metacognitive thinking that has an impact on their strategy use. A search of the literature[2] reveals that there is a serious paucity of research on the listening and speaking strategy use of NNES graduate students. Hopefully results of this study will inform the decision making processes of curriculum designers and teachers of language courses, university language support programs, and even content courses.

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[2] Methods for this literature search will be discussed later.

1.1 Contexts of the study

"Internationalization is perceived by some as the most revolutionary development in higher education in the twenty-first century" (Seddoh, 2001, cited in Gu et al., 2010, p. 8). During the last decade, more and more non-native English speakers have become graduate students at universities in English-speaking countries worldwide. In 2008-2009 academic year, 283,329 international graduate students were enrolled at all U.S. higher education institutes (IIE, 2008-2009). Like their native English-speaking peers, non-native English speaking (NNES) graduate students need to understand formal lectures, to give formal speeches/presentations, and to participate effectively in class discussions and collaborative projects. A certain number of them even have classroom teaching obligations as graduate teaching assistants. Naturally, their communicative competence in spoken English to a large extent 1) determines their academic success and professional future; 2)impacts how much they learn in classrooms and at conferences, and how much they contribute back to those academic discourse communities. However, research reveals that this group of students often has difficulties with communicating in oral academic English (Cheng, Myles, and Curtis, 2004; Choi, 2006; Halic, Greenberg, and Paulus, 2009; Kim, 2006; Zappa-Hollman, 2007).

On the other hand, as major problem-solving tools, language learning (use) strategies have great potential in helping those students develop their abilities to engage in academic dialogues, if used appropriately. In a simplified manner, language learning (use) strategies can be defined as specific steps that language learners take to help them learn or use the target language. The body of research has also established that successful language learners (users) share some patterns of strategy use. Unlike the traditional ESL

(English as a Second Language) learners who use language learning strategies to help them mainly acquire linguistic knowledge, NNES graduate students are generally much more proficient in English and need to mostly use English as a medium for academic communication purposes. The appropriate use of strategies is supposed to help them attain that goal. However, very little research exists about the academic English listening and speaking strategy use of NNES graduate students. To what extent do those students use strategies? How do they use them? What do they generally think about academic spoken English, strategies and relevant issues? Those key questions are still yet to be answered. This research project is aimed to fill this gap in the literature and also provide insights and suggestions for pedagogical purposes.

1.2 Statement of the Problem

The overall problem that motivates this research project is that although NNES graduate students are definitely encountering a considerable amount of difficulties with their spoken English proficiency, there is a lack of research efforts in exploring their listening and speaking strategy awareness, strategy use and relevant issues. Without this information, it is impossible to conceive any initiatives of strategy instruction for this particular group of students, and yet strategy instruction is most possibly capable of, among other pedagogical efforts, helping them overcome those difficulties. Specifically, four research and pedagogical problems underlie this research: 1) Non-native English speaking graduate students need urgently to improve their academic English listening and speaking proficiency. 2) There is a paucity of research on listening and speaking strategies used by non-native graduate students. 3) There is a paucity of research on NNES graduate students' thoughts and attitudes towards listening and speaking strategy

use. 4) There is a general lack of discussion about strategy instruction geared towards NNES graduate students.

First, based on my own experiences as a NNES graduate student in the United States, my observations of fellow NNES graduate students and the findings of my three studies conducted with NNES graduate students, I believe that NNES graduate students need quite urgently to improve their academic English listening and speaking proficiency. This most likely reflects the current trend that among both NNES graduate students and their instructors, English listening and speaking capabilities are much less emphasized than reading and writing.

Secondly, there is a severe paucity of research on strategy use of NNES graduate students. Since the inception of research on language learning strategies in the 70's, numerous studies around the world have been written on learners' strategy use. A research review reveals that most research on strategy use of ESL learners, especially the traditional research body on the "more successful learners" is about high school students or undergraduates. As argued before, NNES graduate students face the often daunting task of negotiating their entry into academic communities using academic English, and they need language learning and use strategies to help them achieve that goal. However, very few studies ever explored language learning (use) strategy use of graduate level learners. This is probably due to the fact that non-native graduate students are assumed to be advanced English learners and so it is also assumed that language learning strategies may not be useful to them anymore. This severe paucity of research is likely linked with the "dearth of research in the higher education literature that looks in-depth at how international students join the academic community of practice and adjust to the host

society through the lens of language experience" (Halic, Greenberg, Paulus, 2009, p. 74).

Thirdly, as the research on language learning strategies develops, strategy use has been viewed as an integral part of the learning process. Thus learners' metacognitive thinking about the whole language learning and use process, which includes the learning goals, the learner himself or herself, and strategy use becomes an important research topic. However, similarly to the situation of "pure" strategy studies, most research studies focus on the metacognitive thinking of middle school, high school or college age learners. Very few studies have probed into the metacognitive thinking of graduate level NNES students about their language learning process.

Fourthly, there are almost no discussions of strategy instruction geared towards NNES graduate students. Since the whole strategy research was based on the premise that if strategies used by those "more successful" learners are discovered then they could be taught to less successful learners, strategy instruction is inevitably an important topic to both scholars and practitioners (Rubin, 1975, Chamot, 2008). Although the benefits and feasibility of strategy instruction are still under debate (Chamot, 2008), no doubt an important mission of strategy research is to explore the pedagogical value of strategies. There is a paucity of research investigating the feasibility of instructing NNES graduate students about strategies and strategy use.

1.3 Purposes of the study

The overall purpose of this study is to address the problems stated above, even if indirectly as in the case of pedagogical issues. The first purpose of this study is to draw the big picture-- to shed light on the complexities of listening and speaking strategy use patterns of NNES graduate students, including what kinds of strategies are used and

how they are used. Researchers seem to agree that 'how" strategies are used is as

important as (if not more important than) "what" strategies are used (Graham, Santos,

and Vanderplank, 2008; Hsiao and Oxford 2002; Yamamori, Isoda, Hiromori, and Oxford,

2003). Therefore, both "what" and "how" will be investigated. Literature reveals that

although it is not recommendable for learners to mechanically imitate or adopt what

strategies are used by more 'successful' learners[3], generally there are some patterns that

are shared by more "successful" (for lacking of a better term) second language learners

and users. Those patterns of strategy use include the following:

- the frequent use of metacognitive strategies;

- the use of a combination of top-down and bottom-up strategies in listening
  and speaking;

- the deployment of "active-use"[4] strategies;

- deliberate coordination of various categories of strategies;

- catering one's strategy use to fit one's own unique circumstances.

It can be generally assumed that graduate level non-native speakers of English

are more successful English learners than others, since they predominantly must take the

TOEFL and even GRE test to enroll in a graduate program in an English-speaking

country such as U.S. or Canada. Once they enroll, they are also assessed along with

English-speaking graduate students. Some of them even have to take classroom teaching

responsibilities. Therefore, when investigating the listening and speaking strategy use

pattern of this particular student group, this study will use research findings about the

strategy use patterns of the more "successful" learners as a reference system. The study

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[3] Also different researchers define "successfulness", "effective" etc. differently.
[4] The definition of "active-use" strategies will be discussed in chapter II-literature review. Generally, those
 strategies enable the learner to learn and use the language in a proactive and dynamic manner (Carson and Longhini,
 2002; Graham, Santos, and Vanderplank, 2008; Green and Oxford 1995; Hsiao and Oxford, 2002).

will show the extent to which the participating NNES graduate students have strategy use patterns that is similar to that of those whom the existing research has viewed as "more successful" learners. The results are expected to not only render insights about the strategy use patterns of NNES graduate students but also to add data to the research body of "more successful" learners. Also, this analysis will provide insights and directions for pedagogical designs.

The second purpose is to collect academic English listening and speaking strategies that are used by NNES graduate students so as to compile a new inventory of strategies. This new inventory will be valuable for both research and pedagogical purposes.

The third purpose is to investigate the metacognitive thinking (knowledge and perceptions) of those students that associate with their strategy use. Metacognition is thinking about thinking, involving high-order thinking. Specifically, this study will investigate the following aspects of students' metacognition and their impact on the students' strategy use: 1) metacognition about their academic English listening and speaking goals 2) metacognition about themselves as language learners and their own levels of academic English listening and speaking 3) metacognition about strategy use. The rationale is that by probing into students' metacognitive thinking and its impact on their strategy use, a more precise picture and a deeper understanding of the students' strategy use behaviors can be achieved.

The fourth purpose is to validate a new data collection instrument—the Academic Spoken English Strategies Survey (ASESS). The survey is the first questionnaire of its kind for the specific purpose of investigating the strategy use

behaviors and perceptions of NNES graduate students and is particularly catered to the learning contexts of this student group. The questionnaire was developed mostly based on a thorough literature review of the listening and speaking strategy use of more "successful" learners, students' input accrued during two pilot projects, and my own learning journal mentioned above. As the major data collection instrument of this study, the questionnaire will be sent to NNES graduate students at a major university in the U.S. in both on-line mode and also hard copies.

The fifth purpose is to present a pedagogical model. Findings of this research study are expected to provide a solid foundation for the researcher to discuss feasibilities of strategy instructions geared towards NNES graduate students and to provide concrete pedagogical suggestions and guidelines. A new model for language learning and use strategy instruction for NNES graduate students will be presented in the final research report.

1.4 Theoretical Frameworks (a brief overview)

This study is fundamentally informed by the following frameworks: (a) Oxford's taxonomy of language learning strategies, (b) the research-generated strategy use patterns of more "successful" learners, (c) communicative competence for NNES graduate students, (d) metacognitive thinking about strategy use. Those frameworks provided substantial guidelines for this research study.

1.4.1 Oxford's revised taxonomy of language learning strategies

This study adopts Oxford's (2008) revised strategy taxonomy of four categories: metacognitive strategies, cognitive strategies, affective and social-cultural interactive strategies. Generally speaking, "metacognitive strategies for guiding the learning process

itself, such as plan an revaluate, affective strategies for managing volition and emotions, such as develop positive motivation and deal with negative emotions; cognitive strategies for mental processing of the L2 and creating cognitive schema (frameworks), such as analyze and synthesize; social-cultural interactive strategies for helping learners interact and collaborate with others, seeking help, continuing social interaction even when knowledge gaps arise, and dealing with sociocultural issues of identity and power" (Oxford, 2011, p.14).

1.4.2 The strategy use patterns of more "successful" learners

A major underlying premise of this study is that research has proved that more "successful" learners have adopted certain strategy use patterns and NNES graduate students, a group that can be justified as more "successful" learners are most likely adopting the following patterns too: 1) the frequent use of metacognitive strategies 2) the use of a combination of top-down and bottom-up strategies in listening and speaking 3)the deployment of "active-use"[5] strategies, 4) deliberate coordination of various categories of strategies 5) catering one's strategy use to fit one's own unique circumstances.

1.4.3 Communicative competence for NNES graduate students

Built on Canale & Swain's (1980, cited in Leaver & Shekhtman, 2003) framework, communicative competence in spoken English for NNES graduate students not only includes oral academic English proficiency, but also includes the abilities to use linguistic skills to communicate appropriately and efficiently in different academic social contexts. In other words, this type of competence enables students to understand and

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[5] The definition of "active-use" strategies will be discussed in chapter II-literature review. Generally, those strategies enable the learner to learn and use the language in a proactive and dynamic manner.

produce the English language "according to the norms of interaction and interpretation[6]" (Hymes, 1972, cited in Hoekje and Williams, 1992, p. 249) of graduate-level classes and conferences. Expanding Canale & Swain's (1980) framework, Leaver & Shekhtman (2003) stated that communicative competence includes four components: "grammatical competence, discourse competence, sociolinguistic competence, and strategic competence (the ability to apply appropriate learning strategies for acquisition of new languages and for coping with unknown language)" (p. 9). Leaver and Shekhtman (2003) also pointed out that superior-level students usually are quite competent strategy users, but they need to develop more metacognitive strategies. Also, they need to develop sociolinguistic competence which includes sociocultural elements as well.

1.4.4   Metacognitive perceptions about strategy use

Flavell (1979, 1987, cited in Graham, 2006) identified three aspects of metacognitive knowledge: knowledge of person variables, task variables, and strategy variables. Based on his framework, Paris and Winograd (1990, cited in Graham, 2006) developed the framework of metacognitive beliefs with three key components too: 1) learners' beliefs in their own capabilities, 2) learners' beliefs in the usefulness of strategies towards achievement of their goals, 3) learners' beliefs in the importance of their goals. Oxford (2011) expanded the concept of metacognitive knowledge and proposed a framework of metaknowledge which includes six categories. Inspired and fundamentally informed by those works, the researcher proposes the framework of metacognitive perceptions about academic English listening and speaking strategy use to help frame part of this study. A key guideline of this framework is the notion that

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[6] Some scholars argue that non-native students should not just accept and learn the established conventions and rules of a discourse community; they should be able to negotiate their identity and power relations within the community. In the conclusion, these issues will be briefly mentioned. The scope of this study generally limits deeper discussion of this issue.

strategy use is an integrative component of the whole language learning process. Thus metacognitive perceptions about strategy use cannot be conceptualized if isolated from this process. The proposed framework has the same six categories as of Oxford (2011)'s framework of metaknowledge: perceptions about the language learning (use) task, the whole language learning (use) process including learners' long-term goals, learners' own abilities and characteristics, the target group culture and other learners, strategy use and conditions of strategy use. This framework can also be seen as including learners' perceptions in three overarching categories: a) learning tasks and goals, b) oneself as a learner and group culture, c) strategy use and conditions for strategy use.

1.4.5 Lave and Wenger's concept of community of practice

"Communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavor" (Wenger, 2007). This concept positions learning in the process of interpersonal interactions and collaborations. Learning is no longer an individualist effort, but a collective enterprise. This concept can be used to frame the NNES graduate students' experiences within their respective English-speaking academic communities. In order to learn from, grow in, and contribute back to their communities of practice in their English-speaking host countries, they need to form relationships and communicate well with other members of those communities. As new comers to those communities, they also need to establish their new identities and adapt to new academic cultures. Thus social-cultural interactive strategies become crucial here.

1.5 Research Questions

This dissertation study is aimed to answer the following research questions:

1. What were the self-rated proficiency levels and self-reported TOEFL

scores, and how do these relate to each other?

2. What are the descriptive statistical characteristics of NNES graduate students' academic English listening and speaking strategy use?

3. What factor structure underlay the Academic Spoken English Strategy Survey (ASESS)?

4. How do the frequencies and types of listening and speaking strategies used by students differ by gender, academic fields, regions of origin, self-rated proficiency, attitude, and level of proactivness[7]?

5. Which of the following variables significantly predict overall reported academic listening and speaking strategy use?
   a. Gender
   b. Degree level
   c. Regions of origin
   d. Academic fields
   e. Self-rated English listening or speaking proficiency
   f. Attitude[8]
   g. Proactiveness[9]
   h. Students' perceptions of the usefulness of strategies

6. What are non-native graduate students' metacognitive perceptions about academic English listening and speaking, self-efficacy, the classroom culture they encounter, and the role of strategies and strategy use?
   a. What are their goals regarding academic English listening and speaking?
   b. How do they perceive the importance of academic English listening and speaking?
   c. How do they perceive themselves as English learners?
   d. How do they perceive the American classroom culture?
   e. To what extent are they confident that they can obtain the level of oral

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[7] Both "attitude" and "level of proactiveness" are measured by individual items on the questionnaire.
[8] Attitude is measured by respondents' frequency choice answers to item 7 on the questionnaire: "I look at each class or conference as a great learning opportunity."
[9] Proactiveness is measured by respondents' frequency choice answers to item 8 on the questionnaire: "I seek opportunities to go to presentations, lectures and conferences even if it is not required."

English proficiency they desire?

- f. What kinds of challenges do they face regarding academic English listening and speaking?
- g. What kinds of strategies are they using or planning to use to overcome those challenges?
- h. How do they perceive strategies and their own strategy use?
- i. What do they think the university should do to help them learn more about strategies?

7.   What are the predictive values connecting overall listening and speaking strategy use, students' perceptions of the usefulness of strategies, and self-rated proficiency?

8.   What are the paths of causality connecting overall listening and speaking strategy use, students' perceptions of the usefulness of strategies, and self-rated proficiency?

1.6   Significance of the Study

As stated before, there is a severe paucity of studies focusing on NNES graduate students' language learning (use) strategies as well as their relevant metacognitive thinking; on the other hand, there is also a lack of discussion on the language experience of international students in the higher education literature. Therefore, this study is expected to fill in gaps in both the body of language learning strategy literature and also the body of higher education literature. Such a dual purpose justifies the significance of this study. The insider status of the researcher also adds some interesting aspects to the study. Although at the same time it may bring some bias, which is fully acknowledged by the researcher.

Secondly, significance of this study also lies in its potential in providing pedagogical suggestions and guidelines. As research reveals, NNES graduate students' academic English listening and speaking capabilities need to be improved. Explicit

instruction of English listening and speaking strategies can be of great value to them, whether integrated into existing curriculums or offered as an independent unit. The results of this study should provide teachers and curriculum developers with an understanding of 1) the situation of academic English listening and speaking of non-native English speaking graduate students 2) the academic English listening and speaking strategy use of those students 3) those students' perceptions and knowledge regarding their academic oral English proficiency and their strategy use.

Overall, significance of this study mainly lies in 1) its potential in providing pedagogical suggestions that can help improve NNES students' performance as communicatively skilled members of their academic communities in graduate school and, indirectly, in their later careers; 2) its linking of listening and speaking strategies, metacognitive thinking, and "success" in a way that has not been done before; and, hence, 3) its potential to fill a very important gap in the body of research on strategies for language learning and language use for NNES graduate students.   Significance of this study also lies in its unique mixed-methods design and its consolidation of the first questionnaire specifically designed to suit NNES graduate students' academic contexts. Finally, this study is expected to raise awareness among both NNES graduate students and their instructors about the importance of oral academic English proficiency versus written academic English proficiency, and also about the importance and usefulness of listening and speaking strategies.

1.7 Overall Research Design

The research study is a mixed-method research study. Both quantitative and qualitative methodologies are used to gather data in order to address the research

questions. The quantitative and qualitative parts are projected to be of equal weights in this study and their results will be used to interpret and supplement each other. The quantitative part of the study employs a self-report questionnaire to mainly explore the strategy use patterns and some relevant perceptions of NNES graduate students. The Academic Spoken English Strategies Survey (ASESS) was developed and pilot-tested by the researcher. The data collected will also be analyzed statistically. The research study also includes a qualitative study design, which will use data from multiple sources for achieving a deep understanding of the phenomenon-NNES graduate students' strategy use. Results from semi-structured interviews, classroom observations, and questionnaires will be synthesized and compared together for providing a holistic view of the topic.

Qualitative interviews conducted with select participants are aimed to reveal further students' metacognitive thinking associated with their strategy use: how they perceive the importance of academic English listening and speaking, how they perceive their own competency in terms of academic English listening and speaking, how they perceive the usefulness of strategies, and what kinds of metacognitive knowledge they have about themselves as learners and also about strategies. Within this overall framework, interesting themes that emerged from the quantitative data that arouse research curiosity will also be used to inform the design of interview questions.

In addition, classroom observations of interviewees will also add insights about the contexts of the learners' strategic choices, and then contribute to a thorough understanding of the whole phenomenon—academic English listening and speaking strategy use of NNES graduate students. As staged before, data from the questionnaires, the interviews and classroom observations will all be triangulated.

1. 8. Defining Key Terms

In this subsection, several key terms will be defined. Those terms are widely used in the literature of second language learning and use strategies.

1.8.1 Language learning strategies and language use strategies

"Although originally a military term, *strategy* in general use has come to refer to the implementation of a set of procedures for accomplishing something; Bialystok (1990) defined this use of the term as "wilful planning to achieve explicit goals" (p. 1) (cited in Dörnyei and Scott 1997, p. 179). Oxford (1990) defined learning strategies as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations"(p.8). Language learning strategies are specific steps, approaches or techniques learners purposefully take to help them with their language learning and also with use of the second (foreign) language. Language learning strategies are affected by other learner variables and social and cultural factors too.

Tarone (1980, cited in Nakatani & Goh, 2007, p.208) suggested the distinction between strategies for "language use" and strategies for "developing linguistic and sociolinguistic competence" in the target language. Cohen (1996) used the term "second language learner strategies" to encompass both learning and use strategies. He defines language learning and use strategies as "steps or actions selected by learners either to improve the learning of an L2, the use of it, or both". (p.11, emphasis in original). Hsiao and Oxford (2002) pointed out that although some scholars argue for the differentiation between strategies for learning and strategies for use, "in daily reality the strategies for L2 learning and L2 use overlap considerably, especially for beginning and intermediate

learners" (p. 378). In this study, the distinction between term language learning strategies and the term language use strategies is not emphasized but acknowledged. Sometimes the two terms are also used interchangeably, because in many circumstances, learners learn a language while using it or use a language while learning it. Also, since the research system of language learning strategies is much more established than that of language use strategies, the literature review part of this proposal (Chapter II) treats the general definitions, taxonomies and empirical study results of language learning strategies as representative of both learning and use strategies.

1.8.2   Tactics and strategies

Tactic is a unit smaller than strategy. According to Goh (1998), the term "strategy" refers to "a general approach", and "tactic" means "a specific action or step" (p. 124). Goh (2002) further explained that "for example, we may say that a strategy such as selective attention can be operationalised through tactics, such as noticing familiar words and paying attention to intonation" (p. 187). In the literature review chapter, some studies reviewed used this distinction, and some didn't. Therefore the review will reflect the authors' choices in this matter.

1.8.3   ESL, EFL and foreign language settings

ESL represents "English as a second language" and EFL represents "English as foreign language". In ESL settings, English is the major language of communication in the social-cultural contexts of the learners' daily life. In EFL settings, English is not the major language of communication in the learner's daily life, but merely a foreign language learnt in the context. Foreign language settings means contexts whereby the learner is learning a foreign language other than English. Hsiao and Oxford (2002)

pointed out that ESL and EFL strategies might be different and this can be a future research direction. Oxford (1996) noted that learners in the foreign language setting "have to go out of their way to find stimulation and input in the target language. These students typically receive input in the new language only in the classroom and by rather artificial means"; while in the second language environment the learners are "surrounded by stimulation, both visual and auditory, in the target language and thus have many motivational and instructional advantages". (p. 4). The target student group of this research—NNES graduate students are students learning and using English in academic ESL settings. However, for the purpose of the literature review in Chapter II, which is to provide a framework for future research and also some practical insights and suggestions to language learners and instructors, conclusions are made without differentiation between ESL, EFL or FL settings. Although generally it is accepted practice in the field that conclusions about language learning strategies in those settings can be generalized across the board, it is important to note the potential effects those different settings have on learners' strategy use.

1.8.4 Top-down and bottom-up processes in listening and speaking

Successful listening usually requires three types of knowledge: "schematic, contextual and linguistic" (White, 2008, p. 208). Listening as a language activity involves two processes: the bottom-up process and the top-down process. The bottom-up process is "where listeners use their linguistic knowledge of sounds and word forms and build up to more complex lexical items and grammatical relationships to comprehend", while top-down is "where prior experience, real-world knowledge or familiarity with the listening context help the listeners to interpret an utterance. These

processes are not used exclusive of each other, but rather alternate and combine to help the listener make meaning (Vandergrift, 2002, cited in O'Bryan and Hegelheimer, 2009, p. 11-12). With the bottom-up process, the listener tries to figure out the meaning of the message based on the spoken text itself, starting from the smallest units of the discourse, such as syllables or words that are heard. Linguistic knowledge is very important during this process. With the top-down process, the listener will first use context and prior knowledge such as genre, world knowledge, common sense, knowledge about the subject to prepare a conceptual foundation of comprehending the spoken text. Generally scholars recommend a balanced combination of both top-down and bottom-up processes. When listeners focus too much on individual segments of the message, they cannot free up their energy and time to use prior knowledge and other resources to help them comprehend the gist of the message. When listeners rely too much on prior knowledge to predict the meaning, they might fail to remain flexible and to adjust their understanding according to what they really hear (Vandergrift, 2007, Macaro, Graham, and Vanderplank, 2007). Listening strategies associated with the top-down process are predicting and inferencing meaning of the words and others; listening strategies associated with the bottom-up process are translating and focusing on individual words and others. Less successful learners tend to rely on either bottom-up or top –down process, while more successful learners will use a combination of both (Peterson 2001, cited in O'Bryan and Hegelheimer, 2009).

The bottom-up process of speech production involves focusing on vocabulary, grammar, pronunciation, intonation, etc. The top-down process involves knowing about and speaking with the consideration of communication conventions in certain social-

cultural contexts and with cultural appropriateness, etc. (Saville-Troike, 2006). Speaking strategies associated with the bottom-up process can be practicing one's pronunciation; top-down speaking strategies can be watching TV to learn how native speakers talk in certain circumstances. Again, a combination of both top-down and bottom-up processes is beneficial to learners.

1.9 Limitations of the study

The limited number of participants and the location of the research-in a U.S. research university to a certain extent limit the generalisability of the results. Since all results come from only a sample of the student population, it is not recommendable to largely generalize those results to the whole student population.

Secondly, all the data collected in this study are reflecting students' own points of view. A way to expand the study is to seek instructors' points of view of NNES graduate students' oral English performance and strategy use, but that is beyond the scope of this dissertation.

1.10 Statement of Positionality

As Choi (2006) pointed out, the "insider" status of a researcher can bring a deeper understanding to the topic; however, it also brings its own bias. I am a NNES graduate student originally from China. I am fully aware of the fact that my own identity, cultural background, previously held perspectives and feelings might color the data collection and analysis stages.

1.11 Summary of Introduction

Compared with other individual learner differences, learning strategies can be largely controlled by the learner (Benson & Gao, 2008). This gives the learner freedom

and power. Learning strategies offer learners a practical and realistic tool to improve their language proficiency. Because language learning strategies can be adopted by the learner independently, learner's self-efficacy and self-confidence are usually enhanced. The value of language learning and use strategies is tremendous to NNES graduate students, especially if they not only want to meet all the requirements of a rigid graduate program, but also to have a more meaningful and enriched academic experience, and to contribute back to their academic communities.

   In this introduction, the major components of the study have been discussed briefly: from statement of the problem, purposes of the study, to the important theoretical frameworks, the research questions, and finally to the general research design and limitations of the study. The results of this study should provide teachers and curriculum developers with an understanding of 1) the situation of academic English listening and speaking of non-native English speaking graduate students 2) the academic English listening and speaking strategy use of those students 3) those students' perceptions and knowledge regarding their academic oral English proficiency and their strategy use. Certainly due to limitations of this study and the fact that all results come from only a sample of the student population, it is not recommendable to largely generalize those results to the whole student population. However, the picture provided in this study should shed some light on those issues that are keenly associated with non-native English speaking students' oral English proficiency and strategy use.

Chapter 2: Review of Literature

This chapter consists of three major sections presenting an overview of key theories and empirical studies relevant to this specific study, among which section 2.2 is the key section:

2.1 Listening and speaking of NNES graduate students
2.2 Strategy use patterns of more "successful" learners
2.3 Metacognitive perceptions and strategy use

2.1 Listening and speaking of NNES graduate students

The difficulties faced by non-native English speaking students have been documented in the literature. As early as 1991, Murphy stated that "Many student populations have significant spoken language needs at the intermediate, advanced, and professional levels" (Murphy, 1991, p. 53). According to Ferris and Tagg (1996), not only "academic listening tasks pose formidable challenges for L2[10] students" (p. 299), but also ESL[11] university students "are often intimidated by academic speaking tasks, including formal presentations and participation in …group discussions"(p. 300). Regarding the extra burden ESL students have to bear, Goh (2002) pointed out: "In the case of first language users, much of the processing …is automatised, whereas language learners often have to work under the constraints of an overloaded working memory, and a lack of linguistic, sociolinguistic and content knowledge" (p. 186).

According to the 5-level Interagency Language Roundtable (ILR) level definitions (Federal Interagency language Roundtable, 1999), at level 3—the superior level, "students can expect to use the language professionally while having obviously less

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[10] Second language
[11] English as a second language

than native control of linguistic and cultural elements". At level 4--the distinguished level, students begin to approach the level of an educated native speaker (Leaver and Shekhtman, 2002, p. 9). Based on existing literature and also the researchers' daily observations as an insider, most NNES graduate students can be assumed to be between level 3 and level 4. At this stage, students need to acquire oral academic communicative competence in English. The definition of communicative competence is proposed by Hymes and developed by Spolsky as following: "the ability to communicate with native speakers in real-life situations—authentic interpersonal communication that cannot be separated from the cultural, paralinguistic, and nonverbal aspects of language" (as cited in Leaver and Shekhtman, 2002, p. 9). For NNES graduate students, oral academic communicative competence is the ability to communicate with native speakers effectively and appropriately in real-life academic settings, such as lectures, seminars, conferences, or group discussions.

Although there is a lack of research on the academic aspect of NNES graduate students' experiences (Halic, Greenberg, and Paulus, 2009), existing research clearly reveals that NNES graduate students often face serious problems with their academic English listening and speaking. Miller (2009) stated that, based on a series of studies mainly focusing on engineering students, "even when students have high proficiency levels in their second language they sill encounter comprehension problems when listening to lectures in the second language" (p. 12). Zappa-Hollman (2007)'s qualitative study of NNES graduate students in Canada reported that "T(t)he NNES students considered themselves to be at a disadvantage compared to their NES peers. Even students who displayed advanced English abilities …and those who had also lived in an

English-speaking context for a number of years … reported feeling linguistically challenged, and they all mentioned that giving a presentation in English made them significantly more nervous than doing the same activity in their L1" (p 470). Based on interview and questionnaire data from 59 NNES graduate students at a Canadian university, Cheng, Myles, and Curtis (2004) confirmed that NNES graduate students do experience difficulties in academic speaking and listening. They especially pointed out that "some students express their frustration in coping with both academic and language demands simultaneously in their academic studies" (P. 65). They also pinpointed some specific difficulties NNES graduate students face in the following: "Whether it is understanding their instructors, taking part in large- and small- group discussions…, NNES graduate students can experience a great deal of stress in their studies and their daily lives"; and "With regard to classroom participations, many students still feel inadequate when responding to questions and expressing themselves clearly in class" (p. 63).

Halic, Greenberg, and Paulus (2009) conducted a qualitative study by interviewing nine non-native English speaking graduate students. All interviewees "described their difficulties in expressing feelings, ideas and knowledge" (p. 91). In fact, one of the major themes that emerged in the data was the frustration and sense of failure those students felt due to their limited abilities in communicating in oral academic English:

> It's bad because when you have such a feeling - that you're a stupid person - it
>   just incredibly reduces your angle and you really feel like a small person, like a
>   mouse in the church ...Well, that's really embarrassing ... (Michael, 124-126).
>   (P. 82)

... after a while it's frustrating... when you try to communicate in terms of academics ... and people think you don't know the topic just because you don't know the words. (Josh, 214-215) (P. 82)

(The above are excerpts from interview transcripts.)

Regarding the largest NNES graduate student group in the U.S.—students from Asia, Choi (2006) interviewed 14 Asian graduate students in the U.S. who were from different countries and academic fields about the major difficulties they encountered during graduate studies and their coping strategies. The most frequently mentioned difficulties were "insufficient language proficiency" and "different cultural knowledge including factual, procedural, and interactional knowledge" (p. 56). Social science students were most concerned with writing and speaking, while science or economics students were concerned about listening. "All participants felt that time, practice and experience improved their language skills, however, none felt this was sufficient" (p. 57). Focusing on NNES graduate students from East-Asia, Kim (2006)'s survey study at a US university reported that 30 percent of respondents had difficulties with whole-class discussions; while 17% reported having trouble in small-group discussions and 24% had some difficulties with asking questions in class. Those students were from non-science and non-engineering majors.

2.2 Strategy use patterns of more "successful" learners

Macaro, Graham, & Vanderplank (2007) wrote: "…(the relationship between) strategy use and successful performance is one of the main claims made by strategy theorists" (p. 168). Manchon (2008) even asserted, "a founding principle of research in the area (of language learning strategies) is that a (causal)[12] relationship exists between

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[12] The parentheses are originally put there by the author.

strategy use and success in language learning." (p. 223). The fact that NNES graduate

students are enrolled in graduate level programs in English-speaking countries should

testify that they enjoy considerable success in English learning. However, there is a

severe paucity of research on NNES graduate students' strategy use.

2.2.1 Two studies on NNES graduate students' strategy use

A search of the literature[13] reveals that only two studies (Zappa-Hollman, 2007,

Choi, 2006) indirectly investigated speaking strategies used by graduate level NNES

students. Although its main focus was on "discourse socialization" of ESL students,

Zappa-Hollman's study (2007) reported strategies used by non-native graduate students

to deliver academic presentations. The participants were six NNES graduate students at a

Canadian university; they were from different disciplinary fields and different countries.

Based on interviews, observational data, and some other secondary data, she reported that

those non-native English speaking graduate students "collectively employed numerous

strategies – most of which proved very effective, according to the audiences – to cope

with the challenges associated with the APs (academic presentations)" (p. 475). Some

key strategies reported were: 1) preparing an outline or script for the presentation 2)

rehearsing (with peers or not) 3) speaking at a slow rate 4) engaging the audience with

verbal and non-verbal strategies.

Choi's study (2006) investigated the difficulties encountered by international

graduate students and their coping strategies. However, the language strategies reported

by the study were only nine general-use strategies such as practice, getting help from

friends, starting early and preparation. There were no task-specific or deep level

strategies. Moreover, Choi (2006) pointed out that "most of these strategies are self-

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[13] Methods for this literature search will be discussed later.

reliant, with the students relying on hard work as the main strategy" (p.61), which means the participating students hardly tried to find out the most efficient and effective strategies based on their own situations.

2.2. 2 Overview of the section

The paucity of available research not only calls for studies to be done in this area, but also makes it necessary to expand the parameters for a research review that can serve as a framework to locate the dissertation study. It can be generally assumed that graduate level non-native speakers of English are more successful learners of English than others, since they predominantly must take the TOEFL and even GRE test to enroll in a graduate program in an English-speaking country such as U.S. or Canada. Once they enroll, they are also assessed along with English-speaking graduate students. Therefore it is reasonable to explore what researchers have found out about the strategy use patterns of more "successful" listeners and speakers of a second (foreign) language, and use those findings as a reference system against which to gauge the strategy use patterns of NNES graduate students.

Section 2 includes studies of the following: 1) ESL, EFL, and foreign language settings, 2) secondary school and college settings 3) U.S. and international settings. There are two reasons for this inclusiveness: 1) unlike that of reading and writing strategies, the research body of listening and speaking strategies is small. Although there is definitely difference among the strategy use and other learner variables of learners of different languages, ages, nations, and proficiency levels, it is still useful to acquire some general themes across those studies 2) the review does not try to achieve an accurate picture of the strategy use patterns of graduate level ESL learners. Rather, the

purpose is to synthesize what researchers have found about strategy use patterns of "better" learners—those who have "something" to be credited for--whether they are called "more successful", "more effective", "more skilled" or "more advanced" learners by different researchers. This "portrait" of the "more successful" language learners is suitable for serving as a "starting point" and as theoretical background for future empirical studies that will explore the strategy use of graduate level non-native English speakers. For example, this model can be used as the theoretical foundation for developing a questionnaire to explore the strategy use of graduate level ESL learners. Until now, there is no such questionnaire existing.

Yamamori, Isoda, Hiromori and Oxford (2003) discussed the "futile search for universally 'good' strategies of successful language learners (p. 382). They argued that a) successful learners do not use special strategies that others do not use; b) rather they coordinate their strategies according to the task and learning styles; c) no single strategy is universally "good" or "bad". Each learner should find his or her own patterns of strategy use based on his or her own specific situation, contexts and the tasks. This review does not attempt to assemble a list of universally good strategies, but tries to gather what researchers have found about strategy use patterns of the "better" learners. The purpose is not to recommend teachers to teach or learners to adopt certain strategies mechanically; rather, the rationale lies in the fact that according to the literature, generally there are indeed differences of both repertoires of strategies and patterns of strategy use between the "worse" and "better" (for lack of better terms) groups of learners, although different researchers define "worse" and "better" very differently. The ideal guiding model for the learners should be a combination of knowledge of general patterns

and also a personalized analysis of one's own learning situation.

For the purpose of conciseness, this review will use a umbrella term—more "successful" (in quotation marks to indicate its special connotations), while it should be clear that among the empirical studies reviewed here, some compared strategy use of high scorers with that of low scorers (Vanderplank et al., 2008); some compared more skilled[14] with less skilled learners (Vandergrift, 2003); some compared "high (listening) ability"[15] with "low (listening) ability" learners (Goh, 1998, 2002); some compared more advanced with less advanced learners (Griffths, 2003, Vandergrift, 1997); some defined a successful learner based on the progress made during a short time (Carson and Longhini, 2002) or on the level of achievement according to a standard (Samimy, 2008). Also, those studies used different means to measure and determine who were more successful or advanced learners: assessed by the researcher after analyzing verbal protocols or interview data, self-rated by students, assessed after recall tasks, and assessed by a standard test. As Cohen (1998) suggested, "there may be strategies that are better suited for beginners and others for more advanced learners" (p.150), and certain strategies might be better suited for advanced language learners in academic settings. Literature on language learning and use strategies of more "successful", "effective", "skillful" "better" learners can provide insights and valuable suggestions for advanced second language learners such as graduate level English speaking students in the U.S. Only it is crucial to remember that there is no consensus about what is good or effective (Cohen and Macaro, 2007).

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[14] "Skilled often means having progressed to the stage of unconscious, fluid performance (procedural knowledge) in some aspect of the language. This implies no longer using learning strategies in that area, because strategies are by definition used consciously". (Personal correspondence, Dr. Rebecca Oxford, Nov. 22, 2009).

[15] Generally it might be better not to differentiate students between high or low ability, because with a progressive view, every student can achieve better results with appropriate methods and efforts.

2.2.2.1 Two perspectives on language learning strategies.

Two major perspectives of on language learning strategies have been developed in the field: the psychological view and the social-cultural view (Oxford & Schramm, 2007). The psychological view of learning strategies was the "classical view" of learning strategies when the field was originated. It looks at learning strategies as mainly involving cognitive, mental processes that the learner conducts. The use of learning strategies is mostly an individual effort to achieve a language learning goal. Traditionally the cognitive view has been associated with quantitative research. The social-cultural view starts with the society instead of the individual learner as its fundamental unit of observation. It is influenced by theories such as Vygotsky's (1986, as cited in Smagorinsky, 2007) "zone of proximal development" model, which describes that learners can learn through contacts or collaboration with a more capable person in a social-cultural context. With this view, the use of learning strategies is no longer an individualized mental process but a social-cultural phenomenon situated in different contexts (Oxford & Schramm, 2007). The social-cultural view will often consider the social-cultural complexities of particular settings which are difficult to generalize, and it is often associated with qualitative studies. Regarding methodologies, there is also a new trend of mixed-methods studies in the field of language learning strategies (Oxford, 2011). The studies reviewed in the following sections reflect major influences of those two perspectives. Although some scholars believe that those two perspectives are mutually exclusive of each other, other scholars believe that they are compatible. Another group of scholars also argue that those two perspectives are on a continuum (Oxford & Schramm, 2007).

2.2.2.2 *Major Instruments and Methodologies.*

As Chamot (2004) pointed out, some language learning strategies are observable, such as taking notes while listening; some are not observable, such as paying attention selectively. It is hard to know what is going on in the "black box" of the learner's mind. Therefore self-reports are predominant instruments for collecting learner data. Major instruments include questionnaires; think-aloud procedures, verbal report protocols and interviews. Yamamori, Isoda, Hiromori and Oxford (2003) pointed out some limitations of standard methods for examining the nature of strategy use, such as questionnaires in need of adaptations to suit different situations and contexts; the difference between formal and informal instruction settings, and the limited information provided by questionnaire and structured-interview data.   However, so far those instruments are still the most effective ones in the field. Studies reviewed here include small-scale qualitative case studies, quantitative studies of a larger scale using statistical methods, and also a few mixed-method studies.

The section includes two subsections: 1) listening strategies, 2) speaking strategies. Each subsection starts with a discussion of important concepts, definitions and taxonomies. Then summaries of major studies will follow. Each subsection also concludes with a summary of major findings. Finally, the section concludes with a combined summary of major findings and suggestions for future research directions.

This section seeks to build on four former reviews: a) Cohen and Macaro's (2007) edited book of 30 years of research on learning strategies; b) Oxford's (2011) review of major issues, concepts and findings in the field; c) a book-length review of research on the good language learner edited by Griffiths (2008); d) Berne's (2004)

review of listening comprehension strategies. However, this section has its own focus, which is on the strategy use of more "successful" learners. Also, this section will include most recent studies that were not included in those previous reviews.

2.2.2.3. Define language learning strategies

In 1975, Joan Rubin, the "founder" of second language learning strategies research (Oxford, 2011) wrote: "if we knew more about what the 'successful learners' did, we might be able to teach these strategies to poorer learners to enhance their success record"(Rubin, 1975, p. 42). Since then, there have been some different definitions of learning strategies and systems of classifications. Oxford (1990) defined learning strategies as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations"(p.8). Ellis (2003)'s definition pointed out that learning strategies were deployed to overcome particular learning problems. Oxford's (2008) more recent definition highlighted the "goal-orienting" characteristics of strategies: "L2 learning strategies are the goal-oriented actions or steps (e.g. plan, evaluate, analyze) that learners take, with some degree of consciousness, to enhance their L2 learning" (p. 41). Finally, White (2007) emphasized learners' role as "responsible agents": "Language learning strategies are commonly defined as the operations or processes which are consciously selected and employed by the learner to learn the TL (target language) or facilitate a language task. Strategies offer a set of options from which learners consciously select in real time, taking into account changes occurring in the environment, in order to optimize their chances of success in achieving their goals in learning and using the TL. As such the term strategy characterizes the relationship between intention and action, and is based

on a view of learners as responsible agents who are aware of their needs, preferences, goals and problems." (p. 9). Based on a survey of international language learning strategy experts, Cohen (2007) reported that experts generally agree that language learning strategies can be used to "enhance learning", "perform specified tasks" and "to solve specific problems" (p. 38-39). However, according to Cohen (2007), language learning strategy experts almost uniformly agree that the effectiveness of learning strategies "very much depend on" individual learner characteristics (such as age, learning styles, motivation and learner beliefs), the learning task at hand, and the learning environment (p. 37). This insight shows the ongoing influence of the social-culture perspective in the field, which views learning strategies as a socially and culturally situated phenomenon. In conclusion, language learning strategies are specific steps, approaches or techniques learners purposefully take to help them with their language learning and also with use of the second (foreign) language. The learner is taking the active role here. Also, language learning strategies are affected by other learner variables and social and cultural factors.

2.2.2.4. *Taxonomies of learning strategies*

A number of taxonomies of strategy use have been developed, and according to White (2007) the two most influential taxonomies are Oxford's (1990) taxonomy of direct (memory, cognitive, and compensation strategies) and indirect strategies (metacognitive, affective and social) and O'Malley and Chamot's (1990) list of metacognitive, cognitive and socio-affective strategies. Later on, Oxford (2011) revised the 1990 taxonomy and the new taxonomy includes four categories: metacognitive strategies, cognitive strategies, affective and social-cultural interaction strategies.

Metacognitive strategies are used for managing the whole learning process; cognitive strategies are used for processing information mentally; affective strategies are used for monitoring the affective side of learning; and social-interactional strategies are used for learning together with others. The two strategy groups in the original 1990 model-- memory strategies for help remember information and compensation strategies for overcoming limitations or gaps of knowledge are now respectively included into the categories of cognitive strategies and social-cultural interaction strategies.

2.2.3 Listening strategies

This section discusses what research reveals as listening strategies used by more successful learners. This section also discusses a special type of listening strategies that are used in interactive listening contexts.

As Vandergrift (2003) mentioned, most research attention on language leaning strategies has been given to reading, writing and speaking, but not listening. Still a group of scholars have done important work in this area, especially Larry Vandergrift (1997, 2003, 2006) and Christine Goh (1998, 2002).

Goh (1998) studied listening strategies and tactics used by Chinese learners from a university ESL program in Singapore. Based on the results from the listening component of a standardized test, 16 learners were selected into two groups: the high ability group and the low-ability group. By analyzing retrospective verbal reports, Goh found out that high-ability listeners not only used more strategies than the low-ability ones, but also more tactics within each category of strategy. Based on her findings, Goh presented a comprehensive taxonomy of listening strategies. She also reported that the high-ability listeners used all the six cognitive strategies (inferencing, elaboration,

prediction, contextualization, fixation, and reconstruction), while the low-ability listeners did not use prediction and contexualization at all. The high-ability listeners used all the five metacognitive strategies (selective attention, directed attention, comprehension monitoring, real-time assessment of input, and comprehension evaluation), while the low-ability listeners did not use real-time assessment of input and comprehension evaluation. Thus Goh (1998) concluded that high-ability listeners had a larger repertoire of listening strategies and tactics.

Table 2.1 Major listening strategies (cognitive and metacognitive) according to Goh (1998)

Cognitive strategies	Metacognitive Strategies
Inferencing, elaboration, prediction, translation, conceptualization, visualization, fixation, reconstruction	self-monitoring, comprehension monitoring, selective attention, directed attention, real-time assessment of input, comprehension evaluation

Goh (1998) further pointed out that one crucial difference between high-ability learners and low-ability learners lies in how they treat difficulties such as new words during listening. According to Goh, the high-ability listeners would continue to listen despite difficulties while the low-ability listeners would get stuck trying to figure out the problem and miss the other parts of the message. This difference implies the importance of using metacognitive strategies to manage one's listening process.

Goh's (2002) study further explored Chinese ESL students' listening strategies by using retrospective verbal report data. She analyzed the 40 informants' data to find out what kinds of listening strategies and tactics they used. Then she further analyzed data from two informants (one high-ability listener and one low-ability listener) to find out the difference of strategy use between them. She reported the following:

- Although the "high ability" listener and the "low ability" listener used similar strategies, the former "demonstrated more effective use of both cognitive and metacognitive tactics" (p. 185).
- The "high ability listener" used two high-level monitoring strategies (a type of metacognitive strategies):

    (a) comparing one's interpretation with prior knowledge

    (b) using the contexts of the big picture to check understanding of a particular part. Both strategies require high-order processing when listening.

- The "high ability listener actively monitored her comprehension and attention" and did not let difficulties with specific parts hinder her from understanding the whole passage.
- "High ability" listeners use listening strategies that interact with each other.

 Goh (2002) also pointed out that learners should learn how to "vary the intensity

of their concentration", which suggests learners to be flexible and strategic with their

attention allocation. This insight is connected with Goh's discovery of a unique strategy

used by "high ability" learners: "real-time assessment of input", by which the learner

assessed how important certain parts of the input were while listening. Based on the

decision, the learner would then decide whether they would give further attention to those

parts (Goh, 1998, 2002). Thus we can infer that more successful listeners should be

flexible and strategic in allocating their attention, energy and time during listening.

Again this points to the importance of metacognitive strategies.

Vandergrift's (2003) study first summarized some important findings of research

literature thus far: a) More skilled[16] listeners were reported to use metacognitive

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[16] It might be necessary to remind the reader that "S*killed* often means having progressed to the stage of unconscious, fluid performance (procedural knowledge) in some aspect of the language. This implies no longer using learning strategies in that area, because strategies are by definition used consciously". (Personal e-mail from Dr. Rebecca Oxford, Nov. 22)

strategies more frequently; b) Although cognitive strategies such as elaboration and inferencing were used almost equally by all listeners, more skilled listeners used them in "more effective combinations"; c) More skilled listeners were "more flexible in strategy use" (P. 470). All those findings have gained support from Goh's two studies discussed previously. Vandergrift (2003) examined the difference in strategy use of "more skilled" and "less skilled" listeners by using an innovative mixed-method (quantitative and qualitative) research design. The learners were 36 grade 7 students learning French as a second language in two intact classes from two different schools. The findings were a) more skilled listeners used much more (almost double) metacognitive strategies than less skilled listeners did; b) more skilled listeners were more flexible and open in their approach; c) less skilled listeners used primarily bottom-up processing. The qualitative analysis of the think-aloud data also revealed that: a) the more skilled listener used "a dynamic interactive approach of top-down and bottom-up processing"(p. 484); b) the more skilled listener "is able to systematically orchestrate a cycle of cognitive and metacognitive strategies" (p. 490).

According to Chen's (2009) review of the literature, researchers have different opinions as to whether learners prefer top-down or bottom-up strategies. It has been suggested that "successful listening comprehension relies on the integration of, and the balance between, both bottom-up and top-down facets" (Flowerdew and Miller, 2005; Vandergrift, 2004, as cited in Chen, 2009, p. 56), "while the nature of that balance may vary depending on a number of different factors, e.g.., the text, task, speaker, listener and input processing factors" (Rubin, 1994, as cited in Chen, 2009, p. 56). Vandergrift (2003) provided further empirical evidence of this combination of both processes and he

specifically pointed out that there was an "interaction" between them.

Using data obtained from two large and different samples of second language learners of various languages—966 learners for the exploratory analysis and 512 for the confirmative factor analysis, Vandergrift, Goh, Mareschal, and Tafaghodtari (2006) established a five-factor model of learner's meta-cognition that directly influences learners' second language listening comprehension success. The participants were from different countries including university students, high school students and government employees with various proficiency levels. This model indirectly confirmed the crucial importance of megacogntive strategies towards listening success: language learners use metacognitive strategies to take control of the whole learning process and to utilize all the resources to achieve the optimal results. Vandergrift et al.'s (2006) model had the following five factors (five aspects of listeners' metacognition): problem-solving, planning and evaluation, translation, person knowledge, and directed attention. Also, Vandergrift et al. (2006) supported the validity of the notion of learner "orchestrating" strategies: "strategy deployment during comprehension is not a serial process; skilled listeners engage in a coordinated, systematic cycle of predicting, elaborating, inferencing, and monitoring based on global comprehension, world knowledge, and plausibility" (Mareschal, 2002, as cited in Vandergrift et al., 2006, p. 452).

Graham, Santos, and Vanderplank (2008) adopted a case study approach to investigate the development of strategy use of one more successful listener (a high scorer) and a less successful listener (a low scorer) over a period of six months. Both participants were secondary school learners in L2 French in England, and they were selected based on their scores on a recall protocol after finishing a listening task. The

researchers concluded that there were indeed strategy differences between the high scorer and the low scorer, at both time points: a) the high scorer used a number of metacognitive strategies to double-check and question his interpretations; b) the high scorer tried to gain an overall understanding of the passage and then used "selective attention" as an almost automatised strategy to locate key information while the low scorer mainly used selective attention to make predictions before listening occurred. Those findings further expanded Goh's (1998, 2002) and Vandergrift's (2003, 2006) conclusions about what kinds of strategies that more successful listeners likely use.

More importantly, Graham et al. (2008) emphasized that the "manner" in which strategies are used leads to effective listening more than the number or types of strategies used. They found out that even if learners used strategies that are normally associated with more effective learners such as "selective attention", if they didn't use them "well and appropriately" (p. 66), they would not find those strategies useful. When exploring the notion of "appropriateness" of strategy use, they lent support to the "social-cultural" view of strategies, which asserts that the effects of using strategies depend upon tasks, learner situations and other contextual factors too. Therefore it is too naïve to predict that learners just need to copy strategies that are used by more successful learners; they also need to learn how to use those strategies appropriately according to their own learning situations. Shortly, "strategy use is highly individualized" (p. 66). This conclusion echoed other scholars' assertions that different learners must coordinate strategies that are most suitable to their own conditions and contexts (Yamamori et al., 2003; Hsiao and Oxford, 2002). Graham et al. (2008) also found out that it is important to use a series of strategies supportive of each other until the problem is solved. This

viewpoint is similar to the "interactive" proposal made by Goh (2002).

        Besides the one-way listening situation described in the above studies, scholars also investigated learners' strategy use in interactive listening situations, whereby the learner not only tries to understand the speaker, but also proactively engages in a conversation with the speaker in order to gain a clearer or deeper comprehension of the message. The interactive listening strategies listeners use to clarify information or to obtain more information are called reception strategies (Vandergrift, 1997). Although Vandergrift classified reception strategies as a subgroup of speaking (communication) strategies, for the purpose of this review, it is still classified as a subgroup of listening strategies, or rather, a "hibernation" of listening strategies and speaking strategies. With reception strategies, learners act "interchangeably in the roles of listener and speaker to negotiate meaning" (Vandergrift, 1997, P. 495). Vandergrift (1997) investigated the reception strategies used by 20 high school L2 learners of French during an oral interview. Vandergrift found out that novel learners used more "kinestics" (non-verbal techniques to suggest non-understanding such as a blank look) and "faking" (trying not to seek clarification or to avoid admitting non-understanding) than more advanced learners. On the other hand, more advanced learners used more "uptaking" (signaling the interlocutor to continue) and "hypothesis testing" strategies (asking questions to verify one's understanding).   Overall, more proficient listeners used strategies that helped them to be more active in interactive listening. For example, they were able to negotiate meaning and advance the conversation. However, novel listeners mainly used strategies to either signal or hide the fact that they did not understand, which made them less interactive and also made it harder for the conversation to continue. Therefore the study illuminated that

the use of reception strategies should help learners remain active in interactive listening. Vandergrift pointed out that reception strategy use has two "constraints": the cognitive constraints and the social constraints. The more advanced learners are, the more they are able to process large chunks of language, which frees up cognitive space and energy for them to engage in a more interactive conversation in the target language. This corresponds to the information processing theory introduced before. Secondly, learners' reception strategy use is potentially influenced by the social setting of the conversation. For example, the learner might choose to fake understanding when he or she is not familiar with the interlocutor. Studies with larger groups of participants are needed to further test this theory.

Moreover, Young (1997) proposed the active nature of general listening comprehension activities. Therefore it can be hypothesized that "effective" strategies help the learner actively engage in the learning procedures; also more "effective" learners will use strategies in a more "active" way. This hypothesis has also been proposed and empirically supported by Green and Oxford's (1995) study on speaking strategies, which will be discussed in the next subsection.

This subsection examined major studies on listening strategies. The literature has clearly revealed that although different researchers differentiate learners in various ways (high ability vs. low ability, high scorer vs. low scorer, novice vs. more advanced, etc.), there are significant differences between those two groups of learners in terms of listening strategy repertoire and patterns of listening strategy use. Common themes have emerged about those differences too. The importance of megacongitive strategies was emphasized by almost each study and the importance of systematically "orchestrating"

(Vandergrift et al. 2006) or coordinating strategies was also highlighted. Grenfell and Harris (1998) proposed that language learning strategy use is developmental: at the early stage they are self-contained and then because more proficient learners tend to be more interactive and also more able to do reflection and meta-reflection on their language tasks, it is reasonable that more proficient users will use more social and metacognitive strategies. Studies reviewed here seem to support the importance of metacognitive strategies to listening success (Goh, 2002, Vandergrift, 2003, 2006). However, so few studies of listening strategies include social or affective strategies that the importance of them to listening success is not evident from the literature.

Cross (2009) cited numerous studies as growing evidence that "more-proficient listeners use a wider variety of strategies with greater flexibility, frequency, sophistication, and appropriateness to meet task demands …, and employ superior configurations of strategies compared to less-proficient listeners" (p. 153).

Appendix 1 summarizes major studies examined in this subsection.

2. 2. 4. Speaking strategies

This subsection will discuss definitions and taxonomies of speaking strategies, and also research results about the speaking strategy use of more successful learners. Finally, key findings will be summarized.

2.2.4.1. Definitions and taxonomies of speaking strategies.

Kawai (2008) asserted that based on studies done in China, Japan, and the USA, "T(t)hose who develop good oral skills appear to be frequent strategy users regardless of culture and learning context." (p. 219). As generally acknowledged by language learners, instructors and researchers, it is crucially important for language learners to use strategies

for helping them engage in social interactions in the target language. Speaking strategies are commonly referred to as communication strategies (CSs) (Nakatani and Goh, 2007).

Dörnyei and Scott (1997) provided a comprehensive review of different definitions and taxonomies of communication strategies. They especially mentioned that scholars have divided communication strategies into two groups: achievement strategies which will help the learner achieve original communication goals, and reduction strategies which will help the learner avoid solving a communication problem by altering, reducing or even abandoning the original communication goals. In another review of communication strategies, Nakatani and Goh (2007) stated that research studies on oral communication strategies are based on two perspectives: the interactional and the psycho-linguistic. The interactional perspective focuses on how learners use strategies to help them negotiate meaning and effectively interact with others. Therefore, with this perspective, communication strategies include not only problem solving strategies to compensate for communication disruptions, but also strategies to enhance the message or otherwise to make the communication more effective. For example, negotiation of meaning is an important communication purpose and the strategies to achieve that include requesting clarification, checking comprehension and confirming. The psycho-linguistic perspective focuses on the mental processes and behaviors of the learner for solving communication problems such as gaps of linguistic knowledge. Therefore, "most researchers of a psycholinguistic orientation have narrowed the description of CSs to lexical-compensatory strategies" (Nakatani and Goh, 2007, p. 208). Strategies for solving communication problems were also traditionally called compensation strategies. Oxford (1990) defined compensation strategies as strategies that "allow learners to use the

language despite their often large gaps in knowledge."(p. 37). Nakatani (2006) explained that "learners can improve communicative proficiency by developing an ability to use specific communication strategies that enable them to compensate for their target language deficiency" (p. 151). However, scholars also point out that speaking strategies should not be limited to compensation strategies, as Nyikos and Oxford (1993) stated: "Learning strategy research expands the strategies competence component of Canale and Swain's communicative competence model by demonstrating that strategic competence goes beyond mere compensation strategies" (p. 11).

Other scholars also suggested additional categories of communication strategies. Cohen (1998) divided communication strategies according to the timeline, into "before task", "during task" and "after task". Nakatani's (2006) Communication Strategy Inventory was based on a combination of both the socialcultural perspective and also the psychological perspective. The inventory included two parts: the listening part and the speaking part. The unique feature of this inventory was that it included nonverbal strategies such as the use of gestures and facial expressions, and strategies learners use to maintain fluency such as paying attention to intonation, rhythm and pronunciation. Vandergrift (1997) also suggested that both verbal and nonverbal strategies should be included into the category of communication strategies. Dörnyei (cited in Dörnyei and Scott, 1997) also expanded the definition of communication strategies by adding strategies that help speakers "gain time to think and keep the communication channel open such as using gap-fillers (p.178). According to Nakatani and Goh (2007), there are "little agreement about what CSs really are" (p. 207), and this review adopts a definition that combines both the international and psychological views: communications strategies

are strategies that learners use to help them interact with others orally and also to help them overcome gaps of linguistic knowledge during this interaction.

2.2.4.2. *Strategies frequently used by more "successful" learners.*

This subsection discusses what research reveals as speaking strategies that are used by more "successful" learners. Those strategies include metacognitive, social-l-cultural interactive, "active-use" strategies and others.

1) Metacognitive, social-affective, and other strategies

Griffiths (2003) conducted a study in a private English language school in Auckland, New Zealand to explore statistically significant relationship between reported strategy use and course level. The participants were 348 students at this school, aged 14-64, from 21 different counties, and of various proficiency levels. The main instrument for measuring students' strategy us was the 50-item version of the Strategy Inventory for Language Learning (SILL) for speakers of other languages learning English (Oxford,1990). Griffith (2003) investigated the 19 "plus" strategies that she found to be used highly frequently by advanced students in this study. While she grouped the use of those 19 "plus" strategies as an independent variable, she found that it accounted for 10.5% (R=0.33) of the variance in course level, which she argued was noteworthy and had "implications for effective teaching and learning" (p. 376). Interestingly, those 19 "plus" strategies included seven strategies that students used for speaking. They included metacognitive strategies for seeking out speaking opportunities such as "I look for people I can talk to in English"; social strategies for asking for help such as "I ask for correction when I talk"; and affective strategies for controlling one's emotions such as "I encourage myself to speak even when afraid". Moreover, Griffiths (2003) discovered two important

strategy groups used by the higher level students that were less explored before: "tolerance of ambiguities" and "utilizing available resources". "Tolerance of ambiguities" strategies helped the learner continue one's learning in the face of imperfectness; "utilizing available resources" helped the learner to proactively seek ways and resources to enhance their learning.

2) Active-use strategies

Although not with a specific focus on communication strategies, Green and Oxford (1995)'s large-scale study of 374 learners of different English proficiency levels contributed important insights regarding the strategy use of more successful learners. They used SILL (Oxford, 1990) for generating data and then factor analysis for a quantitative investigation. Among their findings, one particularly important to the understanding of communication strategy use is based on the new concept of active-use strategies, which is defined as: "(strategies) that involved active-use of the target language, with a strong emphasis on practice in natural or naturalistic situations" (p. 287). Green and Oxford (1995) found out that almost all of these strategies that were more frequently used by more successful learners were active-use strategies. Using the concept of active-use strategies, the authors further pointed out: "…there is a causal relationship between strategy use and proficiency level here, and that this relationship is best visualized not as a one-way arrow leading from cause to effect, but rather as an ascending spiral in which active-use strategies help students attain higher proficiency, which in turn makes it more likely that students will select these active-use strategies" (p. 288).

Among those "active-use strategies", five are strategies that learners use to

actively seek opportunities to conduct conversations in the target language, especially in naturalistic circumstances, such as "to start conversations in English", and "to look for people to talk in English". Those findings indicate that more successful learners use active-use strategies to proactively engage in conversations in the target language. Other important findings also include that more successful learners used active-use strategies in combination with those strategies that were frequently used by less successful learners as well. Strategies used by more and less successful learners alike were termed as "bedrock" strategies.

The following two small-scale qualitative studies of two successful foreign language learners provided further empirical evidence for the use of active-use strategies by more successful learners. Samimy (2008)'s case study investigated how an American male graduate student successfully achieved "superior" oral proficiency in Arabic according to the ACTFL's Oral Proficiency Scale. The student "Mark"'s core strategy was to "create a 'Arabic' bubble in which he immersed himself all day long" (p. 409). As a highly self-disciplined and motivated learner, Mark looked for every opportunity to learn and use Arabic. He even would start to think in Arabic within minutes of waking up in the morning. Some important specific listening and speaking strategies he used included listening to Arabic whenever he went and used memorized lines of script when he spoke to Arabic speakers. The study not only explored Mark's strategies to improve his Arabic proficiency; moreover, it explored how Mark gained access to the Arabic communities and how he "situated himself vis-à-vis a target language community" (p. 403). It explored how Mark achieved a "unified bicultural personality" (p. 408). Thus the study combined the psychological perspective as well as the sociocultural perspective.

Carson and Longhini (2002)'s diary study is a frequently cited unique narrative study of language learning strategies in a totally naturalistic setting. The author/diarist (Carson) immersed herself in the target language-Spanish in Argentina without any formal language instruction. During the eight weeks of her stay, she recorded her learning strategies in a learner's diary. The author was successful with her learning experience, as she made amazing progress during the short eight weeks. Even without formal instruction, Carson used most metacognitive strategies to organize and evaluate her learning; she also used social strategies to "initiate repairs or requests for assistance" (p. 413). She sought opportunities to interact with the Spanish speaking community. She frequently used "compensation" strategies, with which she tried to compensate for missing linguistic knowledge during interactions. She also mentioned affective strategies such as maintaining a positive self-image as a non-native speaker. By recording a great amount of her interactions with native speakers, Carson emphasized the importance of interacting with native speakers as a strategy to improve one's oral proficiency in the target language. At the same time, Carson's diary study also revealed the danger of limiting one's interactions with a group of native-speaker friends. Therefore, one potential strategy indicated here is to initiate conversations with native-speaker strangers. Finally, this study confirmed the notion that successful learners use language creatively, in contrast with less successful learners who will rely on mechanical methods such as memorization. Carson recorded her use of communication strategies to use language creatively in contexts, such as trusting one's instincts, taking risks and learning by trial and error, and learning together with others.

Both narrative studies discussed above depicted an image of a highly self-

regulated and highly motivated and proactive language learner. Both learners continued to pursue their learning when there was no formal instruction available. Both paid great attention towards organizing and reflecting on their own learning, which suggested high use of metacognitive strategies. Also, both learners proactively sought opportunities to use the target language in conversations with native speakers. This suggested high use of "active-use strategies" defined by Green and Oxford (1995), and confirmed their conclusion that more successful learners use those active-use strategies to seek opportunities of naturalistic practice.

3) Social strategies, affective strategies, and fluency-oriented strategies

In the first part of Nakatani (2006)'s study, the Oral Communication Strategy Inventory (OCSI) has been developed and validated to test communication strategies. In the second part of the study, she administered the OCSI and also SILL (Strategy Inventory for Language Learning developed by Oxford, 1990) to 62 female EFL students in Japan. Their responses on those two questionnaires were compared with each other and then based on results from an oral test, the participants were divided into three groups of different oral proficiency. Nakatani (2006) then focused on examining strategy use of the lowest and the highest oral proficiency groups and reported the following important findings: 1) the high oral proficiency group reported more use of the following categories of strategies: social affective strategies, fluency-oriented strategies, and negotiation for meaning while speaking strategies. Especially, the high oral proficiency group used significantly more negotiation for meaning strategies than the low oral proficiency group did, which might suggest that negotiation for meaning is positively correlated with foreign language speaking abilities. Nakatani (2006) further proposed that students who

use those strategies consciously can be considered as effective English learners. Those effective learners used strategies to control affective factors, to keep the conversation flowing and also for maintaining their interaction through negotiation. 2) regarding listening, the high oral proficiency group used more fluency-maintaining strategies, which means they "made efforts to maintain the conversational flow by reacting smoothly when listening to their interlocutors" (p. 160). Besides the above findings, Nakatani (2006) contributed a validated instrument for assessing learners' communication and listening strategy use. She also contributed a taxonomy of communication strategies based on a factor analysis using data from 400 Japanese university students. The new taxonomy is comprehensive and unique among specialized taxonomies of communication strategies, by including the following categories: 1) social affective strategies for communication 2) strategies that are less discussed by other scholars such as paying attention to one's own rhythm and intonation 3) nonverbal strategies while speaking such as using gestures and facial expressions. Finally, the inventory combines listening and speaking, which is based on the insight that oral communication involves both listening and speaking. One limitation of this large-scale study with a sophisticated design is that all the 62 participants were female students, and therefore, as the author acknowledged, the results somehow have to be limited to that gender. Also, compared with the group of 400 participants during the pilot study stage, 62 participants is rather a small group. Nevertheless, Nakatani (2006) did important work to reveal the communication strategy use of effective language learners as well as strategy use of ineffective language learners.

2.2.4.3. Coordination of communication strategies.

Research has demonstrated that learners who develop speaking abilities

successfully tend to use a wide variety of strategies; however, the selection and combination of strategies instead of the number of them are more important in the development of second language oral proficiency (Kawai, 2008). Kawai (2008) conducted a small scale research of the communication strategies used by two professional-level Japanese speakers of English. In order to prepare for speaking tasks in English, they coordinated strategies such as: preparing intensively about the topic, exploring different ways of saying something, and using simulated discussions with others. This study also emphasized the effectively combined use of pre-task, in-task, and post-task strategies. It also reported practicing speaking aloud in a target language as an affective strategy to reduce one's anxiety when actually using the language.

2.2.4.4. Conclusion of the subsection of speaking strategies

Scholars are more and more aware of the fact that strategy use is a situated phenomenon, and individuals will adopt strategies that best fit their own situations. However, the above researches do reveal that there are certain patterns of strategy use of more successful learners. Those patterns include: 1) use active-use strategies, which mainly means they do not passively wait for opportunities of speaking with native speakers; instead they proactively seek opportunities to speak the language in real life situations (Green and Oxford, 1995, Griffiths, 2003, Samimy 2008, Carson and Longhini, 2002) 2) use strategies to proactively solve problems--use meaning-negotiation strategies to ensure understanding; use affective strategies to manage emotions; use socio-cultural interactive strategies to help them improve cultural awareness (Griffiths, 2003). Finally, Kawai (2008) found that advanced second language learners coordinated their strategies.

Appendix 2 summarizes key studies examined in this subsection.

2.2.5 Gender, academic fields, cultural background, proficiency level and strategy use

Oxford (2002) wrote "Research indicates that factors influencing the L2 student's choice of learning strategies include motivation, career/academic specialization, sex, cultural background, nature of task, age, and stage of language learning…"(p. 127). This brief section summarizes what the literature has revealed about the effects of three main factors--gender, academic fields, and cultural background on strategy use.

2.2.5.1. Gender and strategy use

Nyikos (2008) pointed out that gender is a complicated variable that interacts with race, social and economic status, and many other factors in a student's life. Therefore we should not think of gender in its simple biological meaning. Oxford and Ehrman (1995) point out that "gender differences may often be a mask for deeper differences of personality type and career choice" and they also suggest that students should be encouraged to develop strategies that are effective for them, without being "pushed into a gender-stereotyped set of strategies" (p. 379). Still some scholars did find out some effects of gender. According to studies done worldwide, females tend to use more language learning strategies than males do (Oxford & Ehrman, 1995). This is in agreement with the results of a study of a large scale: Oxford and Ehrman's (1995) study of highly educated and motivated language learners. Peacock and Ho's (2003) study of the language learning strategies of 1,006 EAP (English for Academic Purposes) students in eight different disciplines also has found out that female learners reported significantly higher strategy use in all strategy categories than male students did. As for the reasons behind this possible effect of gender on strategy use, Pavlenko's study (2001, cited in

Adams, Fujii, and Mackey, 2005) suggested that female students consider language learning as a social, interpersonal process more than male students do.

2.2.5.2. Cultural background and strategy use

"Cultural background, related to ethnicity or nationality, is a key factor in language learning strategy use" (Bedell, 1993, cited in Oxford and Ehrman, 1995, p.365). Decades of research generally has found the effects of cultural background on language learning strategies (Lee, 2010), with Psalfou-Joycey (2008)'s research as one recent example. Using *SILL* (Oxford, 1990) as the assessment tool, Psalfou-Joycey investigated the strategy use of 177 students who studied Greek as a second language in an academic setting. The results showed that among all the independent variables such as gender, age, language proficiency level and cultural background, cultural background is the "single most powerful variable that indicated significant differences in the choice of learning strategies" (P. 310). Also using *SILL* (Oxford, 1990) as the strategy assessment tool, Rao (2006) found out that three factors related to the students' cultural and educational background especially had effects on Chinese students' use of language learning strategies: cultural beliefs and values, traditional Chinese educational patterns, and the EFL learning setting. Finally, Finkbeiner (2008)'s review of this topic concludes that culture does affect strategy use; in fact, it is related to the topic of the relationship between culture and strategy use.

2.2.5.3. Academic fields and strategy use

Oxford and Nyikos (1989) found out that academic disciplines do have effecst on strategy use. They found social science/education/humanities students used "functional practice" and "resourceful, independent" strategies significantly more often than did

students from other disciplines. Peacock and Ho (2003) studied the strategy use of about one thousand students across eight disciplines in a Hong Kong university. They found out that the English students used the most strategies while the computing students used the least. Actually according to Peacock and Ho (2003), other studies also found out that English students used strategies significantly more often than science students.

2.2.5.4. Proficiency level and strategy use

Green and Oxford (1995) did a large-scale (N=373) study investigating the strategy use of students at three different language course levels at the University of Puerto Rico. They found out that strategy use is related to proficiency level. However, they found out that only some strategy items showed some significant variations and more importantly, those strategies used more often by more proficient learners "emphasized active and naturalistic practice"(P. 261). Peacock and Ho (2003) found out that proficiency level has effects on strategy use too. Lai (2009) focused on the effects of proficiency level on the strategy use of 418 EFL learners in Taiwan. She found out that proficiency levels did have significant effects on how students chose and used strategies. She found out that more proficient students used more strategies and also used metacognitive and cognitive strategies more frequently. On the other hand, the less proficient learners preferred social and memory strategies other than metacognitive and cognitive strategies.

In summary, from early on, some research studies have found out that gender, academic fields, cultural backgrounds, and proficiency levels have significant effects on strategy use. They also have found out about the nuances of effects that those variables have on strategy use. However, there are other studies that have found no effects.

2.2.6. Conclusion

The section reveals that there are different taxonomies for both listening strategies and speaking strategies. Especially for speaking strategies, there is not yet a comprehensive taxonomy like the representative taxonomies developed by Goh (1998) and Vandergrift (2003) jointly for listening strategies. Reception strategies can be seen as a combination of both listening strategies and speaking strategies with the purpose of achieving better comprehension of spoken input.

The listening and speaking strategy literature reveal clearly that there are indeed some general patterns of strategy use of the more "successful" learners, whether in ESL, EFL, or foreign language settings. First, more "successful" learners seem to use certain strategies especially, such as the use of metacognitive strategies becoming a salient theme in both listening and speaking subsections. This frequent use of metacognitive strategies can be explained by the hypothesis that more "successful" learners are more in control and more organized about their language learning. They plan, monitor, reflect, and revise and they know what they are doing. This observation echoes what Stevick (1989) found long time ago in his classic study of seven successful language learners that a successful learner "takes control of one's own learning" (p. 145). It is not surprising that the effective "orchestration" of different strategies also becomes a salient theme across the subsections. More "successful" learners seem to effectively combine their strategies together for achieving a purpose. Those above conclusions can be examined side by side with the conclusion that more "successful" learners used more "active-use" strategies (Green and Oxford, 1995, Samimy, 2008, and Carson and Longhini, 2002).

Other exciting themes that have surfaced also include the flexibility of strategy

use (Goh, 2002, Vandergrift, 2003, Littlemore, 2001), the use of "active-use strategies" and the use of meaning-negotiation strategies. Overall, although different researchers define "more successful" in different ways, this review seems to reveal that there are some strategies preferred by better learners and there are some better ways of using strategies generally. Although it is always recommendable for the learner to find his or her own repertoire of strategies and ways of strategy use that fit with his or her own special situation, it is also fruitful to know about those "lessons from good language learners" (Griffiths, 2008) and learn from them. Finally, the section also includes a brief review of the effects of certain common variables on strategy use.

2.3. Metacognitive perceptions and strategy use

This section introduces an important concept—metacognitive perceptions. This section presents the theoretical foundations of the construction of this concept and also discusses its major components.

Classic definitions of Metacognition include metacognitive knowledge, which refers to the knowledge learners have about their cognitive processes and metacognitive control, which includes learners' monitoring of their cognitive processes (Paris and Winograd, 1990). The term metacognitive knowledge and learner beliefs are often used interchangeably in the literature. For example, Graham (2006) stated that "both effective learner strategy use and motivational maintenance are influenced by learners' metacognitive knowledge or beliefs about language learning" (p. 297). The terms "beliefs" and "perceptions" have been used interchangeably too, as in Mori and Shimizu's (2007) study.

For the purpose of this study, the term perceptions rather than knowledge or

beliefs has been chosen because it is aimed to investigate what learners perceive to be true about listening and speaking and their strategy use, rather than what they know or believe as facts. As a construct, metacognitive perceptions is similar to metacognitive knowledge, with the emphasis on how learners perceive rather than what learners know. Scholars have proposed different models of metacognitive knowledge. Flavell (1979, 1987) "identifies three aspects of metacognitive knowledge: knowledge of person variables, task variables, and strategy variables" (cited in Graham, 2006, p. 297). Based on Flavell's model, Paris and Winograd (1990) suggested a model of metacognitive beliefs with three core dimensions—*agency*, which is learner's belief about their own abilities and competences; *instrumentality*, which concerns learners' perceptions of the relationship between the learning strategies they employ on tasks and learning outcomes; *purpose*, which is learners' ability to value success in the subject", especially how important the success will be to them (cited in Graham, 2006)

Oxford (2011) proposed the term "metaknowledge" to expand the term "metacognitive knowledge". Metaknowledge includes not only knowledge that underlies the control and management of the cognitive process (i.e. the traditional definition of metacognitive knowledge), but also knowledge that underlies the control and management of two other important aspects of language learning (use): the affective and social-interactional aspects. Oxford (2011) then listed six types of metaknowledge:

- Person knowledge which refers to the learner's knowledge about himself (herself) or another learner
- Group/culture knowledge which refers to "broader knowledge of cultural or group norms" (p. 7)
- Task knowledge which relates largely to "the characteristics and requirements of the immediate L2 learning task" (p. 32)

- Whole-process knowledge which "goes beyond task knowledge to embrace the characteristics and requirements of the long-term process of learning the language" (p. 23)

- Strategy knowledge is knowledge about various types of language learning strategies and how they function

- Conditional knowledge is "knowledge of when and why to use a given learning strategy. Conditional knowledge can draw on any or all the other five types of metaknowledge" (p. 23)

Following the lead of Oxford's (2011) system of metaknowledge, this study adopts the same six categories as key features when defining "metacognitive perceptions" with some adaption. The metacognitive perceptions are learners' fundamental perceptions that underlie the control and management of the learner's language learning (use) process, which consists of perceptions in six categories: person, group/culture, task, whole-process, strategy and pedagogical preferences. The perceptions of how and when should strategies be used are combined into perceptions of strategy and strategy use. The perceptions of pedagogical preferences denote students' perceptions of strategy instruction modes. Based on this definition, Figure 2.1 illustrates the framework of metacognitive perceptions about academic English listening and speaking:

Figure 2.1: The framework of metacognitive perceptions

Metacognitive perceptions about listening & speaking strategy use

	Learners' perceptions about academic English listening and speaking (immediate task and whole-process learning)

| Learners' perceptions about themselves, other learners, and community (self, others, group/culture) | Learners' perceptions and knowledge about strategy use and the strategy instruction modes. |
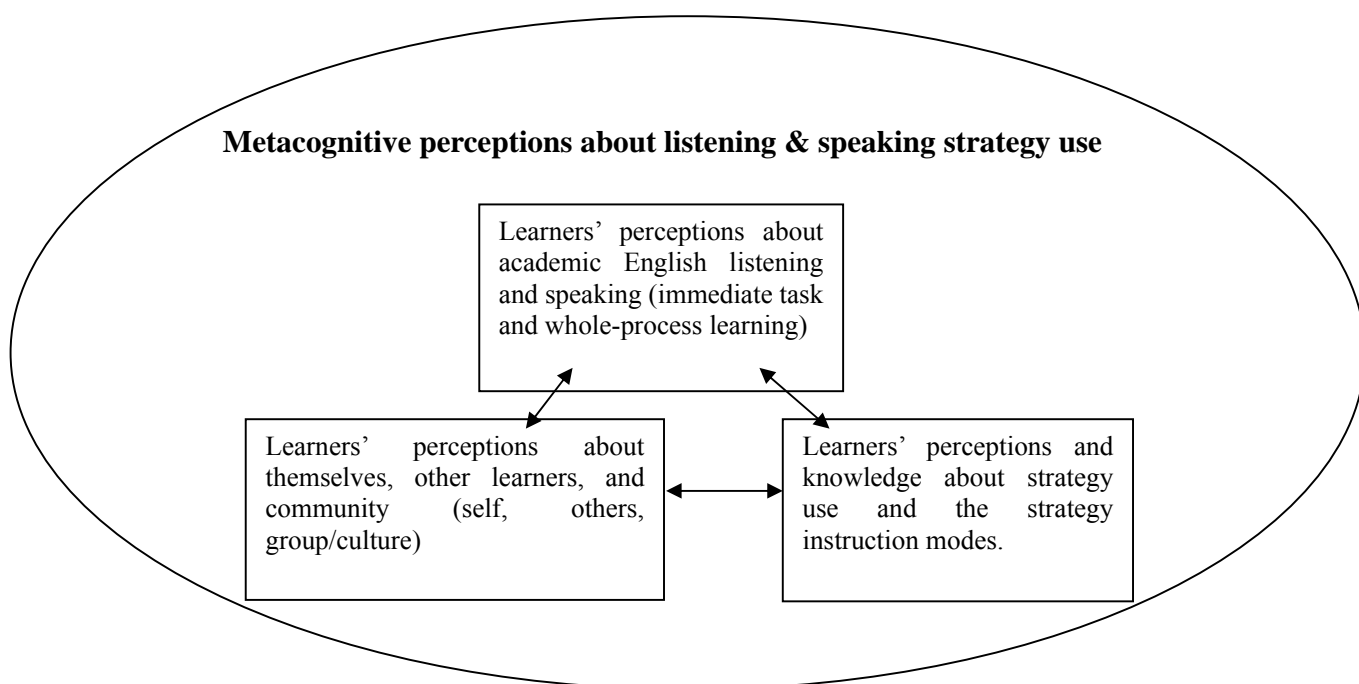
Learners' perceptions can be viewed as a set of weakened and alternative group of learner beliefs. Perception indicates understanding or awareness, which makes it a suitable term for the purpose of this study. Regarding metacognitive thinking as an important factor influencing strategy use, Graham (2006) stated: "Research over the last 10 to 15 years has increasingly shown that in terms of strategy use, in all language skills, it is the use of metacognitive strategies that characterizes the 'good language learner'… Furthermore, it has been argued that effective metacognitive strategy use is in its turn dependent on learners' metacognitive knowledge or beliefs" (p. 296). Metacognitive thinking greatly affects strategy use, especially through the use of metacognitive strategy. The use of metacognitive strategy, as established before in this literature review, is crucial to more successful listening and speaking. Therefore it is meaningful to investigate NNES graduate students' metacognitive thinking about academic English listening and

speaking strategy use. The following is a more-detailed explanation of the three

components.

2.3.1. Learners' perceptions about academic English listening and speaking (motivation and goals)

This component includes learners' perceptions about the importance of academic

English listening and speaking, in terms of immediate task and whole-process learning,

which is also related to immediate and long-term goal setting. What learners perceive as

important/not important about academic English listening and speaking is determined by

their goal setting: what do they want to achieve regarding English listening and speaking?

This goal setting is also related to motivation: what motivates them towards that goal?

Therefore this component includes learners' perceptions about the importance of

academic English listening and speaking, their relevant goal setting and motivation.

1) The importance of academic listening and speaking

Rosenfeld, Leung, and Oltman (2001) conducted a research report for ETS

(Educational Testing Service in the U.S.) investigating what academic English tasks

(English listening, speaking, reading and writing) are deemed as important for non-native

graduate students in the U.S. Among the top ten task statements rated most important by

non-native graduate students: four were listening tasks; three were reading tasks; two

were speaking tasks; and one was writing task, which seemed to indicate that non-native

graduate students think academic English listening and speaking are very important,

compared with reading and writing. The following listening tasks were rated as most

important: 1. understand the main idea and their supporting information, 2. understand

factual information and details, 3. understand the instructor's spoken directions regarding

assignments and their due dates, 4. understand important terminology related to the subject matter. The following speaking tasks were rated as most important: 1. speak clearly and accurately enough so that the instructor can understand and respond to their questions, comments, and suggestions 2. speak clearly and accurately enough to make presentations in class. Those tasks were rated important because they are directly and closely related to non-native graduate students' academic goals for surviving in classes and in their academic programs.

2). Goal-setting

Goh (2002) argues that "A second characteristic of strategic behavior is goal-directedness". Goal-setting influences students' proactiveness in learning and also how strategic they are in language learning. Lemos (1999) emphasized students' own goal-setting, instead of merely adapting oneself to the teacher's goals. She stated that when goals are established or valued by the students themselves, they will demonstrate strategic and flexible behavior and their behavior consists of a series of activities connected with each other, showing directedness. Usuki (2003) found out that one group of students--the heterogeneous learners had "clear life goals in which communicative English proficiency was a means to an end, while homogeneous learners viewed English proficiency—actually, perfectionistic accuracy in English-as an end in itself". Heterogeneous learners were "active, self-confident, flexible, strategic in self-directed learning, and willing to stand out from others". In contrast, "homogeneous learners who fall into common stereotypes of Japanese learners are accepting teacher authority, passive, shy, unconfident, quiet, fear of making mistakes, rote memorization, lack of creativity, and lack of critical thinking".

3) Motivation

Gardner (2001) defined motivation as to have three elements: 1) consistent and persistent effort 2) a desire to achieve the goal 3) enjoyment of learning the language. Motivation is highly related to the affective side of learning, as "what and how much is learnt is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interests and goals, and habits of thinking." (Learner-Centered Principles Work Group of the APA Board of Educational Affairs, 1997, cited in Alexander, 2006, p. 192). Motivations can be categorized into "extrinsic motivation" and "intrinsic motivation" (Ushioda, 2008). Intrinsic motivation, which is termed as motivation "from within", is "doing something as an end in itself, for its own self-sustaining pleasurable rewards of enjoyment, interest, challenge, or skill and knowledge development", and extrinsic motivation is "doing something as a means to some separable outcomes, such as gaining a qualification, getting a job, pleasing the teachers, or avoiding punishment." (Ryan and Deci, 2000, cited in Ushioda, 2008, p. 21). Motivation is also divided into "integrative motivation" and "instrumental motivation". Based on concepts proposed by Gardner and Lambert (1972), ~~the~~ integrative motivation can be defined as "a desire for learning the language for the purpose of cultural/linguistic integration." (Oxford, 1996, p. 2). On the other hand, instrumental motivation is "motivation to learn the language for an instrumental (i.e. practical) purpose, such as getting a better job, earning more money, entering a better college or graduate school, and so on"(Oxford, 1996, p. 3). Sometimes different types of motivation are mixed together. Also, it can be assumed that learners' motivation will be a combination of different types of motivations and the relative proportion of each type in this combination will be on a

continuum.

Pintrich & Shunk (2001) described the relationship between motivation, goals and strategy: "Motivation is the fuel that propels individuals through a problem space toward a desired goal or end. Individuals who are highly motivated move through that problem space with a well-honed sense of direction, energy, and commitment" (cited in Alexander, 2006, p. 192). In contrast, "less motivated individuals meander or wander aimlessly toward some vague end" (Alexander, 2006, p. 192). The above statements testify that motivation controls the purposefulness, persistence and energy level of the pursuit of the goals. Therefore motivation can also be defined as the force that determines how hard the individual will work towards the goal. Also the more motivated the language learner is towards improving his or her spoken academic English, the more likely the learner will use strategic steps (strategies) to achieve that goal, given all the other learner factors remain the same.

2.3.2. Learner's perceptions about their own academic English listening and speaking proficiency and capabilities, other learners and culture

This component not only involves learners' self-judgment about their listening and speaking proficiency level, but also involves learners' self-efficacy regarding listening and speaking. Self-efficacy is an "influential set of beliefs that students hold"; they are "essentially judgments that students form about their ability to perform or execute a task from a specific domain or with particular characteristics" (Alexander, 2006, p. 227). Alexander (2006) further pointed out that "self-efficacy is also linked with student effort and persistence" and "higher efficacy is tied to higher levels of strategy use and engagement" (p.228). It can be inferred that when faced with difficulties, the more

self-efficacy the students have, the more they try to engage in the learning and use strategies because they believe that they can achieve their goals. Also, self-efficacy is closely related to learner's perceptions about other learners and culture of the learning contexts. Bown (2006) reported how language learners' perceptions about themselves as learners and the learning process were influenced by their perceptions of other learners and the unique socio-cultural learning environment of a self-instructed language program. Using a questionnaire and interviews as data-collection instruments, Graham (2006) investigated learner beliefs of English speakers learning French as a second language. She found out that learners who perceived themselves as having low ability in listening comprehension also had very limited awareness of strategy use. She found that most of the learners felt that they simply lacked the ability for listening comprehension of French and this low ability could not be improved. She argued for the correlation between this low sense of self-efficacy and the lack of awareness of the use and importance of strategies. Learners who attributed their failure to low abilities and to task difficulties did not believe in the value of strategy use, because they believed that both innate low ability and task difficulty could not be improved or changed. Those findings revealed the correlation between sense of self-efficacy and strategy use.

Recently Leger and Storch (2009) did a semester-long study to investigate the relationship between learners' perceptions of their speaking abilities in the second language and of their contributions to oral class activities and those learners' willingness to communicate in the L2. The participants were 32 students of French. The instruments were questionnaires and focus-group interviews. Both quantitative and qualitative methods were used for data analysis and the results showed those learners' perceptions of

the speaking tasks and of themselves as learners in the classroom influenced their willingness to communicate. Especially when their level of self-confidence increased during the semester, their willingness to communicate also increased. This study supported the important relationship between learners' perceptions about their own abilities and the speaking tasks and their motivation for communicating in the second language in the classroom.

2.3.3. Learners' perceptions and knowledge about strategy use and the modes of instruction

Learners' perceptions about strategy use are closely related to their knowledge level of strategy use. Perceptions about strategy use denote understanding of what are strategies, how useful they are and how they can be used in certain situations. It is also reasonable to propose that learners' perceptions about the usefulness of strategies will affect their real-life strategy use. Students' perceptions about strategy use are related to their self-perceptions too. Low-efficacy students believe that they don't have the ability necessary to succeed at language learning even with appropriate strategies or extra efforts; high-efficacy students, by comparison, may actively use strategies to overcome difficulties because they believe that they can accomplish their goals (Alexander, 2006).

Zhang and Goh (2006) investigated perceptions about the usefulness of strategies, the knowledge about strategy, and strategy use of 278 ESL learners in Singapore. They found correlations between students' perceptions of the usefulness of strategies and their perceived use of the strategies. They also reported that although students generally knew the usefulness of those strategies, they were not necessarily using this knowledge to enhance their strategy use to the extent that they should have. In

this research project, learners' perceptions of strategy instruction modes focus on what students think that the university can do to help them learn more about strategy use.

2.4. Summary of chapter 2

This review examined key theories and studies in three areas: 1) academic English listening and speaking of NNES graduate students 2) strategy use patterns of more "successful" learners 3) metacognitive thinking and strategy use, with the emphasis on what listening and speaking strategies have been used by more "successful" learners and how they have used them. This review also proposes a framework of metacognitive thinking about academic English listening and speaking strategies. The overall purpose of this review is twofold: 1) to approximate a "portrait" of the graduate level non-native English speakers 2) to provide theoretical frameworks and starting points for this study of the strategy use of this particular group of learners.

2.4.1. The strategy repertoire

Regarding listening and speaking strategies used by more "successful" learners, the review proved that those learners did use a repertoire of strategies of various types. This resourcefulness reflected those learners' ingenuity and creativeness, which should be characteristics of successful language learners. In fact, each study examined above has provided new information about students' listening and speaking strategies; some provided new categories of strategies that have not been included in published taxonomies. Strategies that have been discovered in those studies hopefully could provide a supplementary to the published taxonomies.

2.4.2. Patterns of strategy use

Although some scholars pointed out that there are no "good" or "bad" strategies,

as each learner must choose his or her own strategies appropriate fit for his or her own needs, researches indicated that "strategy use in L2s is related to proficiency or achievement". (Hsiao & Oxford, 2002, p. 369). Hsiao and Oxford (2002) further pointed out that, based on previous research, more effective learners will "intentionally, systematically select and combine strategies relevant to the language task at hand and to their own learning style preferences", while less effective learners will pick up strategies "in a seemingly desperate, random way" and do not care about the relevance of a strategy to the task at hand (p.369). Researches reviewed above have generally supported this view of point in both listening and speaking strategy areas. Also, one common theme across those studies is that metacognitive strategies are very important to more "successful" learners. This finding is in accordance with the conclusion that more "successful" learners "orchestrate" (Vandergrift, et al. 2006) their strategies. Studies reviewed above also indicated that more "successful" learners were more flexible (Littlemore, 2001, Goh, 2002) and more active (Samimy, 2008, Carson and Longhini, 2002, Green and Oxford, 1995).

Overall, as Oxford (2011) suggested, speaking and listening are integrated skill areas (all four skills are integrated), therefore more strategy research should be conducted in integrated skill areas. Vandergrift's (1997) study is an example of integrated skill studies. Also, as Murphy (1991) argued, besides listening and speaking, pronunciation is also an oral language process and all of the three are interdependent. Due to space limit, this review did not include pronunciation strategies. However, it is important to remember that pronunciation strategies are also interconnected with speaking and listening strategies and can be an important direction of research.

2.4.3. Learners' metacognitive perceptions about strategy use

Language learning strategy use is a "situated" phenomenon, affected by many other factors of the individual learner, including learner's metacognitive perceptions. Based on former models and research, this review proposes a framework of metacognitive perceptions of listening and speaking strategy use. This framework includes metacognitive perceptions in three sub-areas: a) importance of academic English listening and speaking related to immediate and long-term goals and motivgation; b) learners' perceptions of one's own proficiency and capabilities, other learners and the learning culture; c) learners' perceptions of academic English listening and speaking strategy use and instructional modes. Components of this framework are connected with important concepts language learning, such as goal-setting, self-efficacy, and motivation.

Stevick's (1989) classic study of seven successful language learners revealed how successful learners used strategies to help them accomplish their learning goals. Compared with other individual learner differences, learning strategies can be largely controlled by the learner (Benson & Gao, 2008). This gives the learner freedom and power. Learning strategies offer learners a practical and realistic tool to improve their language proficiency. Although participants of studies examined here vary in terms of age, proficiency, regions of origin, and language they study, the review did reveal some overall patterns of the strategy use of the "successful" learner in the areas of listening and speaking. Those conclusions can serve as a preliminary framework and starting point for this research study. They also provide valuable insights and guidelines for all kinds of language learners and their instructors. Most of all, the review should strengthen their faith in using strategies for achieving better results.

Besides the above literature, my pilot study of six NNES graduate students and my academic listening and speaking journal as a NNES graduate student also have informed this study. They are included in appendix III and appendix IV.

Chapter 3: Methodology

The first section of this chapter restates the research question. The second section discusses the overall research design, including participants, instrumentation, data collection, and data analysis. The final section of the chapter is a summary of the methodology.

3.1 Restatement of research questions

1. Research Question 1: What were the self-rated proficiency levels and self-reported TOEFL scores, and how do these relate to each other?

2. What are the descriptive statistical characteristics of NNES graduate students' academic English listening and speaking strategy use?

3. What factor structure underlay the Academic Spoken English Strategy Survey (ASESS)?

4. How do the frequencies and types of listening and speaking strategies used by students differ by gender, academic fields, regions of origin, self-rated proficiency, attitude, and level of proactivness[17]?

5. Which of the following variables significantly predict overall reported academic listening and speaking strategy use?

      a. Gender

      b. Degree level

      c. Regions of origin

      d. Academic fields

      e. Self-rated English listening or speaking proficiency

      f. Attitude[18]

      g. Proactiveness[19]

      h. Students' perceptions of the usefulness of strategies

6. What are non-native graduate students' metacognitive perceptions about
   academic English listening and speaking, self-efficacy, the classroom culture
   they encounter, and the role of strategies and strategy use?

    a. What are their goals regarding academic English listening and speaking?

    b. How do they perceive the importance of academic English listening and
   speaking?

    c. How do they perceive themselves as English learners?

    d. How do they perceive the American classroom culture?

    e. To what extent are they confident that they can obtain the level of oral
   English proficiency they desire?

    f. What kinds of challenges do they face regarding academic English listening
   and speaking?

    g. What kinds of strategies are they using or planning to use to overcome those
   challenges?

    h. How do they perceive strategies and their own strategy use?

    i. What do they think the university should do to help them learn more
   about strategies?

7. What are the predictive values connecting overall listening and speaking strategy use,
   students' perceptions of the usefulness of strategies, and self-rated proficiency?

8. What are the paths of causality connecting overall listening and speaking strategy use,
   students' perceptions of the usefulness of strategies, and self-rated proficiency?

3.2 Overview of the research design

      This section provides a detailed description of the research methodology

employed in this dissertation study. First, I will present the rationale for using a mixed-

method design. Second, I will discuss details of the methodologies for Phase I (the

quantitative data collection phase), phase II (the qualitative data collection phase), and

phase III (data analysis phase), including setting, participants, instrumentation, data

collection, and data analysis procedures.

"A strategy to achieve a balance so that a greater diversity of divergent views are heard, questions are answered that other methodologies cannot, and stronger and better inferences are provided (Teddlie & Tashakkori, 2003), is to use a mix of qualitative and quantitative methods" (Crump and Logan, 2008, p. 21). The mixed-methods research design is selected for this study due to its capability in providing a comprehensive quantitative picture as well as in-depth qualitative data of individual cases. Thus it renders the researcher two sets of lenses for observing the phenomenon and also offers great flexibility in choosing research methods. A mixed-method approach is often guided by pragmatism as a theoretical framework (Johnson and Onwuegbuzie, 2004). It is used when the researcher "mixes or combines quantitative and qualitative research techniques or methods…into a single study" (Johnson and Onwuegbuzie, 2004, p.17). Mixed-method researches are starting to increase in the field of language learning strategies (Oxford, 2011).

Greene and colleagues (Greene, Caracelli, & Graham, 1989, cited in Crump and Logan, 2008) stated five purposes of a mixed-methods design, and those five purposes are perfectly fit for the goals of this study. The first purpose is *triangulation*, which means to use more than one method of collecting and analyzing data to reach a better interpretation. The second purpose is *complementarity*, which means different methods work together to provide information that complement each other, such as conducting the questionnaire and conducting the interviews. The third purpose is *development*, which means different perspectives work together to deepen data and achieve new insights. The fourth purpose is expansion, whereby one method will extend

results of another method. The fifth purpose is initiation, which means to discover paradox and contradictions and gender new insights. In this study, all the five purposes of a mixed-method design will be achieved in order to address the research questions in a thorough and deep manner.

In fact, research questions largely determine the adoption of a mixed-methods research design for this study. The quantitative phase and the qualitative phase combine together to add width and depth to the answers. In the case of strategy use, the quantitative phase can answer questions about the general patterns of students' strategy use and factors that affect this strategy use[research questions 1, 2, 3, 4, and 6], while detailed information such as how NNES students select strategies based on their personal situations and how they perceive strategy and strategy use (question 5) can only be acquired through the qualitative phase. Generally, the quantitative phase can provide a general sketch of students' perceptions and attitudes, but only the qualitative phase can generate rich, deep information about the students' thinking. Finally, the class observation data will add insights and more understanding of students' behaviors.

The mixed-method research design of this study is sequential in that generally quantitative data were collected before qualitative data although the questionnaire includes some open-ended questions; it is also concurrent in that quantitative data and qualitative data are converged during the data analysis stage to reach a comprehensive interpretation. Specifically, the major part of quantitative data were collected (phase I) before the qualitative data were collected. This sequential design ensures that in phase II, the selection of interviewees and also the design of the interview protocol could be informed by results from phase I. However, this is not a strict sequential design, as the

researcher may start interviews and class observations even when phase I is still proceeding, as the researcher may find some interesting cases worthy of being pursued further. The researcher assigns equal weights to the two methods in the design. However, the final analysis and conclusion might be skewed toward either qualitative or quantitative data. Major discoveries or exciting themes might lead to this change. The integration of data occurs during data collection stage, as the major quantitative instrumentation-the questionnaire has both open-ended questions and closed-ended questions. At the stage of data analysis and interpretation, data from all sources— questionnaire, interview, and classroom observation will be mixed together to achieve a holistic understanding. Especially the qualitative data analysis will combine information from interviewees' questionnaire data. The above discussion is guided by Creswell's description of mixed-method designs (Creswell, 2003).

3.2.1. Setting of the study

This study was conducted at a major research-oriented university in the mid-Atlantic region of the United States. This university has about approximately 3,600 international students from over 150 countries and over 100 majors and degree programs. Among them, 66% come from mostly Asia, 11% come from Europe, 11% come from Americas, 7% come from near & Middle East and 7% come from Africa. About 2000 are graduate students (the year of 2009). Students might regard themselves native speakers of English if they are from Canada or Britain, and some if they are from India and African countries. Still the majority of those 2000 international graduate students are NNES graduate students, of which Chinese and Indian students are the two dominant student groups. The research contexts that this study investigates are graduate level

courses and academic conferences, all conducted in English.

3.2.2. Participants of the study

Participants were NNES graduate students enrolled at the university. During phase I, efforts were made to reach as many participants as possible and as diverse as possible in terms of country origins and academic fields. During phase II, the researcher chose five interviewees out of those questionnaire respondents based on a variety of criteria.

From March 2010 to September 2010, the collection of quantitative data spanned six months. A web-format questionnaire was sent to all international graduate students (the total number is about 2,000) at the university, with the help of the International Students' Office and various departments at the institution. Multiple invitations and reminders were sent. I also personally invited potential participants in different occasions, on school shuttles, at student social gatherings, and through friends' referrals. Altogether, 534 international graduate students[20] from the university responded to the on-line ASSESS questionnaire. The system recorded the time that each respondent spent on the questionnaire. Because 150 respondents spent too little time on the questionnaire, their responses were discarded. Therefore, altogether 384 questionnaire responses were deemed as valid data, and a response rate of 19.2% was achieved.

Appendix VII *Learner Background* reports the demographic variables based on self-report data: gender, academic disciplines, regions of origin, and degree levels (master's or Ph.D. levels). Of 380 students responding about graduate student level, 74.5% of the respondents were doctoral students, and 25.5% were master's students. Of

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[20] International graduate students, here, refers to graduate students who generally hold student visas in the United States, and most of them are non-native English speakers.

381 students responding about gender, 58.3 % were male students; 41.7% were female students. The respondents came from Asia (66.7%), South America (10.7%), Europe (13%), the Near East and the Middle East (7.6%), and Africa (2.1%). This makeup roughly reflects the overall makeup of the international graduate student population at the whole institution, except for the fact that no native-English-speaking international students from countries such as Britain or Australia participated in the survey. The largest country group represented was India (27%), followed by China (24.7%) and South Korea. which can be compared with the makeup of the total international student population in the United States in the academic year of 2009-2010 (IIE, 2009-2010). In 2009-2010, of all the international students (graduate and undergraduate) enrolled at U.S. colleges and universities, 18.5% were from China; 15.2% were from India; and 10.4% were from South Korea.

The students were from the following academic disciplines: social sciences/humanities/education (28.4%), sciences (29.2%), engineering (31.5%), business (8.9%), and medicine (1.0%), which can be compared with the makeup of the total international student population in the United States in the academic year of 2009-2010 (IIE, 2009-2010). In 2009-2010, of all the international students enrolled at U.S. colleges and universities, 19.1% studied social sciences/humanities/education;18.4% studied engineering; 19.2% studied sciences; 21.1% studied business; and 4.6% studied health professions.

3.2.3. Instrumentation

Three types of instruments were used in this study a) a self-reported questionnaire with both open-ended and close-ended questions b) qualitative interview protocol c)

follow-up e-mail questions.

3.2.3.1 Quantitative instrumentation

A self-reported inventory, the Academic Spoken English Strategies Survey (ASESS) was constructed to survey participants' use of listening and speaking strategies in academic settings such as classes, lectures and conferences and also some of their relevant perceptions. The ASESS consists of three sections: the first section asks the respondents' personal information such as sex, academic fields, undergraduate /graduate standing, country of origin, and institute affiliation. The second section is a 39-item, likert-scaled measure which is divided into the listening section and the speaking section. Each item presents a statement about the use of a tactic. For each statement, there are five options ranging from 'never or almost never" to "always or almost always". This format was based on Oxford's (1990) Strategy Inventory for Language Learning (SILL). In the listening sub-section, the items are generally sequenced following the order: before class or presentation, during class or presentation, after class or presentation. In the speaking sub-section, the items are sequenced from joining in class discussions to giving presentations; within each there is a before-during-after sequence too. The third section includes open-ended questions mainly asking about participants' perceptions of spoken academic English and strategy use. The following discusses the validation of the quantitative instrument-the questionnaire.

1) Theoretical validation of the questionnaire

Berends ((2006) states that "drawing on other's research is always relevant but particularly so during the survey instrument design stage" (p. 632). Construct validity of a questionnaire denotes to what extent it measures the construct that it is supposed to

measure. Content-related evidence of validity of the questionnaire is based on the fact

that the construction of the questionnaire was informed by theories of language learning

strategies and research results.

a) Theories of language learning strategies and taxonomies

> To ensure content validity (Oxford, 2011), the items of the questionnaire are

purposefully selected based on several learning strategy taxonomies. First, Oxford's

(2011) taxonomy provides an overarching framework for the questionnaire. In fact, items

of the questionnaire represent all of the key strategy types in Oxford's (2011) taxonomy:

metacognitive strategies, cognitive strategies, affective strategies and socialcultural-

interactive strategies.

> With specific listening strategies, the construction of the questionnaire relies

heavily on Vandergrift (2003)'s taxonomy of metacognitive and cognitive listening

comprehension strategies. Vandergrift (1997, 2003) presents a listening strategy

taxonomy of four metacognitive strategies: planning, monitoring, evaluation and problem

identification and seven cognitive strategies: inferencing, elaboration, imagery,

summarization, translation, transfer, repetition. Goh's taxonomy (1998) also provides

theoretical foundations for the questionnaire, which includes four major top-down

cognitive strategies: inferencing, elaboration, prediction and contextualization and five

metacognitive strategies: selective attention, directed attention, comprehension

monitoring, real-time assessment of input, and comprehension evaluation. Moreover, the

author consulted established learning strategy questionnaires, including Oxford's 1990

Strategy Inventory for Language Learning (SILL), and the Metacognitive Awareness

Listening Questionnaire (MALQ) developed by Vandergrift, Goh, and Mareschal (2006).

b). social-cultural and psycholinguistic views of learning strategies

Two major perspectives of language learning strategies have been developed in the field: the psychological view and the social-cultural view. The psychological view looks at learning strategies as mainly involving cognitive processes of the learner. The use of learning strategies is mostly an individual effort to achieve a language learning goal. The social-cultural view starts with the society instead of the individual learner as its fundamental unit of observation. It is influenced by theories such as Vygotsky's dialogic model, which describes that learners can learn through contact with a more capable person in a socialcultural context. With this view, the use of learning strategies is no longer an individualized mental process but a social-cultural phenomenon situated in different contexts (Oxford & Schramm, 2007). The questionnaire is based on the dialogue of those two fundamental views of strategies. Therefore it includes learner's strategies in interaction (such as item L18: talking with lecturer or presenter to clarify understanding) and also strategies used in the mental processes of the learner (such as item S8: thinking about the main points before presenting).

c). The strategy use patterns of more "successful" learners

Researchers now generally reject the idea that the more strategies learners use, the better results there will be (Macaro, Graham & Vanderplank 2007). However, researchers point out that more successful learners do share certain strategy use patterns. As the research review of Chapter 2 has established, more "successful" learners share the following: a.) they use metacognitive strategies frequently b.) they are using active-use strategies frequently c) they use a combination of top-down and bottom-up strategies d.) they orchestrate strategies effectively f.) they select and combine strategies based on their

own learning situations (Oxford, 2011, Green and Oxford, 1995, Samimy, 2008, and Carson and Longhini, 2002). For the purpose of finding out to what extent NNES graduate students share those patterns, they have been deliberately incorporated into the design of the questionnaire. For example, both listening section and speaking section include a combination of top-down and bottom-up strategies; 13 out of 38 items on ASESS correspond to tactics that belong to the metacognitive strategy group; in the speaking section, items 5, 9, and 16 are all typical "active-use" strategies. Finally, three open-ended questions are designed to probe whether NNES graduate students deliberately select a combination of strategies to cope with a situation or to accomplish a goal.

2) Other sources of validation

One method of establishing content validity is to obtain expert opinions on the relevance of items to the purpose of the questionnaire, on possible wording and interpretation problems and the instructions. One expert of English language, who is a teacher and also a graduate student, edited the wording of the questionnaire. A well-known expert in the area of language learning strategies also read the second version of the questionnaire, and especially confirmed the categorization and the agreement rate is 89%. Also, since the author is a graduate ESL student herself, she kept a learning journal during the time to record her own listening and speaking strategies in academic settings. Therefore the construction of the questionnaire is partially based on that learning journal. In order to construct a satisfactory instrument, the author also took a course on questionnaire design. The author will seek approval of the final version of the questionnaire from experts too.

3) Reliability of the instrument

The reliability of the 40 items of the questionnaire *ASESS* was examined by Cronbach's alpha. The alpha was 0.923 for the overall instrument; the alpha was 0.875 for the listening strategy sub-scale; and 0.891 for the speaking strategy sub-scale. This indicated a highly acceptable internal consistency.

4) The process of revisions

Dörnyei (2003) pointed out that due to the importance of the actual wording of the questionnaire items, "an integral part of questionnaire construction is 'field testing'." Field testing gives the researcher a chance to collect feedback regarding the questionnaire. During the spring semester of 2009, a first version of the ASSESS was dministered to four NNES graduate students in the Education Department of the university. This sample consisted of two male and two female students. After that the questionnaire was substantially revised. Then immediately the questionnaire was administered to 25 NNES graduate students from a variety of academic fields at the university. After this pilot study, the questionnaire was also significantly revised from wording to format, based on participants' suggestions given as answers to an open-ended question. In Fall semester, 2009, another pilot study was conducted and six participants were asked to fill out the questionnaire before being interviewed by the researcher. The questionnaire was revised again based on participants' suggestions. The final revision occurred after a comprehensive literature review was finished. Items were carefully evaluated using conclusions from the literature review as criteria. The purpose is to make the instrument reflect the results of up-to-date research, especially strategy use patterns of the more "successful" learners. It is worthy to note that due to the severe paucity of

research materials on NNES graduate students' strategy use, the literature review has to be mainly based on high school or college age learner research. Nevertheless, three pilot studies with altogether 35 NNES graduate students show that they do use the strategies listed in the questionnaire, sometimes quite often. Open-ended questions on the pilot-study questionnaire asked participants to write down new strategies they will use and also suggestions they have about improving the questionnaire. Those inputs from the participants and also the researcher (as a NNES graduate student)'s own best judgment ensure that this questionnaire is appropriate for NNES graduate students.

5) The special context of the questionnaire

The questionnaire is geared towards academic classroom and conference listening and speaking. Therefore, its items correspond to spoken English tasks in a real graduate level classroom or academic conferences. Here the "insider" knowledge of the researcher plays a significant role. The listening part includes listening to professor lectures, professional conference presentations, peer presentations and group discussions. The speaking part includes giving class and conference presentations and participating in class discussions. The questionnaire was also geared towards the situation of advanced ESL learners. For example, Leaver and Shekhtman (2002) point out that at the advanced level, learners should strive to carry out the goal of the conversation instead of abandoning it; therefore, the questionnaire does not include any reduction strategies.

Although items of the questionnaire are carefully designed according to established taxonomies of learning strategies (Oxford, 1990, Oxford, 2011, Goh, 1998, Vandergrift, 2003), specific terms of learning strategies did not appear on the questionnaire to avoid distracting the respondents. Oxford (2011) states that task based

surveys are more useful. The ASESS is "semi-task based" in that although the questionnaire is not administered right after participants finish certain tasks, it focuses on participant's experience of finishing three major academic listening and speaking tasks faced by ESL students at the advanced level:

a. Comprehending English academic lectures and conference presentations

b. Giving formal presentations at graduate-level classes or academic conferences

c. Participating in graduate level classroom group discussions

3.2.3.2   *Qualitative instrumentation*

Both the interview protocol and the classroom observation protocol have been piloted with six non-native graduate students at the same university. After the piloting, both protocols have been significantly revised. The interview protocol is designed based on the qualitative research questions. After the piloting, questions that caused confusion have been rewritten. The researcher deleted questions if during the piloting interview process, the researcher found those questions could not generate meaningful answers. Redundant questions were also eliminated. After the interview, the researched also sent out three follow-up questions for the interviewees to answer.

3.2.4. Data Collection procedures

This subsection discusses the collection of both quantitative data and the qualitative data. The whole procedure has phase I and phase II.

3.2. 4. 1. *Collecting quantitative data*

In phase I of collecting quantitative data, a questionnaire survey and multiple reminders were sent to the community of international graduate students at a major research university in the US. Both paper and electronic versions of the Academic

Spoken English Strategies Survey were distributed. According to the calculation table in

Cohen, Manion, and Morrison (2007), a sample size of 322 is needed for a population of

2000 with a 95 percent confidence level and a 3 percent confidence interval (p. 104). The

researcher recruited altogether 534 participants and the qualified responses reached 384,

therefore the targeted response rate was achieved. Ideally, the researcher will aim for a

sample that is "*representative* of the whole population" (Dörnyei, 2003, p. 71). However,

"in most L2 survey research it is unrealistic or simply not feasible to aim for perfect

representativeness in the psychometric sense" (Dörnyei, 2003, p. 71). Therefore the

researcher used a convenience sampling procedure to pursue a sample as "representative"

as possible of the population, with consideration of all realistic constraints. The final

makeup of the respondents, as Chapter 4 will discuss, is largely similar to that of the

research population.

In order to achieve the response rate, the researcher adopted the following

actions for recruiting participants from various academic departments of the university

and also from various country origins: a) secured assistance from the university's

international student office; b) secured assistance from instructors and administrative

offices of various departments on campus; c) contacted individual international graduate

students and submitted personal invitations; d) e-mailed invitations to student groups of

different nationalities on campus, such as the Chinese student association, the Indian

student association, and others; e) attended campus activities such as international coffee

hour and the language house for international students to deliver questionnaires; f) posted

recruiting messages on major student and faculty listserves on campus; g) sent out

multiple invitations, reminders, and follow-up letters; h) distributed questionnaires at

campus festivals, conferences or other social occasions. Finally, the researcher also successfully secured funding from her department in order to give monetary rewards or small gifts to participants.

3.2.4.2 Collecting qualitative data

Strategy use is a situated phenomenon which is influenced by many factors inside and outside the learner. In order to reach a fuller understanding of NNES graduate students' experience of strategy use, in phase II, the researcher interviewed nine NNES graduate students for follow-up qualitative interviews from among those questionnaire respondents who volunteered. Finally five interviews were used in the final analysis. The selection of interviewees was based on their representativeness of certain subgroups among the participants. The selection criteria include answers to the questionnaire (both open and close-ended questions), regions of origin, gender, academic discipline, and possibility for observations to occur. Responses on the questionnaire will be the most important criterion. After the interviews were finished, the interviewees also answered three follow-up questions through e-mail.

For the qualitative part, multiple data sources were collected. The primary data set comprises five half-hour audio semi-structured interviews. Supplementary data sets include questionnaire data of those five students, observations of two-to-three hour graduate level classes in which the interviewees enrolled or conference sessions during which the interviewees presented, and also answers to the follow up e-mail questions. Classroom observations focused on students' strategy use in their classrooms or at conferences. Specifically, interviews conducted with select participants are aimed to reveal further the complexities of students' metacognitive perceptions and knowledge:

how they perceive the importance of academic English listening and speaking; how they perceive their own competency in terms of academic English listening and speaking; how they perceive the usefulness of strategies; and what kinds of metacognitive knowledge they have about themselves as learners and also about strategies. The interviews are also useful in exploring the thinking processes involved when participants select strategies to cope with a specific situation. Especially, the researcher noted conflicts or contradictions that surfaced during those interviews. Although the researcher used a semi-structured interview protocol, the interviewees were free to express his or her ideas as if in a conversation.

In addition, classroom observations of interviewees added valuable information and insights about the contexts of the learners' strategic choices. As stated before, data from classroom observation field notes were combined with the questionnaire and interview data to achieve a thorough understanding of the whole phenomenon. The combination of methods is used to gain a more holistic and in-depth perspective.

3.2.5   Data analysis

This sub-section discusses two key parts of the data analysis procedure: quantitative data analysis and qualitative data analysis. Validity of the analysis is also discussed.

3.2.5.1 Quantitative data analysis

Questionnaire data were analyzed using the software SPSS to answer the following research questions: 1, 2, 3, 4, 6. Questions 1 is answered through descriptive statistics of the questionnaire data; graphs are used to illustrate the frequencies of use among different types of strategies. A factor analysis was used to reveal the factor structure of the ASESS and the results revealed that the instrument was based on reasonable structures. ANOVA

was used to determine whether major factors have statistically significant effects on the frequencies and types of strategies used (question 3). Multiple regression was used to determine the predictive effects of those factors; finally path analysis was used to determine if there are any causal links among students' perceptions of strategy use, self-rated proficiency levels, and actual strategy use.

3.2.5.2 *Qualitative data analysis*

The qualitative interview, the classroom observation data and answers to the open-ended questions of the questionnaire were used to answer research question 5. The main purpose of the qualitative data analysis is to provide insights and understanding about the underlying thinking (metacognitive thinking) behind NNES graduate students' strategy use. It is hard to claim generalizability based on data collected from only five participants. However, the researcher hopes this qualitative part of the study can reveal themes and interesting information that suggest a snapshot of the overall meatcognitive thinking about English listening and speaking strategy use among NNES graduate students. This snapshot further can provide valuable information for pedagogical purposes.

The qualitative data analysis generally followed Creswell (2003)'s procedures which include six steps:

- "*Organize* and *prepare* the data for analysis" (p. 191). The researcher will transcribe interviews, type up and arrange classroom observation field notes.
- Read through all the data" in order to "obtain a *general sense* of the information and to reflect on its overall meaning" (p. 191). The researcher will read through the data and write down any general impressions, thoughts or questions.
- "Begin detailed analysis with a coding process" (p. 191.) The researcher

will start the initial coding by organizing the data into categories and then label those categories. The researcher will pay special attention to those categories that can directly answer the qualitative research questions. At the this stage, the researcher will also adopt the constant comparison method, which was defined by Oxford (2011) as: the analytic tool for open coding, involves constantly comparing the data with the emerging categories (themes) and expanding or altering the categories as needed. Contradictions in the data are seen as useful (Chapter 7, p. 9). (there should not be any future tense. Everything is past tense)

- "Use the coding process to generate a description of the setting or people as well as categories or themes for analysis" (Creswell, 2003, p. 191). Creswell (2003) also mentioned that "sophisticated qualitative studies go beyond description and theme identification and into complex theme connections" (p. 194). At this stage, the researcher might also connect themes to describe the whole picture holistically.

- "Advance how the description and themes will be represented in the *qualitative* narrative…This might be a discussion that mentions a chronology of events, the detailed discussion of several themes (complete with subthemes, specific illustrations, multiple perspectives from individuals, and quotations), or a discussion with interconnecting themes." (Creswell, 2003, p. 194). At this stage, the researcher will pursue a thorough description and discussion of major themes in order to answer the qualitative research questions.

- "A final step in data analysis involves making an interpretation or meaning of the data" (Creswell, 2003, p. 194). At this stage, the researcher goes beyond answering the research questions by providing an interpretation that is inclusive and insightful for the purpose of discussing interesting themes and making pedagogical suggestions based on the data.

The researcher added one more step to the above procedure: after step 3 which is initial coding, the researcher recoded the data in order to assure reliability of the coding.

Also, during the final stage of interpreting the data thoroughly, the researcher triangulated data from classroom observations and questionnaire data in order to reach a comprehensive view.

3.2.5.3 *Validity of data analysis*

This subsection discusses validity issues of both qualitative and quantitative data analysis and the measures that the researcher adopted to ensure validity. Although perfect validation is hard to achieve, the researcher took reasonable measures as seen fit for the project and the contexts of the whole research project.

1) Validity of the quantitative data analysis

Regarding the validity of the quantitative data analysis, Oxford (2011) provided a list of potential threats to the validity of quantitative studies that are not experimental or semi-experimental. The following threats are especially relevant to the quantitative part of this study:

- threat of comprehensiveness (threat exists if important variables are forgotten or ignored);
- instrumentation threat (threat exists if the instrument is not valid);
- procedural threat (threat exists if quantitative procedures are misapplied);
- researcher bias threat (threat exists if the researcher has bias).

To address those threats, the researcher adopted the following measures a) conducted a thorough research review to assure the validity of underlying framework of the questionnaire; b) discarded disqualified questionnaire responses; c) validated the instrument using various methods as discussed earlier including a factor analysis; d) consulted experts in statistical analysis about the quantitative data analysis procedures of this study; e) acknowledged research bias and strived to minimize it; f)acknowledged the limitations of this study in terms of generalizability.

2) Validity of the qualitative data analysis

Creswell (2003) stated that validity of qualitative research "is used to suggest determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account" (p. 196). Creswell (2003) further suggested eight major strategies to ensure validity of qualitative research. The researcher used the following methods to ensure validity: a) triangulated different data sources; b) used member-checking, by which the researcher e-mailed each interviewee the transcript of the interview and asked for feedback and corrections and all interviewees responded; c) used rich, thick description to convey the findings; d) clarified the bias the researcher brought to the study; 5. presented negative or discrepant information that runs counter to the themes (p. 196). Also, the researcher used a validity method suggested by Richards (2003): constant comparison of the coding and classifications of the data.

3.2.5.4 Synthesizing qualitative and quantitative data

Triangulation of data from different sources is one of the hallmarks of mixed methods studies. In this study, data from different sources were organized together to answer the research questions. "In this approach all the relevant data from various data streams (interviews, observations, questionnaires etc.) are collated to provide a collective answer to a research question… this enables patterns, relationships, comparisons and qualifications across data types to be explored conveniently and clearly" (Cohen, Manion & Morrison, 2007, p. 468). Indeed, to the delight of the researcher, the quantitative and qualitative data collected for this project "spoke to each other" in a coherent and fascinating way to reveal the discoveries that the researcher has strived for.

3. 3. Summary

In this section, the methodologies of this dissertation study have been discussed. The basic research design is a mixed-methods design. Quantitative and qualitative data have been collected and analyzed in a combination for this project. All the instruments have been piloted. The quantitative analysis and qualitative analysis have shared equal weights in the investigation of this project. The final analysis and conclusions were based on the joint results too. Measures for ensuring validity of the whole research design have been taken.

Chapter 4: Quantitative Results

This chapter provides answers to research questions 1, 2, 3, 4, 5, 7 and 8 and results of the quantitative analyses are reported, starting with descriptive statistics. The statistical software package SPSS for Windows (Version 17) and AMOS 17.0 were used for data analysis. Statistical results reported include the following: 1) descriptive statistics for the respondents' self-rated proficiency levels and TOEFL scores for answering RQ1; 2) descriptive statistics for the various items on the survey to examine overall statistical characteristics of NNES strategy use (totals, frequencies, percentages, means, and standard deviations) for answering RQ2; 3) results of a factor analysis conducted to reveal the latent factors that underlay the ASESS as a measuring instrument for answering RQ3; 4) results of one-way and two-way analysis of variance (ANOVA) applied to examine whether there were significant mean differences across different demographic factors such as gender, regions of origin, graduate student status at the institution (doctoral or Master's), academic disciplines, and self-perceived language proficiency for answering RQ4; and 5) results of a multiple regression to find out whether the demographic factors and two more factors (attitude and proactiveness) predict the overall strategy use for answering RQ5; 6) results of a multiple regression to find out whether two factors "students' perceptions of the usefulness of strategies" and "students' self-rated proficiency levels" predict the overall strategy use for answering RQ7; 7) results of a simple path-analysis to reveal possible causal links between strategy use frequencies, perceptions of the usefulness of strategies, and self-rated proficiency levels for answering RQ8.

4.1. Research Question 1: What were the self-rated proficiency levels and self-reported TOEFL scores, and how do these relate to each other?

Each respondent was asked to self-rate his or her academic spoken English proficiency level (listening and speaking separately) on a scale from 1 to 10. Table 4.1 demonstrates the descriptive statistics of the self-ratings. Students' overall mean for self-rated listening proficiency is 8.33 (SD 1.380, min 2 and max 10); students' overall mean for self-rated speaking proficiency is 7.42 (SD 1.717, min 2 and max 10). The above seems to indicate that students generally rate their listening proficiency level higher than their speaking proficiency level, as would be expected. If the self-rated proficiency level is lower than 6, it is considered as low proficiency; if the self-rated proficiency level is between 6 and 8, it is considered as middle level proficiency; if the self-rated proficiency level is above 8, it is considered as high proficiency.

Table 4.1   Descriptive Statistics of respondents' self-rated proficiency

	Listening	Speaking
Mean	8.33	7.42
Median	9.00	8.00
Mode	9	8
Std. Deviation	1.380	1.717

Table 4.2 shows that 77.6% respondents rated their listening proficiency level as high; 18.5% respondents rated their listening proficiency level as middle level; and 3.9% respondents rated their listening proficiency level as low. Thus, the majority of the respondents rated their listening proficiency as high.

Table 4.2:Percentages of each self-perceived proficiency level for listening:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid low proficiency	15	3.9	3.9	3.9

medium proficiency	71	18.5	18.5	22.4
high proficiency	298	77.6	77.6	100.0
Total	384	100.0	100.0	

Table 4.3 shows the percentages of each self-perceived proficiency level for speaking. Only slightly more than half showed high proficiency in speaking, according to self-ratings, while 34.1% rated their speaking proficiency at the middle level and 13% rated their speaking proficiency as low.

Table 4.3: Percentage of each self-perceived proficiency level for speaking

Table 4.3 The percentages of each self-perceived proficiency level for speaking:		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low proficiency	50	13.0	13.1	13.1
	medium proficiency	131	34.1	34.3	47.4
	high proficiency	201	52.3	52.6	100.0
	Total	382	99.5	100.0	
Missing	System	2	.5		
Total		384	100.0		

Taken together, Talbes 4.2 and 4.3 indicate that the respondents are quite confident about their listening and speaking proficiency. More respondents rated their listening proficiency level as high than those who rated their speaking proficiency level as high.

For the 163 respondents who reported their TOEFL listening scores, the mean is 27 (the full score is 30); 170 respondents reported their TOEFL speaking scores, and the mean is 23 (the full score is 30). If TOEFL scores can be treated as a standard indicator

of learners' English proficiency, since 27 out of 30 equals 9 out of 10, we may conclude that the respondents were slightly modest in their self-ratings of listening proficiency; since 23 out of 30 equals roughly 7.7 out of 10, we may conclude that the respondents self-rated their speaking proficiency at a level very close to their TOEFL speaking test results. Overall, the respondents were relatively accurate in rating their listening and speaking proficiency level, if we use their TOEFL scores as a standard indicator of their real proficiency level. It is also noticeable that on both scales (proficiency self-ratings and TOEFL), the respondents fare better in listening than speaking. Although only about one third of the respondents reported TOEFL scores, the above suggest that the respondents generally have a good sense of their spoken English proficiency level.

4.2. Research question 2: What are the descriptive statistical characteristics of NNES graduate students' strategies use regarding academic English listening and speaking strategies?

In reporting frequency of use of language learning (use) strategies, the following key was employed to explain mean scores on the Academic Spoken English Strategies Survey (ASESS), which has a scale range of 1-5:

--High use: 4.0 (often) to 5.0 (always or almost always)
--Medium use: 3.0 (sometimes) to 4.0 (often); not including 4.0
--Low use: 1.0 (never or almost never) to 3.0 (sometimes); not including 3.0

As table 4.4 shows, the non-native graduate student participants in this study had a mean = 3.405 (SD 0.565) of overall strategy use on the 5-point Likert scale, which indicates that overall the students reported using strategies "sometimes," not quite "often" yet. This result is very similar to the strategy use mean of the 25 participants of the pilot study conducted by the researcher.

Table 4.4: Descriptive Statistics of Overall Strategy Use

	N	Minimum	Maximum	Mean	Median	Mode	Std. Deviation
strategies	384	1.18	4.93	**3.4047**	3.4250	3.55[a]	.56506
Valid N (listwise)	384						

a. Multiple modes exist. The smallest value is shown

The participants had an overall listening strategy use mean of 3.24 (SD=0.62) on the 5-point Likert scale, which was a little bit lower than the overall strategy use mean; they had an overall speaking strategy use mean of 3.57 (SD=0.64) of overall strategy use, which was a little bit higher than the overall strategy use mean and also higher than the listening strategy use mean. The above indicates that participants reported using peaking strategies slightly more frequently than they used listening strategies. Also, 23.4% of the participants reported low strategy use (never or almost never, rarely); the majority (62.8%) reported medium strategy use (sometimes); 13.8% reported high strategy use (often and always or almost always).

For listening strategies, 30.7% of the participants reported low strategy use; 57.6% reported medium strategy use; 11.7% reported high strategy use. For speaking strategies, 18.2% of the non-native graduate student participants reported low strategy use; 52.6% reported medium strategy use; 29.2% reported high strategy use. The figures above suggest that a significantly larger percentage (+17.5%) of the participants reported high use of speaking strategies than those who reported high use of listening strategies. Also, a significantly smaller percentage (-12.5%) of the participants reported low use of

speaking strategies than those who reported low use of listening strategies. It seems to suggest that participants state that they use speaking strategies more frequently than they use listening strategies.

This conclusion can be considered alongside with the fact that those participants also self-rated their listening proficiency level higher than their speaking proficiency level, and for those who reported their TOEFL scores, their TOEFL listening scores are higher than speaking scores. One possible explanation could be that since students know and feel their speaking proficiency level is lower than their listening proficiency level, they use more strategies to help with their speaking. Table 4.5 shows the percentages in low, medium, high strategy use frequency categories, regarding listening, speaking, and overall strategy use.

Table 4.5: Percentages in low, medium, and high strategy use frequency categories

	Low strategy use	Medium strategy use	High strategy use
Listening	30.70%	57.60%	11.70%
Speaking	18.20%	52.60%	29.20%
Overall	23.40%	62.80%	13.80%

Regarding the mean scores of strategy use among the four strategy categories: metacognitive, cognitive, affective, and socialcultural-interactional strategies, the means of each strategy category are quite close to each other, which suggests a balanced combination. Students use mostly metacognitive strategies (Mean=3.54), followed by social-cultural interactional strategies (Mean=3.45) and cognitive strategies (mean=3.37), and the least frequently used strategy group is affective strategies (3.21).

4.3. Research question 3: What factor structure underlays the Academic Spoken English Strategy Survey (ASESS)?

A factor analysis is used to answer research question 2. "Factor analysis … is a way of determining the nature of underlying patterns among a large number of variables" (Cohen, Manion & Morrison, 2000, P. 354). An exploratory factor analysis (principal component analysis) was performed to explore the factors underlying both the listening strategies and the speaking strategies that students used. For the exploratory factor analysis, a principal components method of factor extraction was used and orthogonal rotation of factors was performed using the VARIMAX method. In order to determine the number of factors, a scree plot was used in which eigenvalues greater than 1.0 and cumulative contribution ratios were utilized as cut-off points. Factor loadings greater than .40 were considered acceptable for simple structure.

4.3.1. RQ 3a: What factor structure underlies the listening strategy use items in ASESS?

As recommended by Stern (2010), the Kaiser-Meyer-Olkin (KMO) test was performed to determine the factorability of the inter-item correlations (correlation matrix). Since the value of KMO test is 0.889 (see table 4.6) for listening strategies, the sample is adequate and the matrix is considered to be very suitable for a factor analysis (Hartas, 2010, Stern, 2010).

Table 4.6 : The Kaiser-Meyer-Olkin (KMO) test for listening strategy use

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.889
Bartlett's Test of Sphericity	Approx. Chi-Square	2373.901
	Df	190
	Sig.	.000

Table 4.7 shows the factors derived from the analysis of the twenty listening strategy items with their loadings. After components with eigenvalues <1 were removed, five factors were retained for the participants' listening strategy use. The scree plot (see figure 4.2) also confirms the retaining of the five factors.

Figure 4.2   Scree plot of the retaining of the five factors

Scree Plot
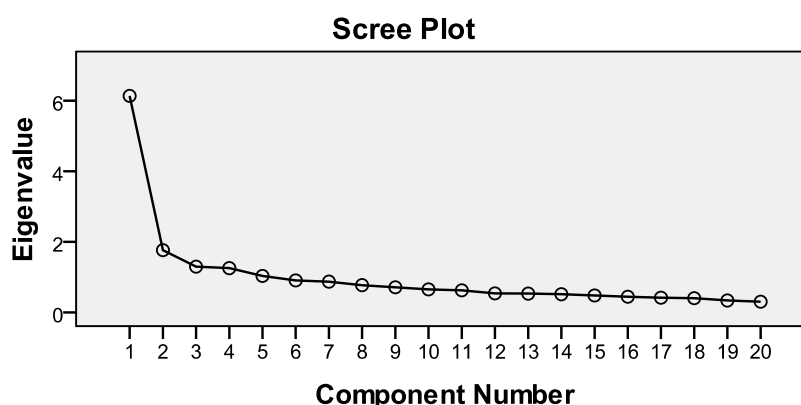
The total percentage of variance accounted for by those five factors was 57.4%. The factors were labeled according to the items that were included. Table 4.7 shows the number and name of each factor, the number and general content of every strategy item that loads adequately (.40 or above) on that factor, the specific loading of each of the strategy items, and the average frequency of use of the items. The five factors are: Factor One, preparing for listening strategies; Factor Two, strategies for keeping concentration and focus; Factor Three, strategies for checking one's own understanding after listening; Factor Four, strategies for monitoring one's own understanding while listening; Factor Five, strategies for using technologies to help with listening.

Item L05 ("Predict the contents") was found to have double loadings on both factor 1 (*preparation*) and factor 4 (monitoring while listening). The loading to preparation was 0.605, and the loading to monitoring while listening was 0.438. After further examination, I decide that this item loaded only on preparation (0.605). The

reason is that items under factor 1 are mostly about preparation for listening activities beforehand and items under factor 4 are mostly about monitoring one's understanding during the listening activities. Therefore, item L05 was categorized into factor 1. Item L15 (Judge whether to look up a word) was found to have double loadings on both factor 2 (keeping concentration and focus) and factor 3 (checking understanding after listening). The loading to factor 2 is 0.402, and the loading to factor 3 is 0.437. After further examination, I decide that this item loaded only on factor 2 (checking understanding during the listening activities). The reason is that items under factor 2 are mostly about keeping one's concentration during the listening activity and items under factor 3 are mostly about checking one's own understanding after the listening activity. Item L15 is about judging quickly whether it is worthwhile to check the meaning of a word during the listening activity, without losing concentration. Therefore, item L15 was categorized into factor 2. Item L09 (check one's own understanding periodically) was found to have double loadings on both factor 3 (checking understanding after listening) and factor 4 (monitoring understanding while listening). The loading to factor 3 is 0.427, and the loading to factor 4 is 0.602. After further examination, I decide that this item loaded only on factor 4 (monitoring understanding while listening). The reason is that items under factor 3 are mostly about checking one's understanding after listening and the items under factor 4 are mostly about monitoring one's understanding while listening. Item L09 is about checking one's own understanding periodically while listening; therefore, it makes sense that L09 should be categorized into factor 4. Finally, item L06 (infer the meaning of words) was found to have double loadings on both factor 2 (keeping concentration and focus) and factor 4 (monitoring understanding while listening). The

loading to factor 2 is 0.435, and the loading to factor 4 is 0.654. After further

examination, I decide that this item loaded only on Factor 2 (keeping concentration and

focus). The reason is that item L15 (judge whether to look up a word) is categorized

under Factor 2; item L15 is closely related to item L06, since if the learner decides that he

or she will not look up a word, he or she will infer the meaning of the word. Therefore,

L06 is categorized into Factor 2.   No other double loadings were found.

Factor One, *preparation for listening strategies*, includes strategies that can

help learners prepare for a listening task, whether it is a class or a presentation. This

factor includes five strategies, and three of them are metacognitive strategies; one

strategy is affective and another one is cognitive. Metacognitive strategies are often used

for planning. The three matecognitive strategies include arriving early, deciding about

listening purpose, and predicting the contents (L2, L4, L5). Those strategies are a series

of conscious actions that help the learner prepare and plan well for the class or

presentation. The one affective strategy is relaxing before class and the one cognitive

strategy is checking key words beforehand. All combined, the learner who uses those

strategies is preparing for the listening task in various aspects. Therefore, the factor can

be referred to as *preparation for listening strategies*. If in terms of average strategy use

frequencies are revealed by the questionnaire responses, high strategy use is defined by

frequencies from 4.0 (often) to 5.0 (always or almost always), including 4.0; medium

strategy use is defined by frequencies from 3.0 (sometimes) to 4.0 (often), including 3.0;

and low strategy use is defined by frequencies from 1.0 (never or almost never) to 3.0

(sometimes), then, most strategies in Factor 1 fall into the low strategy use frequency

range and only one strategy L02 (arriving early for class) is in the medium use frequency

range. This means that the respondents generally do not use strategies frequently for preparing for listening activities, although sometimes they arrive early for a class or presentation.

Factor Two, *strategies for keeping concentration and focus*, includes strategies that can help learners keep their concentration and focus during the listening activity, especially when they are distracted by difficulties or frustration. For example, learners use metacognitive strategies to keep concentration without giving up (L14) and get back on track and regain concentration when they are distracted (L13). Also, they use affective strategies to encourage themselves when they feel frustrated (L12). If difficulties arise, they will notice the speaker's facial expressions, gestures and voice changes to help them comprehend the meaning and keep concentrated (L11). Finally, when learners encounter a word that they do not know, they will judge real time whether to look up the word without losing track of the speech (l15), or they will infer the meaning of the word without losing concentration (L06). This factor is mainly concerned with what learners do in order to keep concentration while listening. Four strategies (L12, L13, L14, L15) fall into the medium strategy use range; while two strategies (L11 and L06) fall into the high strategy use range. This means that respondents generally use strategies quite often to keep their concentration and focus during the listening activity. They especially often infer the meaning of new words so that they can keep listening, and they also often notice facial expression, gestures, and voice changes to help them decode the message they heard and keep going.

Factor Three, *strategies for checking one's understanding after listening*, includes strategies that help learners check their understanding after the listening activity

is over. Learners can talk to someone after the presentation to check their understanding (a social strategy L19); they can ask a question (social strategy L16); they can summarize the information that they heard (cognitive strategy L17); finally, they can reflect on the listening experience and think about how to improve their listening next time (metacognitive strategy L18). All the four strategies in this factor fall in the medium strategy use frequency range. This means that respondents generally use strategies quite often to check their understanding after the listening activity is over.

Factor Four, *strategies for monitoring one's understanding while listening*, includes strategies that help learners monitor their understanding while listening. Learners can check their understanding periodically (L09), adjust their own understanding after they check it (L10), and predict what will be the next message that the presenter will talk about (L08).   Two of the three strategies are metacognitive strategies. All the three strategies in Factor 4 falls into the medium strategy use frequency range, which means that respondents often use strategies to monitor their understanding while listening. This means that they are quite alert and self-monitored listeners.

Factor Five, *strategies for using technologies to help listening*, includes two strategies that help learners use technologies to help with listening. Learners can use laptops to check the meaning of words while listening (L07); they can also audio-record the presentation or the class so that they can listen for the message the second time. Learners use strategy L07 (using laptop to check words) often as the average frequency is 3.28; but they do not audio-record the presentation or class often as the average frequency is only 1.56.

In summary, Table 4.7 shows that the respondents use strategies to keep concentration and focus (Factor 2, M=3.77) most frequently among all the five categories of strategies (five factors); they use strategies to monitor their own understanding while listening (Factor 4, M=3.64) at a similar frequency level. The average strategy use frequencies of those two factors are approximately the same, which attests for the deep connection between those two categories of strategies. After the first two categories of strategies, the most frequently used category of strategies is for checking one's understanding after listening (Factor 3, M=3.20). Learners use strategies to prepare for listening (Factor 1, M=2.788) less often; and they use technologies to help with listening least often (Factor 5, M=2.42). There should be reservations concerning conclusions related to Factor 5, because there are only two items on this factor. Should there be more items, the strategy use frequency might change. Overall, the factor analysis of the listening scale seems to suggest that the respondents most often use strategies to help them concentrate and monitor their own understanding during the listening process. They also use strategies to check their understanding after the listening process more often than using strategies to prepare for the listening task. It should be suggested pedagogically that learners need to be reminded of adopting more strategies for preparing for the listening task.

Table 4.7: Factors for Listening Strategy Use

Factor one: Preparing for listening strategies

Item #	Content	Loading	Average
L04	Decide about listening purpose	0.732	2.55
L03	Check key words beforehand	0.695	2.45
L01	Relax before class	0.642	2.81
L02	Arrive early for class	0.632	3.32
L05	Predict the contents	0.605	2.81

Factor two: Strategies for keeping concentration and focus

Item #	Content	Loading	Average
L14	Keep concentrating without giving up	0.722	3.74
L13	Get back on track and regain concentration	0.704	3.82
L12	Encourage oneself when one feels frustrated	0.611	3.2
L11	Notice facial expressions, gestures and voice changes	0.544	4.03
L06	Infer the meaning of words	0.435	4.25
L15	Judge whether to look up a word	0.402	3.6

Factor Three: Strategies for checking one's own understanding after listening

Item #	Content	Loading	Average
L16	Ask a question	0.672	3.1
L19	Talk to someone after the presentation	0.662	3.03
L17	Summarize information	0.659	3.63
L18	Reflect and think about improvement	0.635	3.03

Factor Four   Strategies for monitoring one's understanding while listening

Item #	Content	Loading	Average
L08	Predict what will be next	0.696	2.81
L10	Adjust one's own understanding	0.646	4.25
L09	Check one's own understanding periodically	0.602	3.85

Factor Five   Strategies for using technologies to help listening

Item #	Content	Loading	Average
L07	Use laptop to check words	0.593	3.28
L20	Tape record the presentation	0.524	1.56

4.3. 2.   RQ3b. What factor structure underlies the speaking strategy use items in ASESS?

The Kaiser=Meyer-Olkin (KMO) test was performed to determine the

factorability of the inter-item correlation. Since the value of KMO test is 0.898 (see

Table 4.8) for speaking strategy use, the sample is adequate and the matrix is considered

to be very suitable for a factor analysis (Hartas, 2010, Stern, 2010).

Table 4.8 The KMO test for speaking strategy use

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.898
Bartlett's Test of Sphericity	Approx. Chi-Square	2798.169
	df	190
	Sig.	.000

Figure 4.3   Scree plot for the retaining of four factors
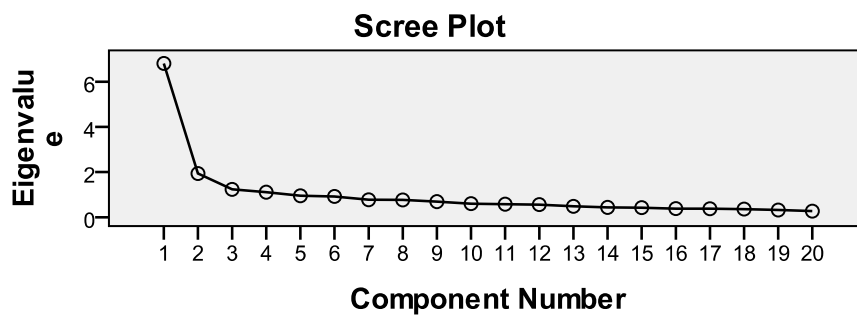
The total percentage of variance accounted for by those four factors was

55.45%. The factors were labeled according to the items that were included. After

components with eigenvalues <1 were removed, four factors were retained for the

participants' speaking strategy use. The scree plot (see figure 4.3) also confirms the

retaining of the four factors.

Table 4.9 shows the factors derived from the analysis of the twenty speaking

strategy items. Table 4.9 shows the number and name of each factor, the number and

general content of every strategy item that loads adequately (.40 or above) on that factor,

the specific loading of each strategy item, and the average frequency of use of the item.

Table 4.9   Factors for Speaking Strategy Use

Factor one: Strategies for seeking opportunities to speak in class

Item #	Content	Loading	Average
S09	Volunteer to answer teacher's questions	0.794	3.11
S15	Encourage onself to speak	0.726	3.86
S14	Raise hands again if fails to get a chance to speak	0.716	3.13
S11	Build upon classmates' remarks	0.691	3.48
S10	Listen to classmates to join conversations	0.542	3.85

Factor two: Strategies for making a clear and convincing argument

Item #	Content	Loading	Average
S13	Notice how people agree and disagree	0.736	3.64
S08	Plan to make clear and precise messages	0.655	3.83
S12	Put stress on important words	0.627	3.26
S07	Prepare key points to share	0.612	3.05

Factor Three: Strategies for improving one's English speaking skills

Item #	Content	Loading	Average
S03	Try to expand vocabulary	0.693	3.65
S01	Pay attention to pronunciation	0.687	4.1
S02	read aloud academic materials	0.659	2.72
S04	Notice how people explain complicated ideas	0.611	3.95
S05	Seek opportunties to interact in English	0.489	3.66
S06	Learn from good presenters	0.465	4.19

Factor Four   Strategies for doing presentations in English

Item #	Content	Loading	Average
S17	Rehearse before presenting	0.781	4.06
S18	Pay attention to audience's reactions	0.584	3.82
S19	Reflect on how I present and plan to improve	0.554	3.77
S20	Praise or reward myself for success	0.452	2.97
S16	Seek opportunities to present	0.447	3.39

The four factors are: Factor 1, strategies for seeking opportunities to speak in class; Factor 2, strategies for making a clear and convincing argument; Factor 3, strategies for improving one's English speaking skills; Factor 4, strategies for doing presentations in English. Item S11 (Build upon classmates' remarks) was found to have

double loadings on both Factor 1 (seeking opportunities to speak) and Factor 2 (making a clear and convincing argument). The loading to Factor 1 was 0.691, and the loading to Factor 2 was 0.464. A further examination decides that this item loaded only on Factor 1 (strategies for seeking opportunities to speak) (0.691). The reason is that items under Factor 1 are mostly about actively seeking opportunities to speak in classes and items under Factor 2 are mostly about making a clear and convincing argument. Therefore, Item S11 was categorized into Factor 1. Item S10 (Listen to classmates to join conversations) was found to have double loadings on both Factor 1 (Seeking opportunities to speak in classes) and Factor 2 (Making clear and convincing arguments). The loading to Factor 1 is 0.542, and the loading to Factor 2 is 0.535. After further examination, I decide that this item loaded only on Factor 1 (Seeking opportunities to speak in classes). The reason is that items under Factor 1 are mostly about actively seeking opportunities to speak in classes and items under Factor 2 are mostly about making a clear and convincing argument. Therefore, Item S10 was categorized into Factor 1. Also Items S10 (Listen to classmates to join conversations) and S11 (Build upon classmates' remarks) are paired-up items, so they should be categorized into the same factor. Item S05 (Seek opportunities to interact in English) was found to have double loadings on both Factor 1 (strategies for seeking opportunities to speak) and Factor 3 (strategies for improving one's English speaking skills). The loading to Factor 1 is 0.513, and the loading to Factor 3 is 0.489. After further examination, I decide that this item loaded only on Factor 3. The reason is that items under Factor 1 are mostly about actively seeking opportunities to speak in classes and items under Factor 3 are mostly about actively trying to improve one's English speaking skills. Item S05 is mostly about

seeking opportunities to interact with people in academic settings that include classes but are not limited to classes. Therefore, Item S05 was categorized into Factor 3. Item S16 (Seek opportunities to present) had double loadings on both Factor 1 (strategies for seeking opportunities to speak in classes) and Factor 4 (strategies for doing presentations). The loading to Factor 1 is 0.601 and the loading to Factor 4 is 0.447. After further examination, I decide that this item loaded only on Factor 4. The reason is that items under Factor 1 are mostly about seeking opportunities to speak in classes, and items under Factor 4 are mostly about trying to do presentations successfully. Therefore, S16 is categorized into Factor 4. No other double loadings were found.

Factor One, *strategies for seeking opportunities to speak in class*, includes various strategies that can help learners seek opportunities to speak in class. This factor includes five strategies; four are cognitive strategies and one is an affective strategy. Two strategies are about getting a chance to speak in class: Volunteer to answer teacher's questions (S09) and Raise hands again if fails to get a chance to speak (S14). Two strategies are used for finding an angle to join the classroom conversation, and they are paired-up strategies: Build upon classmates' remarks (S11) and Listen to classmates to join conversations (S 10). Finally, one strategy is to encourage oneself to speak even when there are difficulties (S15, Encourage oneself to speak). All combined, those strategies are used by the learner to seek opportunities to speak in class. Therefore, the factor can be referred to as *strategies for seeking opportunities to speak in class*. All strategies in Factor 1 have medium strategy use frequencies associated with them.

Factor Two, *strategies for making a clear and convincing argument*, includes strategies that can help the learner make a clear and convincing argument. Those

strategies help the learner in different aspects: pronunciation, main argument points, and rhetoric moves. For example, learners can notice how people agree and disagree from each other in English (S13) and learn from them to make their own stance; learners can think about how to make what they say clear and precise (S08); learners can put stress on important words (S12) to emphasize their points; finally learners can prepare key points beforehand to share (S07) during a class or a presentation. This factor is mainly concerned with making a good argument. Similar to the case of Factor 1, all strategies in Factor 2 have medium strategy use frequencies associated with them.

Factor Three, *strategies for improving one's English speaking skills*, includes strategies that help learners improve their English speaking skills. This factor mostly includes what learners can do daily to improve their English speaking. Most of those actions can happen outside a classroom. Learners can expand their vocabularies (S03), pay attention to pronunciation (S01), read aloud academic materials (S02), and notice how people explain complicated ideas (S04). Finally, they can seek opportunities to interact in English with people (S05). Two strategies under this factor: Pay attention to pronunciation (S01) and Learn from good presenters (S06) have high strategy use frequencies; one strategy (S02, Read aloud academic materials) has low strategy use frequencies; the remaining three strategies have medium strategy use frequencies associated with them. This can indicate that learners use those strategies on a scale of different frequencies of use from low to medium to high.

Factor Four, *Strategies for doing presentations in English*, has five strategies that can be used to help the learner present in academic English. They include strategies that can be used before, during, and after the presentations. The learner first can seek

opportunities to present (S16); then, he or she can rehearse before presenting (S17); next

he or she can pay attention to audience's reactions during the presentation (S18); after the

presentation, he or she will reflect on how he or she presented and can plan to improve

next time (S19), and if the presentation goes well, the learner can praise or reward

himself or herself (S20). Strategy S17 (Rehearse before presenting) has a high frequency

of use; Strategy S20 (Praise or reward myself for success) has a low frequency of use.

The remaining three strategies have medium frequency of use. This can indicate that

while using the strategies for helping a learner present, the respondents will rehearse

before doing presentations most frequently and reward themselves after a successful

presentation least frequently. They use other strategies for presentations at a medium

level.

In summary, based on Table 4.9, the four factors of speaking strategy use have

very similar average frequencies of use associated with them (M=3.49 for Factor 1;

M=3.45 for Factor 2; M=3.71 for Factor 3; M=3.60 for Factor 4). All are in the medium

range of frequency use. The respondents use strategies to help them improve English

speaking skills most frequently (Factor 3, M=3.71) among all the four categories of

strategies (four factors); they use strategies to help them do presentations in English

(Factor 4, M=3.60) second most frequently. They use strategies to help them make clear

and convincing arguments (Factor 2, M=3.45) and to help them gain opportunities to

speak in class (Factor 1, M=3.49) a little bit less frequently. Interestingly, one factor

mainly deals with classroom talk and another mainly deals with presentations. This

indicates that the respondents tend to develop separate strategies for delivering

presentations in academic English, which is a major spoken English task for graduate

students at the university. Compared with listening strategy use, the respondents'

speaking strategy use seems to be more balanced in terms of frequencies of use in each

factor. The factor analysis also reveals the difference of factor structures. Compared with

the speaking strategy use, respondents' listening strategy use seems to be more task-

oriented, and the factors are neatly structured based on pre-listening, during-listening, and

after-listening activities; while with speaking strategy use, the factors also include

strategies for generally improving speaking skills and also for making clear and concise

arguments. Those speaking strategies can be used outside classrooms or academic

conferences. This phenomenon indicatively reflects the fact that among the respondents,

speaking strategies are used more frequently than listening strategies and the respondents

generally think their listening proficiency level is higher than that of speaking. The in-

depth interviews also reveal that interviewees are generally more concerned with

speaking, and generally pay more attention on improving their speaking skills in their

daily lives.

4.4. Research question 4. How do the frequencies and types of listening and
speaking strategies used by students differ by gender, academic fields, regions of
origin, self-rated proficiency, attitude[21], and level of proactiveness[22]?
4.a. How do the frequencies and types of listening strategies used by students differ
by gender, academic fields, regions of origin, self-rated proficiency, attitude, and
level of proactiveness?

Since MANOVA in SPSS is only appropriate when two or more dependent

variables are correlated, ANOVA on each of the dependent variable is used instead of

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[21] "Attitude" is a variable measured by Item 7 on the questionnaire, which indicates learners' attitude towards classes or conferences as learning opportunities.
[22] "Level of proactiveness" is a variable measured by item 8, which indicates how proactive the learners are in seeking opportunities to go to lectures, presentations, or conferences.

MANOVA in SPSS. ANOVA was used to determine how average listening strategy use frequencies in each strategy category differ by gender, level of degree, academic fields, regions of origin, self-reported proficiency, attitude, and proactiveness. Self-reported proficiency data will be used instead of TOEFL score data because only a portion of participants reported their TOEFL scores. The five dependent variables include the overall strategy use and the strategy use of each of four strategy categories. All of the seven independent variables were tested using one-way ANOVA. In order to adjust to the numbers of tests, the Bonferroni correction method was used to avoid the type one errors. Since there are five dependent variables and seven independent variables, a total of 35 tests will be needed. After the Bonferroni correction, the new required significance level is $p < .001$. The following calculation is used:

$p < .05$=the initial significance level

$.05/35 = .001$=initial significance level adjusted by 35 tests

Table 4.10 Summary of Significant Findings from the Separate One-way Analyses of Variance on listening Strategy Use

	Overall strategy use	Cognitive strategy use	Metacognitive strategy use	Affective strategy use	Socialcultural-interactional strategy use
Degree level	.511	0.103	0.946	0.542	0.755
Gender	0.099	0.048	0.229	0.271	0.381
Academic fields	0.869	0.357	0.682	0.635	0.613
Regions of origin	0.479	0.616	0.602	0.827	0.046
Self-rated proficiency	0.234	0.373	0.034	0.007	0.049

Attitude	0.000	0.000	0.000	0.000	0.003
Proactiveness	0.000	0.001	0.000	0.000	0.000

p<.001 (after Bonferroni correction based on p<.005)

As Table 4.10 shows, only two independent variables "attitude" and "positiveness" have statistically significant effects ($p<0.001$) on the participants' overall listening strategy use and strategy use of each category. No other independent variables have any statistically significant effects on the overall listening strategy use or listening strategy use of any category. The report shows that none of the following independent variables: gender, degree level, academic fields, regions of origin, self-rated proficiency has any statistically significant effects on listening strategy use. However, self-rated proficiency has a nearly significant effect on affective strategy use.

Research question 4.b. how do the frequencies and types of speaking strategies used by students differ by gender, academic fields, regions of origin, self-rated proficiency, attitude, and level of proactiveness?

Table 4.11. Summary of Significant Findings from the Separate One-way Analyses of Variance on Speaking Strategy Use

	Overall strategy use	Cognitive strategy use	Metacognitive strategy use	Affective strategy use	Socialcultural-interactional strategy use
Degree level	0.303	0.432	0.343	0.438	0.060
Gender	0.161	0.132	0.252	0.414	0.437
Academic fields	0.147	0.024	0.631	0.192	0.627
Regions of origin	0.447	0.440	0.458	0.401	0.025

Self-rated proficiency	0.001	0.002	0.015	0.055	0.000
Attitude	0.000	0.000	0.000	0.000	0.000
Proactiveness	0.000	0.000	0.000	0.000	0.000

As Table 4.11 shows, similar situations occur here with speaking strategies. Two independent variables "attitude" and "positiveness" have statistically significant effects ($p<0.001$) on the participants' overall speaking strategy use and strategy use of each category. No other independent variables have any statistically significant effects on the overall speaking strategy use or speaking strategy use of any category, except for that self-rated proficiency has statistically significant effects ($p<0.001$) on the use of social-cultural interactional strategies. The report shows that none of the following independent variables: gender, degree level, academic fields, and regions of origin has any statistically significant effects on speaking strategy use. Considering the two cases altogether, we may conclude that those who "look at each class or conference as a great learning opportunity" and those who "seek opportunities to go to presentations, lectures and conferences even if it is not required" actually use both listening and speaking strategies more frequently and more so in each category of the strategies. One possible explanation is that those who have a "learners' attitude" towards learning opportunities and those who proactively seek out those opportunities also tend to consciously and proactively seek all means to improve their spoken academic English, including using all kinds of strategies.

In addition, multiple two-way Analysis of Variance were also conducted to find out possible interactions among the seven independent variables regarding their effects on the dependent variables—overall listening strategy use and overall speaking

strategy use. The results show that academic fields and self-rated listening proficiency have significant interaction ($p=0.014<0.05$), and regions of origin and proactiveness also have significant interaction ($p=0.015<0.05$) on overall listening strategy use. With speaking strategy use, the results show that attitude and academic fields have significant interaction ($p=0.049<0.05$); proactiveness has significant interactions with three other variables: with regions of origin ($p=0.011<0.05$), with self-rated speaking proficiency ($p=0.039$), with attitude ($p=0.041$). The main indications of the above include that for listening strategy use, the joint effects of academic fields and self-rated listening proficiency and the joint effects of regions of origin and proactiveness are significant; for speaking strategy use, the main effects of attitude depend on students' regions of origin; the main effects of proactiveness depend on students' regions of origin, self-rated speaking proficiency, and attitude. For speaking strategy use, it seems that the effects of attitude and proactiveness are much stronger than they are for listening strategy use.

4.5 Research question 5: Which of the following variables significantly predict overall reported academic listening and speaking strategy use?

      a. Gender

      b. Degree level

      c. Regions of origin

      d. Academic fields

      e. Self-rated English listening or speaking proficiency

      f. Attitude

      g. Proactiveness

      h. Students' perceptions of the usefulness of strategies

      A hierarchical multiple regression analysis was conducted with the stepwise method to answer this question separately for listening strategy use and for speaking strategy use. All the eight variables (the predictors) were entered using a stepwise

method to detect any effects of prediction on the dependent variable (reported overall listening and speaking strategy use).

4.5.1. For listening strategy use

For the listening strategy use, the linear combination of the eight variables significantly predicted overall reported strategy use (F(3,360)=23.036, p<0.000) and the R square is 0.161 (see Table 4.12). This indicated that 16% of variance in overall reported listening strategy use could be explained by a linear combination of the eight variables together. Although it is a relatively small percentage, according to Gaur and Gaur (2009), it is acceptable in social science research.

Table 4.12: Model Summary for Multiple Regression Analysis of Overall Reported Listening Strategy Use on All Eight Variables

Table 4.12 Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.314[a]	.098	.096	.58633	.098	39.512	1	362	.000
2	.390[b]	.152	.147	.56951	.053	22.701	1	361	.000
3	.401[c]	.161	.154	.56716	.009	3.991	1	360	.047

. Predictors: (Constant), usefulness

b. Predictors: (Constant), usefulness, Attitude

c. Predictors: (Constant), usefulness, Attitude, Proactiveness

d. Dependent Variable: listeningaverage

Table 4.13 shows the values of unstandardized regression coefficients (B), the standard error of unstandardized   regression coefficients (SE B), and standardized regression coefficients (Beta) for independent variables included at each step of the procedure together with significance tests.

Table 4.13 values of regression coefficients and standard errors

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.561	.113		22.628	.000**
	Usefulness	.187	.030	.314	6.286	.000**
2	(Constant)	2.986	.142		21.100	.000**
	Usefulness	.162	.029	.272	5.513	.000**
	Attitude	-.182	.038	-.235	-4.765	.000**
3	(Constant)	3.119	.156		19.999	.000**
	Usefulness	.151	.030	.254	5.092	.000**
	Attitude	-.144	.043	-.185	-3.355	.001**
	Proactiveness	-.072	.036	-.111	-1.998	.047*

a. Dependent Variable: listeningaverage

 *$p<.05$, ** $p<0.01$

Table 4.14 shows the excluded variables table generated by the stepwise multiple regression procedure. From this table, it is clear that only three variables (usefulness, attitude, and proactiveness) have significant predictive effects ($p<0.05$) on the dependent variable. Usefulness is the variable that has the most significant predictive effects on the dependent variable.

Table 4.14: The excluded variables table

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Degree	.016[a]	.314	.754	.017	.999
	Gender	.080[a]	1.616	.107	.085	1.000
	Fields	-.019[a]	-.379	.705	-.020	.999
	Regions	-.021[a]	-.427	.670	-.022	.999
	Lproficiency	-.049[a]	-.974	.331	-.051	1.000
	Attitude	-.235[a]	-4.765	.000	-.243	.968
	Proactiveness	-.197[a]	-3.898	.000	-.201	.943
2	Degree	.020[b]	.414	.679	.022	.999

	Gender	$.072^b$	1.477	.140	.078	.998
	Fields	$-.014^b$	-.289	.772	-.015	.998
	Regions	$-.019^b$	-.383	.702	-.020	.999
	Lproficiency	$-.067^b$	-1.374	.170	-.072	.994
	Proactiveness	$-.111^b$	-1.998	.047	-.105	.748
3	Degree	$.021^c$	.437	.662	.023	.999
	Gender	$.068^c$	1.399	.163	.074	.997
	Fields	$-.007^c$	-.138	.891	-.007	.993
	Regions	$-.026^c$	-.545	.586	-.029	.992
	Lproficiency	$-.071^c$	-1.472	.142	-.077	.992

a. Predictors in the Model: (Constant), usefulness
b. Predictors in the Model: (Constant), usefulness, attitude
c. Predictors in the Model: (Constant), usefulness, attitude, proactiveness
d. Dependent Variable: listeningaverage

Since the predictor variables were measured with different scales, standardized regression coefficients (Beta) were used for comparing the relative importance of the predictor variables to the dependent variable (listening strategy use). The first two significant predictors of overall reported listening strategy use were usefulness (students' perceptions of the usefulness of listening strategies) and attitude (to what extent students look at each class or conference as a great learning opportunity), and. Usefulness (β=0.251) explained 9.8% of the total variance while controlling for other variables, Attitude (β =-.187) explained 5.3% of the total variance while controlling for other variables. The third significant predictor was proactiveness (β =-0.113), which explained 0.9% of the total variance while controlling for other variables. Altogether the three significant predictors (usefulness, attitude, and proactiveness) predicted 16% of the total variance. The coefficient of usefulness is positive, which means that increasing the value in usefulness (1=not useful, 5=very useful) would result in increasing value in overall reported listening strategy use. This means that students who recognized more the usefulness of listening strategies were more likely to use listening strategies more

frequently. The coefficient of attitude is negative, which means that decreasing the value in attitude (1=strongly agree, 5=strongly disagree) would result in increasing value in overall reported listening strategy use. Since the smaller the value of attitude is, the more strongly the respondent agrees that he or she looks at each class or conference as a great learning opportunity, this can mean that students who treated each class or conference more as a great learning opportunity were more likely to use listening strategies more frequently. In the same manner, the coefficient of proactiveness is negative too, which means that decreasing the value in proactiveness (1=strongly agree, 5=strongly disagree) would result in increasing value in overall reported listening strategy use. Since the smaller the value of proactiveness is, the more strongly the respondent agrees that he or she seeks opportunities to go to presentations, lectures and conferences even if it is not required, this can mean that students who sought opportunities to go to presentations, conferences, or lectures were more likely to use listening strategies more frequently. The rest of the variables (gender, academic fields, regions of origin, self-rated listening proficiency, degree level) did not have a significant unique contribution for predicting the overall reported listening strategy use.

4.5.2. For speaking strategy use

For the speaking strategy use, the linear combination of the eight variables significantly predicted overall reported strategy use ($F(4,358)=23.765$, $p<0.000$) and the R square is 0.21 (see Table 4.15). This indicated that 21% of variance in overall reported listening strategy use could be explained by a linear combination of the eight variables together. Although it is a relatively small percentage, according to Gaur and Gaur (2009), it is acceptable in social science research.

Table 4.15: Model Summary for Multiple Regression Analysis of Overall Reported Listening Strategy Use on All Eight Variables

Model Summary[e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.342[a]	.117	.115	.59158	.117	47.917	1	361	.000
2	.426[b]	.181	.177	.57051	.064	28.146	1	360	.000
3	.444[c]	.197	.190	.56580	.016	7.026	1	359	.008
4	.458[d]	.210	.201	.56202	.013	5.847	1	358	.016

a. Predictors: (Constant), usefulness

b. Predictors: (Constant), usefulness, proactiveness

c. Predictors: (Constant), usefulness, proactiveness, attitude

d. Predictors: (Constant), usefulness, proactiveness, attitude, sproficiency

e. Dependent Variable: speakingaverage

Table 4.16 shows the values of unstandardized regression coefficients (B), the standard error of unstandardized regression coefficients (SE B), and standardized regression coefficients (Beta) for independent variables included at each step of the procedure together with significance tests.

Table 4. 16: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.821	.114		24.667	.000**
	Usefulness	.208	.030	.342	6.922	.000**
2	(Constant)	3.353	.149		22.493	.000**
	Usefulness	.171	.030	.281	5.725	.000**
	Proactiveness	-.172	.032	-.260	-5.305	.000**
3	(Constant)	3.481	.156		22.374	.000**
	Usefulness	.165	.030	.271	5.557	.000**
	Proactiveness	-.129	.036	-.195	-3.569	.000**
	Attitude	-.113	.043	-.143	-2.651	.008**
4	(Constant)	3.138	.210		14.955	.000**
	Usefulness	.166	.029	.273	5.632	.000**

Proactiveness	-.116	.036	-.176	-3.202	.001**
Attitude	-.115	.042	-.145	-2.710	.007**
Sproficiency	.042	.017	.115	2.418	.016*

a. Dependent Variable: speakingaverage

*p<0.05, **p<0.01

        Table 4.17 shows the excluded variables table generated by the stepwise multiple regression procedure. From this table, it is clear that only four variables (usefulness, attitude, proactiveness, and self-rated speaking proficiency) have significant predictive effects (*p*<0.05) on the dependent variable. Usefulness is the variable that has the most significant predictive effects on the dependent variable.

Table 4.17: Excluded Variables[e]

Model		Beta In	t	Sig.	Partial Correlation
1	Degree	-.052[a]	-1.043	.298	-.055
	Gender	.083[a]	1.677	.094	.088
	Fields	.005[a]	.097	.923	.005
	Regions	.042[a]	.838	.402	.044
	Sproficiency	.149[a]	3.051	.002	.159
	Attitude	-.230[a]	-4.710	.000	-.241
	Proactiveness	-.260[a]	-5.305	.000	-.269
2	Degree	-.047[b]	-.994	.321	-.052
	Gender	.070[b]	1.461	.145	.077
	Fields	.025[b]	.514	.608	.027
	Regions	.025[b]	.512	.609	.027
	Sproficiency	.113[b]	2.351	.019	.123
	Attitude	-.143[b]	-2.651	.008	-.139
3	Degree	-.046[c]	-.972	.332	-.051
	Gender	.068[c]	1.436	.152	.076
	Fields	.023[c]	.475	.635	.025
	Regions	.030[c]	.639	.523	.034

	Sproficiency	.115[c]	2.418	.016	.127
4	Degree	-.054[d]	-1.141	.254	-.060
	Gender	.063[d]	1.331	.184	.070
	Fields	.032[d]	.679	.498	.036
	Regions	.008[d]	.158	.875	.008

a. Predictors in the Model: (Constant), usefulness

b. Predictors in the Model: (Constant), usefulness, Proactiveness

c. Predictors in the Model: (Constant), usefulness, Proactiveness, Attitude

d. Predictors in the Model: (Constant), usefulness, Proactiveness, Attitude, Sproficiency

e. Dependent Variable: speakingaverage

Since the predictor variables were measured with different scales, standardized regression coefficients (Beta) were used for comparing the relative importance of the predictor variables to the dependent variable (speaking strategy use). The first two significant predictors of overall reported speaking strategy use were usefulness (students' perceptions of the usefulness of speaking strategies) and proactiveness (to what extent students seek opportunities to go to presentations, lectures and conferences even if it is not required). Usefulness (β=0.273) explained 11.7% of the total variance while controlling for other variables, and proactiveness (β =-.176) explained 6.4% of the total variance while controlling for other variables. The third significant predictor was attitude (to what extent students look at each class or conference as a great learning opportunity). Attitude (β =-0.145) explained 1.6% of the total variance while controlling for other variables. The fourth significant predictor was students' self-rated English speaking proficiency (β =0.115), which explained 1.3% of the total variance while controlling for other variables. Altogether the four significant predictors (usefulness, proactiveness, attitude, and self-rated English speaking proficiency) predicted 21% of the total variance. The coefficient of usefulness is positive, which means that increasing the value in usefulness (1=not useful, 5=very useful) would

result in increasing value in overall reported speaking strategy use. This means that students who recognized more the usefulness of speaking strategies were more likely to use speaking strategies more frequently. The coefficient of proactiveness is negative, which means that decreasing the value in proactiveness (1=strongly agree, 5=strongly disagree) would result in increasing value in overall reported speaking strategy use. Since the smaller the value of proactiveness is, the more strongly the respondent agrees that he or she seeks opportunities to go to presentations, lectures and conferences even if it is not required, this can mean that students who sought opportunities to go to presentations, conferences, or lectures were more likely to use speaking strategies more frequently. In the same manner, the coefficient of attitude is negative too, which means that decreasing the value in attitude (1=strongly agree, 5=strongly disagree) would result in increasing value in overall reported speaking strategy use. Since the smaller the value of attitude is, the more strongly the respondent agrees that he or she looks at each class or conference as a great learning opportunity, this can mean that students who treated each class or conference more as a great learning opportunity were more likely to use speaking strategies more frequently. Finally, the coefficient of self-rated English speaking proficiency is positive, which means that increasing the value in self-rated proficiency (on a scale from 1 to 10) would result in increasing value in overall reported speaking strategy use. This means that students who rated their English speaking proficiency level higher were more likely to use speaking strategies more frequently. The rest of the variables (gender, academic fields, regions of origin, and degree level) did not have a significant unique contribution for predicting the overall reported speaking strategy.

4. 6   Research question 7: What are the predictive values connecting overall listening and speaking strategy use, students' perceptions of the usefulness of

strategies, and self-rated proficiency?

   The qualitative results suggest that students' strategy-usefulness perceptions

and self-rated spoken English proficiency might have predictive effects on students'

strategy use. A multiple regression analysis was done for detecting the predictive power.

For listening strategy use, Tables 4.18 through 4.20 present the regression analysis for

listening strategy use. The regression analysis assessed the significance of predictions

concerning learning strategy use based on hypothesized predictors, perceived usefulness

of listening strategies and self-rated English listening proficiency. The main purpose of

doing this regression analysis is to compare its results with results of the path analysis

that was done for answering research question 8. Table 4.18 shows the regression model

summary, with an R square of .094, indicating that the two predictors together accounted

for 9.4% of the variance in listening strategy use.

Table 4.18. Regression model summary for listening strategy use

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.307[a]	.094	.090	.58256

a. Predictors: (Constant), Lproficiency, usefulness

b. Dependent Variable: listeningaverage

Table 4.19 below shows the analysis of variance, revealing an F-value of 19.448 and significance of $p<.000$ for the listening strategy use regression model. The ANOVA was thus significant.

Table 4.19. ANOVA for the listening strategy use regression analysis

Model		Sum of squares	df	Mean square	F	Sig.
	Regression	13.200	2	6.600	19.448	.000[a]
	Residual	126.588	373	.339		
	Total	139.789	375			

a. Predictors: (Constant), Lproficiency, usefulness

b. Dependent variable: listening strategy use.

Table 4.20 below displays regression coefficients, t-value, and significance for the listening strategy use regression analysis. From the coefficients table, we can see that the regression coefficients in the prediction of listening strategy use frequency level are: -.042 (not significant) FOR self-rated listening proficiency level and 0.303 (significant) FOR perceived usefulness of strategies. Table 4.20 indicates that students' self-rated listening proficiency level does not have significant effects on students' listening strategy use, while students' perceptions of the usefulness of strategies in general have significant effects on listening strategy use. However, the overall effects are not big (9.4% of variance is accounted for).

Table 4.20 Regression coefficients, t-value, and significance for the listening strategy use regression analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.742	.216		12.667	.000
	Usefulness	.180	.029	.303	6.156	.000
	Lproficiency	-.019	.022	-.042	-.848	.397

a. Dependent Variable: listeningaverage

Tables 4.21 through 4.23 reveal results of the regression analysis for speaking strategy use. Predictors were perceptions of usefulness of speaking strategies and self-rated speaking proficiency. Table 4.21 shows the overall model summary for the regression analysis. The R square indicates that 13.2% of the variance in speaking strategy use was accounted for by these two predictors.

Table 4.21 Regression model summary for speaking strategy use

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.363[a]	.132	.127	.58558

a. Predictors: (Constant), Sproficiency, usefulness

Table 4.22 below shows the analysis of variance, displaying an F-value of 28.229 and significance of p<.000 for the speaking strategy use regression model. This ANOVA, like the one above for listening strategy use regression, was significant.

Table 4.22 ANOVA for the speaking strategy use regression analysis

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.360	2	9.680	28.229	.000[a]
	Residual	127.218	371	.343		
	Total	146.578	373			

a. Predictors: (Constant), Sproficiency, usefulness
b. Dependent Variable: speakingaverage

Table 4.23 exhibits the regression coefficients, t-value, and significance for the speaking strategy use regression analysis. This table indicates that the regression coefficients for predictors of speaking strategy use are: 0.166 (significant) for self-rated speaking proficiency level and 0.323 (significant) for perceived usefulness of strategies in general. Interestingly, the effect of self-rated speaking proficiency level on strategy use frequency level is positive here.

Table 4.23 Regression coefficients, t-value, and significance for the speaking strategy use regression analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.410	.172		13.975	.000
	Usefulness	.196	.029	**.323**	6.669	.000
	Sproficiency	.061	.018	**.166**	3.434	.001

a. Dependent Variable: speakingaverage

A comparison of the results from the listening strategy regression and the speaking strategy regression seems to indicate intuitively that the predictions in the case of speaking strategies are more significant than that in the case of listening strategies. The proportion of variance that is accounted for in terms of speaking strategy use is also larger than that in terms of listening strategy use. These indications seem to be connected with what the qualitative results reveal: that the students are much more concerned with their speaking than listening, and they focus more on using speaking strategies than using

listening strategies. Thus with speaking, those two perceptions have larger effects on their strategy use than with listening. It simply seems that "more is going on" with speaking than with listening.

4.7. Research question 8: What are the paths of causality connecting overall listening and speaking strategy use, students' perceptions of the usefulness of strategies, and self-rated proficiency?

The causal links among students' perceptions of strategy use, students' self rated listening and speaking proficiency levels, and students' actual strategy use were tested through a path analysis. The AMOS 17.0 software was used for this purpose. This simplified path analysis only has three variables. Figure 4.4 is the overall hypothesized model that is for both listening and speaking strategy use.   It is based on the qualitative interviews and the questionnaire data generated by this research project. Since neither statistical regression results (perceptions of the usefulness as the dependent variable, regressed on self-rated listening/speaking proficiency level as the Independent variables), nor the qualitative results indicate that there is a connection between perceptions of the usefulness of strategies and self-rated proficiency level, there is no arrow connecting those two variables in the hypothesized model.

Figure 4.4: The hypothesized causal paths towards strategy use frequencies
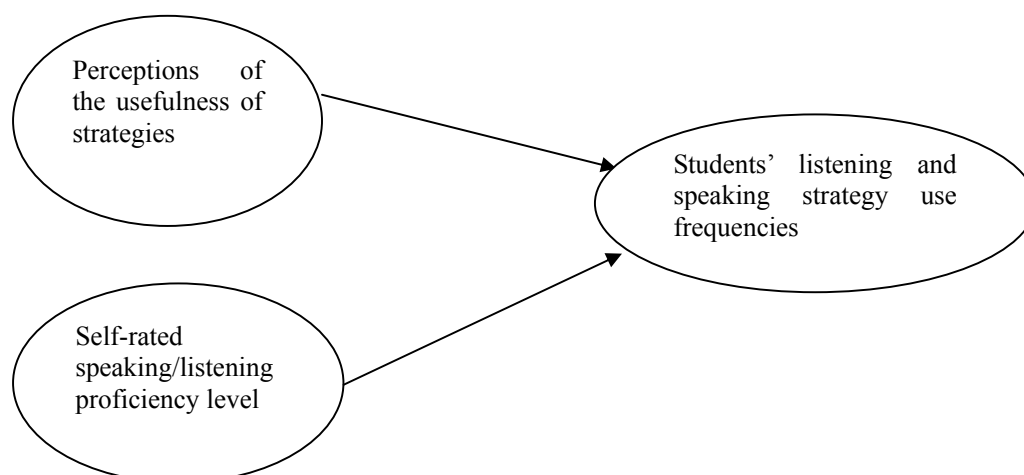
For listening strategy use, Figure 4. 5 presents the path diagram of the

hypothesized model with the standardized estimates and also the error term that was

added to the criterion variable "students' listening strategy use frequencies" (i.e., listening

average). The values on the sides of the arrows are standardized regression weights. The

path model was estimated using Maximum Likelihood estimates, which allows

estimation of means and intercepts for missing data.

Figure 4.5 The AMOS graphic results for the hypothesized model with standardized estimates (Key: Lproficiency = self-rated listening proficiency; usefulness = perceptions of strategy usefulness; listening average = listening strategy use; e1 = error term)
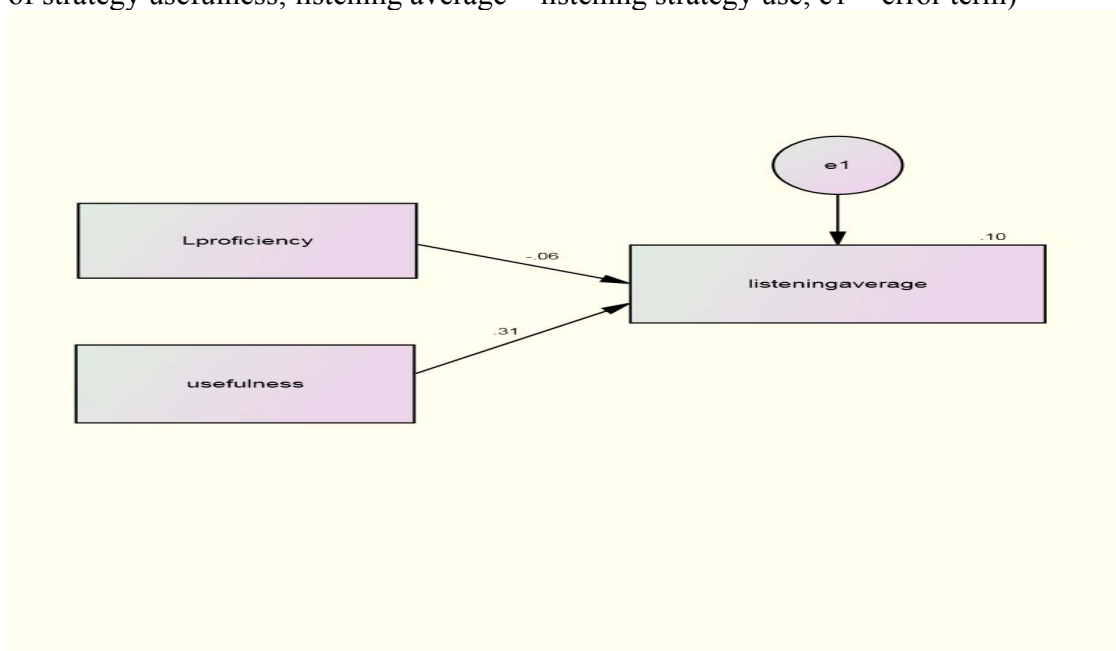
Table 4.24 shows the standard estimates of the paths, the regression weights,

and other the probability levels. The causal link leading from students' perceptions of the

usefulness of strategies to students' listening strategy use is significant (the Critical Ratio,

C. R. = 6.271), based on a probability level of 0.05. As for model fit, the goodness of fit

test index (using the chi-square statistic) is 0.347, and the probability level is 0.556; the

Comparative Fit Index (CFI) is 1.0, which is more than 0.9: all the above indicate that

the model fits the data well. Therefore the causal link leading from students' perceptions of the usefulness of strategies to students' listening strategy use is very likely to be worthy of further investigations as plausible patterns. The path co-efficient (0.31) is statistically significant and is close to the coefficient rendered by the previous regression analysis.

Table 4.24 Additional key statistics for the path analysis for listening strategy use

		Estimate	S.E.	C.R.	P
listeningaverage <---	Lproficiency	-.027	.022	-1.236	.216
listeningaverage <---	usefulness	.184	.029	**6.271**	***

For speaking strategy use, the same procedures using AMOS 17.0 were followed. Figure 4.6 presents the path diagram of the hypothesized model with the standardized estimates and also the error term that was added to the criterion variable "students' speaking strategy use frequencies" (speaking average). The values on the sides of the arrows are standardized regression weights. The path model was estimated using Maximum Likelihood estimates.

Figure 4.6 The AMOS graphic results for the hypothesized model with standardized estimates (Key: Sproficiency = self-rated speaking proficiency; usefulness = perceptions of strategy usefulness; speaking average = speaking strategy use; e1 = error term)
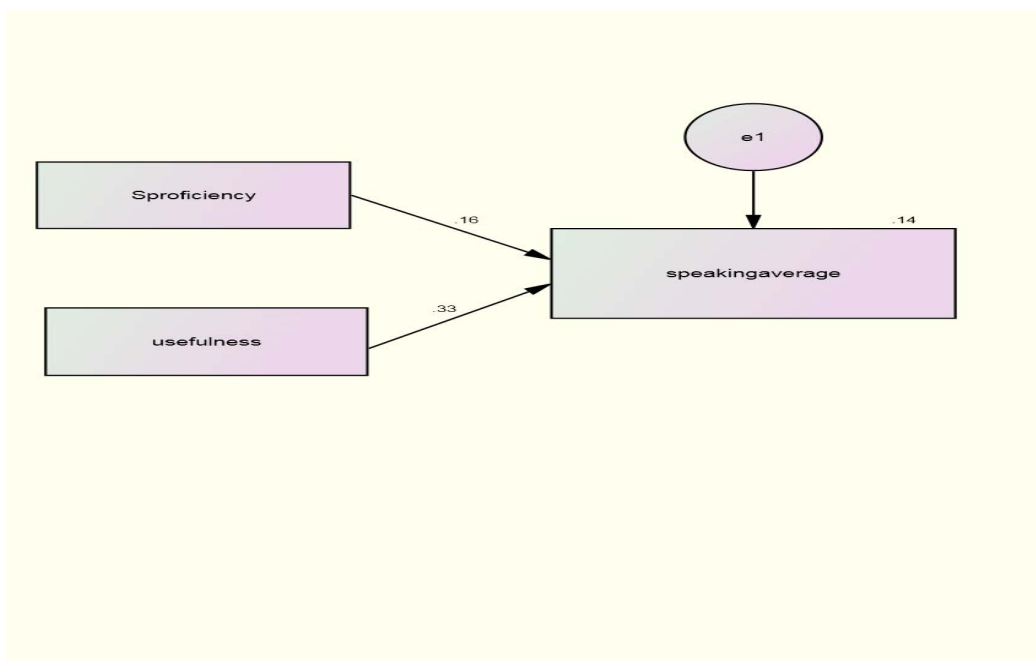
Table 4.24 shows the standard estimates of the paths. Both the causal links leading from students' perceptions of the usefulness of strategies to students' speaking strategy use (Critical Ratio = 6.926), and from self-rated speaking proficiency level to speaking strategy use frequency (Critical Ratio = 3.339) are significant based on a probability level of 0.05. As for model fit, the goodness of fit test index (using the chi-square statistic) is.004, with the probability level at 0. The Comparative Fix Index (CFI) is 1.0, which is more than 0.9. All the above indicate that the model fits the data well. Therefore the two causal links are plausible patterns that are worthy of further investigation. The path co-efficient (0.33) and the path co-efficient (0.16) are both statistically significant and are close to the coefficients rendered by the previous regression.

Table 4.25 Additional key statistics for the path analysis for speaking strategy use

	Estimate	S.E.	C.R.	p
speakingaverage <--- Sproficiency	.059	.018	3.339	***
speakingaverage <--- usefulness	.205	.030	6.926	***

In summary, the path analyses of both listening and speaking strategy use have pointed to three plausible causal links: from students' perceptions of the usefulness of strategies to both listening and speaking strategy use frequencies; from self-rated speaking proficiency level to speaking strategy use frequency. Especially the importance of students' perceptions of the usefulness of strategies as a factor has been strongly indicated.

4.8. Summary of chapter 4

This chapter answered research questions 1, 2, 3, 4, 5, 7, and 8. The conclusions include that the respondents generally use strategies sometimes, not often yet. They use speaking strategies more frequently than listening strategies. There are no significant differences between the strategy use of students with difference in gender, academic fields, regions of origin, and degree levels. However, different attitude and proactiveness seem to predict significant differences in students' strategy use. Finally, the two path analyses indicate that there are plausible causal links from students' perceptions of the usefulness of strategies toward students' listening strategy use; and from perceptions of the usefulness of strategies and self-rated speaking proficiency levels towards students' speaking strategy use.

Chapter 5: Qualitative Results

5.1. Introduction

The qualitative data analysis generally followed Creswell (2003)'s procedures, which include six steps. First, I have transcribed all the interviews, organized the field notes and the post-interview e-mail answers from participants. After this preparation of raw data, I read through all the data in order to "obtain a general sense of the information and to reflect on its overall meaning" (Creswell, 2003, p. 191). Following suggestions made by Merriam (2009), I also wrote down my own comments, impressions, and ideas next to the parts of data that strike me as interesting and relevant to the research questions. During this open coding process, I kept an open mind about what may emerge from the data and I focused on those segments of the data that I thought might be useful for answering the research questions. When I read the all the material for the second time, I started the initial coding by organizing the data into categories and labeled those categories. I paid special attention to those categories that could directly answer the qualitative research questions. At this stage, I also adopted the constant comparison method, which was defined as "the analytic tool for open coding and involves constantly comparing the data with the emerging categories (themes) and expanding or altering the categories as needed. Contradictions in the data are seen as useful" (Oxford, 2010, P. 219). Creswell (2003) stated that "sophisticated qualitative studies go beyond description and theme identification and into complex theme connections" (p. 194). Therefore, I tried to see whether there were subthemes within major themes and whether there were any intertwined themes. I also tried to examine and consider all the themes together, and sought to look for common patterns and connections among themes that could provide a holistic whole picture of the student group represented by the six interviewees and their

overall settings and experiences.

This chapter discusses the results of the qualitative inquiry part of this research project. The qualitative results help deepen the understanding of students' perceptions and attitudes behind the phenomenon of strategy use, and add layers of rich meaning to the topic. Those results also provide lenses through which students' strategies use may be examined in socialcultural and personal contexts, which aligns with the social-cultural perspective of strategy use. Since "the practical goal of data analysis is to find answers to the (your) research questions" (Merriam, 2009, p. 176), the analysis of the qualitative data of this research study will focus on finding answers to the research questions. Specifically, this chapter provides answers for the overarching research question (question 6) and sub-questions: What are the non-native graduate students' metacognitive perceptions about academic English listening and speaking, self-efficacy, the classroom culture they encounter, the role of strategies and strategy use, and pedagogical methods that can help them learn more about strategies?

- How do they perceive the importance of academic English listening and speaking?
- What are their immediate- and long-term goals regarding academic English listening and speaking?
- To what extent are they confident that they can obtain the level of oral English proficiency they desire?
- How do they perceive themselves as English learners?
- How do they perceive American English classroom culture?
- What kinds of challenges do they face regarding academic English listening and speaking?
- What kinds of strategies are they using or planning to use to overcome those challenges?
- How do they perceive strategies and their own strategy use?

- What do they think the university can do to help them learn more about strategies?

Altogether, eight semi-structured interviews were conducted, but I decided to finally focus on five interviewees. I choose the five interviewees because they represented a wide range of and balance of gender, academic fields, and regions of origins that is similar to the make-up of the total sample of 384 respondents. Also, I was able to observe each of them either giving an academic presentation or teaching a class. First, the specific backgrounds of each interviewee will be described and a profile of each interviewee will be presented. Then, major themes that have emerged from the constant comparisons of questionnaire responses, interview transcripts, observation field notes and interviewees' answers to follow-up questions will be synthesized and presented in a coherent way, in order to answer research question six and its sub-questions. Triangulation of data from multiple sources is used here as a major method for qualitative analysis.

5.2. Profiles of the five interviewees

The five interviewees were selected out of a pool of interview volunteers. They included two male and three female students. One of them reported high average strategy use (>4.0); three of them reported medium strategy use (from 3.0 to 4.0, including 3.0); one of them reported low strategy use (<3.0). Table 5.1 provides description of the five interviewees based on the questionnaire data.

Table 5.1   Descriptions of five interviewees

Pseudonym	Gender	Country	Academic fields	Self-rated listening proficiency level	Self-rated speaking proficiency level	TOEFL Listening/ Speaking	Average Strategy Use (on a scale from 1 to 5)
Jill	Female	Turkey	Music	10	8	n/a	4.13
Alex	Male	Singapore	Computer Sciences	10	10	n/a	3.85
Michael	Male	Peru	Chemistry	10	10	n/a	3.63
Sam	Female	South Korea	Education	9	8	n/a	3.53
Hope	Female	South Korea	Language Studies	9	6	28/25	2.7

The following presents a narrative profile of each of the five interviewees. In order to protect interviewees' privacy, each interviewee was given a pseudonym. The profile is based on the synthesis of both qualitative and quantitative data of each interviewee. It is based on salient features that describe the interviewee and put his or her strategy use in context. Major themes that emerged in the interviewee's questionnaire answers, individual interview transcript, the observation field notes, and answers to the e-mail follow-up questions were highlighted to portrait the unique strategy user. The purpose of the profile provided pictures of real people in real-life situations.

Jill **(Strategy user with high frequency)**

Jill came from Turkey more than five years ago. She rated her English listening proficiency as 10 and her speaking proficiency as 8. Those ratings revealed that she thinks quite highly of her own spoken English proficiency. She does believe that every class or conference is a great learning opportunity for her (questionnaire item 7), and she agrees that she seeks to attend presentations or conferences even when they are not required (questionnaire item 8).

Jill started to learn English in middle school, and continued to learn English in high school and college in Turkey. However, she learned a great number of musical terms when she was very young. Those musical terms were internationally used, so she has been well prepared in terms of vocabulary. When she first came to the United States, it was quite easy for her to understand English but it was harder for her to speak in English, especially academic English. She has had American roommates ever since she arrived more than five years ago. Since her field is music, she has to interact with people quite frequently in rehearsals. She needs to communicate with other students all the time because they have to play music together all the time, which she thinks helps her a lot. Like Alex and Bill, Jill also asks her American friends to always correct her English. She socially interacts with Americans frequently and all her professors are Americans. However, she does not do anything specifically to work on her spoken English. She did mention that sometimes when someone speaks a new word, she pays attention and tries to ask what it means. However, she usually does not do anything to improve her spoken English. It seems that unlike Alex and Bill, she does not really care about how much her spoken English has improved since she came here. She said probably she speaks better now but she cannot really tell. She does feel more comfortable speaking in English now.

When she is tired, she cannot find the words to express herself, but this happens even when she speaks in her native language. If she cannot find the words to say, she will use gestures, or try to find another word. Quite frankly, Jill said that she is not a hard-working English learner and she cannot even remember when she studied English at all. She does feel that she could do more and better and she called herself "lazy." She reads a lot; she likes being around people; her field of music is a very social field. All the above, she thinks, have helped her learn English.

Jill is a very special learner. She said that she learns best through "experiences," which means that for her to improve her spoken English, she learns best by just living in the English speaking country and interacting with native speakers as much as possible. However, she is a frequent strategy user (M=4.13), who uses strategies most frequently among all the interviewees. Jill also mentioned that as a music student, most of the time she just plays the music, so she does not need to present in English every week or as often as Alex and Bill do. An ESL teacher who works with music ESL students confirmed to the researcher that music students generally do not care much about improving their English because the "language" they use is music, not English. The researcher observed one violin tutoring session given by Jill. As Jill herself acknowledged later, she talked little and most of the time she demonstrated to the student how to play the violin. She likes what she called the "hands-on" method of teaching, with which she does not need to talk much. She only needs to demonstrate and sometimes touch the student's fingers or wrist lightly. She said she does not talk much even when she teaches in Turkish. The peculiarity of teaching music determines that non-native graduate students of music do not feel the importance of improving their

spoken English proficiency as much as their peers in other fields do. Overall, Jill does

not appear as eager about learning English as other interviewees are. She seems to be

satisfied about her English learning just by living in the United States. She does not think

that she needs to pay particular attention to or to give extra effort towards English

learning. The researcher believes that this is largely related to the fact that she is in the

field of music performance. At the end of the interview, Jill herself also acknowledged

that: "I think…in my field, I don't really need to use academic language that often. Even

when I am writing, unlike all the other majors, … , it is more playing, performing, maybe

that is why I didn't feel I need to improve these skills that much."

Jill has generally revealed a very casual attitude towards spoken English

during the interview. Surprisingly, Jill's average strategy use score is 4.13, which means

that she often uses those strategies. A possible explanation is that Jill uses those

strategies almost automatically to help with her spoken English. She does not put much

serious thought into it. She explains that she is doing what every other non-native

graduate student is doing—nothing extra. English learning to her is a natural process that

occurs when she is living in the United States and it is interacting with native speakers.

She thinks strategies are sometimes useful.

Alex (Strategy user with medium-frequency level)

Alex came from Singapore and is a computer science PhD student at the

university. He had obtained a Master's degree in France before he came to the United

States, and he is also fluent in French. He is a natural extrovert, which was not only

acknowledged by himself, but also was obvious to the researcher during the interview

and the observation. His outgoing and optimistic personality must have influenced his

conversational style in English, which was witty, friendly, and vivid. Also, it is not surprising that he learned spoken English mainly through making friends with native speakers. He lived with Americans and asked them to correct his English. Besides French and English, he speaks mandarin Chinese. Alex's international experiences and multilingualism must have helped him adjust to life in the United States and also have made it easier for him to make American friends easier than other international students might have. Alex's successful experience of learning French should have influenced his attitude towards learning English. He mentioned that he learned both languages by being exposed to the languages outside the classroom. The overall impression of Alex as a language learner is that he is outgoing, flexible, optimistic, confident, and progressive. Alex's spoken English is fluent. Alex has paid great attention to improving his spoken academic English, and believes it is an ongoing, everyday process. Alex's goal is to be able to talk in English confidently and convincingly and he knows his academic spoken English proficiency is closely related to his future career, and his future employers will judge him partially according to his spoken English. In accordance with his personality, Alex has a very flexible view of strategies. He believes that there should not be a recipe or a list of strategies that he should use, but he should be able to develop his own strategies as he gains experiences along the years. It is obvious to the researcher that Alex pays great attention to details, and when he detects there is a problem with his spoken English, he will be proactive. He first will analyze the problem, ask people for help, and make an effort to try to solve it and is very resourceful when doing that. Although Alex said he never sat down and wrote a list of strategies that he should adopt, he actually used a set of strategies to overcome several challenges he faced. Those

challenges include feeling nervous when presenting before an audience and not being able to understand presentations well.

When Alex was doing a presentation, he kept eye contact with the audience; he made jokes and used humor to loosen the atmosphere; he directly asked the audience questions; he used gestures and changed the intonation of his voice and put emphasis on different words. Alex used all means to interact with his audience and the atmosphere of his presentation was very lively. People constantly volunteered questions and comments. Alex's humor and jokes also frequently made people laugh. Alex's outgoing personality helped him express his ideas effectively and in a very interesting way. He is the most relaxed presenter among all the five non-native English speaking students whom I have observed presenting or teaching. It was also noticeable that when a professor in the audience offered a comment, Alex did not accept the professor's views automatically, but further explained the situation to defend his point of view. This exemplifies Alex's confidence as a presenter.

One of the major insights that I have acquired by observing Alex's presentation is that non-native speakers can reach out to their English-speaking audience in many creative ways. They can use those "international languages," such as body languages, facial expressions, and intonations to help make their speeches effective. They also can use friendly smiles and humor to relax the audience and their enthusiasm about the topic can be contagious. Since effective communication is the major goal, non-native English speaking students should not worry about their accents and limited vocabularies too much. There are a lot of strategies that they can use to help them communicate well, although it is recommendable generally for them to try to reduce their accents and enlarge their

vocabularies.

Although Alex said he never consciously thought of using strategies, it is evident from both the interview and the observation that he uses different combinations of strategies effectively to reach his different goals regarding spoken academic English. The interview indicates that he has acquired those strategies through repeated experiences. He views strategy use as non-static, flexible, and feels it should evolve in different experiences. He rejects the idea of consulting a list of strategies. The above provides insights for instructors that it might not be effective to give learners a prescribed list of strategies to adopt. It might be more effective to first raise learners' awareness of their own strategy use and help them reflect on their own strategy use, just as what my interview may have done for Alex. Then, the next step could be introducing some new strategies to the learner, and it is also crucial to let the learner practice and try those strategies in their own experiences in order to decide whether they are going to use them or not. Real, practical experiences should be integrated into strategy instruction. Strategy instruction should also be flexible, emphasizing that different learners should use different strategies according to different situations. On the questionnaire, Alex wrote down two strategies that he uses: 1) listen to the news on the radio with transcripts 2) speak more with native English speakers. Generally, Alex thinks strategies are useful. It would be natural to speculate that since Alex is a very outgoing person and learns spoken English mainly through interacting with others, that he should use sociolcultural-interactional strategies frequently.

Overall, Alex's personality stands out among the five interviewees as being very outgoing, easygoing, confident, optimistic and flexible. It is suggested that this kind

of personality helps Alex integrate into the English speaking academic community more easily and make friends more easily with native speakers. The above might have presented him a lot of opportunities to practice his spoken English. Alex maybe is not be the most fluent English speaker among the five interviewees, but he is an extraordinary communicator in English due to his skillfulness in communication, the ability to relax and engage the audience, and the ability to use complimentary means to facilitate his presentation.

Sam (Strategy user with medium-frequency level)

Sam is a fourth-year doctoral student of education. She came from South Korea to the United States in 2002. She started to learn English at the age of six and she was always very good at mimicking people. She even imitated Korean people's dialects. She attributed this capacity of audibly mimicking people to her success of reducing her accent. The capacity of audibly mimicking people should be one feature of language aptitude. Compared with other interviewees, she has received plenty of formal academic English training in the United States because she was enrolled in academic English classes before she started her Master's program. She took classes that focused on academic English speaking, writing, reading and listening. She thinks she still tries to apply what she has learned from those classes. Sam said before she tried to improve her English, but now she no longer does anything particular to learn English. Sam attended her Master's program in the United States too. Probably due to her sufficient training in academic English, Sam no longer needs to think of herself as an English learner and she thinks of herself more as a user of English. She uses English as a means to have academic discussions. She works for a non-profit organization now where she meets

native speakers of English. It is more like professional relationships than personal friendships. When Sam meets and talks with native speakers of English, she no longer does it for practicing English, but more for discussing her research topics or having academic discussions. Sam obviously has started her transformation from being a simple graduate student to a professional. At first, she taught English to immigrant adults in the United States, but now she works for a non-profit organization. This transformation must have affected her change in perspective from being an English learner to being a user of English. All of the five interviewees are unique in their different ways. Sam is unique because she seems to start thinking of herself as a professional. It is also interesting that unlike other interviewees, she does not think of herself mainly as a teacher or professor in the future. She has an open attitude towards her future career choices; she said she can be a professor, a post-doctoral researcher, or an employee of a non-profit organization.

Unlike Alex, Bill, and Jill, Sam no longer has time to make casual friends with native speakers of English for the purpose of learning English. She prefers to have academic or intellectual conversations with native speakers. She prefers one-on-one discussions or conversations with friends, but she does not prefer large group discussions if she does not know everybody very well. Sam is a very intellectual person, perhaps the most intellectual person among the interviewees. Even in social occasions, she likes to be involved in serious discussions about certain topics. It is not surprising that she looks at English as mainly a means to express her ideas and to exchange ideas with other people.

As a non-native speaker of English, Sam feels that she no longer cares about her accent or whether she uses accurate words or the right grammar or not. She used to

be very concerned about her accent, but now she focuses more on the content, the idea that she tries to convey. She calls this a "learning process and working progress." I observed Sam giving a presentation in one of her graduate level classes. The class had about seven students and more than half of them were American students. My observation notes show that Sam interacted with her classmates very actively. She nodded and gave verbal signals indicating that she was listening quite frequently; she made several suggestions; she looked at the person who was speaking attentively; she would ask questions. She made notes quite often too. Overall, Sam was very interactive and attentive in the classroom and I could not discern her accent. Sam spoke at a calm and comfortable pace, which revealed her confidence in the classroom. Sam was charismatic in the classroom; she laughed together with the class and even sang an American pop song. It seems that English no longer presents any language barrier for her, as she indicated in the interview. During her presentation, she introduced her own experience of working for a non-profit organization and shared her Facebook page.

Overall, Sam is a very confident, charismatic, and fluent speaker in English. She has obtained a large vocabulary and the words that she used were vivid and descriptive. As a non-native speaker, she has passed the stage of focusing on forms of the language such as accents, pronunciation, and vocabulary; she is more attentive to the ideas that she is going to convey in English and the logic of her argument. Sam believes that ideas are more important for her than English proficiency now. She cares more about the quality and depth of her ideas than English, which may indicate that her English proficiency has already achieved a certain level.

Sam's interview reveals an evolving learner of English: from focusing on

pronunciation and accent to focusing on ideas and how to express ideas; from making

personal friends with native speakers of English to forming professional relationships

with native speakers as colleagues; from pretending that she understood English jokes to

confidently telling people that she does not understand (more candid). She is a very

reflective learner, too.

Michael (A strategy user with medium-frequency level)

Michael is a friendly and well-mannered 22-year-old graduate student in the

Department of Chemistry and Biochemistry. Although he is in the PhD program, he is

actually at the Master's level, because he came to study directly after he obtained his

bachelor's degree at another American university. He came to the United States from

Peru when he was 18 years old and finished his undergraduate studies in the United

States. He is the youngest among the five interviewees. He spoke fluent English, almost

with no accent.   In Peru, he took private lessons in English besides English classes that

he took in public schools. When he looked back, he was sure that his English has

improved greatly during those four years in the United States. He spent a lot of time with

quite a number of American friends. He realizes that he is practicing the English

language a lot. Michael is the only person among the five interviewees to express his

interest in meeting with people from different parts of the United States. He said that at

some point, he realized that there are a variety of dialects in the United States and he

wants to learn those different dialects. He thinks that only after he can differentiate the

different dialects, can he truly master the English language. This may indicate that his

spoken English has already reached a considerably high level. When he first came to the

United States to study chemistry, he had a hard time mastering the technical words in

English. Now after four years, he has mastered the technical words. When he was an undergraduate student, he realized that it was easier for him to learn the technical words from the professor rather than from the Internet. Therefore, whenever he heard a new technical word from the professor, he would ask about it; after that, if he still did not understand it, he would check the Internet or a book. Like other interviewees, Michael thinks making American friends has helped him tremendously with his English. Like Bill, Michael made a conscious decision that he would spend more time with American friends than with friends speaking his own native language.

Michael was the only person among the interviewees who mentioned that he took a course on public speaking in his own country. He learned how to present before different audiences and for different occasions. I observed Michael giving a presentation before his academic advisors and colleagues. He was successful in engaging his audience. He changed his intonations and used gestures quite effectively. His presentation was well organized and his PowerPoint slides were well done. Although he said he tended to speak too fast, I did not detect that he spoke too fast. I noticed that he used gestures, but did not feel he used them excessively, as he later on commented that he tends to gesture too much.

Although Michael is sure that he uses a lot of strategies, he thinks he probably does not use enough of them. He thinks it is because as a graduate student, his major task is to study materials in his own academic area. Learning English is not his major task. However, overall, as Michael confirms himself, he is a very hard-working and attentive English learner. His motivation for learning English not only comes from being a graduate student in the United States, but also from think of working in the

United States. He believes that his future American employers will expect him to speak fluent English and to make a conscious effort to improve all the time and to integrate into the local community and culture.   Michael is the only interviewee who mentioned that learning English is beneficial for his personal development. He also indicated that learning the local language makes a person feel better about himself or herself, and also makes the person feel more like a member of a community.

Hope (A strategy user with low-frequency level)

Hope has a very unique personal language background. She was born in Korea but when she was eleven years old, she moved to Hong Kong and attended an international school there.   She was enrolled in an ESL class and learned the English alphabet. She did not learn much grammar, but she was immersed in an English environment, because all her teachers were English speaking and all her friends spoke English too. Then, she went back to Korea for high school. Although she was studying English in high school and at college in Korea, she did not get many chances to speak English during all those years, except for that she joined the college English club and another English study group. It was difficult for her to learn English grammar in Korea too, because she learned the language without learning the grammar in the first place. Therefore, when she came to the United States, it took her six months to "regain" her English. As Hope has had international experiences since she was young, she has grown up with a strong interest in language and language learning. She is now a PhD student studying second language acquisition at the university. After graduation, she wants to teach Korean and to develop a curriculum for Korean students. She also wants to work with immigrants in the United States.

Unlike other interviewees, Hope feels it is hard for her to make American friends in spite of her relatively rich international experiences. She learned spoken English mostly by watching American soap operas. She used to watch it everyday for one hour and she thinks it is the best way to learn spoken English. Since Hope learned English from a very early age and it was in a very informal style, she has to learn the formal way of speaking English, such as the English that people use to present academic contents. She especially wants to help Korean immigrant children in the United States.

I observed Hope giving a presentation both in a class and at a conference. Although she said that keeping eye contact and using gestures are two hardest things for her to do, she did both perfectly during her presentations. She appeared to be very poised, confident, and always with a smile on her face. She spoke fluently in academic English, and she interacted with the audience in a cheerful and gracious manner. Although she used PowerPoint slides, it was obvious that she knew her topic very well and she remembered everything. Her presentation appeared to be the most polished among all the interviewees' presentations that I observed. It seemed that every detail was taken care of. This can be due to the fact that she was presenting at a conference; it can also be due to the fact that she usually rehearses many times before a presentation.   She greeted the audience warmly at the beginning and also thanked the audience at the end. In her interview, she said she particularly tried to do that because she thinks they are good strategies for presentation. She learned to do these from native speakers who are presenters. Hope mentions how contexts can influence her speaking in English. Hope feels much more at ease when she is teaching. She puts emphasis on certain words; she repeats words in order to make an impression; she walks towards her students and asks

each student a question. However, she feels like "frozen" when she gives presentations. Although as an observer, I think Hope looked and sounded natural at the presentation; she herself feels much freer when she is teaching. Hope also said that she would greet her students individually before the class starts and talk with them. Somehow it is hard for her to do that at presentations.

Hope's students commented on her energetic and passionate style of teaching. When I observed her presentation, I definitely found that she was very energetic and passionate about her topic. Hope is the only student among all interviewees to talk about her feelings of isolation and separation from native speakers of English. She said that she only has personal relationships with Korean people in her program and she feels very bad that she cannot connect with other students in her program. She said the situation for her is much better now than it was at the beginning, but she still has a long way to go and she does not want to give up. Hope mentioned that she failed to connect with native speakers of English when she taught English in Korea. She also mentioned that it was very hard for her to connect with American undergraduate students when she worked for a language residence program at the University. It is possible that those incidents have deterred her from trying harder to make friends with native speakers of English.

Although she was first exposed to English when she was only 11, it seemed that this early immersion did not give her much advantage in terms of English learning. Unlike other learners who learned from their former language learning experiences (especially Alex and Bill), Hope seems not to think she benefits much from that experience. Actually it is very impossible that the "otherness" she might felt about when she was young in a foreign country has contributed somewhat to her feelings later on of

being left out by native speakers of English. She recounted two negative experience of

encountering with native speakers. She also gave a negative experience of a group

project. Overall, her experiences with native speakers of English seem to be non-pleasant.

Hope might be too hard on herself, which to some extent prevents her to

proactively to seek opportunities to present and to make friends with native speakers.

She self-rated her speaking proficiency as 6 out of 10, the lowest among all the

interviewees; yet based on my judgment, her speaking proficiency is far from being the

lowest among them. Therefore, it is important to help students achieve an accurate self-

perception of their proficiency.

The profiles of each interviewee were presented in the previous section, and the

main findings of the qualitative analysis will be presented in the following, the results of

multiple coding procedures and constant comparisons of the data sources. The findings

will be synthesized and grouped to answer each sub-question of the overarching research

question six. The main themes and sub-themes emerged from the triangulation of the

original data and are used here to respond to each sub-research question.

5.3. Research question 6: What are non-native graduate students' metacognitive perceptions about academic English listening and speaking, self-efficacy, the classroom culture they encounter, and the role of strategies and strategy use?

5.3.1. Sub-question 1: How do they perceive the importance of academic English listening and speaking?

The interviewees have all agreed that academic English listening and speaking

is very important to them, in terms of graduation, future career, and self-development. In

Sam's words, English is "crucial" for her life, for her degree and for her future career.

English is important also because it is the international language. Even if Sam goes back

to South Korea to teach at a university after graduation, she will be required to teach English. If she goes to a place other than the United States and South Korea, she still probably needs to use English to communicate. Also, English is the language of the international academia. Therefore, if she wants to publish in international journals, she has to write it in English. Alex believes that "spoken English is fundamental for graduating" and is also important for his future career, because graduate students need to do what faculties and researchers are doing now, that is, to teach and present their scientific discoveries at conferences.   Jill believes spoken English is important because as a musician, even if she goes back to Turkey after graduation, she needs to travel for tours around the world and hold concerts together with international artists. In those occasions, English will be the international language for communication. Michael pointed out that learning English is good for his personal development and better feelings about himself, because he will be more accepted into the local community.

5.3.2. Sub-question 2: What are their immediate and long-term goals regarding academic English listening and speaking?

It is hard sometimes to differentiate between immediate- and long-term goals. The interviewees have a variety of goals and it is interesting that all those goals are about speaking and none of them is about listening. This can indicate that those interviewees think they no longer need to strive for better listening, compared with speaking.

5.3.2.1. Immediate goals

Sam wants to feel confident when speaking and, more important, she wants to convey thoughts and feelings precisely and accurately. She also wants to be able to freely express herself in English. Michael wants to be able to present effectively and interestingly in English. Since Hope learned conversational English when she was young,

she said her goal now is to change from colloquial English to formal academic English. Alex was emotional and excited when he declared that he wants to "change the world" by his speech. In other words, he wants to be able to convince people of his new scientific discoveries and have impact on them. This goal is more ambitious than merely getting his idea across to the audience.

5.3.2.2. Long-term goals

Regarding teaching in the future, Jill, Sam, and Hope all want to be able to teach competently and confidently in English. Alex also mentioned teaching in English is his goal. Hope wants to be able to teach not only content knowledge but also Korean in English, since she wants to work with Korean-American immigrant children after graduation. She also hopes to establish personal relationships with native speakers of English.

5.3.2.3. Accent reduction as a goal

All interviewees mentioned the topic of accent reduction as a goal, indicating that it could be an important topic among English learners. Among the interviewees, only Michael believes that it is "definitely the goal," who also earlier said he would "never be like a native speaker," because he was not born and raised in an English-speaking country. Therefore, I can only conclude that even Michael feels doubtful about whether he can sound like native speakers of English in the future. He is also the only one who expressed interest in knowing about the different American dialects and making friends with Americans from around the country. He thinks only by knowing about all the dialects can he truly become "native-like." Hope thinks it is impossible for her to sound like a native speaker, and she does not need to either, because her audience does not

expect her to sound that way. They only expect her to deliver the contents effectively.
Alex also thinks it is fine to have accents and he even claims that a foreign person will
sound unnatural if he or she tries to sound like Americans. When she first came to the
United States, Jill tried for one week to reduce her accent. She tried to imitate people and
asked people to correct her. Then, she gave up and realized that people have no difficulty
understanding her. Probably, Sam has the least accent among all the interviewees. Many
people have told her that she does not have an accent, and she thinks it is because she has
a talent of mimicking people since she was young. This indicates the connection between
the ability to mimic sounds and accent reduction in language learning. Sam thinks of
herself as having an accent, but she no longer worries about it: "I was very concerned
about my accent, whether I sound like a native speaker. But now I am getting over it,
more and more. So, I am not paying attention to my accuracy or pronunciation anymore.
I am trying to focus more on the content than I am trying to convey perfect-sounding
English. So, it is a learning process and working progress."

  It seems that the interviewees generally think they are not required to sound
like native speakers and it is enough for them to be understood clearly. However, Alex
and Michael pointed out that people are judged by their accents. They especially
mentioned that at job interviews, the employers will prefer those who sound like native
speakers. Therefore they seem to have concerns about this. Sometimes, it is a conflicted
issue for them. For example, Alex said it was unnatural to try to sound like Americans;
however, he also indicated that it is desirable to "remove most of the accent." Accent
reduction is a goal that the interviewees (except for Michael) give up but it does not mean
that they do not want to achieve it.

Oxford (2011) described two kinds of goals: "Mastery goals are achievement goals oriented to developing competence, while performance goals are achievement goals aimed at demonstrating competence in comparison to other people (social comparison) and avoiding the relative appearance of incompetence" (p. 76). She further discussed that both goals can motivate the learner positively. It seems that most of the interviewees' goals are mastery goals related to speaking well and performing competently as teachers, colleagues, and research presenters. As for the goal of accent reduction, it is noteworthy that the three women seem to be satisfied with their current situation and no longer pursue it; the two men seem to still be motivated by a performance goal, which is that they do not want to be judged unfavorably by people, especially by future employers, because of their accents.

5.3.3. Sub-question 3: To what extent are they confident that they can obtain the level of oral English proficiency they desire?

The interviewees expressed the belief that improving oral English proficiency is a <u>long-term, daily process</u>. It cannot be achieved overnight. In this sense, they are patient and mature learners and they all consider the improvement of their spoken English proficiency in a long-term time frame. Perhaps also due to this vision of long-time into the future, the interviewees expressed both <u>uncertainty and hopefulness</u> about whether they could reach their goals. Jill believes that her weakness, such as limited varieties of vocabulary maybe "get better in time." Sam said eventually she would reach her goal, but then she said she was not sure. Michael thinks it will take probably another 18 years for him to reach near-native proficiency, and at the same time, he thinks his English will never be as good as that of a native speaker. Only Alex spoke with

confidence that he will "of course" reach his goal of speaking convincingly and being able to teach people about his scientific discoveries. However, he indicated that this cannot happen instantly; he will reach his goal because he "lives in the right country" and interacts with "the right people." In other words, it is an "everyday day-to-day process," and his goal will be achieved through daily and constant interaction and learning.

5.3.4. Sub-question 4: How do they perceive themselves as English learners?

The interviewees talked about their own strengths and weaknesses as English learners. They also shared their former language learning experiences, which obviously had impact on their English learning. They also shared some insights about the progress they have made as learners. Culture, especially the impact of their own native cultural backgrounds, has become a salient theme that emerged from the interviews.

5.3.4.1. Preferred way of learning spoken English

Although the interviewees talked about other ways of learning spoken English, such as watching TV, listening to the radio, and watching on-line videos, they expressed preference of interacting with native speakers as a way of learning English. Among them, Alex, Michael, and Jill are more enthusiastic about learning through social interactions. Sam is more interested in sharing ideas with people in English, and her focus is no longer on English proficiency. Hope feels it is hard to have opportunities to talk with speakers of English, although she would love to. The preference of using social-cultural interactional strategies in learning spoken English will be discussed further in other sections about strategy use.

5.3.4.2. Language learning experiences

The interviewees described their language learning experiences as an integral

part of them as English language learners. Hope started her story with: "I have a very unique personal language background history." She learned conversational English when she was young in an immersed ESL situation. Sam also started young and she loved to imitate people when they spoke, and she thinks that is why she has achieved excellent English pronunciation. Jill started to learn English later, when she was in middle school in Turkey. She felt that when she first came to the United States, she could understand people well but could not speak well in English. Michael had English education in Peru and he also took some private lessons because he needed to prepare for coming to the United States. Alex is the only multilingual person among the five interviewees. He obtained a Master's degree in France and learned French there. He started to learn English when he was in kindergarten in Singapore. On the one hand, his former experience of learning French taught him that communicating with the native speakers is the best way of learning spoken English; on the other hand, he thinks that his multilingualness causes him to easily mix all languages up when he speaks English, which he perceives as something to be avoided. Therefore, all the interviewees studied English outside the United States when they were young. Except for Hope, all the others went through ESL classroom education in their own countries. Michael also took some private English lessons.

Both Hope and Alex mentioned that ESL classroom teaching in their own countries did not help them with listening and speaking in English. After learning English in high school and college in Korea, Hope spent six months when she first came to the United States to "regain" the conversational English she learned when she was abroad at a young age. Although Alex started to learn English when he was in

kindergarten in Singapore, he did not realize that sometimes Singaporeans would pronounce English words or use English expressions in a wrong way until he talked with native speakers.

5.3.4.3. Strengths as English learners

Jill thinks her strength is that she does not need to think in her native language before she speaks out in English. Also, she is relaxed and is not afraid of talking in English. Sam thinks her strength lies in her pronunciation and intonation. Many people complimented her on her pronunciation and commented that she has no accent. She thinks it can be attributed to her talent of mimicking people. My observation of her classroom presentation confirms that at least I think her pronunciation is very close to that of native speakers. Hope said her strength is that she is energetic, passionate, and has a loud voice, which I witnessed when I observed her presenting at an academic conference. Michael thinks that as a non-native speaker of English, his strength lies in that he can present effectively. He speaks with whatever intonations he wants in English. For example, he can raise his voice whenever he wants during a presentation, without jeopardizing his delivery of the message. He can reach the whole audience in the room when he presents. He can use gestures to keep his audience engaged. I observed all those things that he mentioned at his presentation. Alex thinks he can make his speech coherently and understandable and nobody has ever told him that he is hard to understand.

5.3.4.4. Weaknesses as English learners

Sam thinks that as a non-native speaker of English, she is not confident about making strong and logic arguments. She will "jump all over the place" when trying to make a point. It was very hard for her to speak in a very logical and simple way, which

she termed as the "American" way. It is challenging for her to organize her ideas, to stay

focused, and to be straight forward like the Americans are. However, Sam also thinks

that this is not necessarily something bad. Sam also observes that she needs to take time

to make the argument in her mind before speaking it out; she cannot speak while making

the argument like some Americans do. Finally, Sam feels less comfortable joining big

group discussions if she does not know the people very well. I did not observe that Sam

wandered away when she tried to present or lost track of her thoughts. I did observe that

at the beginning of the presentation, Sam appeared to be a little bit nervous and uneasy. I

am not sure whether it was because she had to present before a group. Soon, she was

able to relax. Jill thinks that she needs to use a wider variety of vocabularies, and she

also has an accent and can make some very simple mistakes. Jill is wondering whether

she is too "lazy" as an English learner. I did observe that Jill did not use a very big

variety of vocabulary during the interview. However, it is hard to measure that. Alex

thinks that he tends to speak too fast when he was nervous, especially during a

presentation. He needs to calm himself down before doing a presentation. He also

mentioned that he has no "stage presence" while presenting. I observed that he spoke fast

during the presentation, but I did not feel that he ever spoke too fast. Michael also thinks

that he tends to speak too fast, uses too many gestures, and paces back and forth

excessively when he presents. All three things, according to him, are related to this

Peruvian background. Michael also knows that sometimes he does not know how to

pronounce certain words. I did not observe all those things that Michael mentioned.

However, he said during the presentation, he mispronounced a word. Finally, Hope

mentioned that one of her weaknesses as an English learner was that it is hard for her to

understand American jokes.

Except for Hope's self-perceived weakness, which is difficulty in understanding American jokes, the absolute majority of the self-perceived strengths and weaknesses that have been discussed by the interviewees was about speaking instead of listening. This can indicate that they no longer worry about listening and think of it as a task. Almost all their attention is put on speaking, and especially presenting in public. If scrutinized along with my observations, then, the interviewees seem to be quite correct with their strengths. I did not notice some of the weaknesses that they mentioned, but it might indicate that they are correct with their self-perceived weaknesses because I might have missed them in my observations.

5.3.4.5. The influence from native cultural backgrounds

The influence from native cultural backgrounds has been a salient topic across the interviews. It is obvious that those learners themselves are very aware of their own backgrounds. Alex mentioned two things peculiar about Singaporean English learners: 1) since English has evolved itself in Singapore, Singaporeans have developed their own pronunciations or use of expressions that might not sound right to native speakers 2) since Singaporeans are multilingual; they tend to mix up languages together. For example, they will mingle English with Chinese words. After Alex came to the United States, he realized that the Singaporean pronunciation and use of expressions might not be correct, so he asked his American friends to correct him. Sam mentioned that it was difficult for her to make direct and simple arguments without wandering around. She thinks she was brought up to be this way. It is not bad or wrong; it is just not the "American" way. Jill mentioned that she kept making certain simple mistakes sometimes

due to the influence of her native language; for example, she will mix up "he" and "she," because in Turkish there is no gender in the third person. Michael pointed out that Peruvians like to use gestures and talk the fastest even among nations in South America. Michael thinks that using gestures while talking sometimes can help express thoughts but too many gestures will hinder the process. Hope has a peculiar language background, as she lived and attended English school outside her native country-South Korea when she was young. She described her early exposure to conversational English, which somehow made it rather difficult for her to learn grammar later on and to transition to formal academic English.

It is noticeable that although the interviewees did not necessarily think the impact of their native cultural and linguistic backgrounds was negative on their English learning, they rarely explicitly pointed out any positive impacts. Michael pointed out that the Peruvian way of using gestures might help him express ideas; however, he also pointed out that too many gestures could hurt. How to help language learners look at their native cultural and linguistic backgrounds as precious resources that they can use to help with their English learning should be a worthy topic to pursue further.

5.3.4.6. The progress they have made since they came

Most interviewees were clear about the progress they have made as English learners since they came to the United States. Michael said that he made a lot of mistakes, but also made great improvement. Only after Alex came to the United States did he realize that Singaporeans make mistakes about pronunciation and expressions. Sam used to worry about her accent and pronunciation, and now she focuses on the content and ideas that she wants to express. She no longer worries about her English proficiency now.

Hope spent six months after she came to the United States to "regain" her spoken English. Her listening abilities have improved considerably, and she can now understand 100 percent of talks in her own academic area. However, regarding speaking, she thinks that she has a long way to go. Jill is the most uncertain about her progress since she came. She said her English is "probably better" and at another time, she said her English "has not been improved since she came here."

In summary, the five interviewees seem to have a clear picture of themselves as English learners. They know that they prefer to interact in English with real people to learn spoken English, instead of reading books or watching TV. They are aware of their own weaknesses and strengths, and the impacts of their native cultural and linguistic backgrounds on their English learning. When looking back, most of them also see progress clearly.

5.3.5. Sub-question 5: How do they perceive American English classroom culture?

Although as Sam said, there is not an "American English classroom culture" per se, every American classroom has its own unique culture. Still, the five interviewees' answers revealed some interesting observations and common themes.

Students are more involved and encouraged to speak without fear of making mistakes

Hope has observed that students are much more involved and are interacting far more than students do in Korean classrooms. Students are encouraged to speak up and not to be afraid of making mistakes. Hope used the word "amazed" to describe her reaction towards how American professors respect different ideas instead of trying to force one kind of idea. Sam also commented that American classrooms are "less confined and restricted" than Korean classrooms. She also observed that American

students can make arguments in their minds at the same time when they are speaking. In contrast, she would have to think of the arguments that she is going to make in her mind first before she speaks out. This can be partially due to her limited English speaking proficiency, which does not enable her to think of complicated ideas while speaking in English at the same time; this can also be partially due to her Korean educational backgrounds that restricts her from speaking out of her mind directly. As a graduate student with Chinese educational background, I am also surprised to see that sometimes American students will not finish their sentences or admit that they have lost their thoughts in class.

5.3.5.1. Students are encouraged to work in groups and interact with classmates and professors

Jill also commented that group work is encouraged in American classrooms and she is encouraged to join in all student activities and discussions.   Sam observed that in American classrooms, class participation meant to orally engage in discussions, and students are encouraged to interact with professors and classmates. Michael also commented that his classes provide "great environments for 'peer-motivated improvement,'" which means he had positive experiences of learning together with his classmates. He especially said that his graduate years were "fruitful" and he enjoyed group work.

5.3.5.2. Independent work and ideas are encouraged

Sam observed that in American classrooms, students are required to contribute independent ideas and thoughts. They also have to study the contents independently, without summaries or explanations of vocabularies from professors.

5.3.5.3. Positive experiences with professors

      Jill commented that professors are more accessible and more helpful in the United States than in her own country. Michael also said that his professors are available, "fun to talk to," and helpful. He had "highly productive interactions with professors." Sam commented that "interacting with professors is much easier than with classmates."

      In summary, those interviewees generally have very positive experiences of American classroom culture. Even when they compare American classroom culture with their own native classroom culture, they seem to have favorable opinions of the American classroom culture. From those comments, it might be generated that overall the American classroom culture is favorable for those interviewees to speak up and engage in classroom interactions. That does not mean there is no problem for non-native speakers. Sam later on commented on the difficulty of participating in group discussions when someone dominates the discussions. This reminds me of Alex's comment that in America, "people who are more vocal can get their way." I suspect there might be some connections between those two comments. Sam also expressed her fear of "frustrating" native speakers in the class and being "looked down upon" by them due to her language proficiency. She said she is always "conscious of being a non-native speaker." Based on my years of experiences and observations of classes at U.S. universities, I personally hold the belief that non-native English speakers still speak far less than native speakers do in university classrooms in the United States. My journal study of my own experiences in U.S. graduate classrooms revealed that it is still difficult for non-native speakers to take their turn to join in the discussion and argue back and forth to state their opinions. Several strategies on the ASESS questionnaire are included to target challenges of taking

turns and making competent arguments in English-speaking classes.

5.3.6. Sub-question 6: What kinds of challenges do they face regarding academic English listening and speaking?

Sub-question 7: What kinds of strategies are they using or planning to use to overcome those challenges?

Those two questions will be answered in combination, because they are closely related to each other logically. The following summarizes the main challenges that the interviewees face and the strategies they use to overcome them. The interviewees did not always offer strategies to deal with those challenges, which may suggest pedagogical needs in teaching strategies. It is also noticeable that the interviewees seem to be more challenged in speaking than listening. The difference between interviewees' listening and speaking proficiencies can be exemplified by Hope's example. Hope commented that she has improved a lot in listening. She can now listen to and understand 100% of talks in her own academic area, although she cannot understand a lot when she listens to presentations in other fields. However, with speaking, she "has a long way to go."

A great number of challenges in speaking were in the contexts of doing academic presentations. It is valid to say that doing academic presentations is the biggest challenge (task) discussed by the interviewees. Other challenges include using humor in English, learning academic vocabularies, and joining in group discussions, and so on.

5.3.6.1 Doing academic presentations

"APs (academic presentations) were seen by instructors across disciplines as an instance of academic apprenticeship through which the students become familiar with

the skills and subject matter associated with their respective fields" (Zappa-Hollman, 2007, p. 468). Doing academic presentations is one of the most frequently discussed topics in the interviews. Science students, as well as those in humanities and social sciences, are all required to present their research from time to time. In fact, Alex and Michael are required to present their discoveries to their major professors and lab colleagues probably every month. I went to observe both of their presentations, which are standard academic presentations facilitated with PowerPoint slides. I also observed Hope giving her conference presentation and Sam giving her class presentation. I did not observe a presentation given by Jill, because as a music student, she seldom gives presentations, although she gives musical performances. I only observed her teaching a violin class. All interviewees except for Jill talked about challenges that they encounter when present, and all interviewees discussed strategies that they use to help them do academic presentations. Often doing academic presentations is the most important speaking task required of non-native English speaking graduate students. As a music student, Hope is asked to give performances more than presentations; maybe that is why she is the only one who did not mention any challenges related to presentations.

The interviewees are challenged in both language and non-language issues. The language issues include pronunciation, intonation, and answering questions directly in Q and A. The non-language issues include speaking too fast, using gestures and movements, having stage presence, understanding what the audience needs, keeping eye contact, and so on. Even the non-language issues are often more noteworthy for non-native students because they often entail cultural issues. For example, Hope feels that keeping eye contact with her audience is a significant challenge for her, which might be

related to her Korean background. Michael feels it is difficult for him to speak slowly, mostly because he is from Peru and Peruvian people speak very fast. The interviewees' most important overall strategy for doing presentations is rehearsing (or practicing), which is emphasized by every interviewee. Hope even once lost her voice because she practiced for a presentation too many times. The following discusses the five main challenges and coping strategies mentioned by the interviewees

1) Speaking too fast

   Michael, Hope and Alex all mentioned that they have the problem of speaking too fast due to nervousness when giving a presentation. Michael said he speaks too fast also because his native people, Peruvians, usually speak very fast. All of them mentioned strategies to cope with it, most of which are affective strategies. For example, Alex talks to himself to calm himself down, takes deep breaths, and prepares the materials very well before the presentation. Michael consciously tries to control his breath and takes longer breaks to change the slides so as to give himself time to slow down. He also uses self-talk to relax himself. Hope deliberately tries to speak slowly.

2) Using intonations, gestures, and movements

        Hope said that it is most challenging for her to use intonations and gestures during a presentation. Also, she is "frozen" when doing a presentation—she stays in the same corner. It seems that intonation is not a problem with other interviewees. In fact, Michael changes his intonation to "wake up" the audience and Sam exaggerates her intonation to "sound more proficient." However, Michael tends to use too many gestures and movements when he presents. Again, he said this is due to the influence of his native culture.

3) Answering questions during Q & A

Answering questions during the Q & A period is the "ultimate challenge" (p. 473) for most non-native graduate students in Zappa-Hallman's (2007) study. Because the "Question and Answer" part usually cannot be prepared for as much as the presentation and the presenter is called upon to give an instant and intelligent answer, it has become a challenge for non-native English speakers. When I was observing Michael's presentation, someone in the audience asked a question. However, it was hard for Michael to understand the question until someone else repeated it. The possible reason is that the person mumbled when he asked the question. Michael later on during the interview said that although he welcomes questions from the audience; it is difficult for him to understand the question sometimes. Hope said that handling questions during Q & A is a problem for many international graduate students, and also a challenge for her. Although Alex did not mention Q & A as a challenge, he described two coping strategies: 1) preparing extra slides for Q & A; 2) imagine what the audience might want to know. The above indicates a need for teaching Q & A strategies.

4) Pronouncing the words

Pronunciation should be a main challenge to non-native students. Like accent, it seems to be on everyone's mind, but it is not one of the top priorities. Also, like in the case of accent, the interviewees seem not to have many strategies for improvement. Among the interviewees, Sam feels most confident about her pronunciation. All other interviewees expressed concerns about their pronunciation. Jill checks word pronunciation on-line and also asks her American roommate to help her with pronunciation before she gives a presentation. Alex will speak slowly or find alternatives

if he does not know the pronunciation of a word. Michael has a peculiar strategy, which is to go ahead to pronounce the word(s) even when he does not know how to pronounce it at all. He will pretend that nothing is wrong unless someone in the audience corrects him. The interviewees did not discuss other strategies to help them pronounce words except for the general strategy-"practicing" and asking Americans to help them. This lack of strategies may indicate a need for instruction; it may also indicate that the non-native students are no longer very concerned about pronunciation, especially precise pronunciation. This is the same case with accent. They care more about the contents and ideas and as long as their audience can understand them, they are not eager to pursue accurate pronunciation.

5) Using humor

Sam mentioned difficulties with understanding humor and jokes in English. Hope especially expressed concerns over how to use humor to make her presentation interesting. She actually described a situation whereby she made a joke at the beginning of her presentation, and felt very embarrassed when nobody understood her. She then mentioned that her strategies are to prepare one joke for each presentation and search on-line for jokes. Some other interviewees seem to use humor successfully. Jill said she uses humor to make her talk interesting; Alex, based on my observation, successfully relaxes his audience with his sense of humor.

If doing an academic presentation can be deemed as a main overall challenge, then the interviewees discussed more than 30 tactics to cope with the many aspects of this challenge. The most salient strategy that every interviewee uses to prepare for presentations is "practicing (rehearsing)" in front of a native speaker, a mirror, or none.

Hope once practiced so hard that she lost her voice. Not every "sub-challenge" related to doing an academic presentation has a coping tactic, such as how to use intonations and gestures properly. Still the interviewees' diligence and resourcefulness are remarkable. Besides doing academic presentations as one main challenge, the interviewees also discussed other challenges such as understanding jokes, joining in group discussions, and learning/using vocabularies.

5.3.6.2. Understanding jokes

Understanding jokes is related to carrying on English conversations in casual settings. Hope said she once felt very "left out" during lunch conversations with native speakers and she could not understand half of the jokes. Sam said before she pretended to understand those jokes; now, she would candidly admit so and ask for explanation if she does not understand jokes. This means that she changes from being passive to proactively using a social-cultural interactional strategy-"asking for help" to solve the problem. Hope hinted that jokes and humor are related to culture. This might indicate that strategies for listening and speaking should include strategies for learning the culture.

5.3.6.3. Joining in group discussions

As mentioned before, Sam's perceived weakness as an English learner lies in the fact that it is difficult for her to join in group discussions. She finds it hard to present a direct and simple argument without "wandering around." When someone dominates the discussions, she cannot find her turn to speak up. The challenge of "taking the turn to speak" has been discussed by non-native graduate student interviewees in Zappa Hollman's article (2007) and was also recorded in my English learning journal study. This challenge is often related to cultural background. For example, in some

Asian cultures, students are called on by the teacher to speak up in class. Therefore, they do not need to "grab" their turns. They do not need to "hold their floor" either, because no other student will try to "grab" the turn away from them. This challenge is also related to English proficiency. For example, Sam mentioned that she cannot think of complex ideas while speaking, like the way some native speakers are able to do. She has to think before speaking, which takes time and might cost her a turn to speak. The ASSESS questionnaire includes strategies for "taking the turns," such as "building on what classmates said and joining in"(S11). Generally speaking, more strategies for taking the turns and keeping the "floor" should be explored and taught to learners. Strategies such as using gap-fillers are very useful and relevant, especially to students from cultures that allow periods of silence in conversations.

5.3.6.4. Learning/using vocabularies

With learning vocabularies, different learners have different needs and goals. Alex realizes that since English has "evolved" in Singapore, Singaporeans might not use the proper expressions or words. He thinks he can learn to use the proper expressions or words from talking with native speakers. When Michael first came as an undergraduate, learning academic vocabulary was the hardest task for him. Now, in graduate school, it became easier. Still whenever he reads a scientific paper and sees a new word, he will highlight it and find out its meaning and reread to deepen his understanding. He also aggressively reads scientific literature to learn new words. Jill has learned in Turkey most of the music terms since she was young, but now she wants to acquire different varieties of vocabularies. She uses gestures, examples, or alternatives if she does not know a word. She wants to read more and asks people to explain new words in order to

learn vocabulary. She thinks that the best way of learning vocabulary is by "experiencing," using them in real life and experimenting with new words.

In summary, the interviewees mentioned quite a number of challenges related to English listening and speaking. They have designed or used strategies to cope with certain challenges; however, not every challenge has been dealt with strategically. The best example of using strategies to cope with a challenge is how Alex uses a combination of cognitive and affective strategies to solve his problem of speaking too fast. In most cases, the interviewees just use one or two tactics to cope with a challenge. Therefore, it is worthwhile to help learners carefully design a combination of strategies to overcome a challenge effectively. Also, sometimes a learner will choose to avoid the problem instead of dealing with it.   Michael pretends that nothing happens when he mis-pronounces a word during a presentation; he did not mention how to prevent it from happening beforehand. As a counter-story to that, Sam used to pretend that she understood jokes in English; now she chooses to face the problem and asks the person to repeat the joke during a conversation. Thus, learners need to be encouraged sometimes to face their challenges honestly and deal with it through using strategies. Finally, Hope mentioned that she can move freely and interact with the audience freely when she teaches her class, but she cannot do that when she presents. I did observe that she stayed in the front area when she presented. Also, Sam said that she felt it was difficult to talk in a big group if she does not know the people well. It can be assumed that familiarity with the audience might have an effect on non-native speakers when most people in the audience are native speakers of English, not people from the same cultural and linguistic background. Strategies, especially affective and social-cultural interactional strategies,

can help ease this kind of anxiety needed to be discussed with learners.

5.3.7. Sub-question 7: How do they perceive strategies and their own strategy use?

In this section, first, two main themes extracted from the qualitative data will be used to explain how the interviewees perceive strategies: 1. Definitions of strategies; 2. Insights about strategies. Second, main themes from the qualitative data will be presented to reveal how interviewees perceive their own strategy use: 1. Four types of strategy users; 2. Strategies that are used by learners.

5.3.7.1. Definitions of strategies

Each interviewee was asked to give a definition of strategies. Hope thinks a language learning strategy is "a language learning tool to reach your intended learning outcome, attainment…". She thinks that strategies can help a learner achieve specific goals such as giving a successful presentation. Michael thinks that a strategy is "an organized plan to approach a problem or approach an issue to improve it, to find a solution, (so that) not to run into that issue again, or not as often as previously before." Alex defines a strategy as "something that improves, any[thing], be it any methods, any ideas, any[thing]…that will help you improve your ability to improve your language level, competence." Sam did not give an explicit definition of strategies. Jill just said that living here (in an English speaking country) is strategy for her. For her, there is no need to further define or conceptualize strategies. Living in the country and taking the opportunities of English learning is the "strategy." She thinks that just by living in the United States she can learn, so she does not need any particular language learning strategies. In summary, only three interviewees were able to define strategies explicitly. They defined strategies in terms of usage: as a tool to reach an outcome, as an organized

plan to approach a problem; or as any methods or ideas that help the learner improve. Those definitions are quite similar to the experts' definitions.

5.3.7.2. Insights of strategies

The interviewees also provided insights about strategies. Surprisingly, some of those insights are in agreement with strategy experts' current opinions (see Cohen and Macaro, 2007). 1) Strategies are "personal". Hope thinks that some strategies will fit an individual learner, implying that strategies are individualized. 2) Strategies are flexible. Alex and Hope reject the idea of acquiring and following a rigid general list, a "recipe" of strategies. They both prefer a more flexible concept of strategies, whereby strategies are adopted based on the individual learner's special situation. 3) Strategies should be "constantly renewed and evolve". Alex thinks that there will be always new situations that need new strategies. Learners should choose strategies according to every new situation, and should always add new strategies. 4) Strategies should be applied in real life. Hope pointed out that "knowing" is different from "doing," which means knowing about strategies is different from applying the strategies. It is not enough to just learn strategies in a classroom. Sam pointed out that people have to take a lot of time to practice and apply those strategies in real life. Therefore she concluded that it is not enough to learn strategies just in classrooms. 5) Strategies are accumulated naturally in time. Alex thinks that by experiencing and reflecting, learners accumulate strategies through time. 6) Strategies interact with factors such as motivation. Hope thinks that other factors including motivation interact with strategies in that motivation help learners learn strategies and especially help them apply the strategies.

5.3.7.3. Four types of strategy users

Question 19 on the ASSESS questionnaire asks the interviewees to choose the closest answer that describes their strategy use situation or describe it in their own words. Sam described her strategy use in her words as using them "unconsciously." Only Michael chose the answer "I carefully choose a combination of strategies that I can use." All the other three interviewees chose "I just use one or two strategies when I need to without prior planning." The interviews and observations provided further details about each interviewee's strategy use in contexts. Based on the qualitative data, I have categorized the following four types of strategy users that I think can describe their main characteristics as strategy users. It is important to note that the four "types" are used by the researcher to concisely describe the researcher's impression of the interviewees as to what kinds of strategy users they are. The interviewees did not categorize themselves as such.

1) "Automatic" strategy users

Although the strategies in the questionnaire look very familiar to Sam, because she studied second language teaching, she does not think she use them consciously. In her own words: "..when I try to think about myself, whether I would use those strategies or not, I was not sure, because I was not consciously monitoring myself all the time. First, I thought, I don't consciously use them. But, then, I realize that I use some of them, even though it was not conscious." Sam then said that she does nothing particular now to improve her English, although before she watched TV and talked to herself in English a lot. It is because right now she no longer feels the need to just learn English. She will listen to the radio or watch video clips on-line to catch up with current events, instead of learning English. This is mainly because Sam feels that she currently

has no major problems or issues with communicating with people in English. In her own words, she thinks that improving her English is "important but not urgent."

Jill thinks she is not doing anything particular now for improving her spoken English either. She believes that as long as she lives in the English-speaking country, the United States, and communicates with native speakers, she will improve naturally. She does not need to do anything in particular and she even calls herself "lazy." It is interesting that based on her questionnaire answers, she actually uses those strategies quite often (mean=4.13). One explanation probably is that she is no longer aware of herself using those strategies. She uses them automatically.

2) Organized strategy user

Michael is the only one among all the interviewees who chose the answer "I carefully choose a combination of strategies that I can use." to question 19. His definition of strategies also confirms that point: a strategy is "an organized plan to approach a problem or approach an issue to improve it…". The interview did reveal that he tends to be a conscious planner and a decision-maker. For example, he knew he would come to the United States, so, in Peru he took private lessons in English. Although all interviewees talked about making friends with native speakers, he is the only one who said explicitly that he "made a conscious decision" to spend more time with native speakers than with Spanish speakers. He also explicitly said that he had "an organized plan" to stop himself from speaking too fast during the presentation. He "decide(s) to be conscious of" his breathing and "focuses on" controlling it. Then, he listed several strategies to help himself speak slowly and calm himself down. From his descriptions, it is quite obvious that he first made a decision to solve a problem; then he would focus on

it and think of strategies to deal with it; finally, he would use those strategies. Michael's case seems to indicate the correlation between conscious decision-making and an organized pattern of strategy use.

3) Flexible strategy user

Alex only uses one or two strategies when he needs to without prior planning. His definition of strategy is that something that improves, anything, will be any methods, any ideas, any…that will help you improve your ability to improve your language level, competence…" He is also the one interviewee who provided a lot of insights about strategies: strategies are flexible; should not be a rigid list; should fit different individual's special situations; should evolve all the time; no strategy can "stand the test of time," and there will be always be new strategies for new situations. He even mentioned new strategies for 3-D presentations in the future. The above seems to indicate his flexible, intuitive, spontaneous, optimistic, and futuristic personality. To him, strategies come naturally, slowly, accumulating one-by-one over time. He described in detail how he used strategies to understand presentations. He did not plan on anything like what Michael would do. He uses one or two strategies to help himself listen better each time he goes to a presentation. During the interview, he finally had the chance to reflect on that process and concluded that strategies are accumulated through every experience. He emphasized that each listening experience is different, so he most likely will use different strategies each time. He does not want to be a "robot" following a rigid plan.

4) Diligent strategy user

Among all the interviewees, Hope seems to be the most diligent learner

working on her spoken English. She would practice for her presentations numerous times and she discussed twelve strategies and eight challenges about doing presentations. She was thinking about almost every detail about doing a presentation: gestures, eye contact, movement, slides, and beginning and ending…   Once she practiced so hard that she lost her voice. I found her talk very polished, but she said that it was an informal talk; if it were a formal talk, she would practice more times. She carefully studied how to take notes while listening to a talk. Her hard-working spirit is admirable. On the other hand, the interview also indicated to me that the very high standards that she set for herself and former negative experiences related to spoken English probably made it hard for her to explore new learning opportunities and strategies. She is the only interviewee who answered on the questionnaire that she does not seek opportunities to go to conferences or presentations. She also talked about how she is "more and more distressed" by her academic studies and has no time to invest in improving her spoken English. I would suggest that affective strategies such as reasonable goal-setting and overcoming negative experiences should be taught to learners such as Hope. Although Hope is a hard-working learner, her strategy use frequency is low (M=2.7). It might be because she is intimidated by her previous experiences and did not try to use the opportunities to join in classroom discussions nor presenting.   However, she is very diligent when she is faced with the task. A careful examination of her questionnaire responses reveals that she uses the strategies for class discussions at a very low rate (M=2.14); which seems to indicate that she does not actively involve herself in classroom discussions. As for the group of presentation strategies (S16, S17, S18), her average frequency is medium (M=3.3). During the interview, she described the strategies that she would use for doing presentations, some of

which were not included in the questionnaire inventory, such as practicing eye contact in front of the mirror.   The above indicates that Hope uses a lot of her own strategies to help her give presentations, and she may not use many strategies to help her join in class discussions. She also does not actively seek opportunities to speak up in classes; she only sometimes seeks opportunities to present.   It is also interesting to see that she rarely does the following: 1) adjust her presentation according to reactions from the audience; 2) reflect on her performance after her presentations; 3) reward herself if she speaks well. All the above can be pointed out to her by a strategy instructor or coach, so that Hope can have a more balanced pattern of strategy use. All the above also indicate that a single strategy use frequency level indicator based on questionnaire responses may not accurately reflect whether the students are using strategies frequently or not. This further indicates the importance of qualitative data which can reveal the story behind the quantitative data.

There should be more types of strategy users in the whole group of respondents. The qualitative data may only reveal a small fragment of the whole picture. Strategy use types seem to be very relevant with students' perceptions of strategies. It is worthwhile to help students learn how to set goals, design an organized plan of using strategies to reach that goal, and to assess the results and their strategy uses.

5.3.7.4. Other main strategies that are used by learners

The interviewees also described in detail main strategies they use, which provides more in-depth information than what the questionnaire responses have revealed. Besides the presentation strategies discussed formerly, they mainly discussed the following strategies: 1. making friends with (or associating with) native speakers of

English; 2. "experiencing" and "practicing"; and 3. sets of listening strategies.

1) Making friends with (or associating with) native speakers of English as an

important

strategy

All the interviewees discussed making friends with native speakers of English as an important strategy for improving spoken English, and they revealed a variety of different experiences. For Jill, "trying to be with native speakers most of the time" is her main strategy of learning spoken English and she does not need to try hard to achieve that. She has had American roommates since she arrived five years ago. As a graduate student studying music, she has a lot of opportunities to rehearse with other students—in her own words: "music is very social". Therefore, it requires little effort for Jill to "surround herself with nice native speakers." Both Michael and Alex agree that making friends with native speakers has helped them greatly. Michael made a deliberate decision to spend more time with native speakers of English than with Spanish-speaking people, in order to learn English. He even avoids listening to conversations in his native language. He "made a conscious effort to hang out with Americans" and it "definitely helped a lot." Alex had American roommates when he first came; he is very grateful that those Americans taught him "the proper way of" expressing himself. He also asked the Americans to correct his Singaporean English. His former experience of learning French in France obviously has affected his way of learning spoken English—he spoke to the French people who corrected his pronunciation. Sam has found another "layer of meaning" to the concept of making friends with native speakers. She used to make personal friends with native speakers when she was a Master's student. Now, as a Ph.D.

student with a higher proficient level of English with less time, and more interests in

ideas, she prefers to have discussions with native speakers about ideas and work with

them professionally. She is more interested in working together with native speakers to

pursue an academic idea or as colleagues than just "hanging out together" as friends. The

interviewees have emphasized the importance of mingling with English-speaking

Americans in terms of learning English. They also have discussed the other benefits of

making American friends: Michael thinks it makes him feel better about himself to

become a member of the local community; Sam enjoys discussing intellectual or

academic topics with friends in English, and she also forms professional relationships

with English-speaking people.

It is a totally different story for Hope, who said that watching American TV

dramas is the best method of learning spoken English, mostly because she finds it

difficult to make friends with Americans. Although she was immersed in English when

she was only 11, later on, she found it difficult to form relationships with native speakers

of English. During the interview, she recounted two negative experiences when she tried

to form relationships with native speakers of English. One is when she taught ESL in

Korea, she felt left out by her native English-speaking colleagues during lunch

conversations; another one is when she worked for an undergraduate language residency

program at the university, and she felt it hard to connect with American undergraduate

students. Hope wants to form relationships with Americans, but she feels it very hard to

reach out to them. For seven years in her program at the university, she has only

associated with Korean students in the program and cannot reach out to other classmates.

However, she is successful at establishing satisfying relationships with her professors and

her Korean American students.

2). "Experiencing" or "practicing" as a strategy

The interviewees are aware of the fact that they are living in an English-speaking country, which provides them with plenty of opportunities to learn English. Taking advantage of those opportunities is one of their main strategies. Alex is confident that he can achieve his desired oral English proficiency because he "is in the right country, using the right language, and interacting with the right people." He also thinks that being an extrovert helps, and he should "try to seize every opportunity to speak and speak it well." Michael also mentioned that he "is trying to experience," which to him means to "hang out with people," reading newspapers, watching TV and movies, etc. Jill said that she learns better through "experiencing," which means "living in the country."

3). Sets of listening strategies

The interviewees generally did not mention problems with academic listening. Still Hope, Alex, and Sam each discussed a set of listening strategies that they use to help themselves listen. Hope discussed how to take notes while listening; Alex focused on how to listen well during conference presentations; Sam talked about how to listen during discussions. What they have shared provide materials for future expansion of the ASESS listening part. Hope uses a series of strategies to take notes efficiently while listening. She draws a chart of important points of the presentation. She also writes down examples that support the important points and key words. Then, she writes down important questions that have been asked and their answers. She emphasizes active listening, which is to listen for the most important points without losing track. Alex asks friends what they did to understand presentations. Then, he uses a series of strategies to understand

those presentations: 1) read the abstract 2) listen to the people instead of looking at the slides 3) get used to the presenter' accent in the beginning. 4) ask questions during Q & A, and also talk with the presenter if he is really interested. Unlike Michael, Alex did not deliberately plan an organized combination of strategies that he was going to use. He seems to analyze each specific occasion and the task, and adopts strategies to solve the problem and meet the specific challenge. He has acquired those strategies slowly and through experiences. Sam takes notes while listening, especially on new words. She also tries to summarize in her mind about ideas or PowerPoint presentations. She tries to look at the person when the person speaks to sense a person's emotions and feelings from his or her body languages and facial expressions; she also nods and offers feedback such as "uh, hun…"to indicate that she is paying attention.

Interestingly, a comparison of the three sets of listening strategies indicates that learners' strategy use is related to their personal situations. Hope's meticulous attention on taking notes speaks to me as the typical behavior of a diligent and detail-oriented learner whom I think she is. Alex's list of strategies includes quite a few social strategies such as asking friends and talking to the presenter. It is not surprising as he called himself "outgoing" and based on my observation and judgment, he is the most outgoing person among all the interviewees. Sam's list of strategies mainly focuses on group discussion contexts, because she feels that is a challenge for her. The above seems to indicate that learners' patterns of strategy use are correlated with how learners think of strategies, what are their perceived challenges, and probably also with their decision-making and problem-solving patterns, as well as with their personalities. It also reveals that the interviewees are very much aware of the advantages and opportunities provided

by their study-abroad environments.

5.3.8. Sub-question 8: What do they think the university can do to help them learn more about strategies?

Generally speaking, the interviewees want to know more about strategies. However, as Michael and the others pointed out, they have to focus most of their time and energy on their studies, which gives them very limited time to spend on learning about strategies or even on improving their spoken English. Also, I have noticed that they often equalize language learning strategies as presentation skills or communication skills. To non-native graduate students, spoken English proficiency mostly means the ability to present in English well and to communicate well in English. At this advanced level, they are also more concerned with how to use English instead of how to learn English.

The interviewees suggested ways in which the university can help them learn more about strategies: 1) personal coaching. Sam and Jill welcome the idea of having a personal coach who will observe them in classrooms or when they are giving presentations, maybe videotaping or audiotaping them, and then giving them suggestions on how to improve their spoken English. 2) workshops. Hope thinks that it is helpful for the university to conduct workshops for international teaching assistants about how to be an effective TA, including presentation skills, how to lecture, and listening skills. She especially mentions workshops that teach presentation skills such as how to start and end a presentation. Sam also supports the idea of having a workshop whereby the instructor records a group discussion and helps students analyze their own behaviors and strategy use. Michael thinks a workshop on strategies would be must useful to him, because he

thinks that it is not useful to learn how to speak or listen in English from a book. He would rather hear someone to tell him about it. However, he does not think a workshop for international graduate students from all disciplines would be helpful. He thinks it is more applicable to have individual workshops for different disciplines and maybe even for different language backgrounds. 3) <u>one-credit class</u>. Jill hopes that the university will offer a one-credit English speaking class that can be paid by her assistantship. Michael also thinks that a one-credit course is good, because it will not give too much pressure on the students. 4) formal training on how to speak properly. Alex wants a long-term course on communicative skills and proper speaking, similar to public speaking or communication courses offered by MBA programs. He thinks one-day or two-day workshops are not "deep and concrete" enough. 5) more traveling grants to conferences. Alex wants the university to give graduate students more traveling grants so that they can go to more conferences. 6) giving people more opportunities of interacting with each other. Alex suggests changing "the entire layout of the whole office." In his own words: "everybody is stuck in his own cubicle and interaction is not encouraged, which is really bad."

5.4. Summary of chapter 5

This chapter presented the qualitative results based on five interviewees' data gathered from interviews, follow-up e-mail answers, and field observations. The chapter answered research question four and its sub-questions. Generally, students agree that spoken English is important for them in terms of graduation, future careers, and self-improvement. English is also important to them because it is an international language. However, they also expressed concerns of lack of time to be spent on improving their

English. Regarding goals about spoken English, students focus on speaking rather than listening, especially on presenting and teaching confidently and clearly. They have ambiguous attitudes towards the goal of accent reduction. On the one hand, they recognize its importance for job interviews and for how they are going to be perceived by native speakers; on the other hand, they think conveying the contents is more important than accurate pronunciation. They also remain doubtful about ever being able to achieve it.

The students generally think that improving their spoken English proficiency is a day-to-day long-term process. They have a patient and mature attitude towards it. They all recognize the many opportunities presented to them by living in an English-speaking country such as the United States. As for perceptions of themselves as English learners, the students generally recognize the influence of their native cultural backgrounds. They also are quite aware of their own strengths and weaknesses as learners of English, and again, they focus on speaking rather than listening when they talk about that. Interestingly, I did not observe most of the weaknesses they mentioned. On the other hand, I observed all the strengths they mentioned. This could be explained in that the students are a little bit hard on themselves in terms of self-assessment. Another possible explanation is that the students have already corrected their perceived shortcomings to some extent and they themselves were not fully aware of their improvements. The qualitative data also indicate that the learners have gone through an evolving and learning process. Fore example, Sam mentioned how she changed from being worried about her accent and pronunciation to focusing more on the ideas and content. Michael also commented that he "made a lot of mistakes but also have improved

a lot."

Generally speaking, students have very positive impressions of the American academic classroom culture. They praise the opportunities of interaction, the involvement of students in classroom discussions, and the open-mindedness and helpfulness of professors. Still, Sam mentioned her concerns about being "looked down upon" by native speakers and "frustrating" them because of her English. I suspect that it is still a common issue among non-native graduate students.

As for challenges and strategies to overcome them, students focus on giving academic presentations as a major challenge and also sub-challenges that are related to giving presentations. Each of them mentioned a series of strategies that they use to help them present in academic English. Besides doing academic presentations, they also discussed other challenges such as understanding jokes, joining in group discussions, and learning/using vocabularies.

Each interviewee was asked to define strategies and three of them gave a rather precise definition. They defined strategies as something for helping them reach a goal, solve a problem, or improve. Generally those definitions align with the definitions in the literature (see chapter 2). More important, the interviewees provided insights about strategies, some of which have also been presented in the literature. They realize that strategies should be flexible, and fit for each individual situation; that strategies should be evolving all the time and no strategy can work forever; that strategies should be applied in real life, and it is not enough just to learn them in classes; that strategies can be accumulated through different experiences and as time goes by; that strategies interact with other factors such as motivation. Those insights are valuable for both research and

pedagogical purposes.

Based on the interviewee's accounts and my own observations, I described them in four typical types of strategy users. The purpose is just to provide some portraits of strategy users, many distinct peculiarities of which could be missing in the questionnaire data. The learners also discussed important strategies that they use. Making friends with/associating with native speakers is one of the most important strategies that they use to improve spoken English. However, not everyone succeeds at that. Hope talked about her difficulties and previous unsuccessful attempts to make friends with the community of native speakers. Experiencing/practicing is another important strategy. Learners try to utilize the many opportunities that have been presented to them just by living in the English-speaking country. They are also trying to practice all the time, although the time that they can spend on improving their spoken English is limited. Finally, they talked about the many listening strategies that they use. The overall impression is that listening overall no longer presents any challenges to them, but they have worked hard for it and have used many personal strategies to help themselves during the process. The interviewees' data seem to reveal that their strategy use is indeed correlated with their perceptions of strategies and strategy use, their ways of solving problems, previous relative experiences, and maybe their personalities.

Finally, the interviewees also suggested possible ways that the university can adopt to help them learn more about strategies. Both Jill and Sam like the idea of having personal coaching, which can observe them and suggest strategy use based on their individual situations. The interviewees also mentioned holding workshops and one-credit classes. Alex also expressed his hope that the university will encourage students to attend

conferences and promote more interactions among students.

Overall, the qualitative data satisfactorily answered research question number four and its sub-questions. Of course it should be remembered that the data comes from only five non-native graduate students. However, since the make-up of this carefully selected group is to some extent similar to the total make-up of the non-native graduate student body at the university, I believe the results can claim some generalizibility to a certain extent.

Chapter 6 Summary of Findings and Implications

This chapter summarizes the whole research project and its discoveries. Overall, the quantitative part reveals the students' general strategy use patterns and what factors have effects on those patterns. The qualitative part reveals students' major perceptions behind their strategy use patterns and offers explanations of how and why those students use strategies in real life. Interestingly, there are salient connections between those two parts. For example, students generally use speaking strategies more frequently than listening strategies, which can be connected with their perceptions that they are more challenged in speaking, and being able to teach and present well in English is very important to them. Also, "attitude" and "proactiveness" are two main factors that significantly affect respondents' strategy uses, which can be connected to students' perceptions of the importance of learning through "experiencing," which means utilizing the many opportunities presented by living in the English-speaking country. This chapter is organized in four sections: section one offers a combined review of both quantitative and qualitative results; section two compares the respondents' strategy use patterns with the patterns of "more successful" language learners in the literature; section three discusses pedagogical implications of the results; section four discusses implications for future research.

6.1. A combined review of the quantitative and the qualitative results

This section is a combined review of the quantitative and the qualitative results, and is organized under four important themes: 1) Students' current situation of spoken English proficiency and strategy uses; 2) Students' current thinking of strategy uses; 3) Factors and their effects on strategy use; 4) The factor structure of ASESS.

6.1.1. Students' current situation of spoken English proficiency and strategy uses

A high percentage of 77.6% of the respondents rated their academic English listening proficiency as high (above 8 out of 10); while 52.3% of the respondents rated their academic English speaking proficiency as high. On average, they rated their listening proficiency level as 8.33 out of 10 and with speaking, 7.42 out of 10, which indicates that there is need for improvement, especially with speaking. The respondents' TOEFL scores[23] also indicate that their listening proficiency levels (M=27 out of 30) are considerably higher than their speaking proficiency levels (M=23 out of 30). Correspondingly, interviewees also have indicated that listening is generally no longer a problem for them, but they are still challenged by speaking tasks, especially by doing presentations. When they talked about their future goals, they also focused on improving speaking skills in order to teach and present effectively in the future. It is quite obvious that the interviewees' main energy and attention focused on speaking, much more than on listening, because they feel much more challenged in speaking than in listening. The general questionnaire responses to item 21 also indicate that some students tend to think of strategies as mainly speaking strategies, which reflects also their focus on speaking more than on listening when discussing spoken English.

The students typically use English listening and speaking strategies sometimes (M=3.41), not quite often yet. They use mostly metacognitive strategies (Mean=3.54), followed by social-cultural interactional strategies (Mean=3.45) and cognitive strategies (mean=3.37), and the least frequently used strategy group is affective strategies (3.21). Generally, the respondents use speaking strategies (M=3.57) more frequently than they use listening strategies (M=3.24). Among speaking strategies, they

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[23] 163 respondents provided their TOEFL scores.

use strategies for doing presentations more frequently than for joining in class discussions;
and the interview data indicated that the students feel challenged with doing presentations.
The evidence seems to point to a connection among the students' perceptions of their
proficiency levels, the areas where they feel challenged, the goals that they want to
accomplish in the future regarding spoken English, and their strategy uses. It also
narrowed down to English presentation/teaching skills as the focus, the challenge, the
goal, and the area for strategy use. It seems that students' perceptions of their proficiency
level are correlated with the frequency of their strategy uses: when they feel more
challenged in an area, they tend to use more strategies in that area. The qualitative results
further reveal that overall they focus their attention and energy much more on speaking
than listening. One possible explanation is that mostly they have solved listening
problems soon after they arrive, but they still feel challenged in terms of speaking.

It is also worthwhile to point out that a number of students use strategies
without consciously being aware of using them. Sam and Jill belong to this group.
Students also wrote on the questionnaire (answering item 21): "When answering this
questionnaire, I realized how much of this I have been doing intuitively without prior
planning"; and "I was not quite aware of these strategies. I just did these method(s) you
called 'English listening and speaking strategies' here to be able to get my study going in
English settings." This "automatic" strategy use pattern, which is more possible among
more proficient learners, has been recorded in the literature, too.

Students' current thinking of strategy uses

Regarding questionnaire item 19, more than half (193, 50.3%) of the 351
students who answered this question chose the second answer: "I just use one or two

strategies when I need to without prior planning." Ninety-five respondents (24.7% of the whole group) chose the first answer: " I don't usually know which strategies to use or to choose from." Only 63 respondents (16.4% of the whole group) chose the third answer: "I carefully choose a combination of strategies that I can use." Regarding questionnaire item 20, among the 376 students who responded to this item, 152 students (39.6% of the group) think strategies are useful; 92 students (24% of the group) think strategies are sometimes useful; 82 students (21.4% of the group) think strategies are very useful. 37 students (9.6% of the group) think strategies are a little bit useful; only 13 (3.4% of the group) think strategies are not useful. As for answers to questionnaire item 21, most (over 80%) respondents indicated that they knew very little or nothing about strategies. The above information seems to validate the need for strategy instruction among non-native graduate students, especially the need for helping them learn how to carefully plan a number of strategies in order to solve a problem or cope with a challenge.

The qualitative data indicate that this students' group, as relatively mature English learners, also has wonderful insights about strategies and strategy uses. The interviewees define strategies as means for helping them reach a goal, solve a problem, or improve. They think that strategies should be flexible, and fit for each individual situation; that strategies should be evolving all the time and no strategy can work forever; that strategies should be applied in real life, and it is not enough just to learn them in classes; that strategies can be accumulated in time through different experiences; that strategies interact with other factors such as motivation. Answers to questionnaire item 21 also reveal the following main themes: 1) students generally know very little about strategies, 2) to them, strategies are mostly about speaking strategies and especially

presentation skills, 3) some of them use strategies "intuitively," without consciously thinking about them, 4) they have not learned strategies formally before, 5) they learn about how to improve English by observing other speakers of English and 6) They know more about strategies if they are language teachers or if they have taken important English tests.

6.1.2. Factors and their effects on strategy use

The quantitative results reveal that gender, academic fields, and degree level do not have significant effects or predictive power on those learners' strategy uses. The analysis of the qualitative data does not indicate that gender and degree level[24] play a significant role either. As for academic fields, the qualitative data reveal that, contrary to some common assumptions, students in the scientific fields pay the same amount of attention to spoken English as humanities/social science students do. The science students need to transfer their scientific data and results to the public orally. They can no longer just work silently in their lab and write the results. This can be the important reason why academic fields do not make a significant difference. Although the interview of a music student suggests that students in fields like music or dance might not need to use spoken English so much as other students do, the difference is hard to tell in the quantitative results mostly because students from those fields occupy a very tiny percentage of both the whole student population and the sample. The quantitative data also suggest that regions of origin do not make a significant effect on strategy use. Although the qualitative data provides rich material about the nuances of subtle influences of one's cultural background, it is hard to show this significantly in the

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[24] The majority of the respondents and the selected interviewees were PhD-level students. Therefore, the results might be biased to some extent, although a statistical significance test was carried out.

quantitative data. For example, the interviewee from Peru mentioned that because Peruvians tend to use gestures excessively while talking, he has to control his own gesture use; while another interviewee from South Korea has to learn how to use gestures possibly because in her culture, gestures are not used often during conversations.   While they took the questionnaire, both could state that they do pay attention to gestures as a strategy, but the single answer to a questionnaire item did not reveal the difference underneath.   Hence, the importance of qualitative investigations in providing details of the "real story" is confirmed once more.

The influence of one's regions of origin has surfaced as a salient topic mostly as one's cultural and linguistic backgrounds in the qualitative data. The interviewees discussed how their backgrounds influence their English learning. Although sometimes their attitudes towards their backgrounds in terms of its effects on English learning is neutral, they tend to focus on the more or less negative effects and try to "counteract" those effects. For example, Michael even refrains from reading sciences in his own language and avoids conversations in Spanish.   When comparing American classroom culture with their own, the interviewees also did not mention anything positive about their own native classroom cultures. At first look, this trend might reflect the students' eagerness to learn the English language and the native English culture. However, in the long run, it might negatively affect non-native graduate students' self- confidence, if they continue to portrait their own cultural backgrounds as the negative influence on their English learning. It is healthy for non-native graduate students to recognize the wealth they have inherited from their own cultural and linguistic backgrounds and realize that they have something valuable and special to contribute to the English speaking

community of discourse.

The results of a hierarchical multiple regression analysis reveal that "attitude" and "proactiveness" significantly predict students' overall strategy uses. One additional variable—"perceptions of the usefulness of strategies" significantly predicts respondents' listening strategy uses; while another additional variable—"self-rated proficiency level of speaking" significantly predicts respondents' speaking strategy uses. The quantitative data also reveals that among several variables, two variables "attitude" and "proactiveness" have significant effects on strategy use; although their effects depend on other variables such as regions of origin, academic fields, and self-rated proficiency level. "Attitude" measures how much learners think classes and conferences are great learning experiences for them; "proactiveness" measures how proactive learners are in pursuing opportunities to attend lectures, presentations and conferences. Essentially they measure how attentive and proactive learners are towards opportunities of learning spoken English. The more learners think classes and conferences are great learning opportunities and the more they seek out those opportunities, the more frequently they will use listening and speaking strategies. Some respondents' answers to questionnaire item 21 also mentioned how they think utilizing the opportunities such as classes and conferences is an important strategy. To some, it is even the only strategy that they can think of. For example, one student wrote on the questionnaire: "An exposure to an environment where English is the only language to communicate is helpful enough."

Interestingly, utilizing the many opportunities brought by living in an English-speaking country is one of the most salient themes presented by the qualitative data. The interviewees generally agree that "experiencing" is the best strategy for learning spoken

English, which essentially means to take all the opportunities that have presented

themselves when one is studying and living in an English-speaking country. Those

opportunities of course include classes, presentations, and conferences.   The connection

between those two salient results—one from quantitative analysis, one from qualitative

analysis—seems to prove that the two data sources do compliment each other and make

sense. Interestingly, "experiencing" might also explain the case of "automatic" strategy

use that has been discussed in the literature (e.g. O'Malley and Chamot, 1990). One of the

interviewees, Jill, is not very interested in strategy use or in learning more about

strategies; she even calls herself a "lazy" English learner. However, she said that

"experiencing," in other words, "just by living in the country," is her best strategy. She is

also a "very high frequency" (M=4.13) strategy user. Therefore, is it possible that

although those "high" strategy users do not actually "care" about using strategies, they

are using them at a high rate because they have a good learners' attitude and are proactive

in seeking out and using learning opportunities.

The path analysis also has indicated that there are plausible causal links

connecting students' perceptions of the usefulness of strategies and their listening and

speaking strategy use; as well as connecting students' self-rated speaking proficiency

levels and speaking strategy use.

In addition, students' perceptions of themselves as English learners, including

their spoken English proficiency level, their weaknesses, and strengths seem to affect

their strategy use. For example, Michael knows his weakness is that he speaks too fast

when doing presentations, so he has planned a series of strategies to help him control his

breath. Also, the qualitative data suggest that learners' former language learning

experiences and personality can affect their strategy uses. For example, Alex's previous experiences of learning French led him to think that interacting with native speakers is the best way of learning spoken English; while with Hope, her former self-perceived negative experiences of associating with native speakers of English led her to use watching English TV dramas as a main strategy for learning spoken English. As an organized decision maker,[25] Michael is the only one among the five interviewees to state that he carefully planned a group of strategies to solve a problem.

To summarize the above, a model depicting factors that potentially have effects on non-native graduate students' strategy uses is presented in Figure 6.1.

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[25] I have observed those personality traits based on my interview and observation data and my overall impression during our several contacts.

Figure 6.1: Factors that can potentially affect strategy use of non-native graduate students
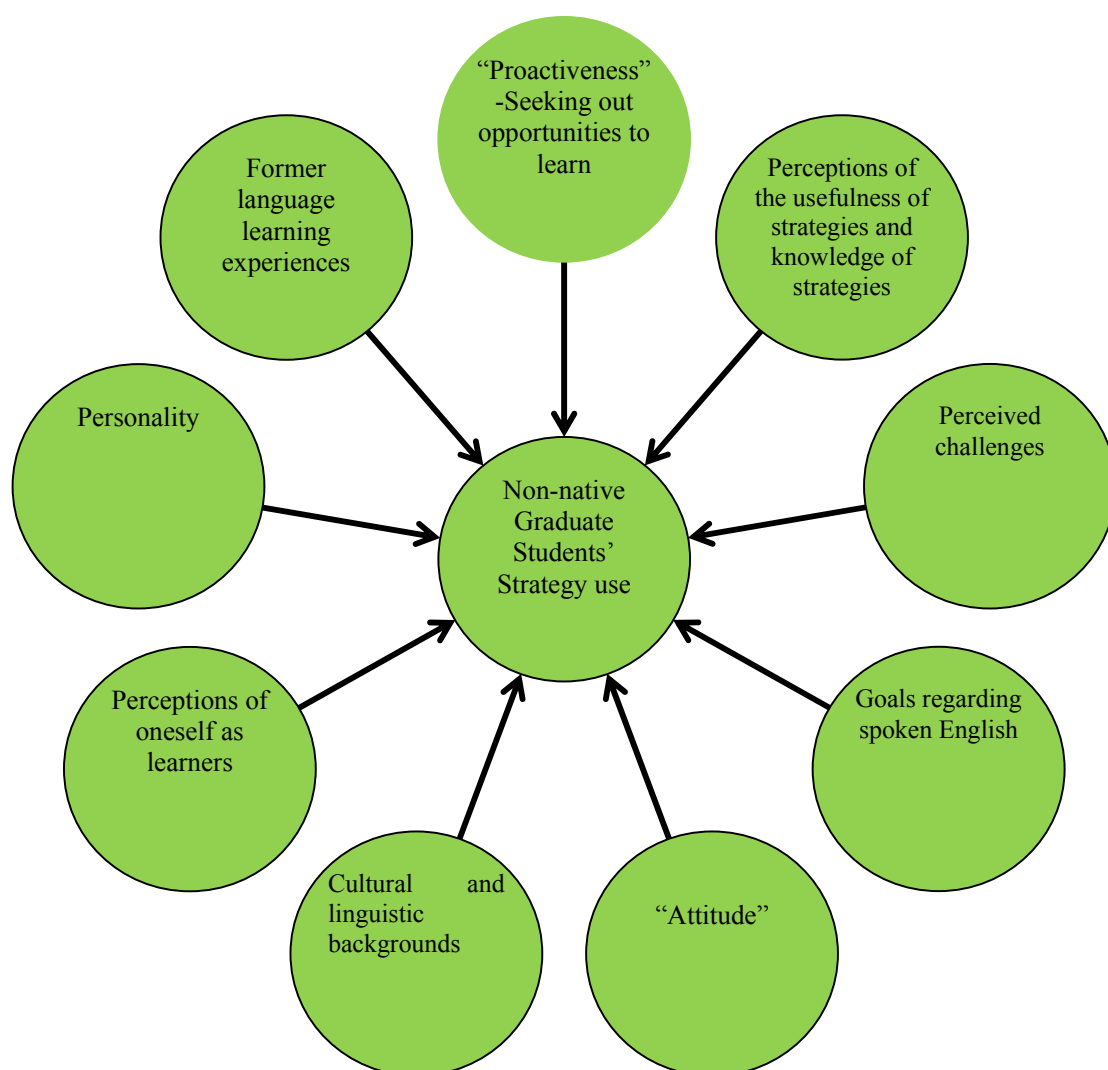
The variables " Proactiveness," "Attitude," and "Perceptions of the usefulness of strategies" have been statistically proven to have predictive effects on the student group's strategy uses. Perceptions of the usefulness of strategies also have plausible causal links with strategy use. Based on the qualitative data, students' goals regarding spoken English, perceived challenges regarding spoken English, former

language learning experiences, and perceptions of themselves as English learners all have effects on their strategy use. The effects of their regions of origin are mostly exemplified by the effects of their cultural and linguistic backgrounds. The qualitative data also revealed that personality can have important effects on strategy use patterns. Since some students are "automatic" strategy users, the effects of their knowledge about strategy use on their actual strategy use can be compromised. However, the fact[26] that a considerable percentage of respondents do not usually know what strategies to use or choose from (let alone plan their strategy use) seems to be connected with the fact[27] that most of them know very little about strategies. The results of the study claim little evidence about the effects of degree level and gender. As for academic fields, the qualitative data only indicate that students in the fields of performing arts or music might feel differently about English learning and strategy use; the quantitative data did not detect any significant effects. The arrows in figure 6.1 do not represent causal links nor predictive power; they represent potential effects only. This model has potential implications for theory building. It might contribute to the construction of theories of how students' metacognitive perceptions and personal situations can affect their strategy use. It also seems to suggest that compared with "objective" features such as gender and degree levels that students cannot have any control over, "subjective" factors such as attitudes, motivation, perceptions and knowledge have more significant effects on learners' strategy use. Intuitively, this is in align with the core elements of strategy use: self-initiative, proactiveness, autonomy, and learner control. In summary, the unique model demonstrated in figure 6.1 is based on both quantitative and qualitative results.

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[26] Based on answers to questionnaire item 19.
[27] Based on answers to questionnaire item 21.

6.1.3. The factor structure of the ASESS questionnaire

A factor analysis was used to reveal the conceptual structure underlying the ASESS questionnaire. The results prove that both the listening strategy inventory and the speaking strategy inventory are based on clear, reasonable, and interpretable structures. In addition, the factor analysis reveals that the respondents use strategies to keep concentration and focus most frequently among all the five categories of strategies (five factors); they use strategies to monitor their own understanding while listening at a similar frequency level. Learners use strategies to prepare for listening less often; and they use technologies to help with listening least often. Therefore, pedagogically learners need to be reminded of using more pre-listening strategies. The factor analysis also reveals that learners tend to use strategies to help them present almost as frequently as they use strategies to help them join in classroom discussions. Therefore, it confirms that doing academic presentations and joining in classroom discussions are two major tasks of this student group. The factor analysis also shows that learners use speaking strategies in the four different categories (factors) almost at the same frequency levels. That indicates a very balanced strategy use pattern. The study also suggested some ideas for future development of the questionnaire. A separate inventory for presentation strategies might be necessary.

6.1.4. The comparison with the more "successful" language learners in the literature

As the literature review (chapter 2) concludes, studies have revealed that the more "successful" language learners tend to have the following strategy use patterns: 1) deliberate coordination of various categories of strategies, 2) the deployment of "active-use" strategies, 3) the use of metacognitive strategies, 4) the use of a combination of both

bottom-up and top-down strategies and 5) catering one's strategy use to fit one's own unique circumstances. Results of this research study indicate that first the non-native graduate students tend not to deliberately coordinate various categories of strategies. In fact, they tend not to plan strategies ahead. As stated previously in this chapter, only 63 respondents (16.4% of the whole group) chose the answer to item 19: "I carefully choose a combination of strategies that I can use." About half of the group (50.4%) only uses one or two strategies when they need to without prior planning. The rest of the group doesn't usually know what strategies to use or choose from. Second, the respondents do demonstrate at least medium use of active-use strategies, with 60.4% of the respondents that strongly agree or agree that they seek opportunities to go to presentations, lectures and conferences even if it is not required (questionnaire item 8). Since the whole questionnaire is designed for natural situations that those non-native graduate students will typically encounter, the strategies listed in the questionnaire can be categorized as active-use strategies. The respondents use them at a medium frequency level (M=3.41), which further testifies that they use active-use strategies at a medium frequency rate. Third, although the respondents use metacognitive strategies only at a medium level (M=3.54), they do use this category most frequently among all the categories. As for top-down and bottom-up listening strategies, in the questionnaire, typical "bottom-up" strategies are Items L3, L7, L11, S1, S2, S3, S12; typical "top-down" strategies are Items L4, L5, L6, L8, L15, S4, S6, S8, S13. The average frequency of the former is 3.352; the average frequency of the latter is 3.546. Therefore, the learners do use a combination of "top-down" and "bottom-up" strategies at the frequency level of "sometimes." Finally, the qualitative data and respondents' answers to questionnaire item 21 all indicate that the

learners do use strategies to fit their own individual situations. In fact, Alex and Hope reject the idea of following a general list (in Alex's words, a "recipe") of strategies. They think strategies must be personalized. Respondents' answers to Item 21 also expressed similar ideas: "In my personal opinion, I usually do whatever is appropriate for me to improve myself by any mean(s) or strategies"; and "I gather information by looking at/hearing different people and then arrive at a good balance that suits me." In summary, the respondents as a group of non-native graduate students generally have the same strategy use pattern as the more "successful" learners have, but at a modest- to medium-level only, except for that they seldom deliberately coordinate their strategies of different categories.

6.2. Pedagogical Implications

Results of this study seem to justify the need for strategy instruction because of the following: 1) students recognize the importance of spoken English; 2) students still need to improve their spoken English proficiency, especially speaking proficiency level; 3) students do not know much about strategies; 4) students only use strategies at a medium-level and they do not usually plan their strategy uses; 5) the majority of this student group think strategies are useful. The qualitative data also indicates that sometimes the students will avoid challenges or difficult situations instead of using strategies to solve the problems. For example, when Michael does not know the pronunciation of a word, he would just go ahead with whatever he feels comfortable with. He did not mention any strategies that he could use to prevent this situation or solve this problem. Another typical example is accent reduction. The interviewees seem to give it up because it is hard to achieve. The interviewees also mentioned other challenges

without mentioning strategies for coping with them. They should be encouraged to explore strategies that can help them instead of passively avoiding the problem or giving up the goal. The pedagogical implications presented here are organized in the following three themes: 1) Starting points for instruction; 2) Emphasis/contents of instruction; 3) Forms of instruction.

6.2.1. Starting points for instruction

Respondents expressed belief in an individualized plan of strategy use, which should be one of the principles of strategy instruction, too. The nine factors of Figure 6.1 can provide a starting point for helping learners assess their individual situations and potential factors that might affect their future strategy uses. Also, since a number of students are "automatic" strategy users already, and it is recommendable to help them become aware of their present strategy use and continue to use strategies that have worked for them personally. The ASESS questionnaire certainly is a validated tool for examining students' current strategy use. As for individual coaching, it is recommendable to discern a student's strategy use patterns by examining the questionnaire responses carefully. For example, what is the strategy use frequency level for class participation items versus presentation items? What is the frequency level for pre-listening (pre-presentation) strategies versus during-listening (during-presentation) strategies and after-listening (after-presentation) strategies? What is the frequency level for each category of the strategies? If there is any trace of imbalance, further questions should be asked to determine whether there is a need to refocus.

6.2.2. Emphasis/contents of instruction

Since the study indicates that students generally have little knowledge about

strategies, it is beneficial to provide information about the categories of strategies and useful strategy inventories as references. It is not useful to dictate a list of strategies; instead, as stated above, students should be encouraged to assess their individualized strategies. Since a number of students pointed out that they accumulate strategies through real-life experiences and constant practice, instructors should continue to encourage them to do so and let "experiencing" be their main strategy. The results reveal that students do not usually plan their strategies carefully. Therefore, the instructor needs to help them form this habit. Also, since students are mostly challenged in the area of presenting in English, strategies for doing academic presentations should be a key point.

The interviews reflect the needs for instruction in social-cultural interactional strategies and affective strategies. In order to enter and become valuable contributing members of their communities of practice (Wenger, 2007) in the English-speaking host country, those non-native graduate students need to be able to communicate competently with other members in English. That is also the main goal mentioned by the interviewees. Therefore, social-cultural interactional strategies are important. Regarding social-cultural interactional strategy instruction, the results of the study provide the following insights. First, instructors should remind students that their communities of practice also should include other non-native graduate students and scholars. Essentially, they need to learn how to communicate in English with speakers of English from all over the world. Secondly, a learner needs to appreciate his or her own cultural background before he or she can truly appreciate another culture. The interview data indicates that the learners might need to learn how to appreciate more elements of their own cultural background and to contribute their unique perspectives more confidently and freely to their English-

speaking communities of practice. Finally, since the difficulty of understanding English humor has been mentioned twice by the interviewees, strategies for coping with that should be included into instruction.

Among all the categories of strategies, affective strategies are the least used (Mean=3.21). However, the interviews revealed that affective strategies are crucial, too. For example, Hope might need to use affective strategies to help her overcome effects of former negative experiences of socializing with native speakers of English. She is a typical student case who needs to learn more social-cultural interactional strategies and affective strategies. Also, all interviewees except for Jill discussed the anxiety and stress they suffer before and during their presentations. Affective strategies to help ease those anxieties should be taught to the students.

6.2.3. Forms of instruction

Interviewees expressed concerns that, as graduate students, they do not have much time and energy to focus on improving spoken English. Therefore, as suggested by the interviewees, one-credit courses or workshops are suitable forms of instruction. One-credit courses might be preferable because as the interviewees pointed out, strategies are more useful if they are applied in real situations and become habits. One-credit semester-long courses do not demand too much time for each session, and yet the whole semester provides enough time for practice, application, and habit-formation. Also, Hope, Jill, and Sam all welcomed the idea of having personal strategy coaching. With enough time and resources, individual coaching might be the best method of strategy instruction. I felt this strongly during the interviews and observations. The recommended procedure will be: 1) assess student's personal English learning situation and current strategy use

together with the student; 2) go to observe the student in classrooms or at conferences, audiotape or videotape him or her, and then analyze it together with the student; 3) discuss with the student his or her challenges, strengths and weaknesses; 4) work with the students together to design a careful plan of strategy use for each student; 5) let the student come back regularly to talk about it and remind the student constantly to stay open-minded to what works and what does not; 6) at the end, assess together with the student the strategy use plan after some time of putting it into practice. If necessary, a new cycle of strategy coaching will begin.

Based on the above insights, a simple but applicable strategy instruction model for non-native English speaking graduate students is proposed and described in figure 6.2.

Figure 6.2

Strategy Instruction for Non-native
English speaking graduate students

Starting point
1. Analysis of students' background (nine factors)
2. Students' current strategies

Contents of instruction
1. Categries and inventories of strategies
2. Social-cultural interactional strategies and affective strategies
3. Presentation strategies
4. Plan strategy use
5. Continue to "collect" and test strategies through ""experiencing

Forms of instruction
1. One-credit courses and workshops
2. Individualized coaching

6.3. Implications for future research

This research project uses a mixed-method approach to investigate the target student group's strategy use. The quantitative part provides the overall picture, and the qualitative part provides details that add depth, explanations, insights and understanding.

The project proves that using questionnaire data, interviews, and classroom observations as major sources of data is an efficient way for strategy use investigation.

Since the student group seems to focus on speaking much more than listening, a questionnaire focusing on speaking strategies might be necessary. Furthermore, a questionnaire for investigating non-native graduate students' academic presentation strategies might be needed for research and pedagogical purposes. A questionnaire for investigating non-native graduate students' relative perceptions is also a worthwhile project to develop. It is recommendable to add text questions into a questionnaire, because those questions often provide surprisingly rich details, as proved by Item 19 and Item 21 on the ASESS questionnaire.

This project focuses on non-native graduate students enrolled at one university only. It will be beneficial to conduct similar projects in another comprehensive university and compare those two results. Of course, a similar project to investigate the academic English strategy use of non-native undergraduate students might also be necessary.

Finally, Appendixes VII and VIII also provides an inventory of the strategies that have been mentioned by students other than those on the questionnaire. Those strategies can be materials for developing inventories and questionnaires in the future.

6.4. Conclusion

The main **purpose** of this project is to gather reliable data about the current situation of academic English listening and speaking strategy use and the learning of academic spoken English among non-native graduate students. This investigation not only will provide insights for pedagogical purposes, but also will fill a gap in the

literature, as data about non-native graduate students' strategy use is rare.

The results led us to infer that non-native graduate students at this university might use academic English listening and speaking strategies only sometimes, not quite often. Also, they do not usually plan carefully what strategies they are going to use. In addition, they generally do not know much about strategies and strategy use. On the other hand, the results disclose a gap between students' ambitions regarding their spoken English proficiencies and their actual levels. Today's non-native graduate students are not satisfied with just getting by in classes; they want to teach and present ideas clearly and convincingly. They want to be active members of their "communities of practice" (Wenger, 2007), and even "change the world" (quoting Alex) through their speech in English. Yet, they still face a number of challenges in reaching their goals. Their actual spoken English proficiency levels are still below their ideal, and the need for strategy instruction is justified. In fact, the students provided valuable suggestions and insights about strategy instruction, such as strategies must be flexible, evolving, individualized, and put into practice. They also welcome workshops, one-credit courses, and individual coaching on strategy use. The research data also calls for presentation strategy instruction and instruction on affective strategies.

Another valuable contribution of this project is that it investigated students' perceptions on key issues related to academic spoken English: their goals, strengths and weakness, challenges, and their opinion of American academic classroom culture. It is important to know that they care about academic spoken English and they are trying hard to learn. Students also shared candidly their fear of failure, concerns, trials, errors, and also their improvements and accomplishments. In Michael's words, they "have made a

lot of mistakes, and also have improved a lot." The overall impression is that in regard to learning spoken academic English, they are patient ("it is a day-to-day process"), innovative (using a lot of strategies on their own), attentive ("always practicing, always experiencing"), and evolving (from focusing on accent/pronunciation to focusing on ideas). They have genuinely positive feelings towards the English-speaking community, and want to make friends outside their own people, with "people of a different color." Even Hope expressed her goal to make friends with English-speaking people. I believe all the above details will be valuable to those who work with non-native English speaking graduate students, because they offer a chance for them to see the real person.

Other accomplishments of this research project include the following: 1) it compared the strategy use patterns of this student group with that depicted in the literature as the strategy use patterns of the more "successful" learners; 2) it proposed a model depicting a group of factors that could possibly affect the academic spoken English strategy use of this group; 3) it provided an inventory of non-native English speaking graduate students' academic English listening and speaking strategies (see appendixes VII and VIII); and 4) finally, it validated a new questionnaire, the first of its kind to investigate academic English listening and speaking strategies of non-native graduate students. I believe it will continue to be a useful tool for researchers and instructors, after further revisions.

Appendix I
Summary of Major Studies Examining Listening Strategies

Study	Participants	Instruments	Major Findings
Goh (1998)	16 Chinese ESL students in a university ESL program in Singapore	Retrospective verbal reports	1) The "high ability" learners will use a larger repertoire of cognitive and metacognitive tactics and strategies. 2) The "high ability" learners will move on when encountering difficulties while the "low ability" learners will "get stuck".
Goh (2002)	Chinese EFL learners in Singapore. Two informants were selected for further analysis: a "high ability" listener and a "low ability" listener.	immediate retrospective protocols. Learners' listening diaries for the purpose of triangulation.	1) The "high ability" learner used cognitive and meta-cognitive strategies more effectively. 2) the "high ability" listener actively monitored her comprehension and attention. She also focused on the big picture. Her strategies interacted with each other. 3) More successful learners should be flexible and strategic with time, energy and attention.

Vandergrift (1997)	20 high school L2 learners of French	Two –way information gap activities	novel learners used more "kinestics" and "faking" strategies; while more advanced learners used more "uptaking" and "hypothesis testing" strategies
Vandergrift (2003)	Thirty-six grade 7 students learning French	Main instrument: Think-aloud data analyzed both quantitatively and qualitatively	1) more skilled learners used much more metacognitive strategies 2) more skilled listeners are more flexible and open 3) the more skilled listener used "a dynamic interactive approach of top-down and bottom-up processing" 4) the more skilled listener orchestrate a number of metacognitive and cognitive strategies

Vandergrift, et. al. (2006)	Two groups of learners: 966 learners for the exploratory factor analysis and 512 language learners for the confirmatory factor analysis. They were from different countries, including college students, high school students and government employees.	Questionnaire	The following metacognitive strategies are crucially important to listening comprehension: 1) strategies that help learners concentrate such as getting back on track when losing concentration 2) strategies that prepare listeners before the task and help them evaluate the effects such as having a goal in mind while listening and evaluating one's listening 3) strategies that help learners to inference, such as using one's personal knowledge to infer the meaning
Graham, et al. (2008)	Two lower-intermediate learners of L2 French in secondary schools in England.	Main instrument: verbal reports	1) the more successful learner used meta-cogntive strategies to double-check and question his interpretations. 2) the more successful learner tried to gain an overall understanding of the passage. 3) It is important to use strategies appropriately according to the task and other contexts.

Farrell & Mallard (2006)	14 French learners of all proficiency levels	two-way information gap tasks	Uptaking, hypothesis testing, and text-level reprise were the most frequently used strategies across the proficiency levels

Appendix II
Summary of Major Studies Examining Speaking (Communication) Strategies

Study	Participants	Major instruments	Major findings
Littlemore (2003)	82 French speaking, university-level intermediate-to-advanced learners of English		Reconceptualization strategies (describing the item's distinctive features, location, function, activity, etc. to make up for a gap in vocabulary) were the most effective in communicating the meaning. Compensation strategies that minimize cross-culture misunderstandings were most effective.
Griffths (2003)	348 ESL students aged 14-64, from 21 different counties, and of various proficiency levels	Strategy Inventory for Language Learning (SILL) for speakers of other languages learning English (Oxford,1990)	1) Advanced students used strategies much more frequently than elementary students. 2) Advanced students used more meta -cognitive, affective and social strategies. 3) Advanced students used "tolerance of ambiguities" strategies and "utilizing available resources".

Green and Oxford (1995)	374 learners of different English proficiency levels	SILL	1) More successful learners use active-use strategies to proactively engage in conversations in the target language. 2) More successful learners used active-use strategies in combination with those strategies that were frequently used by less successful learners as well.
Samimy (2008)	A male American graduate student studying Arabic	Interviews, artifacts, records	The successful learner created as many opportunities as possible to immerse himself in Arabic, to use Arabic and to learn Arabic. This learner used active-use strategies frequently.
Carson and Longhini (2002)	The author (diarist)	The author's own learning diary	The successful learner used metacognitive, affective and social strategies. She used compensation strategies frequently. She also tried to find opportunities to interact with native speakers. She used strategies creatively, not mechanically. This learner also used active-use strategies.

Kawai (2008)	Two Japanese advanced speakers of English	e-mailed questions	Those two advanced learners effectively combined strategies to help them during pre-task, in-task, and post-task periods.
Nakatani (2006)	62 female EFL students in Japan	Oral Communication Strategy Inventory (OCSI) and SILL	1) the high oral proficiency group reported more use of social affective strategies, fluency-oriented strategies, and negotiation for meaning while speaking strategies.

Appendix III

The findings of an academic listening and speaking journal study

The diarist/researcher kept a detailed learning strategy journal during the 85 days from February 7 to May 11, 2009. During this time period, the researcher took two graduate level courses at a large research university in the U.S. Both were about education. One was 3 credit, while the other was 1 credit. The 3 credit course was obviously much more intensive and demanding academically than the 1 credit course. The 3 credit course had about 40 students, while the 1 credit course had about 10 students. In both courses the researcher took, class discussions were heavily encouraged and the mean teaching method in the classroom was lecturing and discussion. The researcher (diarist) recorded how she used strategies to help her improve her academic English listening and speaking in those classes. This study provides one more piece of evidence that academic English listening and speaking is important to NNES graduate students and strategy use can help them improve their classroom performance. The diarist focused on two challenges she encountered regarding classroom discussions and how she used strategies to overcome them: 1) turn-taking 2) disagreeing with others in classroom discussions. Also, preferred use of metacognitive strategies was proved by the researcher's results from taking a questionaire and also by the ample evidence presented in the diary. Another important strategy highlighted in this study was a social-cultural interactive strategy--to observe American classroom culture and decide one's own coping strategies based on that. Overall, the study emphasized the importance of coordinating strategies based on one's own special situation and the tasks. With its limitations as a learner journal study, this study nevertheless provides guiding insights and real-life

evidence for the development of this dissertation study.

Appendix IV: A qualitative pilot study of six NNES graduate students

In order to find out about non-native graduate students' perceptions about their listening and speaking in the classroom and also their strategy use, in Fall, 2009, the researcher did a small-scale qualitative pilot study. I observed six NNES graduate students in their classrooms and also interviewed them. The interview lasted about 35 minutes, and was recorded on audiotape.

The following is a summary of key findings and interesting themes that have helped shape the dissertation study:

1) The NNES graduate students generally agreed that academic English listening and speaking are important to them. However, they did not express strong interest in listening and speaking strategies. The researcher suggests two explanations of this 1) they do not have enough knowledge about strategy use 2) they do not really seriously want to improve their listening and speaking.

2) Classroom observations revealed that those NNES graduate students bypassed many opportunities of speaking in class (the effect of the researcher's presence has been considered). Further analysis seemed to suggest that they tended to remain in their "safety zones". For example, in both classes observed, NNES graduate students tended to sit together with students from their own countries and would talk in their native language in class. Also, they did not join in discussions when the topic was not familiar to them. They became much more outspoken when they were prompted to talk about familiar things, such as the educational situation in their own countries.

3) The NNES graduate students could have used strategies to help them become much

more active participants in classrooms. For example, they could have deliberately chosen to sit with Americans or students from other countries to improve chances of practicing English. They could have prepared very well about topics that they are not familiar with before they come to classes to discuss them. In both cases, strategies could have helped them.

4) There is a perceived need for strategy instruction geared towards NNES graduate students, since it seemed that those NNES graduate students do not have systematic knowledge about strategies and have not thought about strategies carefully either.

5) There is a perceived need to raise awareness of the importance of academic English listening and speaking among NNES graduate students.

6) NNES graduate students perceive difference between American classroom culture and the classroom culture back home.

Appendix V: Academic Spoken English Strategies Survey (ASESS)

Dear participants:
We treat the data that you put here very seriously in order to get a result as accurately as
possible. Please carefully choose the answers that are closest to your situation.
All responses will be kept confidential. Thank you very much in advance for your time
and cooperation!

Are you a non-native English speaking graduate student? Check your answer.

Yes and I am a doctoral student. _____
Yes and I am a Master's student. _____

Female ☐   Male ☐

What is your academic discipline? _____

What is your country of origin? _____

Your e-mail address (optional, for entering into the drawing for prizes) _____

1. How would you rate your level of academic English[28] listening and speaking? (Rate yourself on a scale from 1 to 10, 1 being the lowest and 10 the highest). Please put an "x" in a square.

	1	2	3	4	5	6	7	8	9	10
Listening										
Speaking										

2. Regarding the following statements, circle one that fits your situation the most.
    1= strongly agree 2=agree 3=neutral 4=disagree 5=strongly disagree

a)   I look at each class or conference as a great learning opportunity. 1 2 3 4 5
b)   I seek opportunities to go to presentations, lectures and conferences even if it is not required. 1 2 3 4 5

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[28] English used for academic purposes, such as in lectures, academic presentations, and classroom discussions

Academic English Listening **1**=never or almost never, **2**=rarely, **3**=sometimes, **4**=often, **5**=always or almost always, circle one.

1	I try to relax before the class (presentation) so I can concentrate later.	1 2 3 4 5
2	I arrive early for classes or presentations and choose to sit where I can hear the speaker (instructor) better.	1 2 3 4 5
3	I check the meaning of key words or concepts before a lecture.	1 2 3 4 5
4	I decide in advance what my listening purpose is and I listen with that purpose in mind.	1 2 3 4 5
5	Before I listen, I try to predict what new things I might learn, based on what I already know about the topic.	1 2 3 4 5
6	I infer (guess) the meaning of unknown words from the contexts of the speech.	1 2 3 4 5
7	If I don't understand a word or something else that I hear, I use my laptop to check about it on-line.	1 2 3 4 5
8	As I listen, I make predictions about what the speaker will talk about next.	1 2 3 4 5
9	While I listen, I periodically check whether the information is making sense to me.	1 2 3 4 5
10	As I listen, I will adjust my understanding if I realize my understanding is not correct.	1 2 3 4 5
11	I pay attention to the speaker's facial expressions, gestures and voice changes.	1 2 3 4 5
12	I encourage myself if I feel frustrated because I cannot understand certain parts of the speech.	1 2 3 4 5
13	When my mind wanders, I try to get back on track and recover my concentration.*	1 2 3 4 5
14	When I have difficulty understanding what I hear, I keep concentrating without giving up.	1 2 3 4 5
15	If I hear a word that I do not know, I quickly judge whether I need to check its meaning, without losing track of the speech.	1 2 3 4 5
16	I identify what I don't understand about the speech, and ask a precise question to solve the problem.	1 2 3 4 5
17	I summarize (in my head or in writing) important information that I have heard.	1 2 3 4 5
18	After the lecture (presentation), I reflect on how much I understood and how I can improve next time.	1 2 3 4 5
19	After a lecture or presentation, I discuss with the lecturer (presenter) or somebody else.	1 2 3 4 5
20	I tape record the lecture or presentation, so that I can listen to it again.	1 2 3 4 5

*Item adapted from the MALQ (Metacognitive Awareness Listening Questionnaire) (Vandergrift, et al, 2006)

Academic Speaking 1=never or almost never 2=rarely 3=sometimes 4=often 5=always or almost always   Circle one.

1	I pay attention to my pronunciation and try to sound as clear as possible.	1 2 3 4 5
2	I read aloud materials in my field to practice speaking in academic English.	1 2 3 4 5
3	I deliberately try to expand my academic vocabulary in English.	1 2 3 4 5
4	I pay attention to how people in my field explain complicated ideas in English.	1 2 3 4 5
5	I seek opportunities to interact with classmates, professors and others in academic settings (classes, conferences, group activities…)	1 2 3 4 5
6	I try to learn from good presenters or classmates who speak clearly and convincingly.	1 2 3 4 5
7	I prepare key points to share in class.	1 2 3 4 5
8	Before I speak in class, I think about how to make my message clear and precise.	1 2 3 4 5
9	I volunteer to answer teacher's questions in class.	1 2 3 4 5
10	During class discussions, I listen attentively to what my classmates say in order to join the conversation.	1 2 3 4 5
11	I build upon what my classmates have said and join in the class discussion.	1 2 3 4 5
12	When I speak, I put the stress on important words (speak them louder or for longer time).	1 2 3 4 5
13	I pay attention to how people agree and disagree with each other in classes and at academic conferences.	1 2 3 4 5
14	If I raise my hand and fail to get the chance to speak in class, I will raise it again without giving up.	1 2 3 4 5
15	Although I know my English is not perfect, I encourage myself to speak up when I have something meaningful to say.	1 2 3 4 5
16	I seek opportunities to present (such as at conferences).	1 2 3 4 5
17	I rehearse before presenting in class or at a conference.	1 2 3 4 5
18	I pay attention to my audience's reactions while I speak and adjust accordingly.	1 2 3 4 5
19	After a class (or a presentation), I reflect on how I participated in the class or how I presented, and think about how to improve.	1 2 3 4 5
20	If I feel satisfied with my class participation or presentation, I will praise or reward myself.	1 2 3 4 5

Appendix VI: **Interview Protocol**

Interviewee ID:
Date/Time: _____   Place:_____

1. Could you please briefly introduce yourself…?

2. Could you describe what kind of English learner you are?

3. As a graduate student, what goals do you have regarding oral English proficiency?

    (I: be able to understand lectures and deal with daily life, II: be able to join in class

    discussions, and talk with professors III: be able to present at conferences, IV: be

    able to become a faculty in the English-speaking world)

4. How important is it for you to improve your oral English proficiency and why? Please

    elaborate on that.

5. Do you feel confident that you can reach the level of oral English proficiency that you

    desire?

6. What steps do you take to reach a high level of oral English proficiency?

7. Could you describe for me what strategies are, when and how you can use them?

8. What do you think if I say that listening and speaking strategies would help you with

    the quality and efficiency of your reading and writing as well?

9. Regarding your oral English proficiency, what are your strengths and what are your

    concerns or challenges if any?

10. Have you thought of any strategies you can take to overcome those challenges?

11. Has there been a situation whereby you deliberately selected a group of strategies to

    help you reach a certain goal or overcome a challenge, in terms of academic English

    listening and speaking? Please describe how you chose those strategies? Were those

    strategies effective?

12. Do you think you are using enough strategies to enhance your oral English

    proficiency?

13. Do you think it is necessary for you to know more about listening and speaking

    strategies?

14. What would make it easier for you to use more strategies to help you with your

    academic English listening and speaking?

E-mail follow-up questions:

1) What do you think about the American academic culture (including classroom culture, conferences, group work interactions)? Any thoughts, comments or impressions? You can compare it with academic culture in your own country too.

2) What is your experience about joining in classroom discussions, doing group work such as group presentations, interacting with professors, establishing relationships with other colleagues? Can you give some examples of your experience?

3) Have you used any strategies to help you do the above?   Please describe them.

Appendix VII

Main academic listening strategies mentioned by students (question 17 on the questionnaire) in addition to the questionnaire items and those discussed by the interviewees.

1. Watching on-line videos or presentation clips about the topic, and
2. Taking extracurricular classes in arts or sports
3. Listening to podcasts or on-line lectures
4. Learning the vocabulary first
5. Getting used to different accents
6. Teaching undergraduate classes
7. Taking part in university activities
8. Reading the textbook before the class
9. Writing down questions to ask later
10. Coming to class with printed slides
11. Reciting academic papers or textbooks that explain complicated ideas or concepts
12. Seeking to understand the presenter's main arguments and critically judging the meaning
13. Watching movies with sub-titles and paying attention
14 Listening to the radio for calling-in discussions

Appendix VIII
Main academic speaking strategies mentioned by students (Item 18 on the questionnaire)
in addition to the questionnaire items and those discussed by the interviewees

1. Borrowing classmates' or instructor's vocabulary during a discussion
2. Singing songs aloud with the singer in English
3. Talking with the audience before my talk to gauge their knowledge and ideas
4. Discussing ideas with the advisor and classmates
5. Paying attention to the speaker's stress patterns while watching TV shows
6. Auditing classes
7. Repeating and practicing a sentence several times when hearing an usual word or ways of speaking
8. Trying to think in English
9. Rehearsing with someone who speaks the same native language before presentations
10. Trying to remember how academic people pronounce certain words.
11. Using simple vocabulary and avoiding long sentences
12. Writing down an outline of the speech before speaking
13. Recording the rehearsals and analyzing them to see the strengths and weakness
14 Using a CD program or tutorials to improve one's accent or pronunciation
15 Making a note of useful expressions
16. Participating in teamwork
17. Tutoring other students in different courses

Appendix IX: Learner Backgrounds in terms of gender, degree level, regions of origin, and academic fields.

Gender and Degree level

	Male	Female	Ph.D.	Master's
Frequency	222	159	287	93
Percentage	58.3%	41.7%	75.5%	24.5%

Regions of origin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Asia	256	66.7	66.7	66.7
	South America	41	10.7	10.7	77.3
	Europe	50	13.0	13.0	90.4
	Near and Middle East	29	7.6	7.6	97.9
	Africa	8	2.1	2.1	100.0
	Total	384	100.0	100.0	

Academic Fields

|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	social s/humanities/education	109	28.4	28.7	28.7
	Sciences	112	29.2	29.5	58.2
	engineering	121	31.5	31.8	90.0
	Medicine	4	1.0	1.1	91.1
	Business	34	8.9	8.9	100.0
	Total	380	99.0	100.0	
Missing	System	4	1.0		
Total		384	100.0		

Appendix X: Histograms of participant's regions of origin and academic fields
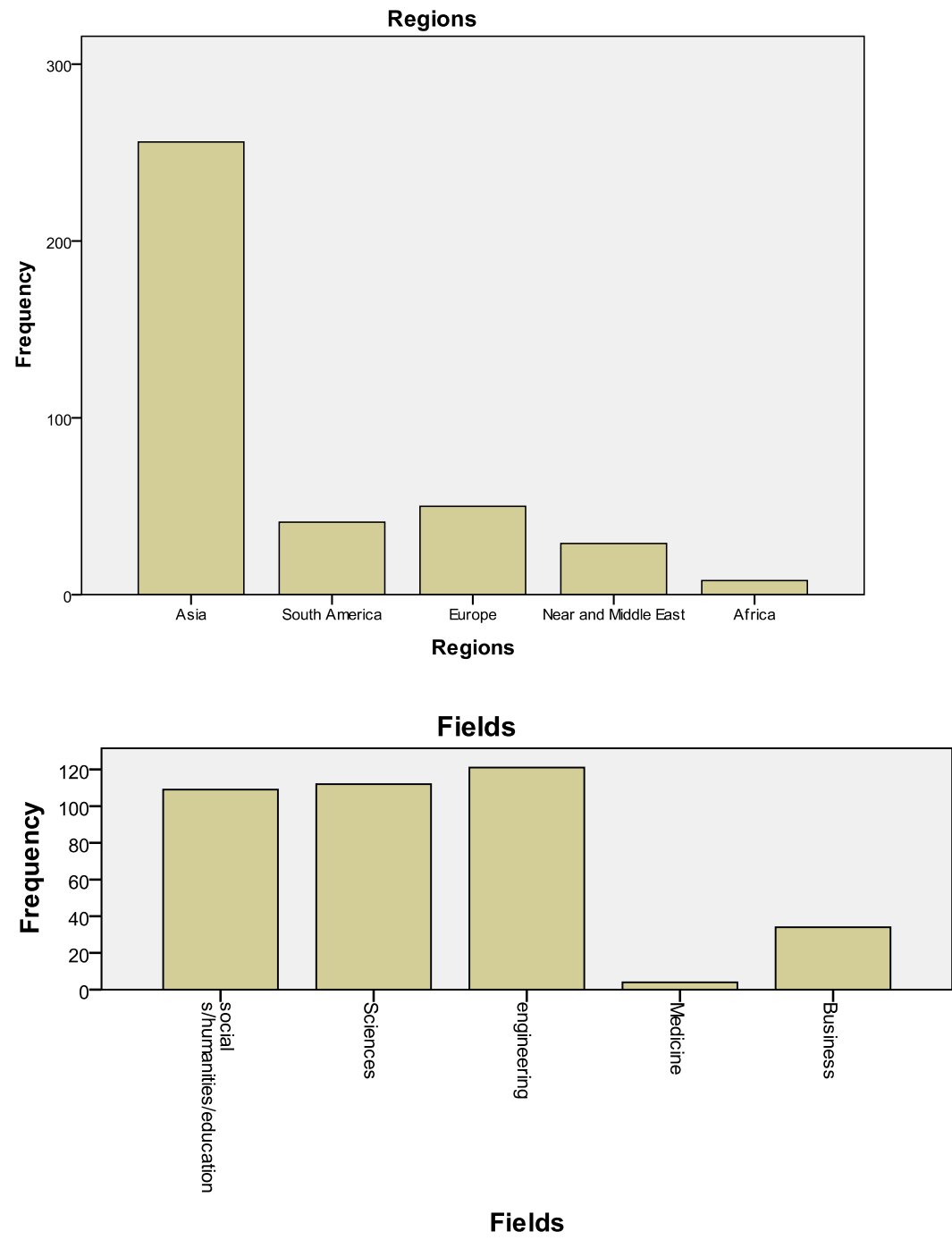
Appendix XI: The histogram of respondents' self rating of academic English listening and speaking proficiency

listening

Mean = 8.33
Std. Dev. = 1.38
N = 384

speaking

Mean = 7.42
Std. Dev. = 1.717
N = 382
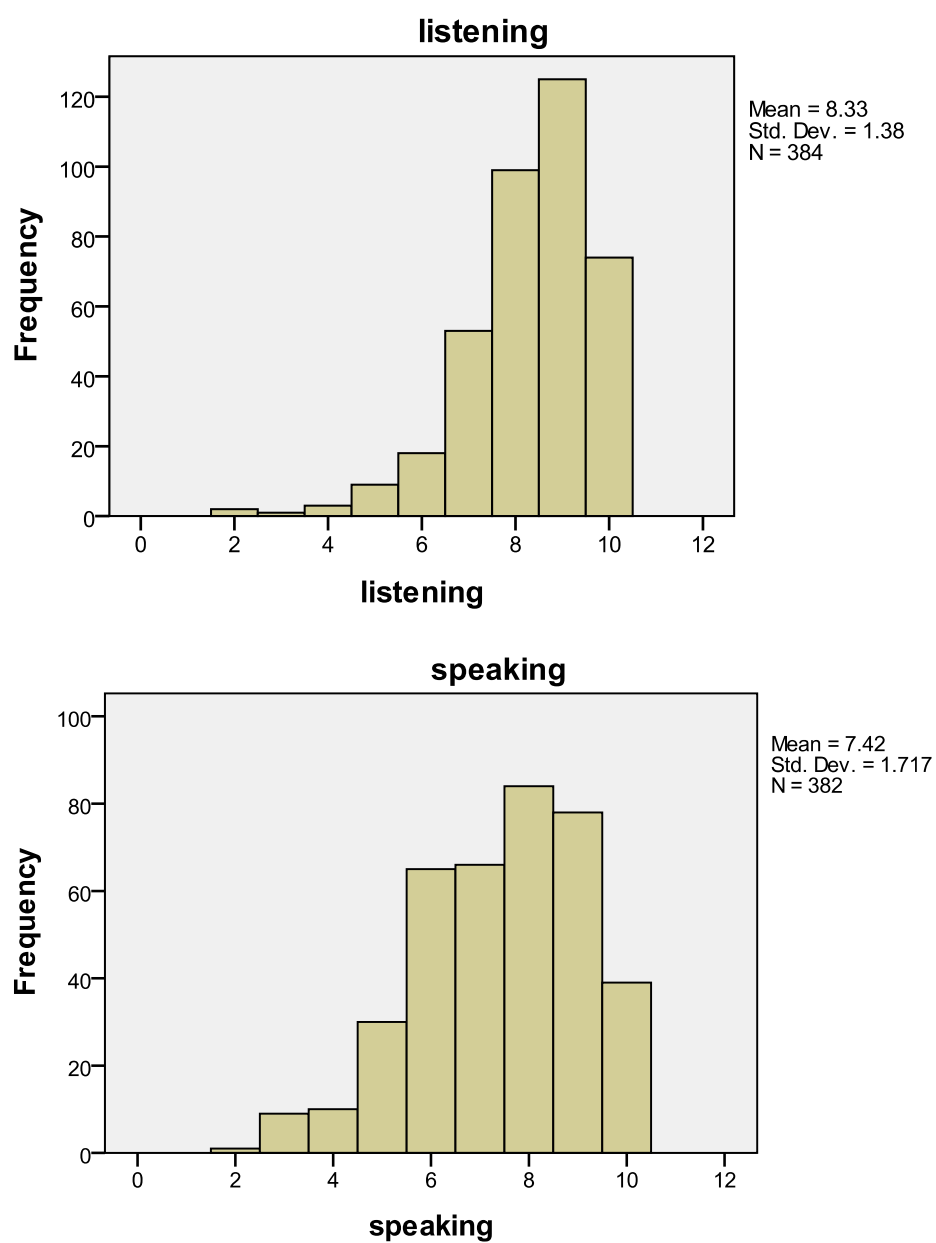
References

Alexander, P. (2006). *Psychology in learning and instruction*. Upper Saddle River, New Jersey: Pearson Education Inc.

Amuzie, G. and Winke, P. (2009). Changes in language learning beliefs as a result of study abroad. *System,* 37, 366-379.

Bawn, J. (2006). Locus of learning and affective strategy use: Two factors affecting success in self-instructed language learning. *Foreign Language Annals*, *39*(4), 640-659.

Brown, J. D., Robson, G., & Rosenkjar, P. (2001). Personality, motivation, anxiety, strategies and language proficiency of Japanese students. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and language acquisition* (pp.361-398). Honolulu, HI: Second Language Teaching and Curriculum Center, University of Hawaii.

Bernat, E. (2008). Beyond beliefs: Psycho-cognitive, sociocultural and emergent ecological approaches to learner perceptions in foreign language acquisition. *Asian EFL Journal*, *10*(3), Article 1.

Benson, P., & Gao, X. (2008). Individual variation and language learning strategies. In S. Hurd & T. Lewis (Eds.), *Language learning strategies in independent settings* (pp.25-40). Bristol, England: Multilingual Matters.

Berne, J. E. (2004). Listening comprehension strategies: A review of the literature. *Foreign Language Annals, 37*(4), 521-533.

Boxer, D., & Cohen, A. (2004). *Studying speaking to inform second language learning*. Clevedon, Buffalo, Toronto: Multilingual Maters Ltd.

Bruen, J. (2001). The parallel development of oral proficiency and use of language learning strategies. *UP, 34*(2), Fall, 158-168.

Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching*, *1*(1), 14-26.

Chamot, A.U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics*, 25, 112–130.

Chamot, A. U. (2008). Strategy instruction and good language learners. In C. Griffiths (Ed.), *Lessons from Good Language Learners* (pp.266-281). Cambridge: Cambridge University Press.

Chen, A. (2009). Listening strategy instruction: Exploring Taiwanese college students' strategy development. *Asian EFL Journal*, 54-84.

Cheng, L., Myles, J., & Curtis, A. (2004). Targeting language support for non-native English-speaking graduate students at a Canadian university. *TESL Canada Journal*, 21, 50–71.

Choi, T. (2006). Asian international students' academic adjustment in a U.S. graduate school and Stanton-Salazar's framework. *Pacific Asian Education*, 18(2), 51-68.

Cohen, A.D. (1996). Verbal reports as a source of insights into second language learner strategies. *Applied Language Learning*, 7, 5-24.

Cohen, A. D. (1998). *Strategies in learning and using a second language*. London: Longman.

Cohen, A. D. (2007). Coming to terms with language learner strategies: Surveying the experts. In A. Cohen and E. Macaro (Eds.), *Language learner strategies: Thirty years of research and practice.* Oxford, England: Oxford University Press.

Cohen, A.D., Weaver, S. J. , & Li, T.-Y. (1998). The impact of strategies-based instruction on speaking a foreign language. In A. D. Cohen (Ed.), *Strategies in learning and using a second language* (pp. 107-156). Essex, UK: Longman.

Cohen, L., Manion, L., & Morrison K. (2000). *Research methods in education* (5th ed.). New York : Routledge.

Cohe, L. Manion, L., & Morrison K. (2007). *Research methods in education* (7th ed.). London and New York: Routledge.

Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand oaks, London, New Delhi: SAGE Publications.

Cross, J. (2009). Effects of listening strategy instruction on news videotext comprehension. *Language Teaching Research*, 13 (2), 151-176.

Crump, B. & Logan, K. (2008). A Framework for Mixed Stakeholders and Mixed Methods. *The Electronic Journal of Business Research Methods*, 6 (1), 21 – 28.

Derrington, K. (2006). *Comparative analysis of perceptions of metacognitive processes in traditional school leavers and mature age entry students in their first year of university education. Master of education thesis, Queensland University of Technology.*

DeSanto, R. (2008). SLA reflections on learning Arabic via a collaborative diary study. *The International Journal of Learning*, 15(10), 197-205.

Dörnyei, Z. & Scott, M. L. (1995). Communication strategies in a second language: definitions and taxonomies. *Language Learning*, 47(1), 174-209.

Dörnyei, Z. (2006). Individual differences in second language acquisition. *AILA Review*, 19, 42-68.

Duncan, T. G., & McKeachie, W. (2005). The making of the motivated strategies for learning questionnaire. *Educational Psychologist*, *40*(2), 117-128.

Ellis, R. (1994). *The Study of second language acquisition*. Oxford, England: Oxford University Press.

Ehrman, M. E. , & Leaver, B. L. (2003). Cognitive styles in the service of language learning. *System*, *31*, 393-415.

Ehrman, M. E., Leaver, B. L., & Oxford. R. L. (2003). A brief overview of individual differences in second language learning. *System*, 31, 313-330.

Farrell, T., & Mallard, C. (2006). The use of reception strategies by learners of French as a foreign language. *The Modern Language Journal*, 90 iii. 338-352.

Ferris, D. , & Tagg, T. (1996). Academic listening/speaking tasks for ESL students: Problems, suggestions, and implications. *TESOL Quarterly*, *30* (2), 297-320.

Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition*. Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center.

Goh, C. (1998). How ESL learners with different listening abilities use comprehension strategies and tactics. *Language Teaching Research*. *2*.(2). 124-147.

Goh, C. (2002). Exploring listening comprehension tactics and their interaction patterns. *System*, *30*(2), 185-206.

Graham, S. (2006). A study of students' metacognitive beliefs about foreign language study and their impact on learning. *Foreign Language Annals, 39*(2). 296-309.

Graham, S. (2006). Listening comprehension: The learners' perspective. *System*, 34. 165-192.

Gu, Q., Schweisfurth, M. , and Day, C. (2010). Learning and growing in a 'foreign' context: intercultural experiences of international students. *Compare*, *40*(1) 7-23.

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

Green, J. M. & Oxford, R. L. (Summer, 1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly, 29* (2). 261-297.

Griffiths, C. (2003). Patterns of language learning strategy use. *System*, 31, 367-393.

Griffiths, C. (2008). (ed.). *Lessons from Good Language Learners*. Cambridge: Cambridge University Press.

Johnson, R. B. and Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33,14-26.

Halic, O., Greenberg, K., & Paulus, T. (2009). Language and academic identity: A study of the experiences of non-native English speaking international students. *International Education*, 73-93.

Hoekje, B. ,& Williams, J. (1992). Communicative competence and the dilemma of international teaching assistant education. *TESOL Quarterly*, *26* (2), 243-269.

Hsiao, T., & Oxford, R.L. (2002). Comparing theories of language learning strategies: A confirmatory factor analysis. *Modern Language Journal*, *86*(3), 368-383.

Horwitz, K. E. (1988). The beliefs about language learning of beginning university foreign language. *The Modern Language Journal, 72*(3), 283-294.

Hurd, S. (2007). Distant voices: Learners' stories about the affective side of learning a language at a distance. *Innovation in **Language** Learning & Teaching*, *1*(2), 242-259.

Institute of International Education (2008-2009). Open Door Reports 2008-2009. Retrieved March 23, 2010, from http://opendoors.iienetwork.org/?p=28633.

Kawai, Y. (2008). Speaking and good language learners. In C. Griffiths (Ed.), *Lessons from good language learners* (pp.218-230). Cambridge: Cambridge University Press.

Kim, S. (2006). Academic oral communication needs of East Asian international graduate students in non-science and non-engineering fields. *English for Specific Purposes*, 25, 479-489.

Kormos, J., & Csizer, K. (2008). Age-related differences in the motivation of learning English as a foreign language: Attitudes, selves, and motivated learning behavior. *Language Learning. 58* (2), 327-355.

Kwai, Y. (2008). Speaking and good language learners. In C. Griffiths (Ed.), *Lessons from good language learners.* Cambridge: Cambridge University Press.

Leaver, B. L., & Shekhtman, B. (2002). *Developing Professional-Level Language*

Proficiency. Cambridge: Cambridge University Press.

Lee, K. R., and Oxford, L. R. (2008). Understanding EFL learners' strategy use and strategy awareness. *Asian EFL Journal*, *10* (1). Article 1.

Li, D. (2007). Coping with linguistic challenges in UK higher education: the use of strategies by Chinese research students. **Language** *Learning Journal*, *35*(2), 205-219.

Leger, D., & Storch, N. (2009). Learners' perceptions and attitudes: Implications for willingness to communicate in an L2 classroom. *System,* 37, 269-285.

Littlemore, J. (2001). An empirical study of the relationship between cognitive style and the use of communication strategy. *Applied Linguistics*, *22*(2), 241-265.

Littlemore, J. (2003). The communicative effectiveness of different types of communication strategies. *Systems*, 31, 331-347.

Lu, Y., & Berg, D. R. (2008). ESL learners' learning motivation and s**trategies**. *International Journal of Learning*, *15*(1), 17-24.

Macaro, E., Graham, S., & Vanderplank, R. (2007). A review of listening strategies: Focus on sources of knowledge and on success. In A. Cohen & E. Macaro (Eds.), *Language learner strategies: Thirty years of research and practice.* (pp.166-185). Oxford, England: Oxford University Press.

MacIntyre, P., Clement, R., & Donovan, L. (2002). Willingness to communicate in the L2 among French immersion students. *SLRF*, 1-6.

MacIntyre, P., Zoltán, D., Clément, R., & Noels, K. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal,* *82*(4), 545-562.

Manchon, R. M. (2008). Taking strategies to the foreign language classroom. *International Review of Applied Linguistics in Language Teaching*, *46* (3), 221–243.

Manfred, W. M. (2007). The *Relationships between the use of metacognitive language-learning strategies and language-learning motivation* among Chinese-speaking. *Asian EFL Journal***,** *9*(3), Article 5.

Morita, N. (2004). Negotiating participation and identity in second language academic communities. *TESOL Quarterly*, *38*(4), 573-603.

Masgoret, A. M. & Gardner, R. C. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates.

Language Learning, *53*, 123-163.

Miller, L. (2009). Engineering lectures in a second language: what factors facilitate students' listening comprehension? *Asian EFL Journal, (11)*2, Article 1.

Murphy, J. (1991). Oral communication in TESOL: Integrating speaking, listening, and pronunciation. *TESOL Quarterly*, *25*(1), 51-75.

Nakatani, Y. (2006). Developing an oral communication strategy inventory. *The Modern Language Journal*, 90, ii. 151-168.

Nakatani, Y & Goh, C. (2007). A review of oral communication strategies: Focus on interactionist and psycholinguistic perspectives. In A. Cohen & E. Macaro (Eds.), *Language learner strategies: Thirty years of research and practice.* Oxford, England: Oxford University Press.

Norton Pierce, B. (1995). Social identity, investment, and language learning. *TESOL Quarterly*, *29*(1), 9-31.

O'Bryan, A. & Hegelheimer, V. (2009). Using a mixed methods approach to explore strategies, metacognitive awareness, and the effects of task design on listening development. *Canadian Journal of Applied Linguistics*, *12*(1), 9-33.

Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Boston, MA: Heinle & Heile publishers.

Oxford, R. L. (1996). *Language Learning Motivation: Pathways to The New Century*. Honolulu, HI: University of Hawai'I Press.

Oxford, R. L. (2002). Language learning strategies in a nutshell: update and ESL suggestions. In J. Richards and W. Renandya (Eds.), *Methodology in Language Teaching: an Anthology of Current Practice*. Cambridge University Press.

Oxford, R. L. (2003). Language learning styles and strategies: Concepts and relationships. *IRAL, 41*, 271-278.

Oxford, R. L. (2008). Hero with a thousand faces: learner autonomy, learning strategies and learning tactics in independent language learning. In S. Hurd and T. Lewis (Eds.), *Language Learning Strategies in Independent Settings*. (pp.84-102). Bristol, Buffalo,Toronto: Multilingual Matters.

Oxford, R. L. & Ehrman, M. (1995). Adults' language learning strategies in an intensive foreign language program in the United States. *System*, *23*(3), 359-386.

Oxford, R. L. & Shearin, J. (1996). Language learning motivation in a new key. In R. L.

Oxford (Ed.), *Language Learning Motivation: Pathways to the New Century*. (Technical Report #11) (pp. 121-144). Honolulu, HI: University of Hawai 'I, Second Language Teaching & Curriculum Center.

Oxford, R. L. & Schramm, K. (2007). Bridging the gap between psychological and sociocultural perspectives on L2 learner strategies. In A. D. Cohen & E. Macaro (Eds.), *Language Learner Strategies: Thirty Years of Research and Practice*. (pp.47-68). Oxford, England: Oxford University Press.

Psaltou-Joycey, A. (2008). Cross-**Cultural** Differences in the Use of **Learning Strategies** by Students of Greek as a Second **Language**. *Journal of Multilingual & Multicultural Development*, 29 (4), 310-324.

Peacock, M. & Ho, B. (2003). Student language learning strategies across eight disciplines. *International Journal of Applied Linguistics*, *13*(2), 179-200.

Pintrich, P. R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into Practice*, *41*(4), 219-225.

Pintrich, P. R. & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology 82* (1), 33-40.

Rosenfeld, M., Leung, S., & Oltman, P. K. (2001). *The Reading, Writing, Speaking, and Listening Tasks Important for Academic Success at the Undergraduate and Graduate Levels.* TOEFL monograph series 2001 conducted for the Educational Testing Services. Retrieved at http://www.ets.org/Media/Research/pdf/RM-01-03.pdf. on April, 9, 2010.

Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, *9*(1), 41-51.

Saville-Troike, M. (2006). *Introducing second language acquisition*. Cambridge: Cambridge University Press.

Schmidt, R., & Watanabe, Y. (2001). Motivation, strategy use, and pedagogical preferences in foreign language learning. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (Technical Report #23, pp.313-359). Honolulu, HI: University of Hawai'I, Second Language Teaching and Curriculum Center.

Sims, R. R. & Sims, S. J. (2006). Learning styles, decontextualized testing, and the need for style-switching in minority students. In R. R. Sims & S. J. Sims (eds.), *Learning Styles and Learning*. New York: Nova Science Publisher, Inc.

Smagorinsky, P. (2007). Vygosky and the social dynamics of classrooms. *English Journal*

97 (2). 61-66.

Stevick, E. W. (1989). *Success with foreign languages: Seven who achieved it and what worked for them.* London: Prentice Hall.

Takeuchi, O., Griffiths, C., & Coyle, D. (2007). Applying strategies to contexts: the role of individual, situational, and group differences. In A. Cohen & E. Macaro (Eds.), *Language Learner Strategies: Thirty years of research and practice.* (pp.69-92). Oxford, England: Oxford University Press.

Ushioda, E. (2001). Language learning at university: Exploring the role of motivational thinking. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and Language Acquisition*, 361-98, Honolulu, HI: Second Language Teaching and Curriculum Center, University of Hawaii.

Usioda, E. (2008). Motivation and good language learners. In *Lessons from Good Language Learners.* (pp. 14-39). Cambridge: Cambridge University Press.

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

Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language learning, 53* (3), 463-496.

Vandergrift, L. (2004). 'Listening to learn or learning to listen?'. *Annual Review of Applied Linguistics*, 24 (I), 3-25.

Vandergrift, L. (2005). Relationships among motivation orientations, metacognitive awareness and proficiency in L2 listening. *Applied Linguistics*, 26 (1), 70-89.

Vandergrift, L., Goh, C., Mareschal, C, & Tafaghodtari, M. (2006). The metacognitive awareness listening questionnaire: development and validation. *Language Learning*, *56* (3), September, 431-462.

Vandergrift, L. (2008). Learning strategies for listening comprehension. In S. Hurd & T. Lewis (Eds.), *Language Learning Strategies in Independent Settings.* (pp.84-102). Bristol, Buffalo,Toronto: Multilingual Matters.

Vogely, A. (1995). Perceived strategy use during performance on three authentic listening comprehension tasks. *The Modern Language Journal*, *79* (1), 41-56.

Wang, J., Spencer, K., Xing, M. (2009). Metacognitive beliefs and strategies in learning Chinese. *System,* 37, 46-56.

Wenden, A. L. (1999). An introduction to metacognitive knowledge and beliefs in language learning: beyond the basics. *System*, 27, 435-441.

Wenger, E. (2007) 'Communities of practice. A brief introduction'. *Communities of practice* http://www.ewenger.com/theory/. Accessed April 10, 2010.

Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning, 50* (2), 203-243.

White, G. (2008). Listening and good language learners. In C. Griffiths (Ed.), *Lessons from Good Language Learners*. (pp. 208-217). Cambridge: Cambridge University Press.

White, C. (2008). Beliefs and good language learners. In C. Griffiths (Ed.) *Lessons from Good Language Learners*. (pp. 121-130). Cambridge: Cambridge University Press.

Yamamori, K., *Isoda*, T., *Hiromori, T., & Oxford, R. L.* (2003). Using cluster analysis to uncover L2 learner differences in strategy use, will to learn, and achievement over time. *IRAL*, 41, 381-409.

Yang, N.-D. (1999). The relationship between EFL learners' beliefs and learning strategy use. *System*, 27, 515-535.

Yoshiko, M., & Shimizu, H. (2007). Japanese *language* students' attitudes toward Kanji and their *perceptions* on Kanji l*earning* strategies. *Foreign Language Annals*. *40* (3). 472-490.

Zappa-Hollman, S. (2007). Academic presentations across post-secondary contexts: The discourse socialization of non-native English speakers. The *Canadian Modern Language Review*, *63* (4), 455-485.

Zimmerman, B. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25**,** 82–91.