THE EFFECTS OF A TECHNOLOGY-SUPPORTED TRAINING SYSTEM ON SECOND

LANGUAGE USE STRATEGIES FOR INTERNATIONAL TEACHING ASSISTANTS

A Dissertation

Presented to

the Faculty of the Graduate School

University of Missouri-Columbia

In Partial Fulfillment

of the Requirement of the Degree

Doctor of Philosophy

by

Shenghua Zha

Dr. Gail Fitzgerald, Dissertation Supervisor

AUGUST 2006

The undersigned, appointed by the Dean of the Graduate School, have examined the dissertation entitled

THE EFFECTS OF A TECHNOLOGY-SUPPORTED TRAINING SYSTEM ON SECOND LANGUAGE USE STRATEGIES FOR INTERNATIONAL TEACHING ASSISTANTS

Presented by Shenghua Zha

A candidate for the degree of Doctor of Philosophy
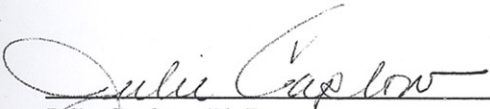
and hereby certify that in their opinion it is worthy of acceptance.
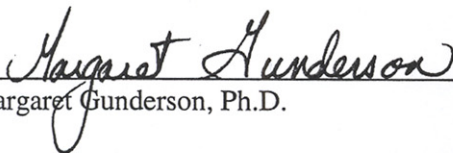

_____

Gail Fitzgerald, Ph.D.

_____

Denice Adkins, Ph.D.

_____

Julie Caplow, Ph.D.

_____

Sanda Erdelez, Ph.D.

_____

Margaret Gunderson, Ph.D.

THE EFFECTS OF A TECHNOLOGY-SUPPORTED TRAINING SYSTEM ON SECOND

LANGUAGE USE STRATEGIES FOR INTERNATIONAL TEACHING ASSISTANTS

Shenghua Zha

Dr. Gail Fitzgerald, Dissertation Supervisor

ABSTRACT

As previous studies suggested that ITA training should focus on communicative competence and the management of a repertoire of language strategies could result in the improvement of communicative competence, effective instructional methods are needed to empower international teaching assistants (ITAs) with language use strategies in order to improve their communicative competence when taking on teaching roles. Strategy-based instruction has been identified in some studies that could improve students' usage of language learning and use strategies. In addition, as possible solutions to the shortage of training experts and time in current ITA training programs in American colleges, online peer discussion and case-based learning have been found in a number of studies that can improve students' learning autonomy, allow them to learn to solve teaching problems and apply those solutions in real settings. However, the effectiveness of these instructional methods in ITA training program has not yet been identified in empirical studies.

The purpose of this quasi-experimental study is to investigate the effectiveness of online strategy-based instruction facilitated through case-based peer discussion. This study also seeks to find out whether ITAs' backgrounds would affect their changes of self-reported and observed usage of language use strategies. Quantitative data are collected via a demographic survey, and two sets of pre- and post-tests in ITAs' microteaching presentations. The two sets of pre- and post-tests focus on ITAs' presentation and active

listening strategies respectively. Qualitative data are collected through online interviews for ITAs' reflections of their online learning experience.

Results of this study reveal that online strategy-based instruction facilitated through case-based peer interaction is at least as effective as face-to-face strategy-based instruction facilitated through case-based peer interaction in learning and using language use strategies. Analyses of relationship between ITAs' demographics and changes of their self-reported and observed usage of language use strategies show that ITAs' study experience in U.S. colleges had significant influence on their changes of observed usage of active listening strategies. Themes extracted from the online interviews suggest that strategy-based instruction in this informal online peer-supported case-based learning environment help ITAs to acquire language use strategies and develop abilities to solve teaching problems.

This study also provides recommendations for instructors in ITA training programs and implications for future researchers who are interested in technology-supported ITA training.

TABLE OF CONTENTS

Chapters

   Overview

   Statement of the Problem

   Purpose of the Study

   Research Questions

   Importance of Results

   Chapter Summary

   Definitions

   Overview

   ITA Training Program

   Language Strategies

   Strategy-based Instruction

   Case-based Learning

   Online Peer Support System

   Chapter Summary

LIST OF TABLES

LIST OF FIGURES

Figures

The Effects of a Technology-supported Training System on Second Language Use

Strategies for International Teaching Assistants

CHAPTER 1

INTRODUCTION

Overview

With the globalization of U.S. higher education, the number of international graduate students had increased during the past twenty years (De Berly, 1995; Hoekje & Williams, 1992; Rounds, 1987; Rubin, 1993; Smith & Simpson, 1993; Yule & Hoffman, 1990). In the university where this study is conducted, the number of international students enrolled in the graduate program increased from 762 in 1989 to 1077 in 2004 (Office of the University Registrar, 2005). Many of these international graduate students work as instructors, tutors, lab supervisors and course graders to help meet the great demand of instructors in undergraduate classes and to present undergraduates "an international view and interpretation for their discipline" (Smith, 1993, p.150), while at the same time using the financial support afforded by teaching assistantships to enroll in advanced graduate programs.

However, self-perceptions of international teaching assistants (ITAs) reveal that it is a difficult process for them to step into classrooms as instructors (De Berly, 1995). "They come to the classroom with a sense of being 'the other', neither teacher nor student, expert or neophyte, professional or peer" (De Berly, 1995, p.2). Besides being new to the U.S. educational system and culture, language is the main reason for this role ambiguity (Hoekje & Williams, 1992). The role of being an instructor and a second-language speaker at the

same time means that ITAs need to have high proficiency in the use of English for general purposes as well as for pedagogical purposes in their subject areas.

The communication problem between ITAs and their students has been addressed as a significant issue with the increasing number of ITAs in universities. Complaints are often received from students in ITAs' classes that they have difficulty in communicating with ITAs and understanding their lectures, primarily due to language difficulties (Rounds, 1987; Smith, 1993). However, ITAs who use typical patterns of interactions in class, such as active seeking for students' feedback, are less likely to cause resentment from undergraduates (Hoekje & Williams, 1992). According to students' feedback, they feel more comfortable in classrooms where ITAs use typical patterns of interaction than in classrooms where ITAs have better pronunciations but do not promote interactions in class.

Strategy-based Instruction

Universities and the general public have been aware of the importance of ITA training. The Speaking Proficiency English Assessment Kit (SPEAK) test and other screening tests have been mandated in many states for use with international students. Some universities offer preparation courses for ITAs. A typical preparation course usually lasts one to two hours per week in one semester, and includes exercises on language skills, discussion of cultural difference and teaching styles, and videotape assessment of their performance (Yule & Hoffman, 1990). Some seminars are orientated toward the undergraduate-students' culture and include workshops with undergraduate student mentors (Tang & Sandell, 2000). Nevertheless, the shortage of ITA training experts to conduct ITA training, and time for training continue to be problems in ITA courses or workshops (Gorsuch, Stevens & Brouillette, 2003; Hoekje & Williams, 1992). There needs be a way to empower ITAs with

language strategies that they can employ to improve their classroom communication effectiveness when taking on teaching roles.

Language strategies refer to processes "which are consciously selected by learners and which may result in action taken to enhance the learning or use" of a language, through "the storage, retention, recall, and application of information about that language" (Cohen, 1998, p.4). Language strategies encompass language learning strategies and language use strategies. Language learning strategies are utilized to help learners improve their knowledge of a target language, while language use strategies are employed by learners to improve their appropriate use of a target language. For example, if a person categorizes a group of similar words for easier learning, he/she is using language learning strategies. When a person rephrases a sentence which was unclear to audience to convey his/her thought, he/she is using language use strategies. Cohen (1998) divided language use strategies into four subsets: retrieval strategies, rehearsal strategies, cover strategies and communication strategies. Retrieval strategies are the ones that people use to call up information from storage. Rehearsal strategies refer to those strategies for rehearsing target language structures. Learners use cover strategies to "create the impression they have control over materials when they don't" (Cohen, 1998, p.6). Communication strategies are the strategies that learners use to express information to receivers.

Most language strategy studies are focused on language learning strategies. Studies show that students' language proficiency is closely related to their use of language learning strategies (Chang, 1991; Oxford, 1996; Park, 1994; Phillips, 1991; Rossi-Le, 1989; Watanabe, 1990). Students with high language proficiency use more strategies than students

with low language proficiency. For instance, students with proficient English use planning and evaluating strategies more often than students with less proficient English.

Studies in language use strategies have predominantly focused on in learners' use of communication strategies. Smith (2003) has found that the types of tasks affect learners' use of communication strategies. Concerning the effectiveness of communication strategies, Littlemore's (2003) study suggested that strategies that require shared context and content are communicatively more effective than those that do not require shared contexts and content because they leave less room for imagination. The most successful strategy in his study was the one used by learners to describe the features of an item. The least successful strategy in his study was the use of word avoidance.

Strategy-based instruction focuses on having students learn to use a group of potentially useful language learning/use strategies in language tasks (Weaver & Cohen, 1998). Paige, Cohen and Shively (2004) used strategy-based instruction to reinforce students' use of language learning strategies. Students' feedback was highly positive toward the strategy-based instruction. Students thought that it helped improve their language skills. In their journals, students wrote that the strategies "encouraged them to be language detectives, and seek out native speakers who could serve as resources" (p.11).

ITA Training Requirements

Graduate students with high Test of English as a Foreign Language (TOEFL) scores and Graduate Record Exam (GRE) scores are typically given priority in being selected as teaching assistants. However, Yule and Hoffman's study (1990) showed that it could not be assumed that students with high TOEFL and GRE scores would have the capability to present instructional materials in spoken English. While school faculty, parents and students

in the U.S. required ITAs to communicate with students in a proficient way, ITAs' training and assessment became essential before teaching duties could be assigned to prospective international teaching assistants. Universities could no longer rely on exam scores to guarantee language proficiency.

Because the time for ITA training programs is very short and "the improvement of grammatical accuracy can be a time-consuming, long-term process" (p.248), Hoekje and Williams (1992) proposed that effective training should take consideration of "language appropriateness and context" instead of the accuracy of pronunciation and grammar (p.246). They proposed that this approach would take a shorter time for ITAs to improve their language use. Furthermore, ITAs with proficient language use, such as being skillful in the use of language to present materials, could surpass barriers caused by pronunciation or grammatical problems (Hoekje & Williams, 1992). Results from other studies (Rounds, 1987; Rubin, 1993; Yule & Hoffman, 1990) also supported the recommendation that ITAs' language training should focus on the improvement of communication skills. A case study on an ITA's experience revealed that the ITA's use of communication strategies, for example, the rephrasing of students' statement and comments, benefited both the ITA and his students (Smith, 1993). Results of an ITA study in a mathematics classroom suggested that language use strategies, like "using questions in a timely fashion" and "using persuasive techniques", would help ITAs' development of communication with students in the classroom (Rounds, 1987, p.666).

Popular topics in ITA's language training are usually focused on pronunciation and fluency (Hoekje & Williams, 1992; Guthrie, 2000). A common problem of this kind of curriculum is that it does not give adequate attention to context and role. ITAs who learned

skills to improve lecturing in class would not find that skill as helpful in lab consulting, which requires more interaction skills than lecturing skills. Also, ITAs' submissive role when participating in face-to-face training classes may affect their ability to perform in authoritative roles as teaching assistants. Their roles when taking training classes are usually different than what a student does in classes—listening to instructors' lecture, taking notes, asking/answering instructors'/peers' questions and completing assignments. These passive roles as students may have a negative effect on ITAs' authority or confidence in teaching (Hoekje & Williams, 1992).

<p style="text-align:center">Case-based Learning</p>

Other teaching methods, like case-based learning, may allow students to assume a more active role. Case-based learning has been widely implemented in teacher education as well as other disciplines (Bramorski, 2002; Flynn & Klein, 2001; Semrau & Fitzgerald, 1995; Stepich, Ertmer & Lane, 2001; Weiss & Levison, 2000). In a typical case-based learning class, students are presented stories or narratives that have supposedly occurred in real life. Students discuss and debate on issues raised in the cases by analyzing the resources and contexts provided in the cases before they solve problems and make conclusions. Case-based learning aims to engage students in authentic learning experiences similar to real world use where their knowledge and skills can be used in practice (Semrau & Fitzgerald, 1995). Most ITAs do not have teaching experiences in U.S. colleges before they take ITA training. By using case-based learning in ITA training, novice ITAs can have opportunities to "confront their conceptions and identify what they still need to learn" (Kolodner & Guzdial, 2000, p. 220). Case-based learning can also encourage them to "think about the kinds of difficulties they have faced in solving a problem or developing a skill", "the kinds of solutions they

confronted," and "how future situations might be used again, focusing particularly on how the lessons learned from experiences might be utilized in new ways" (Kolodner & Guzdial, 2000, p. 221). In an ITA training program, case-based learning can be hypothesized to help ITAs interpret others' teaching experiences from multiple perspectives, to learn to solve problems, to learn from others' solutions, and to apply them in their future teaching.

Online Peer Support System

A strong support system may also help international students overcome their problems caused by language and cultural background (Stoynoff, 1997). Studies on international students' use of social support find that peers and families are their main sources for social support (Ghaith, 2002; Heggins & Jackson, 2003; Stoynoff, 1997; Ying, 2003). Peer-supported group work has been studied and utilized in various disciplinary areas. Researchers propose that it can increase students' learning autonomy, promote "a sense of ownership of and commitment to their work" and develop "deep cognitive processing of the material they work with" (Leki, 2001, p.40). However, research has found that peer-supported group work involving a combination of native-speaking students and non-native-speaking students did not work well due to non-native-speaking students' language limitations and their culturally-different attitudes toward collaboration (Leki, 2001; Parks & Raymond, 2004).

Statement of the Problem

Although a number of studies have been conducted to document ITAs' success and difficulties of language use in teaching situations (Hoekje and Williams, 2002; Rounds, 1987; Rubin, 1993; Smith, 1993; Smith & Simpson, 1993; Yule & Hoffman, 1990), few of

these studies focused on interventions that would reinforce ITAs' use of language use strategies in building language proficiency in teaching situations.

One challenge to improve ITAs' language is the lack of support from their peer groups (Smith, 1993). ITAs are usually friends with those who have the same ethnic background and speak the same language. Their communication in native languages reduces their practice in the use of English. In addition, ITA training time provided by universities is short, and leaves little chance for ITAs to communicate and build social networks with other ITAs. Therefore, a broad social mix of ITAs may help them to use English to discuss and solve teaching problems outside ITA training class and increase their practice of English.

On many campuses, graduate students taking ITA training programs do not receive credit towards their degree requirements for ITA training, which discourages students' application of their training outside their classrooms (Rubin, 1993). ITA training programs in U.S. universities are either an intensive program for several weeks, or a semester-long course that takes one or two hours every week (Gorsuch, Stevens & Brouillette, 2003). At the Midwestern university where this study is conducted, the ITA training program usually requires two hours per week for 15 weeks, which is a short time for ITAs to improve their language and teaching skills. With class size restricted to a maximum of twelve students per class, this puts a heavy load on ITA trainers to meet current needs. One possible solution to these problems is to use an online support system to provide ITAs flexible time to exchange solutions and opinions with other ITAs and to encourage their practice of language outside classrooms. An online support system where ITAs can have "shared authority" and "more opportunities to talk and question" would allow them to get additional practice and might ease ITA trainers' burden at the same time (Yildiz & Bichelmeyer, 2003, p.176).

Case-based learning appears to hold potential to help novice ITAs learn from others' real teaching experiences and learn to solve similar problems in their future teaching situations. Unlike its popular use in teacher education, no studies have been found to date that examined the effectiveness of case-based learning in ITA training programs.

As most ITAs are inexperienced in teaching, case-based learning could present detailed episodes of real life experiences and provide ITAs opportunities to discuss and solve real teaching problems. The use of case-based learning in an online support system is an unknown approach in ITA training, with no studies found to describe or evaluate its effectiveness. Many questions need to be addressed before an ITA training program utilizing a case-based, online support system focusing on learning strategies could be proposed. How should cases be presented in an online support system? What activities would help to engage prospective ITAs active participation in case discussions? What kind of instructions could be implemented to foster students' development of the usage of language use strategies in the role of teaching assistants?

Purpose of the Study

The primary purpose of this study is to examine the effectiveness of an ITA training program utilizing online, strategy-based instruction facilitated through case-based learning and online peer-supported discussion. The effectiveness of the language training program is measured by changes in ITAs' self-reported and observed usage of language use strategies in their microteaching presentations. The study also seeks to clarify whether outcomes are related to the interventions or to participants' background differences of the participants.

Research Questions

The following questions are examined in this study.

1. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' self-reported usage of language use strategies, compared to face-to-face instructions?

2. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' observed usage of language use strategies, compared to face-to-face instructions?

3. What is the relationship between ITAs' demographics and changes in their self-reported usage of language use strategies?

4. What is the relationship between ITAs' demographics and changes in their observed usage of language use strategies?

5. What are ITAs' perceptions of online strategy-based instruction using peer-supported case-based learning?

Importance of Results

Researchers (Bauer, 1996; Hoekje & Williams, 1992; Rounds, 1987; Rubin, 1993; Shannon, Twale, & Moore, 1998; Yildiz & Bichelmeyer, 2003; Yule & Hoffman, 1990) agree that empirical studies are needed to identify possible solutions to offer ITAs experiences in the role of authority when teaching, to enrich TAs' knowledge of pedagogical skills, and to focus on the improvement of communicative competence in ITA training. Therefore, this study aims to clarify the effectiveness of online strategy-based instruction facilitated through case-based peer-supported learning. Provided that results of this study support the feasibility of the instructional activities, they will be used in future international teaching assistant training program at the university where this study is conducted and disseminated through professional journals.

Chapter Summary

Chapter 1 provides an overview of information about ITAs' training, explains the importance of teaching prospective ITAs language use strategies and the potential importance for using case-based learning approaches in ITA training, and addresses the potential for online peer support for prospective ITAs. The purpose of the study—the examination of the effect of online strategy-based instruction utilizing case-based learning approaches on prospective ITAs' use of language use strategies and observed language use— is explained and proposed in the five specific research questions.

Chapter 2 reviews the literature regarding conceptual and theoretical framework and its development in ITA training. Current trends in English as a Second Language (ESL) education and teacher education are also described, including strategy-based instruction, case-based study, and peer-supported learning. After reviewing developments and problems in ITA training and ESL education, this chapter proposes a solution that employs strategy-based instruction facilitated through online peer-supported case-based learning to improve ITAs' usage of language use strategies in teaching situations.

Chapter 3 describes the research methods, instruments, participants and interventions used to examine the effectiveness of strategy-based instruction facilitated through online peer-supported case-based learning on improving ITAs' usage of language use strategies in teaching situations. It includes the description of participants' background information, validation of instruments, instructional activities, and measurement of learning outcomes. Data analysis techniques are also discussed in this chapter.

Chapter 4 provides the findings to address the five research questions based on data analysis. Results of pre- and post-tests are reported to investigate prospective ITAs' change

in the usage of language use strategies. The relationship between prospective ITAs'

background information and pre-to-post gains in the usage of language use strategies is also

examined. Themes are identified from transcripts of online interviews for ITAs' reflections

of their learning experiences and suggestions of instructional improvement.

Chapter 5 provides the conclusions of the study. Limitations of the study are reported.

Implications are proposed for further studies. Recommendations for future ITA training

instructions are proposed based on literature review and findings of this study.

Definitions

Language Strategies— Language strategies are processes or actions consciously

selected by users for the purpose of learning or using a language (Cohen, 1998). They

include language learning strategies and language use strategies.

Language Learning Strategies— Language learning strategies are processes taken by

language learners to improve their learning of a language. They involve strategies "for the

material that needs to be learned, distinguishing it from other material if need be, grouping it

for easier learning, having repeated contact with the material, and formally committing the

material to memory when it does not seem to be acquired naturally" (Cohen, 1998, p.5).

Language Use Strategies— Language use strategies were firstly distinguished from

language learning strategies by Cohen in late 1990's. People employ language use strategies

for the purpose of conveying their thoughts and making audience understand their speaking

and writing. For example, at the beginning of a class, an ITA would use greetings they

learned from other situations to warm up the classroom atmosphere, or start discussions by

talking about previously-learned information.

CHAPTER II

REVIEW OF LITERATURE

Overview

The purpose of this study is to examine the effectiveness of an ITA training program utilizing online, strategy-based instruction facilitated through case-based learning and peer-supported discussion. This chapter identifies development and prior research that has been done in ITA training. It includes research in cultural training, pedagogical training, and the training of communicative competence. The shortage of time and intensive training is addressed as major problems as well as facts in current ITA training programs. Teaching language use strategies are then introduced as a solution to the two problems. Further, other factors such as online peer support and case-based learning are discussed and proposed to facilitate ITAs' learning of language use strategies.

ITA Training Program

Based on the general public's assumption that ITAs' low level of second language pronunciation and fluency are the biggest obstacles for ITAs teaching classes (Hoekje & Williams, 1992; Yule & Hoffman, 1990), the Speaking Proficiency English Assessment Kit (SPEAK) test and other screening tests have been mandated in many states as criteria for certifying international graduate students to teach. The SPEAK test developed by the Educational Testing Service evaluates non-native English persons' speaking proficiency in four categories—overall comprehensibility, pronunciation, grammar, and fluency (Clark & Swinton, 1979). However, Hoekje and Williams (1992) point out that ITAs' language fluency, in terms of pronunciation, grammaticality and lexis, will not always reach native speakers' level. In Bailey's typology of ITAs (1984), she suggests that ITAs using a variety

of interaction skills and humors overcame language barriers while those with better language fluency but poor interaction skills did not. These empirical studies suggest that the improvement of language fluency is not an effective solution to ITA teaching problems. Improvement of ITAs' communicative competence, in other words, the improvement of ITAs' knowledge and ability required for communication in teaching situations (Canale, 1983), could be an effective solution to ITA teaching problems. Although there are no unified standards in ITA training programs, researchers, instructors and faculty seem to agree that improvement of ITAs' communicative competence requires combined training from three perspectives—culture, pedagogy and language (Bailey, 1984; Hoekje & Williams, 1992; Rounds, 1987; Rubin, 1993; Tang & Sandell, 2000).

Cultural Training

Culture is closely related to users' communicative competence in many researchers' definition (Bachman, 1990; Canale, 1983; Gorsuch, 2003; Hoekje & Williams, 1992). Within the context of ITA training, culture is commonly defined in terms of ITAs' ability to produce appropriate language in the role of teacher in US college classrooms and their awareness of American cultural expectations when using English. Cultural difference is a critical issue that could result in ITAs' failure to interact successfully with their undergraduate students (Tang & Sandell, 2000). For example, in East-Asian culture, instructors are in a higher position than students. As a result, students should keep silent in class to show their respect to instructors and to let instructors concentrate their minds on their own lecture. But in U.S. classrooms, students are encouraged to speak out and interact with instructors in class. Thus, it might occur in some occasions that ITAs from East-Asian countries neglect classroom interactions and get negative feedback from their American undergraduate students. Therefore, in an ITA

training program, cultural learning should include instruction in appropriate nonverbal/verbal communications in the role of a teacher, how to utilize different teaching styles according to the nature of courses, and assistance in interpreting ITAs' own culture and self-evaluation of cultural-based problems (Gorsuch, 2003).

Assuming that attitudes result in behaviors, Gorsuch (2003) utilized questionnaires to examine ITAs' attitudes toward classroom interactions, teachers and students' roles, and significant mores in U.S. educational culture. The analysis of the data showed that ITAs with learning experiences in the U.S. had acculturated to educational culture in U.S. universities since they became students. Gender differences existed among ITAs on the issues of authority and communication. Female ITAs preferred a more supportive role with students, such as communicating learning expectations, while male ITAs were more likely to use authority roles in classrooms without providing support to students. Gorsuch (2003) also suggested that ITAs should be exposed to diverse teaching styles in trainings since courses in different disciplines require different teaching strategies and practices.

Hoekje and Williams (1992) suggested that ITAs without teaching experiences before coming to the U.S. should receive instruction about the role of informality and authority in U.S. classrooms. ITAs with previous teaching experiences in other countries should also receive instruction about role relationships between teachers and undergraduate students. However, classroom settings in ITA training make ITAs feel they are still students—listening to lectures, memorizing knowledge, and proposing questions to instructors. It is difficult to help improve ITAs communication ability in the role of authority when taught in such settings. A learning environment is needed that can give ITAs autonomy and control over the class, and allow them to use different communication styles.

Pedagogical Training

Shannon, Twale and Moore (1998) investigated the impact of teaching assistants' (TAs) teaching and learning experiences on their teaching effectiveness. They found that TAs with training on pedagogical methods were rated by undergraduate students higher than those without such training. On the other hand, there was no significant difference on teaching effectiveness ratings between TAs with prior teaching experiences and TAs without such experiences. Therefore, Shannon, Twale and Moore (1998) suggested that ITA training programs should have a specific plan designed to enrich TAs' knowledge of pedagogical skills. Bauer (1996) summarized five areas that should be identified in ITAs' pedagogical training. They include ITAs' roles, their familiarity with U.S. educational setting, interactive teaching styles, ITAs' perceptions of undergraduate students' behavior and feedback, and appropriate use of language in classroom lecture and communication.

Communicative Competence in ITA Training

Studies suggest that ITA training should cover the improvement of communicative competence (Hoekje & Williams, 1992; Rounds, 1987; Rubin, 1993; Yule & Hoffman, 1990). The concept of communicative competence was introduced by Hymes in the mid-60s. It refers to second language users' knowledge and ability required for communication (Canale, 1983). Canale and Swain (1980) identified four components of communicative competence. They are grammatical competence, discourse competence, sociolinguistic competence, and strategic competence.

Language users' grammatical competence concerns their ability to recognize, construct and apply grammatical structures of a language in communication (Canale, 1983). Most ITA training programs put an emphasis on the improvement of ITAs' grammatical

competence, which is actually difficult to address due to ITAs' different language levels and the limited time of training. Therefore, Hoekje and Williams (1992) suggested that it would be practical to teach ITAs second language strategies to compensate for their grammatical problems.

Discourse competence involves language users' mastery of understanding and ability to produce spoken/written text in different genres, and being able to combine texts in a way that hearers/readers can understand (Canale, 1983). Cohesion and coherence are two important elements in discourse competence. Evidence has shown that ITAs often overuse and over-generalize connectors like *and* and *so*. That could cause confusions for undergraduate students in understanding ITAs' lecture (Hoekje & Williams, 1992). Discourse competence involves not only linguistic correctness but also the ways ITAs organize and present materials. Rounds (1987), based on her analysis of a mathematics classroom discourse, suggested that communicatively-competent teaching in mathematics classrooms should include explicit elaboration of mathematical symbols. However, this issue is hard to detect and address in ITA training classes, as trainers are usually ESL professionals but not experts in other disciplines. As a result, it is suggested that undergraduate students and ITAs with teaching experiences in U.S. classrooms should participate in training programs together to improve their discourse competence (Damron, 2003; Pae, 2001; Tang & Sandell, 2000). Undergraduate students can serve as mentors, helping ITAs detect the differences in classroom discourse and adjust their use of language.

In Canale's model, sociolinguistic competence refers to the ability to understand and produce language appropriately in different socio-cultural contexts (Canale, 1983). It is mostly related to culture issues in ITA training (Gorsuch, 2003). However, Hoekje and

Williams (1992) point out that sociolinguistic competence also includes users' knowledge of discourse rules. In ITA training, it is concerned with ITAs' ability to use language according to "the norms of interaction and interpretation of the classroom" (Hoekje & Williams, 1992, p.250). The subject-matter experts who attended a simulated chemistry class found that ITAs would have communication problems if they did not understand the way American undergraduates expected chemistry problems to be written (Selinker & Douglas, 1989).

Strategic competence refers to language users' mastery of using verbal/non-verbal communication strategies to improve the effectiveness of communication, or to compensate for communication breakdowns (Canale, 1983). It is hard for ITAs to use language like native speakers. But they can use compensatory strategies to bridge communication gaps and to succeed in their teaching. William's (1995) study found that ITAs who use compensatory strategies, like elaboration, get higher comprehensibility ratings by undergraduate students. Some non-verbal strategies, like illustrations or handouts, are also found very helpful to overcome communication barriers between non-native speakers and native speakers (Faerch & Kasper, 1983). Although these strategies may not improve linguistic competence, they can help ITAs improve teaching effectiveness.

While Canale's interpretation of strategic competence concentrates on compensatory strategies, Bachman and Palmer (1996) broadened the concept to "a set of metacognitive components, or strategies, which can be thought of as higher order executive processes that provide a cognitive management function in language use" (p.70). Therefore, strategic competence includes not just strategies employed when language ability is deficient, but strategies employed in setting goals, planning, and assessing a language task as well. In ITA teaching settings, they may be strategies used to decide whether to answer students'

questions in verbal language or by illustrations, strategies used to retrieve relevant information from knowledge and organize it in proper language structure in order to successfully interpret complicated phenomena, or strategies used to assess the appropriateness of the response to a question.

The theoretical model of communicative competence represents the multi-faceted nature of proficiency in the use of language (Spolsky, 1989). When used in ITA training, this model requires that ITA training should expand its focus from language fluency to appropriateness of cross-cultural communication in teaching situations. Since ITAs' cross-cultural communication and pedagogical skills are incorporated in their discourse and sociolinguistic competence, the improvement of ITAs' communicative competence in the role of teachers should be the focus of ITA training programs (Hoekje & Williams, 1992; Rounds, 1987; Rubin, 1993; Yule & Hoffman, 1990).

Language Strategies

Language strategies are processes or actions consciously selected by users for the purpose of learning or using a language (Cohen, 1998). They include language learning strategies and language use strategies. Brown (2000) asserts that language strategies are "the moment-by-moment techniques" that contribute to the development of communicative competence (p.122). Chamot and Rubin (1994) pointed out that it is the management of a repertoire of language strategies, not a particular strategy, that will result in the improvement of communicative competence.

Language Learning Strategies

Language learning strategies are processes taken by language learners to improve their learning of a language. They involve strategies "for the material that needs to be

learned, distinguishing it from other material if need be, grouping it for easier learning,

having repeated contact with the material, and formally committing the material to memory

when it does not seem to be acquired naturally" (Cohen, 1998, p.5). Many studies of

language learning strategies have been done in English as a Second Language (ESL)

programs. It is generally agreed that the use of language learning strategies is positively

related to learners' language proficiency (Chang, 1991; Oxford, 1996; Park, 1994; Phillips,

1991; Rossi-Le, 1989; Wantanabe, 1990).

Language Use Strategies

The role of teachers in class requires that majority of language strategies used by

ITAs should be language use strategies. As teachers, ITAs need to use English to do lectures

or presentations and facilitate undergraduate students' understanding. The utilization of

language use strategies will help ITAs solve language problems and maintain successful

communication with students.

Language use strategies were firstly distinguished from language learning strategies

by Cohen in late 1990's. People employ language use strategies for the purpose of conveying

their thoughts and helping the audience understand their speaking and writing. Cohen (1998)

classified language use strategies into four subsets: retrieval strategies, rehearsal strategies,

cover strategies, and communication strategies.

- Retrieval Strategies

  People use retrieval strategies when they recall information from storage. In biology

  classes, for example, when students ask ITAs about new biological vocabulary words,

  ITAs might link related words or word roots they know to retrieve the meaning of the

  new vocabulary words. In this case, retrieval strategies would include ITAs' efforts to

link related words to retrieve the meaning of new words.

- Rehearsal Strategies

Rehearsal strategies are used when people rehearse targeted language structures. For example, at the beginning of a class, an ITA would use greetings they learned from other situations to warm up the classroom atmosphere, or start discussions by talking about previously-learned information.

- Cover Strategies

Cover strategies are another form of compensatory strategies. People use cover strategies to make the false impressions that they take control of the materials when they actually do not have control. For example, ITAs would often meet a situation of being asked to explain something that is not in the curriculum. It's difficult for them to retrieve relevant knowledge and to articulate that knowledge in correct structures of a second language in a very short time. Some ITAs might simplify the explanations in one or two sentences and go on to the next topic in order to avoid the impression that they look illiterate or unprepared for the class. Although the use of the cover strategy helps ITAs to avoid embarrassment, it can easily lead to students' confusions or misconceptions. A better way to deal with this problem is to say "Can we discuss this after class?" and postpone the discussion to give ITAs themselves sufficient time to organize and deliver appropriate explanations. This is called topic avoidance strategy.

- Communication Strategies

This topic avoidance strategy is under Cohen's fourth subset of language use strategies—communication strategies. Communication strategies refer to approaches

people use when "conveying a message that is both meaningful and informative for the listener or reader" (Cohen, 1998, p.7). While Canale's (1983) model of strategies in communicative language use (strategic competence) has given much focus to compensatory strategies, some researchers suggested that communication strategies should include more than compensatory strategies (Bachman & Palmer, 1996; Cohen, 1998; Faerch & Kasper, 1983; Littlemore, 2003). Faerch and Kasper's (1983) classification of strategies was based on users' different behaviors when handling communication problems. Language users would either do away with problems (avoidance strategies) or directly deal with problems (achievement strategies). Littlemore's (2003) study found that topic avoidance strategies, were not so communicatively effective as a strategy that is used to describe features of an item. No matter how the communication strategies are subdivided, researchers believe that communication strategies serve the purpose of enhancing communicative effectiveness. In teaching situations, ITAs should be able to use these strategies to negotiate meaning, to bridge communication gaps between them and students, and to handle communication problems better.

Current studies have primarily been conducted on the use of communication strategies. A study conducted in computer-mediated communication (CMC) found an improvement in learners' interactive competence as result of computer-assisted class discussion (Chun, 1994). Learners' interactive competence was assessed by counting the number of questions and answers, statements and imperatives, and discourse management. Results showed that learners took a more active role in interactions and discourse management than they did in normal face-to-face classrooms. Smith (2003) examined the

impact of task type on the amount and nature of communication-strategy use in CMC. Results showed that students used more communication strategies in decision-making tasks than jigsaw tasks. Some studies intend to compare the effectiveness of different types of communication strategies or individual communication strategies (Chen, 1990; Ellis, 1984; Littlemore, 2003). Littlemore (2003) finds that users with different cognitive styles have different preference for communication strategies, and strategies favored by ectenic users who see the big picture and were good at synthesis and induction, were more effective than those favored by synoptic users, who see the details and were good at analysis and deduction.

Langham (1989) examined the effectiveness of discourse strategies used by American and international teaching assistants. She used a survey and mid-term exam scores of students to test the effectiveness of teaching assistants (TA). Results from statistical analysis and case study methods showed that clear organization, prompt checking on students' understanding, and proper non-verbal behaviors were the most effective strategies used by TAs. TAs were rated effective if their lessons had clear opening, instructions, and closing marks. Effective TAs provided overview and summary of the materials besides communicating learning expectations with students. The most effective TAs were those who listened and replied to their students' feedback. They elicited students' responses, prepared a study guide for the readings, or demonstrated their openness to students at the beginning of the course. Less effective TAs also had inappropriate behaviors, like frequent silence and little eye-contact in class. Results of Langham's study challenge Canale and Swain's (1980) assertion that language use strategies are acquired and won't be developed by classroom practice. As a result, Langham (1989) suggested that TAs should have substantive opportunity to acquire necessary skills or strategies in the role of teachers.

Although language use strategies are considered as a window into an individual's communicative competence (Canale, 1983; Chamot and Rubin, 1994), no studies have been found that investigate its utilization in ITA training.

Strategy-based Instruction

Learner empowerment is a main reason for teaching language strategies. In the mid-western university where this study was conducted, ITAs usually spend one to two hours per week in ITA classroom training for the duration of one semester, which is not sufficient time to improve ITAs' language proficiency, cross-cultural communication and pedagogical skills (Hoekje & Williams, 1992). If an ITA training class focuses on ITAs' use of language in teaching, it is impossible to thoroughly learn appropriate use of language in such a short time. In this case, it might be more efficient to teach language use strategies to empower ITAs to become autonomous and self-directed learners (Ellis & Sinclair, 1989; Hoekje & Williams, 1992; Struc, 2002). ITAs can employ strategies to adjust their appropriate use of language in teaching situations even after the training is over. In short, the teaching of language use strategies can help ITAs overcome the shortage of training time and support their learning effort over a longer period of time. Strategy-based instruction is defined as "a learner-centered approach" to teach students how, when and why strategies can be used to facilitate language learning and language use tasks (Weaver & Cohen, 1998, p.81). In Weaver and Cohen's (1998) definition, teachers in a typical strategy-based training situation should:

1. describe, model, and give examples of potentially useful strategies;

2. elicit additional examples from students based on the students' own learning experiences;

3. lead small-group and whole-class discussions about strategies;

4. encourage their students to experiment with a broad range of strategies; and

5. integrate strategies into everyday class materials, explicitly and implicitly

embedding them into the language tasks to provide for contextual strategy practice.

(p.81)

As few studies have shown convincing benefits in strategy-based instruction, it is still a controversial approach in the field of second language learning. Results from some studies suggested that strategy training was ineffectual and learners' individual differences mediated its success (Kellerman, 1991; Rees-Miller, 1993).

Dörnyei (1995) instructed ESL students in a Hungarian high school to use three types of communication strategies: topic avoidance and replacement, circumlocution, and using fillers. Topic avoidance and replacement strategies were defined as strategies learners used to avoid topic areas due to language difficulties. Circumlocution strategies are those learners used to describe an object or action in an indirect way, like *using the thing you open the bottle* for *corkscrew*. Learners would use filling strategies to gain time to plan for the next utterance, like *well* or *let me see*. Students who received the instruction took three lessons every six weeks, with each lesson lasting 20 to 40 minutes. After teachers modeled the strategies in role-playing, games, and discussions, students practiced them first in Hungarian and then in English. The assessment instruments include a written pre-test and oral pre- and post-tests. In oral testing, students were asked to talk about some topic for three minutes, to describe a cartoon strip with three to four pictures, and to define five Hungarian concepts in English. Post-testing showed improvement in the quality of circumlocutions, and in the quantity of circumlocutions and fillers. Therefore, the researcher concluded that

communication strategy-based instruction encourages learners to keep their communicative goals constant. This means that the strategies second language learners learned in class empower them to remain in conversations till they reach their communication goals.

Although Dörnyei's study has positive findings for teaching language use strategies, it is limited in the three communication strategies. Cohen's study expands it to the training of language use and learning strategies that students would use in speaking a foreign language (Cohen, Weaver & Li, 1998). In ten weeks, students went through three tasks: self-description, story-retelling and city description. Strategies were either explicitly taught by instructors or embedded in classroom activities. Students used a strategy checklist to report the frequency of strategy use after each set of three tasks. In order to assess students' task performance, the self-description and the city description tasks were rated on three aspects: self-confidence in delivery, acceptability of grammar and control over vocabulary, while the story-retelling task was rated on two aspects: identification of key story elements and appropriate ordering of the elements. The post-testing also included a verbal report protocol to collect students' feedback and insights on the strategy use. Results showed an increasing use of certain language strategies was related to the improvement of task performance. Investigators found that the strategy checklist was an effective measure as it targeted specific tasks, and hence linked the use of strategies to the improved task performance. In a recent study, Paige, Cohen and Shively (2004) found that students had positive attitudes toward strategy-based instruction, noting that it helped improve their language skills. Students commented in their e-journals that the language strategy inventory help them better understand the different communication styles between cultures, as well as providing new ideas to improve their language skills.

As Gu (1996) has indicated in his review of empirical research, studies done in strategy-based instruction were "narrow in scope" (p.22). The relationship between language strategy use and actual language performance has not been adequately studied. A systematic framework for strategy use in a specific task should be created to provide a clear picture for curriculum designers.

Case-based Learning

Case-based learning is a widely used method in business, law, medicine and teacher education (Bramorski, 2002; Flynn & Klein, 2001; Riedel, Fitzgerald, Leven & Toenshoff, 2003; Semrau & Fitzgerald, 1995; Stepich, Ertmer & Lane, 2001; Weiss & Levison, 2000). In case-based learning, students can be engaged in learning from authentic experiences and analyzing and solving real problems. Through case-based discussions, students learn to reflect from different perspectives. Studies demonstrated that the utilization of case methods can improve students' problem-solving abilities, knowledge acquisition, and even learning attitudes in a short period of time (Cliff & Wright, 1996; Fitzgerald & Semrau, 1998; Fitzgerald, Wilson & Semrau, 1997; Tillman, 1995).

Empirical studies have focused on the impact of different approaches in case-based learning on outcomes. Droge and Spreng's (1996) comparison study found that student-led case analysis worked better than teacher-led case analysis in terms of use of time, students' self-reported involvement, students' self-reported satisfaction, achievement of learning goals and specific skill competence.

Group discussion is considered key to case analysis (Flynn & Klein, 2001; Griffith & Laframboise, 1997; Johnson, Semrau & Fitzgerald, 2000; Tillman, 1995). A study on individual versus group use of case-based hypermedia instructional materials showed that

students in group work performed significantly better than students in individual work (Johnson, Semrau & Fitzgerald, 2000). Griffith and Laframboise (1997) analyzed small group and large group discussions in case analysis. Results showed that more meaning was constructed in small group discussions where discussions were focused on sharing experience than on analyzing course content or theory. Flynn and Klein (2001) also investigated the role of small group discussion in case-based learning. They found that students in groups performed better on the analysis and alternatives part of the case while students working alone performed better on the evaluation and recommendation part of the case. This result may due to the fact that students working in groups allocated too much time on early parts of the case and left too little time to compete the evaluation and recommendation part of the case. Therefore, Flynn and Klein suggested that students should be offered enough time for individual preparation before they work in groups.

However, case analysis cannot guarantee students' learning without effective support or instruction from teachers. A study investigating case-based learning in Computer-mediated Communication (CMC) found that it did not foster extensive communication (Angeli, Valanides & Bonk, 2003). The decreasing number of online postings indicated that case-based learning in CMC failed to sustain participants' interest and engagement after the first week. Qualitative analysis of the online messages also revealed that participants were not involved in critical thinking and most of their communication was the sharing of experiences. Sykes and Bird (1992) explained that case-based learning depends on "the interaction among what the case presents, what the reader brings, and what the teacher does with the case" (p.511). So without effective instruction from teacher and ongoing direction, it may be difficult for students to value case-based learning as a way to foster their critical

thinking. To solve this problem, Stepich, Ertmer and Lane (2001) proposed strategies to engage students in case-based learning. They are

> Strategy1: Structure the discussions by giving students an initial role to play or a
>
> > position to take in the discussion.
>
> Strategy 2: Begin the discussion with a structure, but avoid rigid adherence to that
>
> > structure.
>
> Strategy 3: Ask specific questions and limit the number that you ask at one time.
>
> Strategy 4: Look for opportunities to join the discussion, but participate carefully.
>
> > (p.62-64)

Although a number of studies of case-based learning have been done in the field of teacher education, no empirical studies have been located regarding the effect of using case-based learning in the ITA training area.

<div align="center">Online Peer Support System</div>

Online discussions have been widely implemented to improve ESL learners' communication (Lam, 2000; Liu, Moore, Graham & Lee, 2002; Singhal, 1998). Studies found that ESL learners had a higher participation rate, produced more sentences, and used a greater variety of discourse functions in online discussions than face-to-face communication (Beauvois, 1992; Gonzalez-Bueno, 1998; Kern, 1995). This difference is thought to occur because online discussions offer an equal opportunity for learners with different cultural background and personalities, hence, increase their participation and use of language. The trend of using online discussions with ESL learners is also supported by studies on the linguistic features of online messages. Warschauer (1996) and Chun's (1994) studies reveal that students' written language in online discussion boards resembles what they would say in

face-to-face discussion. As a result, they propose that online discussions can serve as a prelude to oral discussions, or a bridge connecting oral interaction and written composition.

Online discussions can be conducted among students, or between students and instructors. Vygotsky's socio-cultural theory suggests that learning firstly occurs in interpersonal communication with experts (Vygotsky, 1978). Experts are not necessarily the learners' parents or teachers. They can be their peers who have more knowledge or skills. As peers use the same target language and have similar experiences in groups, they are familiar with learning behavior and learners' characteristics that instructors might be unaware of. Therefore, they can help their peers to learn from their peers, to solve problems, and to learn to actively participate and contribute to group work (Chen & Lou, 2004; Topping & Ehly, 1998). Studies show that online peer interaction helps learners acquire new strategies and strengthen their own ideas by offering their peers' writings and answers in text format (Beauvois, 1994; Forman and Cazden, 1985; Miller, 1995).

Peer support is a common form of online peer interaction, and it is frequently present in virtual learning environments. Students offer explanations or advice to questions elicited by their peers through asynchronous and synchronous communication. It helps promote participants' mutual responses, "encouraging them to be givers as well as receivers of the support" (Burgstahler, 1997, p.2). Kear (2004) used block asynchronous discussion boards to study participants' online peer support. The online course was divided into several structured blocks. Each block had a discussion board with sub-boards for each assignment and activities. Instructors' intervention was minimal. The survey results from participants revealed that input from their peers was very important in helping their understanding of the course. Results from online communication studies on language perspectives show that both

learners' knowledge of language and their language production increase through online peer interaction (Kern, 1995; Singhal, 1998; Warschauer, 1996).

Heift and Caws' (2000) quantitative study revealed that students' participation was not related to their language proficiency. Active participants were those who posted the most peer-feedback messages. However, examples of peer-feedback messages in their study were like "I agree with that" or "Thanks" (Heift & Caws, 2000, p.210). To make an impression of active involvement in teachers' minds, students posted many of these messages without inputting substantive comments or reflections. This finding prompted task designers and instructors to design online activities or instructions that get students involved in tasks that require higher order thinking.

Hyland's (2000) case study on the impact of feedback on ESL writers found that informal peer feedback worked better than peer feedback directed by the teacher. Students appreciated their peer support at various stages of the writing process. In Maarof's (2002) study, students were asked to observe their peers' communication strategies and then discuss their observations. Evidence from students' comments and responses suggested that peer observation, feedback, and discussion all helped to raise students' awareness of using communication strategies.

Most ESL studies have involved students from diverse cultural backgrounds (Hyland, 2000; Maarof, 2002; Matsumura & Hann, 2004). Attitudes toward peer support vary in different cultures. For example, students in some cultures might think it impolite to comment on others' work or products (Hyland, 2000). Accordingly, trainers need to help ITAs discern cultural differences between U.S. and their native countries through peer support.

Although studies showed the effectiveness of an informal peer-supported learning

environment on students' language learning, few studies documented peer support among ITAs. Studies with graduate teaching assistants (GTA) found that they exchanged experiences and information with their peers, and sought help from their peers (Darling, 1987; Darling & Staton, 1989; Duba-Biederman, 1994). Myers' (1998) study explored GTAs' involvement in supportive communication relationships. Results showed that peer supportive communication was more effective than mentoring supportive communication. GTAs reported that they were engaged in collegial social and collegial-task relationship at a higher rate than in mentoring relationships. The peer supportive communication relationship was "the primary socialization agent" for novice GTAs. As a result, Myers (1998) concluded that peer support "provided a foundation for TA socialization" (p.66).

Chapter Summary

In conclusion, this chapter reviews current trends and problems that exist in ITA training. Studies suggest that the training for international teaching assistants should shift its focus from pure language proficiency to the improvement of ITAs' communicative competence. Cultural and pedagogical training should be integrated into the improvement of ITAs' communicative competence. Although discipline-specific training is also proposed by several researchers, it is not feasible because of the small number of ITA trainers and limited training time on campus. Therefore, there are needs for further studies to create a learning environment to offer ITAs experiences in the role of authority, to design a specific plan to enrich TAs' knowledge of pedagogical skills, and to focus on the improvement of communicative competence in ITA training.

Concerning possible solutions to improve the quality of ITA training, prior research on strategy-based instruction, case-based learning and online peer support are discussed in

this chapter. Results of studies have demonstrated that strategy-based instruction is effective in terms of improving students' communicative competence and their understanding of different communication styles. Case-based learning is proposed to provide ITAs authentic teaching experiences for discussion and problem-solving. Many studies suggest that with appropriate instruction, students can learn from real teaching experience cases and improve their problem-solving skills. An online support system is proposed to be included in ITA training for the purpose of creating a learning environment that would offer authority and informality to ITAs. Peer interaction in an online learning environment would allow students more control of their learning and interactions, and hence, would foster an informal learning and communication atmosphere. A study using the combination of these factors in ITA training will be introduced in the following chapters.

CHAPTER III

METHODOLOGY AND PROCEDURES

Overview

This chapter addresses the research methods utilized in this study, including the

description of participants, quasi-experimental design, instrumentation and data collection,

and data analyses. Participants in this study were ITAs who enrolled in the course of

"Communication and Culture for American College Teaching" in the Fall semester, 2005.

Interventions were undertaken in two classes to compare the effects of online versus face-to-

face activities on ITAs' acquisition of language use strategies in instruction. One class of

ITAs participated in face-to-face discussion activities while the other class of ITAs

participated in online activities in the Blackboard Learning System^{TM}. In both online and

face-to-face activities, language use strategies in teaching situations were discussed and

analyzed after ITAs watched video cases. Instruments used in this study included a

demographic questionnaire regarding the backgrounds of the ITAs, a questionnaire

measuring ITAs' self-reported usage of language use strategies, and a questionnaire rating

ITAs' observed usage of language use strategies. Survey data were collected and analyzed in

the program of Statistical Package for the Social Science (SPSS). Qualitative data collected

from online interviews were coded and interpreted using the NVivo qualitative data analysis

program.

Research Questions

The purpose of this comparison study is to explore the effectiveness of a web-

supported ITA training system facilitated through peer-supported case-based instruction. The

effectiveness was measured by comparing changes of ITAs' (self-reported and observed)

usage of language use strategies in online discussions with that in face-to-face discussions in pre- and post-assessment. Unlike language learning strategies that are employed by users for their second language learning, language use strategies are processes consciously selected by users to enhance their use of a target language (Cohen, 1998). Considering the purpose of the ITA training program was to improve ITAs' appropriate use of English in teaching, language use strategies in Cohen's definition were chosen as ITAs' learning objects in this study. ITAs' demographics were also analyzed to investigate their impact on ITAs' changes in usage of language use strategies. Therefore, the following questions were examined in this study.

1. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' self-reported usage of language use strategies, compared to face-to-face instructions?

2. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' observed usage of language use strategies, compared to face-to-face instructions?

3. What is the relationship between ITAs' demographics and changes in their self-reported usage of language use strategies?

4. What is the relationship between ITAs' demographics and changes in their observed usage of language use strategies?

5. What are ITAs' perceptions of online strategy-based instruction using peer-supported case-based learning?

Participants

Due to the limited number of ITA students enrolled in the course, a convenience sampling method was selected that included all the twenty-two ITAs in the two sections of the course "Communication and Culture for American College Teaching" in the Fall semester, 2005. Before being admitted to the mid-western university where this study was conducted, those ITAs had taken the Oral Proficiency Test. Their scores fell in the intermediate language proficiency level (lower than 4 out of 5 score). The two participating classes were taught by the same instructor with the same course content. Detailed description of participants is provided in Chapter Four.

Interventions

Course Instructors

The instructor agreed not to teach the language use strategies that were being implemented in this study. The researcher, who has used the Blackboard Learning System™ for several years, was responsible for the delivery of language use strategy instruction and the organization of the instructional activities in both face-to-face and online discussions.

Course Organization

Face-to-face instructional activities took place in the classroom once a month, which lasted approximately 75 minutes each class. Instruction on language use strategies and question sheets were given to students before they watched a video case presentation. ITA students were then required to answer questions about usage of language use strategies in the video case via group discussions and present their group answers to class members. This instruction was undertaken in the last class of the week prior to a microteaching presentation made during the following class by each ITA based on the timeline of the course established by the instructor.

Online instructions were delivered through the Blackboard Learning System™. The

Blackboard Learning System™ is an online course management system, affording dynamic

interactions, collaborative learning and assignment organization. The following screenshot is

the homepage of the online activity site (Figure 1). The researcher posted instructions for

online discussions, weekly announcements and learning tasks. ITA students were required to

participate in online discussions each week.

Figure 1. The homepage of the course

The first week was a training week for online learning activities, assuming most ITAs

in class did not have online learning experiences prior to this course. ITAs were taught how

to log in/off the Blackboard Learning System™, navigate between different sections,

download/print materials, and post/edit discussion messages. ITAs were asked to post

messages on the discussion board in order to demonstrate their proficiency in using the

learning system. Messages included self-introduction, greetings to each other, and questions and replies pertaining to the use of the Blackboard Learning System™.

In each class, ITAs were divided into three small groups. They proceeded through four phases in case discussions. In the first phase, ITAs discussed their reflections after watching the video cases. In the second phase, guiding questions (Appendix F) were posted aiming at the usage of language use strategies in the video cases. These questions were also proposed for the purpose of initiating ITAs' awareness and reflection on their usage of language use strategies in real teaching situations. ITAs discussed and answered the questions in small groups. In the third phase, comments and reflections on the same cases by American undergraduate students were provided to ITAs. ITAs were then asked to rewrite and summarize their group answers. Due to the shortage of discussion time for ITAs in face-to-face class, only ITAs in online discussions were asked to present their group summaries to the whole class. In the last phase, ITAs were required to write a script for their next microteaching presentation.

Topic 1. Classroom Presentation

Strategies introduced in this section involved presentation strategies listed in the Language Use Strategy Questionnaire for ITAs. Problems displayed in the video cases, such as class introduction and students' lack of comprehension of instructions, were presented. Guiding questions were focused on ITAs' interpretation of inappropriate usage of language use strategies in the video cases.

Topic 2. Being an Active Listener

This section involved the discussion of listening strategies and questioning and answering strategies a teacher should use in class. Problems presented in the video cases

included classroom disruptions and students' misunderstanding of classroom instructions. Students in small groups discussed solutions to the problems demonstrated in the video cases.

After each topic, there was a required video-taped microteaching in which each ITA did a teaching presentation on their own discipline-specific topic. After the microteaching, individual ITAs were asked to self-report their usage of language use strategies by filling out the Language Use Strategy Questionnaire for ITAs (Appendix C). At the same time, the instructor evaluated ITAs' observed usage of language use strategies by completing the Evaluation Sheet for ITAs' Observed Use of Language (Appendix D).

The instructor was informed not to cover the topics of presentation and active listening strategies in the course until after all data were collected. Therefore, she covered the topics of pronunciation, adequate planning, and effective visual aids during the weeks of this study. The schedule of activities in this study is shown in the following timetable (Table 1).

Table 1.

Class Schedule in the Full Study

Week	Face-to-face Activities	Online Activities
1		Training on the use of Blackboard
2	Microteaching as pre-test on usage of presentation strategies	
3		Topic 1. Classroom Presentation
4		
5	Topic 1. Classroom Presentation	
6	Microteaching as post-test on usage of presentation strategies and pretest on usage of active listening strategies	
7		Topic 2. Being an Active Listener
8		
9	Topic 2. Being an Active Listener	
10	Microteaching as post-test on usage of active listening strategies	
11		Online interviews

Six video cases were presented for ITAs' viewing and discussion. Four of them were available at the web sites of the ITA training programs at the University of California-San Diego and the University of Minnesota. One video case was converted from a clip in a VHS tape produced by the Teaching Assistant Program at the University of Connecticut. The other video case was available at the web site of the Undergraduate Tutorial Center at North Carolina State University. Among these six video cases, two of them focused on the effect of inappropriate preparation for class presentations, two of them focused on disruptions in

ITAs' teaching classrooms, and the other two were concerned with communications between ITAs and American students. Each video was less than three minutes long.

ITAs also received information on perceptions of American undergraduate students on the problems presented in the video cases. Prior to the beginning of the study, a recruitment email was sent to the email listserv of the College of Education in the university where this study was conducted. Four American undergraduate students were selected on the conditions that firstly, they agreed to participate in the study, and secondly, each was from different area of specialization. These four undergraduate students specialized in the areas of biology, math, social science and English. Prior to the study, they viewed and discussed the same video cases as the ITAs. Summaries of these undergraduate students' reflections and comments were shared with the ITAs during the study so that they could receive and read reflections on video cases from undergraduate students' perspectives. American undergraduate students were not included in the data collection and analysis as they were part of the experimental treatment of the study.

Most ITAs in online instructional activities were active participants. They posted at least one message to each video case and made at least one comment on their group members' messages in each phase of activities, which was usually a three- or four-sentence-long paragraph. No participants posted more than five messages in each phase of the activities.

<div align="center">Instrumentation and Data Collection</div>

<div align="center">*Demographic Questionnaire*</div>

Gorsuch's (2003) study suggests that ITAs' acculturation occurs not only through their study experiences inside the U.S. but also through their prior teaching experiences

outside the U.S. Through their study experiences in the U.S., ITAs acquire communication techniques as well as the appropriate use of language in class. Through their prior teaching experiences, ITAs acquire a universal educational culture like the governing role of a teacher (Fuller, Snyder, Chapman & Hua, 1994). Studies of graduate teaching assistants indicate that gender differences, as well as other factors like age and ethnicity, would also affect ITAs' language use in class (Bos, Zakrajsek, Wolf & Stoll, 1980; Daniel, 1983a; Daniel, 1983b; Gorsuch, 2003; McDowell, 1993; Murray & Peterson, 1993).

As a result of these findings, a demographic questionnaire (Appendix B) was administered to the ITA trainees in the beginning of the course. Items in the questionnaire included ITAs' gender, age, ethnicity, academic major, duration of time in the U.S., Oral Proficiency Test score, and prior teaching experiences. Questions regarding ITAs' experiences with computers, the Internet and online courses were also covered in the questionnaire for ITAs participating in online activities. These data were collected for further analysis of their possible influence on changes of ITAs' self-reported and observed usage of language use strategies after they completed online or face-to-face instructional activities.

Language Use Strategy Questionnaire for ITAs

Cohen and Chi (2002) developed a Language Strategy Questionnaire to examine students' usage of second language strategies when they study abroad. In this instrument, 89 items are categorized into 5 factors: learning structure and vocabulary, speaking, listening, reading, and asking for clarification. Validity and reliability estimates for this questionnaire were reported by Paige, Cohen & Shively (2004). The reliability coefficients of these five factors are learning structure and vocabulary (α=.85), speaking (α=.77), listening, reading

(α=.83), and asking for clarification (α=.79). These results suggest adequate reliability for this questionnaire.

A five-point Likert scale questionnaire of language use strategies (Appendix C) has been adapted for this study based on Cohen and Chi's (2002) Language Strategy Questionnaire. As Cohen and Chi's Language Strategy Questionnaire includes both language use strategies and language learning strategies, only language use strategies were selected and adapted in the questionnaire to fit ITAs' teaching context, named the Language Use Strategy Questionnaire for ITAs (Table 2). Due to the shortage of strategies for teaching purposes in Cohen and Chi's Language Strategy Questionnaire, additional presentation, and questioning and answering strategies (Meyers & Holt, 2002) were added into the Language Use Strategy Questionnaire for ITAs so that the questionnaire would more adequately examine ITAs' usage of language use strategies in classroom teaching.

Table 2.

Comparison between Cohen and Chi's Questionnaire and the Language Use Strategy

Questionnaire for ITAs

Items Included in Cohen and Chi's Language Strategy Questionnaire	Items Included in Language Use Strategy Questionnaire for ITAs
	Presentation Strategies 1. Use concise and clear sentences to give an overview of the day's lesson. 2. Use concise sentences to summarize after each major point. 3. Give a substantial conclusion at the end of a presentation. 4. Use obvious transitions, like "next" and "however" to mark topic changes and/or make organization explicit. 5. Check to see how well my speaking reflects what I want to communicate.
58. Look for a different way to express the idea, like using a synonym.	6. Change the structure of the sentence to communicate my intended message if I have difficulty in completing the original sentence.
48. Regularly seek out opportunities to talk with native speakers.	7. Try to get feedback from students regularly.
	8. Repeat what I have said if it wasn't clear to students. 9. Re-phrase what I have said if it wasn't clear to students.
59. Use words from my own language, but say it in a way that sounds like words in the target language.	10. Be careful when directly transferring words and ideas from my own language into English.
	11. Slow down to make sure students can hear what I said clearly.
14. Pay attention to when and how long people tend to pause.	12. Avoid longtime pauses in presentations.
	13. Avoid using fillers, like "uh," "you know," or "well," in the presentation. 14. Use inclusive pronouns, like using "we" instead of "I" in class. 15. Repeat key points to get students' attention.

Table 2. (cont.)

45. Practice saying new expressions to myself. 47. Think about how a native speaker might say something and practice saying it that way.	16. Put my own language out of mind and think only in English as much as possible.
	17. Use examples to help students' understanding.
58. Look for a different way to express the idea, like using a synonym.	18. Find a different way to express an idea when I don't know the correct expression (e.g., use a synonym or paraphrasing).
55. Encourage others to correct errors in my speaking. 57. Ask for help from my conversational partner.	19. Encourage students to correct errors in my speaking.
	Listening Strategies
12. Listen for key words that seem to carry the bulk of the meaning. 16. Practice "skim listening" by paying attention to some parts and ignoring others.	20. Pay special attention to important words to understand what students are saying.
10. Try to predict what the other person is going to say based on what has been said so far. 24. Make educated guesses about the topic based on what has already been said.	21. Make educated guesses about the topic based on what has already been said.
6. Look for associations between the sound of a word or phrase in the new language with the sound of a familiar word.	22. Look for associations between the sound of a word or phrase in English and the sound of a familiar word.
9. Pay special attention to specific aspects of the language; for example, the way the speaker pronounces certain sounds.	23. Use the students' tone of voice as a clue to the meaning of what they are saying.
11. Prepare for talks and performances I will hear in the target language by reading some background materials beforehand. 25. Draw on my general background knowledge to get the main idea.	24. Draw on my background knowledge to get the main idea.
17. Try to understand what I hear without translating it word-for-word.	25. Try to understand what has been heard or read without translating it word-for-word into my own language.
26. Watch speakers' gestures and general body language to help me figure out the meaning of what they are saying.	26. Watch students' gestures and general body language to help me figure out the meaning of what they are saying.

Table 2 (cont.)

	Questioning and Answering Strategies
52. Ask questions as a way to be involved in the conversation.	27. Ask questions as a way to get students involved in the conversation.
	28. Answer questions directly and concisely.
	29. Ask for clarification if I don't understand students the first time around.
	30. Restate a student's question to indicate my understanding of his/her question.
	31. Use questions to check students' mastery of what I have taught.
	32. Ask students questions to check their understanding of my explanation.
	33. Ask students questions to check their satisfaction of my explanation.
50. Direct the conversation to familiar topics.	34. Delay answers if I'm not sure about the answer.
	35. Delay answers if there's not enough time to answer.
	36. Decline politely to answer if the question is off-topic.

Similar to Cohen and Chi's classification of five factors in their questionnaire, the Language Use Strategy Questionnaire for ITAs was divided into two groups: items in (1). speaking strategies that ITAs use in class presentations (referred to as "presentation strategies" in Topic 1 discussion), and (2). listening strategies, and questioning and answering strategies ITAs utilize when communicating with students in class, labs, or individual consulting (referred to as "active listening strategies" in Topic 2 discussion).

The five-point Likert scale was based on the perceived frequency of ITAs' usage of language use strategies. The rating of 1 indicates that an ITA never uses the strategy in a presentation while the rating of 5 indicates that an ITA always uses the strategy. In other words, the higher the rating, the more frequently an ITA thinks he/she uses this strategy in his/her microteaching presentation. ITAs used the questionnaire to self-report their usage of language use strategies in the pre- and post-testing. Validity testing on the Language Use

Strategy Questionnaire was conducted in the pilot study and detailed in the pilot study report

(Appendix A). The Cronbach's alpha value in the reliability testing of the Language Use

Strategy Survey for ITAs was .92, which demonstrated a good level of reliability.

Evaluation Sheet for ITA's Observed Use of Language

The ITA training program where this study was administered has used an evaluation

sheet for many years for rating the ITAs' microteaching presentations. It was focused on

English fluency and grammatical accuracy. This form was used by audience members in the

microteaching presentations, including other ITAs, American undergraduate students, and the

instructor, to rate the performance of the presenters. Based on the evaluation sheet that the

ITA training program has used, a five-point Likert scale evaluation sheet, named Evaluation

Sheet for ITA's Observed Use of Language (Appendix D), was created to measure ITAs'

usage of observable language use strategies. While focusing on ITAs' observed use of

English in teaching situations, the Evaluation Sheet for ITA's Observed Use of Language

matched observable language use strategies listed in the Language Use Strategy

Questionnaire for ITAs (Appendix C) as shown in Table 3.

Table 3.

Relationship of ITAs' Observed Use of Language (Appendix D) and Observable Language

Use Strategies (Appendix C)

Items in Appendix D	Items in Appendix C
1. Vocabulary and word/phrase choice	10. Be careful when directly transferring words and ideas from my own language into English
2. Emphasis on key points	15. Repeat key points to get students' attention
3. Explicitness of directions	3. Slow down to make sure students can hear what I said clearly 1. Use concise and clear sentences to give an overview of the day's lesson 2. Use concise sentences to summarize after each major point 3. Give a substantial conclusion at the end of a presentation
4. Comprehensibility of presentations	8. Repeat what I have said if it wasn't clear to students 9. Re-phrase what I have said if it wasn't clear to students 17. Use examples to help students' understanding
5. Organization of lectures	1. Use concise and clear sentences to give an overview of the day's lesson 2. Use concise sentences to summarize after each major point 3. Give a substantial conclusion at the end of a presentation 4. Use obvious transitions, like "next" and "however" to mark topic changes and/or make organization explicit
6. Eliciting students' input	27. Ask questions as a way to get students involved in the conversation 31. Use questions to check students' mastery of what I have taught 32. Ask students questions to check their understanding of my explanation 33. Ask students questions to check their satisfaction of my explanation

Table 3. (cont.)

7. Responding to students' questions	28. Answer questions directly and concisely
	29. Ask for clarification if I don't understand students the first time around
	30. Restate a student's question to indicate my understanding of his/her question
	34. Delay answers if I'm not sure about the answer
	35. Delay answers if there's not enough time to answer
	36. Decline politely to answer if the question is off-topic

The five-point Likert scale is based on the instructor's observation of the effectiveness of ITAs' usage of language use strategies. A rating of 1 indicates ITAs' ineffective usage of language use strategies while a rating of 5 indicates ITAs' highly effective usage of language use strategies. This evaluation form was used in pre- and post-testing to evaluate changes in ITAs' observed usage of language use strategies. Validity analysis was conducted in the pilot study and detailed in the pilot study report (Appendix A). The Cronbach's alpha value in the reliability testing of the Evaluation Sheet for ITAs' Observed Language Use Strategies was .93, which is an acceptable level of reliability.

Interview Protocol

Online interviews were conducted for the purpose of instructional improvement. Each interview lasted approximately one hour. The guideline questions (Appendix E) for the interviews centered upon ITAs' experiences in case-based learning, online discussions and strategy-based instructions. Questions also intended to elicit ITAs' reflections of online learning experiences and suggestions for improving online learning activities.

Microteaching Protocol

A microteaching presentation (see a sample of the protocol in Appendix H) was undertaken to pretest ITAs' self-reported and observed usage of language use strategies. The other microteaching presentation was held as post-test. In a microteaching, ITAs were provided with a hypothetical teaching situation and asked to deliver a presentation on some general topic related to their disciplines. They were also expected to answer questions that an audience might pose and lead short discussions of their presentation topics. Each presenter was allowed five to ten minutes in a microteaching presentation.

Data Collection

This study employed a combination of quantitative and qualitative research methods. Each ITA who took the course was asked to fill out a demographic questionnaire in the beginning of the course. Demographic data were utilized to investigate their impact on ITAs' changes in their self-reported and observed usage of language use strategies.

A pre-testing was conducted to assess ITAs' initial level of self-reported and observed usage of presentation strategies when each ITA had a microteaching presentation in the beginning of the course. Each ITA used the Language Use Strategy Questionnaire to self-report his/her usage of language use strategies after the presentation while the instructor evaluated the presenter's observed usage of language use strategies using the Evaluation Sheet for ITAs' Observed Use of Language. The same instruments were administered at the end of the discussion activity on presentation strategies as a post-test for ITAs' usage of presentation strategies and a pre-test for their usage of active listening strategies. The post-test of ITAs' usage of active listening strategies was conducted after the discussion activity on active listening strategies was completed.

At the end of the course, ITAs participated in online interviews, reflecting their

learning experiences and commenting on the usefulness of the teaching methods. Transcripts

were collected and coded in NVivo for qualitative analysis of themes.

Data Analysis

A pilot study was conducted in the semester prior to the full study. The purpose of the

pilot study was to troubleshoot problems that might occur in the full study, and ameliorate

interventions and instruments for the full study. Reliability and validity testing were

conducted to assess the instruments of ITAs' self-reported and observed usage of language

use strategies, and items were rewritten and combined when duplicative. A revision was

made by adding a comparison group to better answer the research questions in the full study.

ITAs in experimental group will participate in the online strategy-based instruction facilitated

through case-based peer discussion while ITAs in the comparison group will participate in

the face-to-face strategy-based instruction facilitated through case-based peer discussions.

Full details of the pilot study are included in Appendix A.

Quantitative Analyses

Independent Variables

Pertaining to research question 1, the independent variables in this study were the pre-

test measures of ITAs' self-reported usage of language use strategies in their microteaching

presentations.

Pertaining to research question 2, the independent variables in this study were the pre-

test measures of ITAs' observed usage of language use strategies in their microteaching

presentations.

Pertaining to research questions 3 and 4, the independent variables in this study were ITAs' demographic data, including ITAs' gender, age, ethnicity, academic major, duration of time in the U.S., and prior teaching experiences (Appendix B).

Since research question 5 was analyzed using qualitative methods, there were no independent and dependent variables. Sentences were coded and analyzed for themes.

Dependent Variables

The dependent variables in this study were ITAs' self-reported and observed usage of language use strategies (Question 1 & 2). ITAs' language use strategies included 36 items of specific strategies ITAs should use in teaching situations (Appendix C). Those strategies were classified into three categories: presentation strategies, listening strategies, and questioning and answering strategies, in which listening strategies and questioning and answering strategies were defined and analyzed as active listening strategies. ITAs' observed usage of language use strategies involved seven items of ITAs' observable language use strategies in microteaching presentations (Appendix D).

Statistical Analysis

Data obtained from the pre- and post-testing of ITAs' self-reported language use strategies were collected to determine the improvement of ITAs' use of language strategies in teaching situations. Repeated measures analysis of variance (ANOVA) were used to analyze the significance of changes in ITAs' self-reported usage of language use strategies after they took online or face-to-face instructional activities, and whether these changes were significantly different between participants in the two classes using SPSS.

Data obtained from the pre- and post-testing of ITAs' observed usage of language use strategies were collected to determine the improvement of ITAs' observable language use

strategies in teaching situations. Repeated measures ANOVA were used to analyze the significance of changes in ITAs' observed usage of language use strategies after they took online or face-to-face instructional activities, and whether these changes were significantly different between participants in the two classes using SPSS.

Correlations between ITAs' demographic data were examined first in order to group the variables that might measure the same aspect. After that, a non-parametric statistical method—Kruskal-Wallis Test was conducted to investigate whether ITAs' backgrounds had any significant impact on the learning outcomes, namely ITAs' self-reported and observed language use strategies in teaching situations.

Qualitative Analysis

Transcripts from interviews were collected and imported into NVivo 2.0, a qualitative analysis software program for theme analysis. Coding nodes were 1) the effect of language use strategies on their microteachings and their future teaching; 2) the effect of online instructions on their learning; 3) the effect of online peer discussions on their learning; 4) the effect of video cases on their learning and future teaching; 5) a major change since their participation in online activities; and 6) suggestions on the improvement of online instructions. Theme analysis, while centering upon these nodes to reveal ITAs' reflection toward their learning experiences, was expected to offer supplementary explanation of quantitative results.

Research Quality

Validity and Reliability

The small number of ITA students was the main limitation in this study. Twenty-two (twenty-one in learning activities of Topic 2) participants are considered to be a small sample

for a research study, which might contribute to non-significant results in statistical analysis. Therefore, the qualitative data were important in understanding results in small sample size experiments.

ITAs' teaching experiences and prior experience with the Internet could be a threat to the internal validity of the study. As a result, information about ITAs' experiences with computers, the Internet and online learning, and their teaching experiences was collected in the demographic questionnaire. Also, all ITAs received face-to-face training with the Blackboard environment to ensure they were competent in using the learning system.

Although the regular course instructor agreed not to discuss the topics covered in the online sessions, it is possible that ITAs' classroom instruction affected the learning outcomes measured by the Language Use Strategy Questionnaire for ITAs and the Evaluation Sheet for ITAs' Observed Use of Language. Therefore, the comparison study was designed to eliminate the influence of classroom instruction on the assessment of the effects of online activities on ITAs' usage of language use strategies. Further, online interviews were conducted to gather ITAs' reflections on their online learning experiences separate from their classroom instruction.

<div align="center">Protection of Human Subjects</div>

Prior to the study, producers of the video cases signed a request for permission to use the videos form that was approved by the IRB. Prior to participation, American undergraduate students who were invited to join in the online discussions, ITAs and the instructor signed informed consent forms approved by the Campus Institutional Review Board (IRB).

<div align="center">Chapter Summary</div>

This chapter described a quasi-experimental study to assess the effectiveness of an ITA training program utilizing online, strategy-based instruction facilitated through case-based learning and peer-supported discussion. This comparison study was designed with the experimental class having online instructional interventions and the comparison (control) class having face-to-face instructional interventions. Methods used in this study were mainly quantitative approaches based on a demographic questionnaire and self-reported and observed language use strategy questionnaires from pre- and post-tests, with a qualitative component from online interviews included to better explain quantitative results. Repeated measures ANOVA was used to analyze the differences between online and face-to-face activities on ITAs' self-reported and observed usage of language use strategies. The Kruskal-Wallis Test was used to analyze the influence of ITAs' demographics on their changes of self-reported/observed usage of language use strategies. Interview data were analyzed qualitatively to identify themes of ITAs' reflections and suggestions about their online learning experience. Results of the study will be presented in Chapter Four.

CHAPTER IV

RESULTS

Overview

Chapter Four describes results of analyses on the following research questions.

1. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' self-reported usage of language use strategies, compared to face-to-face instructions?

2. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' observed usage of language use strategies, compared to face-to-face instructions?

3. What is the relationship between ITAs' demographics and changes in their self-reported usage of language use strategies?

4. What is the relationship between ITAs' demographics and changes in their observed usage of language use strategies?

5. What are ITAs' perceptions of online strategy-based instruction using peer-supported case-based learning?

Changes of ITAs' self-reported usage of language use strategies were calculated by pre-posttest gain scores. Demographic information was analyzed for its influence on ITAs' usage of language use strategies. ITAs' online interviews were coded for themes to identify ITAs' online learning experiences. Findings and explanation of the qualitative analysis are also addressed in this chapter. Data analysis techniques included repeated measures analysis of variance (ANOVA), Kruskal-Wallis Test, and qualitative analysis.

Demographic Data Screening

Twenty-two international teaching assistants (ITAs) participated in this study. Ten ITAs who took the ITA training class in the morning participated in the online instructional activities while twelve ITAs who took the ITA training class in the afternoon participated in the face-to-face instructional activities. One ITA dropped the class prior to the post-test of the usage of active listening strategies, so there were eleven ITAs taking the post-test of the usage of active listening strategies in the face-to-face section.

Each ITA filled out a demographic survey prior to the beginning of the study. According to the survey, none of them used English as their native language. So the item of "English as a native language" was deleted from the variable list when the data were used to examine the impact of their differences on ITAs' usage of language use strategies. Another item "the most recent time to take screening test" was also deleted from the list because all the ITAs in the study took the screening test within the same time period as required by the ITA training program at the university where this study was conducted.

ITAs' demographic data found that ITAs in this study had either university teaching assistant experience or no teaching experience at all. In other words, the item "types of schools I have taught" and the item "teaching title" were correlated positively and perfectly ($r=1$, $p<.01$), that indicated that the items might measure the same demographic variable. In order to minimize multicollinearity in the data set, the two items—"types of schools I have taught" and "teaching title"— were combined into one variable "university teaching assistant experience". Following this combination, the analysis revealed that two other items "country of teaching" ($r=.957$, $p<.01$) and "teaching duty" ($r=.722$, $p<.01$) also had significantly strong correlation with the new item "university teaching assistant experience" and with each

other (r=.675, p<.01). Therefore, these three items were combined into a new item "teaching duty in US colleges" when the demographic data were input in SPSS.

Eleven demographic variables, as described in Table 4, were used to investigate their influence on changes of ITAs' self-reported and observed usage of language use strategies. Results of t-test comparing participants in the two sections of the course indicated that there were no significant differences in the distribution of these eleven demographics between ITAs in online and face-to-face instructional activities (see Table 4).

In addition, five other variables collected from ITAs during online instructional activities were analyzed to study the impact of ITAs' prior experience with the Internet and online courses on changes of their self-reported and observed usage of language use strategies. The five variables were proficiency of the Internet usage, comfort level with the Internet and computers, experience of online course, experience of using the Blackboard Learning System, and experience of using other online learning systems (see Table 5).

Table 4.

ITAs' Demographic Information

	ITAs in online class	ITAs in face-to-face class	Sig.
Gender			
Female	5 (22.7%)	7 (31.9%)	.616
Male	5 (22.7%)	5 (22.7%)	
Age			
20-29	8 (36.4%)	5 (22.7%)	.809
30-40	2 (9%)	7 (31.9%)	
Ethnicity			
Asian	9 (40.9%)	10 (45.6%)	
African	0	1 (4.5%)	.782
White	1 (4.5%)	1 (4.5%)	
Highest degree attained			
Bachelor	5 (22.7%)	3 (13.7%)	.097
Master	5 (22.7%)	9 (40.9%)	
Country to get the highest degree			
US	3 (13.5%)	4 (18.2%)	.751
Out of US	7 (31.9%)	8 (36.4%)	

Table 4 (cont.)

Duration after attaining the highest degree			
Less than one year	1 (4.5%)	2 (9.1%)	
One year	2 (9.1%)	2 (9.1%)	
Two to three years	5 (22.7%)	4 (18.2%)	.247
More than three years	2 (9.1%)	4 (18.2%)	

Major			
Science and technology	6 (27.3%)	6 (27.3%)	
Non-science and technology	4 (18.2%)	6 (27.3%)	.686

Duration of stay in US (year)			
Less than one year	1 (4.5%)	1 (4.5%)	
One year	5 (22.7%)	4 (18.2%)	
Two years	2 (9.1%)	4 (18.2%)	.266
More than three years	2 (9.1%)	3 (13.7%)	

Teaching duties in US colleges			
Classroom teaching	1 (4.5%)	3 (13.7%)	
Others	2 (9.1%)	5 (22.7%)	.887

Duration of teaching (month)			
1	0	3 (13.7%)	
4	1 (4.5%)	2 (9.1%)	.880
8	2 (9.1%)	3 (13.7%)	

Table 4 (cont.)

Oral Proficiency Test score			
2	7 (31.9%)	6 (27.3%)	.222
3	3 (13.7%)	6 (27.3%)	

Table 5.

Experience of ITAs' Use of Technology in Online Class

	Proficiency of the Internet usage
Proficient	8
Adequate	2
Unfamiliar	0

	Comfort level with the Internet and computers
Comfortable	8
Less comfortable	2
Uncomfortable	0

	Experience of online course	Experience of using the Blackboard Learning System	Experience of using other online learning systems
First-time user	7	7	4
Not a first-time user	3	3	6

Research Question Results

Question 1

Q1. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' self-reported usage of language use strategies, compared to face-to-face instructions?

The analysis for question 1 compared self-reported usage of language use strategies, including presentation and active listening strategies, between ITAs in online instructional activities and ITAs in face-to-face instructional activities to examine the effectiveness of online learning activities. Data used to analyze this question were collected when ITAs completed the Language Use Strategy Questionnaire for ITAs after their microteaching presentations. A t-test was conducted to examine the differences between ITAs in the online class and ITAs in the face-to-face class on their pretest data of the self-reported usage of language use strategies. Results found no significant difference between the two classes prior to online or face-to-face instruction ($p_{presentation\_strategies}$>.05, $p_{active\_listening\_strategies}$>.05).

Repeated measures ANOVA was performed to identify the significance of changes in ITAs' usage of language use strategies after they took online or face-to-face instructional activities, and whether these changes were significantly different between ITAs in the two classes. Results of the study suggested that both groups reported significant improvement on the usage of presentation strategies in the tests (F=5.271, *p*<.05). However, there was no statistically significant difference on the usage of presentation strategies between ITAs in online instructional activities and ITAs in face-to-face instructional activities (F=.573, *p*>.05). As shown in Figure 2, in the post-test immediately following the discussion of presentation strategies, the self-reported usage of presentation strategies from ITAs in online instructional activities represented greater improvement than ITAs in face-to-face instructional activities.
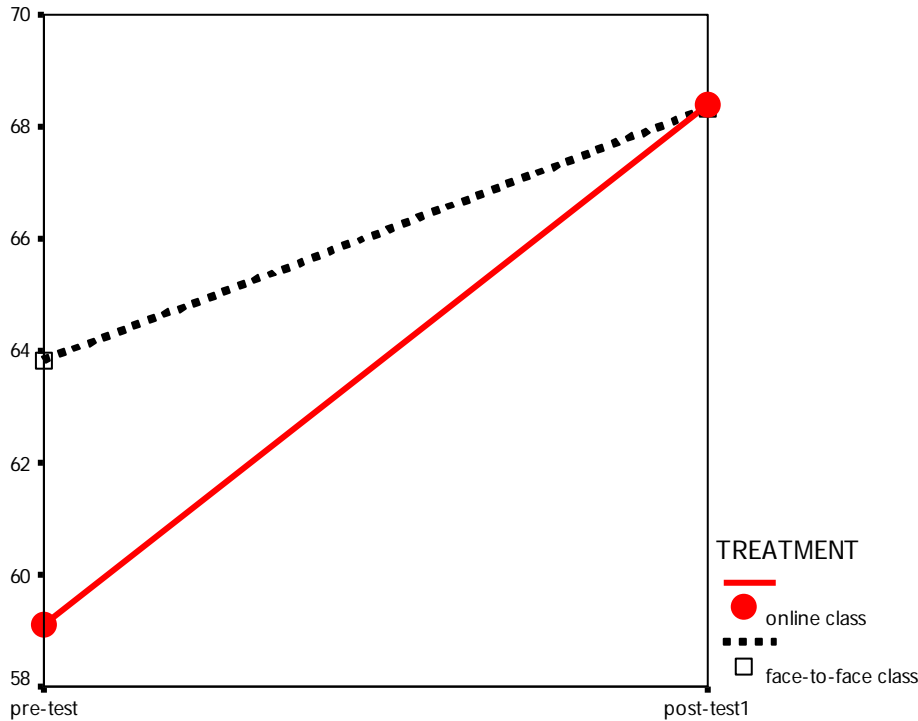
Figure 2. Self-reported usage of presentation strategies

Results of the post-test showed that ITAs in face-to-face instructional activities reported almost identical usage of presentation strategies as ITAs in online instructional activities, although, in the pre-test, ITAs in face-to-face instructional activities reported greater usage of presentation strategies than ITAs in online instructional activities (Table 6).

Because one ITA in face-to-face instructional activities dropped the course before the post-test of the usage of active listening strategies, the missing value of her self-reported usage of active listening strategies was imputed using the Linear Trend at Point in SPSS procedure that "replaced the missing data by running regression on all of the valid data" ("Time Series Analysis", 1999, p. 36). Analysis revealed that ITAs in online instructional activities reported greater improvement on the usage of active listening strategies in the post-test, which surpassed the self-reported improvement of ITAs in face-to-face instructional activities, as shown in Figure 3.
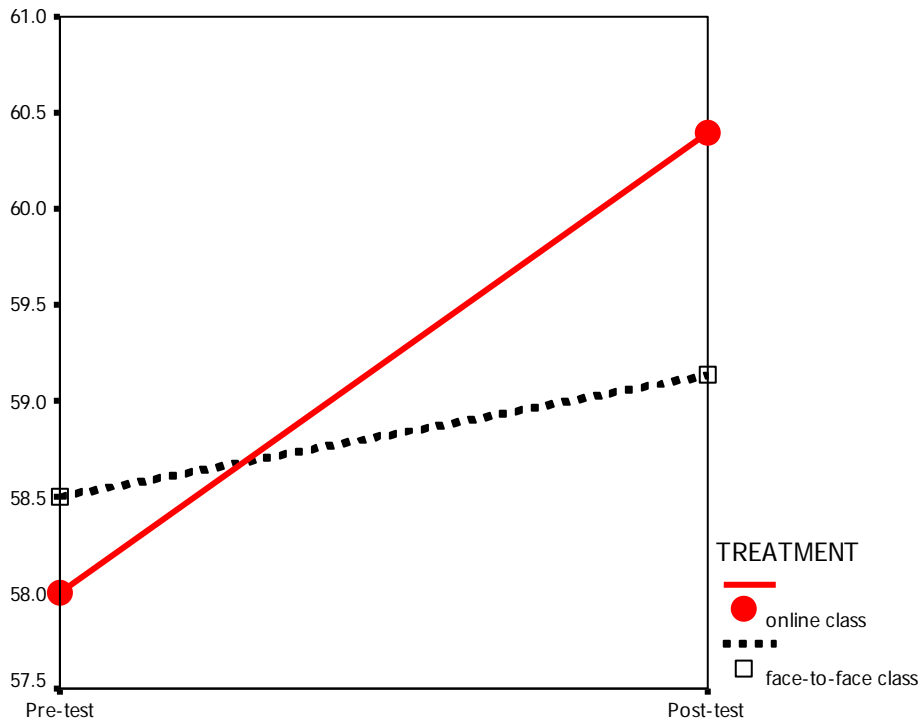
Figure 3. Self-reported usage of active listening strategies

ITAs in online instructional activities reported greater usage of active listening strategies in the post-test than ITAs in face-to-face instructional activities did in the post-test, although in the pretest ITAs in online instructional activities reported less usage of active listening strategies than ITAs in face-to-face instructional activities (Table 6). However, this difference between ITAs in the two classes was not statistically significant (F=.013, *p*>.05); neither were there significant differences in improvement of self-reported usage of active listening strategies within each classes (F=.804, *p*>.05).

Table 6.

Means of ITAs' Self-reported Usage of Language Use Strategies in Pre- and Post-test

	Pre-test		Post-test	
	Presentation strategies (N=10)	Active listening strategies (N=12)	Presentation strategies (N=10)	Active listening strategies (N=11)
ITAs in online activities	59.10	58	68.40	60.4
ITAs in face-to-face activities	63.83	58.5	68.33	59.1

In summary, after watching video cases and participating in discussions on language use strategies, ITAs in online instructional activities perceived themselves as having greater development of their usage of presentation and active listening strategies than ITAs in face-to-face instructional activities. However, their differences were not statistically significant in both presentation and active listening strategies.

Question 2

Q2. What is the effect of online strategy-based instruction using peer-supported case-based learning on ITAs' observed usage of language use strategies, compared to face-to-face instructions?

A t-test was conducted to examine the differences between ITAs in the online class and ITAs in the face-to-face class on their pretest data of the observed usage of language use strategies. Results suggested that there was no significant difference in observed usage of presentation strategies between the two classes prior to the online and face-to-face

instructions ($p_{presentation\_strategies}$>.05). However, ITAs in face-to-face class had significantly

higher observed usage of active listening strategies than ITAs in online class prior to the

online and face-to-face instructions ($p_{active\_listening\_strategies}$<.05).

Results of repeated measures ANOVA were that ITAs in both classes showed

significant improvement (F=5.387, p<.05) on their observed usage of presentation strategies.

However, the improvement was not significant between two classes (F=1.092, p>.05). ITAs

in online instructional activities had greater improvement on their observed usage of

presentation strategies than ITAs in face-to-face instructional activities (Figure 4). ITAs'

observed usage of presentation strategies in online discussions reached almost the same level

as that of ITAs in face-to-face discussions after the discussion of presentation strategies,

although in the pre-test before the discussion, ITAs in face-to-face discussions used

presentation strategies much more than ITAs in online discussions, as shown in Table 7.
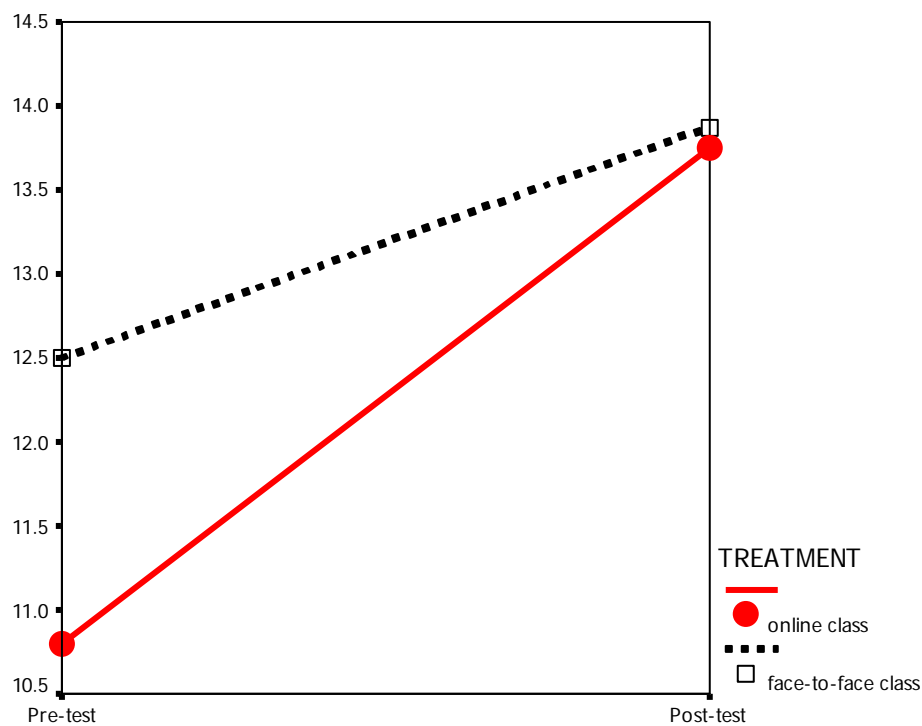
Figure 4. Observed usage of presentation strategies

Because one ITA in face-to-face instructional activities dropped the course before the post-test of the usage of active listening strategies, the missing value of her observed usage of active listening strategies was imputed using the Linear Trend at Point in SPSS procedure. Results indicated that ITAs in face-to-face instructional activities significantly outperformed their peers in online instructional activities on the observed usage of active listening strategies (F=7.119, *p*<.05), as shown in Figure 5. Since ITAs in face-to-face instructional activities had significantly higher usage of active listening strategies than ITAs in online instructional activities in the pre-test as well, the improvement rate was computed to see whether ITAs between the two classes in the pre- and post-tests were different on their improvement rate of usage of observed active listening strategies. Results showed that ITAs in online instructional activities improved their usage of active listening strategies at a percentage of 33.7 while ITAs in face-to-face instructional activities improved their usage of active listening strategies at a percentage of 24.8.
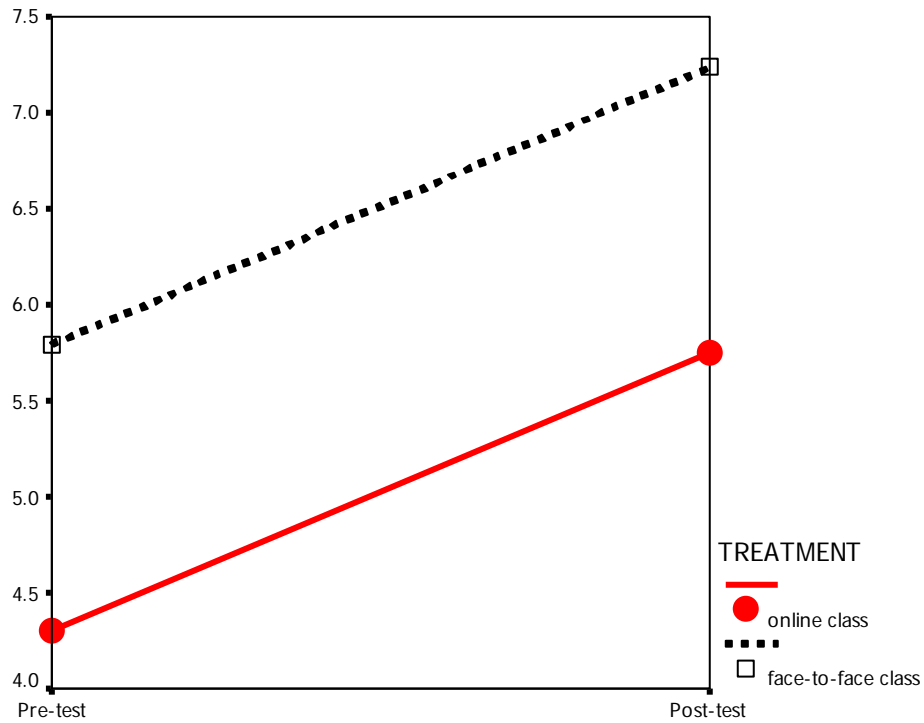
Figure 5. Observed usage of active listening strategies

Analyses of self-report and observed usage data indicated a similar pattern for ITAs'

self-reported and observed usage of presentation strategies. ITAs participating in online

instructional activities had greater improvement on their usage of presentation strategies than

ITAs in face-to-face instructional activities did, but the improvement was not statistically

different between ITAs in two classes.

Table 7.

Means of ITAs' Observed Usage of Language Use Strategies

	Pre-test		Post-test	
	Presentation strategies (N=10)	Active listening strategies (N=12)	Presentation strategies (N=10)	Active listening strategies (N=11)
ITAs in online activities	10.8	4.3	13.75	5.75
ITAs in face-to-face activities	12.5	5.8	13.87	7.24

Results of ITAs' observed usage of active listening strategies were quite different from their self-reported usage. ITAs in online instructional activities reported greater improvement on the usage of active listening strategies while the instructor observed greater improvement on ITAs in face-to-face instructional activities (compare Figure 4 and 5).

Question 3

Q3. What is the relationship between ITAs' demographics and changes in their self-reported usage of language use strategies?

Since the sample size in this study was quite small (N=22) and demographic variables were not normally distributed, a non-parametric statistical method—Kruskal-Wallis Test was conducted to reveal the relationship between ITAs' demographics and their changes of self-reported and observed usage of language use strategies (Sheskin, 1997). This method was used to analyze Question 3 and 4.

Changes of ITAs' self-reported language use strategies were measured by results of self-report in the post-test minus results of self-report in pre-test, thus creating a change score. Each demographic variable was paired with changes of ITAs' self-reported language use strategies. Results of Kruskal-Wallis Test indicated that none of the demographic variables significantly influenced changes of ITAs' self-reported presentation or active listening strategies (Table 8).

Table 8.

Results of Kruskal-Wallis Test on the Influence of ITAs' Demographics on Changes of Their Self-reported Language Use Strategies

Changes of ITAs' self-reported presentation strategies

	Chi-Square	Sig.
Gender	.01	.921
Age	10.063	.435
Ethnicity	.053	.974
Highest degree	.001	.973
Country of the highest degree	.180	.672
Duration after the highest degree	6.614	.579
Major	2.125	.346
Duration of stay in U.S.A.	5.018	.414

Table 8. (cont.)
Teaching duties in US. colleges   1.633   .652

Duration of teaching   2.972   .396

Oral Proficiency Test score   .296   .587

Changes of ITAs' self-reported active listening strategies

	Chi-Square	Sig.
Gender	.682	.409
Age	6.263	.793
Ethnicity	.660	.719
Highest degree	.198	.657
Country of the highest degree	.450	.502
Duration after the highest degree	8.837	.356
Major	2.395	.302
Duration of stay in U.S.A.	2.483	.779
Teaching duties in US. colleges	4.160	.245
Duration of teaching	.769	.857
Oral Proficiency Test score	.000	1.000

Prior Internet and online course experience of ten ITAs who participated in online

instructional activities were analyzed with their changes in self-reported usage of language

use strategies. Results revealed that prior Internet and online course experience of ITAs in

online instructional activities did not have any significant impact on their changes of self-

reported language use strategies (Table 9).

Table 9.

Results of Kruskal-Wallis Test on the Influence of ITAs' Prior Internet and Online Course

Experience on Changes of Their Self-reported Language Use Strategies

Changes of ITAs' self-reported presentation strategies		
	Chi-Square	Sig.
Proficiency of the Internet usage	.017	.896
Comfort level with the Internet and computers	.274	.600
Experience of online course	.209	.648
Experience of using the Blackboard Learning System	.013	.909
Experience of using other online learning systems	.011	.915
Changes of ITAs' self-reported active listening strategies		
	Chi-Square	Sig.
Proficiency of the Internet usage	.273	.600
Comfort level with the Internet and computers	1.098	.295
Experience of online course	.052	.819
Experience of using the Blackboard Learning System	1.307	.253
Experience of using other online learning systems	.926	.336

Results of Kruskal-Wallis Test found that ITAs' perceived changes of usage of

language use strategies were not significantly affected by their gender, ethnicity, highest

degree (including countries where they get their highest degrees and duration after they get

the highest degrees), duration of stay in US, teaching duties in US colleges (including

duration of teaching), or oral proficiency score. Likewise, perceived changes of usage of

language use strategies of the ITAs who participated in online instructional activities were

not significantly affected by their prior Internet and online course experiences.

<div align="center">*Question 4*</div>

Q4. What is the relationship between ITAs' demographics and changes in their observed

usage of language use strategies?

The Kruskal-Wallis Test was used to analyze the relationship between ITAs'

demographics and their changes of observed usage of language use strategies in the pre- and

post-test. Changes of ITAs' observed usage of active listening strategies was measured by a

change score derived by subtracting pre-test from post-test assessments.

Results indicated that the variable "countries where ITAs get their highest degree"

had significant impact on changes of their observed usage of active listening strategies. ITAs

who received their highest degree in US (*M*=15.43) showed greater improvement on the

observed usage of active listening strategies than ITAs whose highest degree was obtained

outside US (*M*=9.67). Analysis also revealed that other demographic variables did not have

significant effects on ITAs' changes of observed language use strategies, as shown in Table

10.

Table 10.

Results of Kruskal-Wallis Test on the Influence of ITAs' Demographics on Changes of Their

Observed Language Use Strategies

Changes of ITAs' observed presentation strategies

	Chi-Square	Sig.
Gender	1.415	.234
Age	11.476	.322
Ethnicity	.018	.991
Highest degree	.379	.538
Country of the highest degree	.978	.323
Duration after the highest degree	9.684	.288
Major	3.725	.155
Duration of stay in U.S.A.	7.704	.173
Teaching duties in US. colleges	2.944	.400
Duration of teaching	1.194	.755
Oral Proficiency Test score	.001	.971

Table 10. (cont.)

Changes of ITAs' observed active listening strategies

	Chi-Square	Sig.
Gender	.073	.786
Age	7.105	.715
Ethnicity	.431	.806
Highest degree	.177	.674
Country of the highest degree	3.968	.046
Duration after the highest degree	7.032	.533
Major	.595	.743
Duration of stay in U.S.A.	9.937	.077
Teaching duties in US. colleges	2.251	.522
Duration of teaching	.202	.977
Oral Proficiency Test score	.793	.373

Prior Internet and online course experience of the ITAs who participated in online instructional activities were analyzed together with their changes in observed usage of language use strategies. Results did not render any statistical significance, which means that ITAs' prior Internet and online course experiences did not have any significant impact on their changes in usage of observed language use strategies (Table 11).

Table 11.

Results of Kruskal-Wallis Test on the Influence of ITAs' Prior Internet and Online Course

Experiences on Changes of Their Observed Language Use Strategies

Changes of ITAs' self-reported presentation strategies		
	Chi-Square	Sig.
Proficiency of the Internet usage	.017	.896
Comfort level with the Internet and computers	2.075	.150
Experience of online course	.000	1.000
Experience of using the Blackboard Learning System	.052	.819
Experience of using other online learning systems	.046	.831
Changes of ITAs' self-reported active listening strategies		
	Chi-Square	Sig.
Proficiency of the Internet usage	.071	.790
Comfort level with the Internet and computers	.018	.894
Experience of online course	.122	.727
Experience of using the Blackboard Learning System	.488	.485
Experience of using other online learning systems	1.436	.231

Results of the Kruskal-Wallis Test indicated that ITAs who received their highest

degree in the US had significantly greater improvement on the observed usage of active

listening strategies than ITAs who got their highest degree outside the USA. Other

demographic variables, including gender, ethnicity, highest degree, duration of stay in USA,

teaching duties in US colleges, oral proficiency score, as well as ITAs' Internet and online

course experience, did not have significant impact on changes of ITAs' usage of observed language use strategies.

<div align="center">Question 5</div>

Q5. What are ITAs' perceptions of online strategy-based instruction using peer-supported case-based learning?

To better understand results of quantitative analysis in this study, the nine ITAs who participated in the online instructional activities participated in online interviews. It was hosted on the Blackboard course management system. Due to ITAs' different availability of time, they were divided into six interviews, including two group interviews and four individual interviews.

Interview questions included the following themes: ITAs' reflection of their learning and utilization of language use strategies, their reflection of video case analysis, major changes that ITAs observed through their online learning, and suggestions for future class instruction.

ITAs agreed that the language use strategies included in the instruction would be very helpful in their future teaching. They recalled many strategies that they thought would affect their future teaching as shown in the following examples.

"I (would) use more transition words. If I am not sure what others said, I will ask someone to repeat it."

"I would use the simplest words, use simplest sentence structure, put everything important on the blackboard and speak as loud and clearly as I can."

"I (will) try to stress important words."

However, ITAs also felt that it was hard to utilize those newly-acquired strategies in their microteaching presentations as one ITA said "*I remembered them, but I am nervous when I was doing microteaching. So I did not use them effectively.*" ITAs suggested that they should have opportunities to practice those strategies in their face-to-face class.

"In real life we face many types of problems. I know professors who have (been) teaching for more than a decade also face many kinds of challenging situation in each semester.... Yeah definitely (The video case analysis helped my preparation to be a TA)." When asked about benefits from online video case analysis, all nine ITAs responded with an enthusiastic "Yes." They explained that "*it is very hard to learn too much from the course. But we can remember something if ~~you~~ (we) are facing ~~the~~ (a) real problem.*" "*The problems in the video ~~session~~ (cases) are very common. We will also be in face of such situations...... After watching the video and (having) discussion(s), I do know how to deal with the situation.*" Feedback from American undergraduate students on the video case analysis was regarded as "*(the) most important*" part of understanding the teaching culture in American colleges and selecting appropriate language use strategies to solve the problems. Online instructions (including organization of the activities and questions) were also described as not only guidelines for ITAs to analyze the video cases but also providing hints to solve the problems.

"Definitely, their (American undergraduate students') feedback is most important."

"They (instructions) were very helpful in analyzing the tape."

"The questions you posted gave us some focuses."

When asked about suggestions on case-based learning, ITAs expressed a desire to watch more cases. They wanted cases that presented solutions and students' feedback after the

solutions, cases with positive usage of language use strategies, and cases on tutoring during office hours.

Although ITAs were not satisfied with their group members' participation in online instructional activities, they admitted that they learned some or a lot from their group members.

"It (discussion) just reminded me some strategies I already knew to make them engraved in my memory."

"It does help me to improve my problem solving as she (one of his group members) can always think out all the possibilities and the solutions."

"It (exposure to different people's opinions) encouraged me to give my own opinions because you can't only repeat others' ideas."

The small group size and short discussion times for each topic were seen as barriers to ITAs' active online participation.

"It is helpful. If there are more students join(ing) the discussion. It will be better."

"I think it might be better if you pool all students together and then let them discuss about your question……It might increase the probability that students will participate more."

"Give us more time to answer your questions…… because everyone is busy"

Some other major changes from ITAs regarding their instruction included use of technology and their increasing awareness of students' understanding of lectures.

"Ah, one more thing that is helpful is that I could learn how to use the blackboard and chatting."

"I (would) always think I am a teacher, (and) how can I make my students understand me."

The interviews conducted in the end of the study showed that ITAs had positive attitudes toward their online learning experience. They thought case-based learning facilitated by peer discussion strengthened their awareness of using appropriate language use strategies in classroom teaching, improved their problem solving abilities, and encouraged expressions of their opinions. Most importantly, interviews identified a reason that might cause discrepancy between ITAs' self-reported and observed usage of active listening strategies. The ITAs' identified affective factors such as language anxiety that restrained their actual usage of language use strategies in real teaching situations.

Chapter Summary

ITAs in the online activity class reported greater improvement on the usage of language use strategies than ITAs in the face-to-face activity group. Observation ratings by the instructor showed that ITAs in online instructional activities had greater improvement on the usage of presentation strategies, but were outperformed on the usage of active listening strategies by ITAs in face-to-face instructional activities. Results of the Kruskal-Wallis Test of the relationship between ITAs' demographics and their changes in usage of language use strategies indicated significant influence of ITAs' study experience in U.S. colleges on their changes of observed usage of active listening strategies. Qualitative theme analysis of the interviews helped to identify the approaches that enhanced ITAs' awareness of language use strategies and suggested the discrepancy between ITAs' self-reported and observed usage of active listening strategies might be caused by ITAs' language anxiety. Discussion of results will be addressed in Chapter Five.

CHAPTER V

DISCUSSION

Overview

In this chapter, findings from the quantitative and qualitative analyses are interpreted to answer the research questions regarding effects of an online strategy-based training program using peer-supported case-based instructions on ITAs' usage of language use strategies, and the relationships between these changes and ITAs' demographic differences. Secondly, limitations affecting design and interpretation of the results are discussed. The limitations primarily include small sample size and use of a single rater in observing language use strategies. Recommendations for instructors in ITA training programs and implications for future studies are also discussed in this chapter.

Discussion

Effect of Strategy-based Instruction Facilitated through Case-based Peer-supported

Learning on ITAs' Self-reported and Observed Usage of Language Use Strategies

Results of this study found that no significant difference existed between ITAs in online instructional activities and ITAs in face-to-face instructional activities on their self-reported usage of language use strategies and on observed presentation strategies. However, mean scores of their strategy usage suggested that ITAs participating in online instructional activities had greater improvement in self-reported and observed usage of language use strategies than ITAs in face-to-face instructional activities, as shown in Table 12.

Table 12.

ITAs' Improvement Rate on Their Usage of Self-reported and Observed Presentation and

Active Listening Strategies

	Self-reported presentation strategies	Self-reported active listening strategies	Observed presentation strategies	Observed active listening strategies
ITAs in online activities	15.7%	4.14%	27.3%	33.7%
ITAs in face-to-face activities	7%	1%	11%	24.8%

In the post-tests, ITAs in online instructional activities outperformed ITAs in face-to-face

instructional activities on the self-reported usage of presentation strategies by .87% (.07

points) and on the self-reported usage of active listening strategies by 25.9% (1.3 points) (see

Table 6, Page 65). The gap of observed usage of presentation strategies between ITAs in

online instructional activities and ITAs in face-to-face instructional activities was narrowed

from 1.7 points in the pre-test to .12 points in the posttest (See Table 7, Page 69). The

improvement rate of ITAs' observed usage of active listening strategies also showed that

ITAs in online instructional activities had better improvement than ITAs in face-to-face

instructional activities (Table 12). Interviews with ITAs participating in online instructional

activities also supported these findings. ITAs agreed that strategy-based instruction in this

informal online peer-supported case-based learning environment helped them to acquire

language use strategies and develop abilities to solve teaching problems. These results were

consistent with previous studies in the fields of strategy-based language instruction, case-

based learning and online peer-supported interaction that instruction using these teaching/learning approaches would help learners' knowledge acquisition, and help to increase their awareness of language strategy use (Beauvois, 1994; Cliff & Wright, 1996; Dörnyei, 1995; Fitzgerald & Semrau, 1998; Fitzgerald, Wilson & Semrau, 1997; Forman & Cazden, 1985; Huang, 2003; Miller, 1995; Paige, Cohen & Shively, 2004; Tillman, 1995). In summary, analysis of effects of this quasi-experimental design on ITAs' self-reported and observed usage of language use strategies indicated that strategy-based instruction facilitated through peer-supported case-based learning had a potential positive effect on ITAs' usage of language use strategies. However, studies with a large sample are needed to further identify statistical significance of the changes in ITAs' usage of language use strategies.

ITAs' self-report on the usage of active listening strategies was inconsistent with the instructor's observation of the usage of active listening strategies. Self-report of ITAs in online instructional activities indicated a greater but insignificant improvement on the usage of active listening strategies than their peers in face-to-face instructional activities. However, the instructor's observation suggested ITAs in face-to-face instructional activities had a significantly greater improvement on the usage of active listening strategies then their peers in online instructional activities. Some affective factors, like language anxiety, may explain the discrepancy between ITAs' self-reported usage and their observed usage of active listening strategies, as MacIntyre, Noels and Clement (1997) found in their study that affective factors may cause ITAs' underestimation or overestimation of their usage of language use strategies. Analysis of the interviews by ITAs in the online class supported the impact of affective factors in ITAs' usage of language use strategies in microteaching presentations, as one ITAs said, "… *but I am nervous when I was doing microteaching. So I*

did not use them (language use strategies) effectively" (personal communication, October 31, 2005). Having a single rater of the observed language use strategies may be another reason that contributed to the discrepancy between ITAs' self-reported and observed usage of active listening strategies. The instructor was the only rater scoring ITAs' observed usage of language use strategies. She was not blind to the study and may not have been completely objective when making the observation ratings. Also, different demeanor of ITAs in the two classes may impact the instructor's grading in microteaching presentations (Allen & Lambating, 2001). Compared to ITAs in the afternoon class, ITAs in the morning class were very quiet. The impression of active participation of ITAs in face-to-face instructional activities (afternoon class) versus passive participation of ITAs in online instructional activities (morning class) may influence the instructor's grading in microteaching presentations. Other factors, like boredom and fatigue, may also affect the instructor's judgment in microteaching presentations (Klein, 2002). It is suggested that an outside, independent observer make ratings in similar studies in the future.

Relationship between ITAs' Demographics and Their Self-reported and Observed Usage of

Language Use Strategies

Results of the Kruskal-Wallis Test showed that ITAs' higher educational experience significantly affected their observed usage of active listening strategies. ITAs who received their highest degrees in US used strategies more effectively to elicit students' input and to respond to students' questions than ITAs who got their highest degree outside USA. This finding supported Gorsuch's (2003) assumption that ITAs with study experience in the US have started their acculturation to educational teaching methods in U.S. while they were

learners, and therefore could use communication techniques more successfully than ITAs without study experience in the USA.

Analyses of the data showed that differences of prior Internet and online course experiences did not significantly influence changes on self-reported and observed usage of language use strategies of ITAs who participated in online instructional activities. This result confirms that online learning can be a useful learning approach in ITA training programs even when ITAs do not have prior experience with technology as long as adequate orientation is provided for using the technology. Results confirm that ITAs can acquire language use strategies more effectively and enrich their teaching experiences by using technologies. Further, online instruction offers ITAs a good opportunity to experience the use of educational technologies in instruction, which they may apply in their future teaching.

Limitations of the Study

Small sample size was a primary limitation in this study. There were only twenty-two ITAs participating in this study, with ten ITAs in the experimental group (online instructional activities) and twelve ITAs (eleven subjects in the post-test) in the comparison group (face-to-face instructional activities). Such a sample size may be too small to generate statistically significant results, although positive but insignificant results were found in this study.

As the inter-rater reliability on the observed usage of language use strategies was very low (.20) in the pilot study and it was not possible to employ more raters, the instructor was the only determiner for ITAs' observed usage of language use strategies in the full study. Therefore, lack of objectivity in the scoring is a possible limitation for this study. The instructor's interaction with ITAs and impression of their participation and classroom

demeanor, even the instructor's understanding of ITAs' presentation topics, may affect the instructor's scoring of ITAs' observed usage of language use strategies.

ITAs' knowledge of what the researcher was looking for might also influence results of the study. As each ITA filled out the same Language Use Strategy Survey for ITAs in two pairs of pre- and post-tests in this study, they may have developed an awareness of the purpose for the research and remembered the items in the survey. As a result, they may have paid special attention to questions related to those items and ignored other questions during the instructional activities. Furthermore, some ITAs' anxiety of getting higher scores may have increased in the post-tests while some ITAs may have underestimated their performance measured by those items in the post-tests. These additional factors may have impacted the objectivity of their self-reports on the usage of language use strategies.

Due to the limitation of enrollment in the ITA training program where this study was conducted, convenience sampling was used to compare differences of usage of language use strategies of ITAs in two classes. As this sampling method is based on easy accessibility of research subjects, the sample might not be representative of the population of international teaching assistants (Rasor & Barr, 1998). Another bias of convenience sampling is that it couldn't eliminate differences of ITAs in two classes in this comparison study. A discernable difference in the two ITA training classes was their classroom participation. ITAs in online instructional activities took this course at 8am every Tuesday and Thursday while ITAs in face-to-face instructional activities took class at 2pm in the same days. The early class time may have a negative effect on classroom participation of ITAs in online instructional activities. As a result, ITAs in face-to-face instructional activities responded more actively toward the instructor's questions and classroom conversations while ITAs in online

instructional activities were mostly silent in class; these demeanor difference might have negatively impacted the instructor's scoring of the observed usage of language use strategies as Cumming, Kantor & Powers' (2002) study suggested that raters' previous teaching and rating experiences would influence their criteria in present ratings.

Different amounts of time ITAs had in the in online and face-to-face instructional activities were also a limitation in this study. ITAs in online instructional activities had three weeks on each topic while ITAs in face-to-face activities had only seventy-five minutes for each topic. Although ITAs in online instructional activities were not required to spend the entire three weeks on online discussion, it gave them more time to understand the video cases, read comments from American undergraduate students, and organize their own verbal reflections. ITAs in face-to-face instructional activities did not have three weeks of class time to complete the activities because both classes included other instructional topics taught by the course instructor. This difference may have affected ITAs' language use strategies learning, thus contributing to their usage of language use strategies in microteaching presentations.

Recommendations for Further Study

The use of only one rater to examine ITA trainees' observed usage of language use strategies was a serious limitation in this study since ratings could be easily affected by the rater's teaching experience, rating experience, and involvement with the ITAs. Two or more raters should be used as studies indicated that the employment of two or more well-trained raters would increase objectivity and consistency in the rating process (Bejar, 1985; Schoonen, 2005). One possibility would be to have a panel of well-trained raters who could

be invited to assess videotapes of ITAs' microteaching as videos are not likely to increase

presenters' anxiety during face-to-face presentations.

Affective factors should be included in future studies of ITAs' usage of language use

strategies. Results of the discrepancy between ITAs' self-reported and the instructor's

observed active listening strategies in the current study suggested that affective factors, like

ITAs' language anxiety might influence the objectivity of their self-report (MacIntyre et al.,

1997). Therefore, in future studies, assessment of affective factors may help to explain causes

of bias in ITAs' self-reported usage of language use strategies. Likewise, ITAs' attitude

toward the course and the learning environment should also be considered in future studies to

analyze possible relationships with their pre-post gain on the usage of language use

strategies.

Continued examination and development of the self-report and observation

instruments should be conducted in further studies. As this study only had a small sample

size of twenty-two participants, the examination of instruments was limited in assessment of

face validity, content validity and internal reliability. Further development of instruments,

like factor analysis, needs a larger pool of at least 200 participants. Therefore, further studies

to develop and broaden examination of the instruments are needed to improve the quality of

measurements on ITAs' self-reported and observed usage of language use strategies.

The purpose of this quasi-experimental preliminary study was to investigate the

impact of online strategy-based instruction facilitated through peer-supported case-based

learning on ITAs' usage of language use strategies. As Chamot and Rubin (1994) proposed

in their paper that the improvement of communicative competence could result from

management of a set of language strategies, further studies should examine relationship

between ITAs' usage of language use strategies and their communicative competence, and effect of online strategy-based instruction facilitated through peer-supported case-based learning on ITAs' improvement of communicative competence in teaching.

<div align="center">Implications for Instructors and Researchers</div>

Suggestions for instructors in ITA training programs are proposed based on the literature review and results of this study, which include using technology in ITA training programs, offering oral practice after online instructional activities, and increasing educational cultural training for those ITAs who do not have study experience in U.S. colleges. Educational cultural training would increase their understanding of methods of teaching and learning in the USA.

<div align="center">*Adding a Technology Component in ITA Training Program*</div>

In this study, ITAs' online instructional activities were not significantly affected by their prior experience with the Internet and online courses after one-week training on the use of the online course system. Howover, strategy-based instruction facilitated through online peer-supported case-based learning has been suggested to have a positive impact on ITAs' usage of language use strategies. Other than findings related to the research questions of this study, observations by the researcher revealed some differences between online case-based peer discussions and face-to-face case-based peer discussions. Being provided specific instructions, ITAs in the online class could self-regulate their watching of those video cases and their online interaction activities. But ITAs in the face-to-face class had to watch and discuss video cases with their class group members at the same time and space. A problem often occurred when some ITAs needed to watch the video cases more than once in order to understand the cases while their group members were ready to start the discussion. There was

always a shortage of time in the face-to-face class for the activities. Also, it was difficult to control case-based peer discussions in the face-to-face class. In classes that had several small discussion groups operating at the same time, it was impossible to monitor the quality of ITAs' discussion by the instructor. Findings in this study indicate that technology components can be added to an ITA training program so that ITAs could have more opportunities to have successful and engaging discussions on the usage of language use strategies, and hence, strengthen their awareness of using strategies in their own teaching.

Case-based learning can be a useful contribution in ITA training programs, in which most of ITAs have little or no teaching experience in U.S. colleges. Cases with ITAs' teaching problems can offer ITAs opportunities to solve real teaching problems and help them remember and apply strategies they learn in class. Comments and reflections from all stakeholders of teaching, including American undergraduate students, faculty and other teaching assistants, can help ITAs to understand and solve problems in cases analysis. A variety of positive teaching cases, as well as negative teaching cases with solution episodes, can give ITAs clear ideas of how appropriate usage of language use strategies will affect teaching and what good teaching situations look like.

Offering Supplementary Oral Practice after Online Instructional activities

Due to insufficient time in online instructional activities, ITAs were not organized to have oral practice of those language use strategies. Online instructional activities with supplementary oral practice may be a powerful approach in improving ITAs' usage of active listening strategies. Most of ITAs' teaching responsibilities in the class were conducted through oral communication. Strategy application opportunities should be given to ITAs to initiate real use of newly-acquired strategies, to help their transferring what they learned in

online instructional activities to their classroom teaching tasks (Huang, 2003). On the other hand, since affective factors were cited as the main reasons that prevented ITAs' application of language strategies (Huang, 2003; MacIntyre et al., 1997), oral practice may help ITAs reduce the negative impact of affective factors in their microteachings and their future teaching.

Increasing Educational Cultural Training

Results of this study indicated that ITAs with study experiences in U.S. colleges had significantly greater improvement than ITAs without such experiences on their observed usage of active listening strategies. Active listening strategies are a group of listening and responding strategies utilized to enhance mutual understanding. ITAs from different cultural backgrounds may inherit different styles of communication, and hence may not be accustomed to different uses of active listening strategies in U.S. colleges as quickly as those ITAs who had study experiences in U.S. Therefore, ITA training programs should offer more educational cultural training to ITAs without study experiences in the US so that they could overcome cultural barriers and speed up their acculturation to educational culture in U.S. colleges.

Conclusion

This chapter summarizes and discusses the effect of online vs. face-to-face strategy-based instruction facilitated through case-based peer-supported learning on ITAs' self-reported and observed usage of language use strategies. No significant difference was found on self-reported language use strategies and observed presentation strategies between ITAs in online and face-to-face instructional activities. However, quantitative results of the study showed that ITAs in online instructional activities had greater changes of improved scores on

their self-reported usage of language use strategies and observed presentation strategies in pre- and post-tests than ITAs in face-to-face instructional activities. Also ITAs in online instructional activities had almost identical changes of scores on the observed usage of active listening strategies in pre- and post-tests as ITAs in face-to-face instructional activities. These findings indicate that online peer discussion is at least as effective as face-to-face peer discussion in learning and using language use strategies. Qualitative analysis from ITAs' online interviews also suggest that use of technology in ITA training program help to increase ITAs' awareness of language strategy use, to offer them authentic learning experiences, and to enhance their knowledge acquisition and problem-solving ability in teaching situations.

Relationships between ITAs' background information and their changes of self-reported and observed usage of language use strategies were also examined for their possible impact on ITA training. Only ITAs' study experience in the USA was found to have a significant impact on changes in their observed usage of active listening strategies.

Limitations, such as small sample size and use of single rater in observing language use strategies, were addressed as possible reasons that caused lack of significant results in changes in self-reported language use strategies and observed presentation strategies from ITAs in online instructional activities, and the discrepancy between ITAs' self-reported and observed usage of active listening strategies. Two or more objective raters for observed usage of language use strategies, assessment of affective factors in strategy use studies, and further studies of relationship between ITAs' strategy use and their changes in communicative competence in teaching situations were proposed as recommendations for future studies.

APPENDIX A

PILOT STUDY

Appendix A. Pilot Study Report

This report describes the validity and reliability testing of the instruments designed to assess international teaching assistants' (ITA) self-reported and observed usage of language use strategies in a pilot study undertaken with five ITAs enrolled in the summer ITA training course in 2005.

Description of the Pilot Study

Design of the Study

The five participants in the pilot study were ITAs enrolled in the course "Communication and Culture for American College Teaching" in the summer of 2005. Two ITAs were from China, two ITAs were from South Korea while the other ITA came from India.

ITAs discussed four topics over eight weeks using the Blackboard Learning System™. The four topics were introduction and summary, presentation on a topic, listening, and questioning and answering strategies.

Topic 1. Introduction and Summary

Strategies introduced in this section involved preparation strategies and introduction and conclusion strategies in the Language Use Strategy Survey for ITAs. Video cases of introductions in the beginning of a class were presented in this section. ITAs analyzed cases based on guiding questions, which were proposed for the purpose of initiating ITAs' awareness and reflection of preparation, introduction, and summary strategies in real teaching situations.

Topic 2. Presentation on a Topic

Presentation strategies introduced in this section included language use strategies for class presentation. Problems like class disruptions and students' problems in comprehending instructions were presented in the video cases. After ITAs reached their consensus on the solutions, they summarized their solutions for the whole class.

Topics 3 and 4. Listening, Questioning and Answering Strategies

The third and fourth topics were combined for discussions in the pilot study as the researcher found that they were inseparable in instructors' observed communication with students. Thus, this section involved the discussion of listening strategies and questioning and answering strategies. Students in small groups discussed solutions to the problems in the video cases. Problems in video cases included students' misunderstanding of classroom instructions and instructor-dominated presentation.

At the beginning of the class, ITAs filled out a demographic survey. Then each of them did a microteaching presentation on discipline-specific topics as pre-testing. During their presentations, the researcher and the instructor evaluated the presenter's observed usage of language use strategies using the Evaluation Sheet for ITAs' Observed Use of Language. After the microteaching, individual ITAs were asked to self-report their usage of language use strategies by using the Language Use Strategy Survey for ITAs. After the online discussions finished, each ITA did a micro-teaching presentation following the same procedure as the pre-testing and this presentation provided post-test data.

Following the conclusion of the online discussions, a face-to-face focus group was conducted for the purpose of instructional improvement. It lasted approximately half an hour. The questions for the focus group centered upon ITAs' experiences in case-based learning, online discussions and strategy-based instructions, asking for their reflections on learning

experiences and suggestions for the improvement of this online learning system. The

schedule of activities in this pilot study is shown in the following timetable (Table A1).

Table A1.

Pilot Study Schedule

Week	Discussion Topics
Week 1	Training on the use of the Blackboard (face-to-face) Microteaching as pre-testing
Week 2	Topic 1 (online) *Introduction and summary*
Week 3	Topic 1 (online) *Introduction and summary*
Week 4	Topic 2 (online) *Presentation strategies*
Week 5	Topic 2 (online) *Presentation strategies*
Week 6	Topic 3 & 4 (online) *Listening strategies, questioning and answering strategies*
Week 7	Topic 3 & 4 (online) *Listening strategies, questioning and answering strategies* Online focus group
Week 8	Microteaching as post-testing

Data Analysis and Results

Data obtained from the pre- and post-testing of ITAs' self-reported usage of language

use strategies were collected to determine the improvement of ITAs' usage of language use

strategies in teaching situations. Internal reliability testing was undertaken to examine the

consistency of the items in this survey instrument. A t-test was conducted to analyze ITAs'

changes in their self-reported usage of language use strategies in the post-testing compared to

the pre-testing.

Data obtained from the pre- and post-testing of ITAs' observed use of language were collected to determine the improvement of ITAs' observed use of language in teaching situations. Internal reliability testing was undertaken to examine the consistency of the items in this evaluation instrument. Inter-rater reliability was conducted to investigate the correlation between the instructor's rating and the researcher's rating. A t-test was used to analyze ITAs' changes in their self-reported usage of language use strategies in the post-testing compared to the pre-testing.

Discussion messages from the focus group were transcribed and coded for the purpose of finding ITAs' reflections of their learning experiences and their comments on the instruction.

The Cronbach's alpha value in the reliability testing of the Language Use Strategy Survey for ITAs was .80. The Cronbach's alpha value in the reliability testing of the Evaluation Sheet for ITAs' Observed Language Use Strategies was .89. These scores demonstrated acceptable levels of reliability.

The inter-rater reliability testing of the Evaluation Sheet for ITAs' Observed Language Use Strategies was .20. This score is not an acceptable level of reliability.

Results of the t-test on ITAs' self-reported usage of language use strategies is shown in Table A2. Results of the t-test on ITAs' observed usage of language use strategies is shown in Table A3. Results indicated that ITAs' observed and self-reported language use strategies improved but the changes were not significant. However, ITAs' active listening strategies improved significantly in their self-reports ($p<.05$).

Table A2.

T-test Results of ITAs' Self-reported Usage of Language Use Strategies

	Mean	N	Sig.
Pre-testing (total)	166.6	5	
Post-testing (total)	183.8	5	.058
Pre-testing (preparation strategies)	22.4	5	
Post-testing (preparation strategies)	25.2	5	.206
Post-testing (presentation strategies)	78.2	5	
Post-testing (presentation strategies)	83.6	5	.275
Pre-testing (listening, questioning and answering strategies)	66	5	
Post-testing (listening, questioning and answering strategies)	75	5	.036

Table A3.

T-test Results of ITAs' Observed Usage of Language Use Strategies

	Mean	N	Sig.
Pre-testing	31.6	5	
Post-testing	35.9	5	.192

In the focus group, the ITAs gave positive feedback toward the use of video cases and peer discussions. They thought it would help them to solve problems in future teaching.

Revisions of the Design of the Study

Discussion Strategies

In the pilot study, the first learning topic included the discussion of preparation, introduction and conclusion strategies in classroom presentations. The discussion of

preparation strategies will be deleted from the learning activities due to the insignificant result of the improvement of preparation strategies in the pilot study, and the fact that the video clips do not cover any cases showing how ITAs prepare for class instruction. The introduction and conclusion strategies will remain as discussion topics in classroom presentation strategies.

The last two topics in the pilot study (listening strategies and questioning and answering strategies) will be combined into one topic in the full study—active listening strategies. This is due to the finding that listening strategies and questioning and answering strategies were inseparable in classroom instruction.

Therefore, in the full study, there will be two learning topics instead of four. The two topics will be classroom presentations and active listening strategies.

Design of the Study

The full study will be a comparison study. ITAs in two classes will be assigned to do face-to-face learning activities and online learning activities separately. <u>Face-to-face discussions</u> will take place in the classroom once a month, for 75 minutes over a three-month period of time. Instruction and discussion question sheets will be given to students prior to their discussions. ITAs will be required to answer the questions in group discussions and present their group answers to the class. <u>Online discussions</u> will be conducted using the Blackboard Learning System™. The researcher will post instructions for online discussions, weekly announcements and learning tasks. ITA students will be required to participate in discussions each week.

Learning Activities Based on the Pilot Study

After the pilot study, the procedures for the learning activities have been finalized. In each class, twelve ITAs will be divided into three small groups. They will go through four phases in case discussions. In the first phase, ITAs will be asked to discuss their reflections after watching the video cases. In the second phase, discussion questions will be posted aiming at the usage of language use strategies in the video cases for the purpose of initiating ITAs' awareness and reflection regarding language use strategies in real teaching situations. ITAs will be asked to discuss and answer the posed questions in small groups. In the third phase, comments and reflections by American undergraduate students on the same cases will be presented to ITAs. ITAs will be directed to revise and summarize their group answers before presenting them to the whole class. Consensus will be required within each group before they share their solutions with the entire class. In the last phase, ITAs will be required to write a script for their next microteaching presentation.

Revisions of the Instruments

The timeline will be adjusted in the full study, as shown in Table A4.

Table A4.

Class Schedule in the Full Study

Week	Face-to-face Activities	Online Activities
1		Training on the use of Blackboard
2	Microteaching as pre-test on usage of presentation strategies	
3		Topic 1. Classroom Presentation
4		
5	Topic 1. Classroom Presentation	
6	Microteaching as post-test on usage of presentation strategies & pretest on usage of active listening strategies	
7		Topic 2. Being an Active Listener
8		
9	Topic 2. Being an Active Listener	
10	Microteaching as post-test on usage of active listening strategies	
11		Online interviews

The post-testing will be administered twice, aiming to test ITAs' performance of each learning topic respectively. The instructor will be allowed to discuss content from the discussion topic only after the post-testing of the relevant topic is over. This agreement satisfies her desire to include these topics in her class sessions.

The evaluation of ITAs' observed usage of language use strategies were conducted by the instructor and the researcher in the pilot study. However, the inter-rater reliability between the instructor and the researcher's rating was as low as .20. Therefore, it has been

decided that only the instructor will evaluate ITAs' observed usage of language use strategies in the full study.

<div align="center">Revisions of the Instruments</div>

<div align="center">*Demographic Survey*</div>

Based on the ITAs' feedback, minor changes have been made to eliminate students' misunderstanding on some items. "Highest degree attained" has been changed to "highest degree that you have obtained." Items are marked by bullets so that ITAs would not miss an item by accident.

<div align="center">*Language Use Strategy Survey for ITAs*</div>

Four domains were assessed: preparation strategies, presentation strategies, listening strategies, and questioning and answering strategies. In the full study, preparation strategies will be deleted as this topic has been dropped as a discussion topic.

Face validity was assessed before the pilot study by individual discussions with a group of international graduate students who had teaching experience in U.S. colleges. They were asked to think aloud when reading through the instrument. Changes were made to improve their understanding. For example, the item "Check to see how well my speaking reflects what I want to say" was reworded as "Check to see how well my speaking reflects what I want to communicate."

Content validity was also assessed prior to the pilot study by the course instructor who provided comments on the clarity and content of the instrument. Interaction management strategies were renamed as questioning and answering strategies. Presentation strategies and explanation strategies were combined into presentation strategies. Items that had the same meaning were deleted or revised. For example, as the item "Monitor how my

speaking is going" had almost the same meaning as the item "Check to see how well my speaking reflects what I want to communicate," the former one was deleted because it was vaguer than the latter one.

Two items were deleted in order to minimize the influence of the factors outside the study because these strategies will be taught by the instructor in the full study. These two items are "Use gestures, eye contact, or facial expressions as a way to try and get my meaning across" and "Use visual aids, like illustrations to try and get my meaning across".

Reliability testing was undertaken to assess the consistency of the items in the instrument. The Cronbach's alpha value was as high as .80. However, as the number of students in the pilot study was too small for internal reliability testing, it will be assessed at the beginning of the full study.

In summary, the Language Use Strategy Survey for ITAs will be used for the full study with 36 items in three categories—presentation strategies, listening strategies, and questioning and answering strategies. See the revised survey instrument in Appendix C.

Evaluation Sheet for ITAs' Observed Language Use Strategies

Face validity was assessed prior to the pilot study. Several international graduate students who had teaching experience in U.S. colleges were asked to read through the instrument and discuss it with the researcher. They thought the measure was valid for the purpose of this instrument.

Content validity was also assessed by the course instructor who provided comments on the clarity and content of the instrument. In the pre-testing, the instructor found it difficult to judge ITAs' observed language use strategies from "Very ineffective" to "Ineffective", and from "Very effective" to "More than effective" and "Effective". Thus the effectiveness

scales was re-defined for the full study. The narrative definition of the effectiveness of use will only be provided with two anchor points (1=Very ineffective and 5=Very effective) so that the instructor can rate ITAs' observed language use strategies on this scale.

Due to the changes in the full study, the following items were deleted from the instrument. These items are "Adequate preparation for the class", "Use of non-verbal expressions, like gestures, eye contact or facial expressions" and "Use of visual aids, like PowerPoint slides".

The Cronbach's alpha value of the instrument was as high as .89. However, as the number of students in the pilot study was too small for internal reliability testing, it will be assessed at the beginning of the full study.

After the revision, the seven-item Evaluation Sheet for ITAs' Observed Language Use Strategies will be used by the instructor in the full study. See the revised evaluation instrument Appendix D.

APPENDIX B

DEMOGRAPHIC SURVEY

Appendix B. Demographic Survey

Name: _____   Date: _____

Please check or fill in the appropriate answer to the following questions.

- Gender: Male__   Female___

- Age: ____

- Ethnicity: Native American (including Alaskan Native) _____
             Asian (including Oriental, Pacific Islander and Filipino) ____
             African _____
             Hispanic _____
             Caucasian ____
             Others _____

- Highest degree that you have obtained_____
  Where?_____ When?_____

- Current major of graduate study_____

- Is English your native language? Yes___   No___
  If not, what's your native language? _____

- When did you firstly come to the U.S.?
  I came to the U.S. in ____(year) as a minor (under 18 years old)_____
                                    as an undergraduate student_____
                                    as a graduate student_____

- Please list your recent teaching experiences in the last 5 years.

Types of schools	Country	Job Title	Description of teaching duties	Duration (from mm/yy to mm/yy)

- Please list your most recent screening date and score that you received:

  Date:_____ Level: _____ [ ] low [ ] high

- How do you rate yourself as an Internet user?

  ___I'm a proficient Internet user. I can navigate through the Internet, checking emails, using search engines, and perform word-processing tasks.
  ___I'm an adequate Internet user. I have a basic understanding of using the Internet and email.
  ___I am not familiar with the Internet.

- What's your comfort level with computers and the Internet?

  ___I enjoy using computers and the Internet, and I use it frequently for searching and e-mail.
  ___I only use computers and the Internet when necessary.
  ___I am uncomfortable using computers and the Internet and avoid using them as much as possible.

- Is this your first time to take an online course? Yes_____ No_____

- Is this your first time to use the Blackboard Learning System™?
  Yes_____ No_____

- Have you used other online learning systems for courses, such as WebCT?
  Yes_____ No_____

---The End----
Thank you.

APPENDIX C

LANGUAGE USE STRATEGY SURVEY FOR ITAS

Appendix C. Language Use Strategy Survey for ITAs

Date: _____(mm/dd/yy)

Dear _____(your name),

        The purpose of this survey is to help you master language use strategies that would facilitate your teaching in face-to-face classes. Please circle the number that best describes your use of each strategy in today's microteaching.

        Thank you.

Presentation Strategies (1)	never used	seldom use	sometimes use	frequently use	always use
1. Use concise and clear sentences to give an overview of the day's lesson.	1	2	3	4	5
2. Use concise sentences to summarize after each major point.	1	2	3	4	5
3. Give a substantial conclusion at the end of a presentation.	1	2	3	4	5
4. Use obvious transitions, like "next" and "however" to mark topic changes and/or make organization explicit.	1	2	3	4	5
5. Check to see how well my speaking reflects what I want to communicate.	1	2	3	4	5
6. Change the structure of the sentence to communicate my intended message if I have difficulty in completing the original sentence.	1	2	3	4	5
7. Try to get feedback from students regularly.	1	2	3	4	5
8. Repeat what I have said if it wasn't clear to students.	1	2	3	4	5
9. Re-phrase what I have said if it wasn't clear to students.	1	2	3	4	5
10. Be careful when directly transferring words and ideas from my own language into English.	1	2	3	4	5

Presentation Strategies (2)	never used	seldom use	sometimes use	frequently use	always use
11. Slow down to make sure students can hear what I said clearly.	1	2	3	4	5
12. Avoid longtime pauses in presentations.	1	2	3	4	5
13. Avoid using fillers, like "uh," "you know," or "well," in the presentation.	1	2	3	4	5
14. Use inclusive pronouns, like using "we" instead of "I" in class.	1	2	3	4	5
15. Repeat key points to get students' attention.	1	2	3	4	5
16. Put my own language out of mind and think only in English as much as possible.	1	2	3	4	5
17. Use examples to help students' understanding.	1	2	3	4	5
18. Find a different way to express an idea when I don't know the correct expression (e.g., use a synonym or paraphrasing).	1	2	3	4	5
19. Encourage students to correct errors in my speaking.	1	2	3	4	5

Listening Strategies	never used	seldom use	sometimes use	frequently use	always use
20. Pay special attention to important words to understand what students are saying.	1	2	3	4	5
21. Make educated guesses about the topic based on what has already been said.	1	2	3	4	5
22. Look for associations between the sound of a word or phrase in English and the sound of a familiar word.	1	2	3	4	5
23. Use the students' tone of voice as a clue to the meaning of what they are saying.	1	2	3	4	5
24. Draw on my background knowledge to get the main idea.	1	2	3	4	5
25. Try to understand what has been heard or read without translating it word-for-word into my own language.	1	2	3	4	5
26. Watch students' gestures and general body language to help me figure out the meaning of what they are saying.	1	2	3	4	5

Questioning and Answering Strategies	never used	seldom use	sometimes use	frequently use	always use
27. Ask questions as a way to get students involved in the conversation.	1	2	3	4	5
28. Answer questions directly and concisely.	1	2	3	4	5
29. Ask for clarification if I don't understand students the first time around.	1	2	3	4	5
30. Restate a student's question to indicate my understanding of his/her question.	1	2	3	4	5
31. Use questions to check students' mastery of what I have taught.	1	2	3	4	5
32. Ask students questions to check their understanding of my explanation.	1	2	3	4	5
33. Ask students questions to check their satisfaction of my explanation.	1	2	3	4	5
34. Delay answers if I'm not sure about the answer.	1	2	3	4	5
35. Delay answers if there's not enough time to answer.	1	2	3	4	5
36. Decline politely to answer if the question is off-topic.	1	2	3	4	5

—The End—

APPENDIX D

EVALUATION SHEET FOR ITAS' OBSERVED USE OF LANGUAGE

Appendix D. Evaluation Sheet for ITAs' Observed Use of Language

Name of the presenter: _____ Date:_____(mm/dd/yy)

Please circle the number which you think best describes the presenter's use of language as a teacher.

	Very ineffective ←------------------------→ Very effective				
1. Vocabulary and word/phrase choice	1	2	3	4	5
2. Emphasis on key points	1	2	3	4	5
3. Explicitness of directions	1	2	3	4	5
4. Comprehensibility of presentations	1	2	3	4	5
5. Organization of lectures	1	2	3	4	5
6. Eliciting students' input	1	2	3	4	5
7. Responding to students' questions	1	2	3	4	5

APPENDIX E

PROTOCOL FOR ONLINE INTERVIEW

Appendix E. Protocol for Online Interview

Hello, everyone. Welcome to today's discussion. You have finished the online session of the course Communication and Culture for American College Teaching. The purpose of this discussion is to examine how the online session of the course affects your learning to teach in American colleges. I would like you to share your experiences and reflections on peer discussions, the learning of language use strategies, and the video cases used in the online session. I would like to remind you that your contributions will remain confidential as explained on the research consent form.

Do you have any questions before I start our discussion?

1. Which language use strategy had the greatest benefit on your microteaching presentations? How did those strategies benefit your microteaching presentations?

2. How did the instructions (e.g. guiding questions) in online activities affect your mastery of language use strategies?

3. How did the online discussion with your classmates affect your learning? Does it make you aware of strategy use in microteaching presentations? Did it encourage your participation in the course? Did it help you to solve problems in the video cases? Did it help you to master the language use strategies?

4. What do you think about the video cases used in the online session? Did they help your preparation to be a teacher? How?

5. Can you describe a major change you have observed in your use of English since you have taken the online session of this course?

6. Do you think the online discussions make you feel closer to your classmates?

7. What suggestions do you have to improve the online session of this course?

8. Are there other issues that you would like to discuss related to your learning experiences in the online session of this course that we have not talked about today? What are they?

I would like to thank you for your participation. Your feedback is very helpful for me to improve the quality of the ITA training program. Now, do you have any questions for me? ……Then, you may feel free to go.

APPENDIX F

SAMPLE OF THE ONLINE LEARNING ENVIRONMENT INSTRUCTION

Appendix F. Sample of the Online Learning Environment Instruction

Topic 1. Introduction and Summary

Overview

An adequate preparation for a class would increase class effectiveness and decrease your nervousness. In this section, we will learn some language strategies in preparing for class presentations. Strategies of how to make introductions and summaries in class presentations will also be discussed in this section.

Materials

- The video clip "Wanting to be Liked"

- The video clip "Classroom Management"

- The list of Preparation Strategies and Presentation Strategies in the Language Use Strategy Survey for ITAs

Instructions

You are now assigned to small groups. You can access the group discussion board by clicking …..(*instructions for accessing the discussion board*).

Discuss the following questions with your group members. Read your group members' posting and make comments by replying to their messages.

- What should an instructor prepare for class presentation?

- In order to understand students' expressions/comments, what do you do to prepare before class?

- How do you overcome the influence from your primary language?

- How do you think you would handle unfamiliar words and expressions in class?

- Are you confident to give lectures in class? Are you confident to ask and answer questions in class? If yes, what did you do gain your confidence? If no, what are you going to do build your confidence?

You have one leader for each of the questions. After the discussion, the leader will make a summary and post it to the general discussion board.

Directions for the Use of Media

Here are two cases of introductions in the beginning of a class. Click *play* button to watch the clips. On your group discussion board, discuss the following questions with the strategy list (open the list by clicking this link).

- What language use strategies do the instructors utilize in the above cases?

- What are differences in the two instructors' introductions?

- What impresses you the most about these two types of introductions?

- What strategies would you use to indicate the beginning of a class? Give an example of what you would like to say in class.

- What strategies would you use to indicate the end of a class? Give an example of what you would like to say in class.

You have one leader for each of the questions. After the discussion, the leader will make a summary and post it to the general discussion board.

APPENDIX G

REQUEST FOR PERMISSION FOR CLASSROOM USE

Appendix G. Request for Permission for Classroom Use

Date: 05/16/2005
Name of Copyright Holder:
Address of Copyright Holder:

Dear Sir/Ms.,
I am a doctoral candidate in the School of Information Science and Learning Technologies at the University of Missouri-Columbia. I request permission to use two of your video clips with University students in my research study.

Title of the tape:
Edition or Copyright Date:
Author:
Portions of the tape to be used:

Method of Use:
   The video clips will be used as a part of instruction in a research study, utilizing online training sessions and discussions. In order to share the video clips electronically, the video need to be converted into QuickTime formats and uploaded into a password-protected online learning system. The content of the videos clips won't be modified. Only students who enroll in the course and the instructors will be able to view the clips. The clips will be removed immediately after the course and research are finished. If required, we can add the producer's name and copyright notice at the beginning of the clips.

   I hope you will allow me to use those clips for research purposes. Please mark your response in the space below and return the signed document in the enclosed envelope. Thanks for your consideration.

Sincerely,

Shenghua Zha, Doctoral Student
School of Information Science and Learning Technologies
University of Missouri-Columbia

Permission Notice
_____ I grant permission to the above request.
_____ I do not grant permission to the above request.
_____ I grant permission to the above request with the following restrictions:

   _____

   _____

   _____

Signature of Copyright Holder

Name:_____

Title:_____

Date:_____

APPENDIX H

SAMPLE OF MICROTEACHING PROTOCOL

Appendix H. A Sample of Microteaching Protocol

Introducing Yourself and the Course
Total Length of Presentation – 5 minutes

General Directions:
Assume this is the first day of class. You are teaching an introductory level course. You will introduce yourself and the general content of the course and purpose of the course.

1. Write a 'script' introducing yourself and the course.
2. Practice OUT LOUD.
3. Record and time your presentation. Replay and listen critically: Does your speaking reflect what you want to say?
4. Bring a copy of your script (complete with markings) with you to class.

Introducing Yourself (1-2 minutes)
1. What is your name? What would you like to be called? How do you pronounce your name? Do you have a nickname or English name? What would you like us to call you?
2. Where are you from?   Explain why you are in the U.S. How long have you been at MU?
3. **Acknowledge** your English difficulties, but **don't apologize** for them. How will you put students at ease regarding your accent? What strategies can you suggest to avoid misunderstandings?
4. What field are you in? (You may want to tell what your research interests are or give an example.)
5. What past teaching experiences have you had? (If you have no teaching experience, talk about another experience that is relevant to teaching.)

Introducing the course (3-4 minutes) (Provide a brief outline on Power Point.)
1. State the course name and number.
2. What are the days and times for the class?
3. What textbooks are required and supplemental?
4. Give your office hours, location, phone number, and email, etc...
5. Give a general overview of the course. State the main objectives of the course.
6. What kind of homework assignments and tests will students be doing?
7. How will they be graded?
8. What about attendance policies?
9. What are your expectations of students with regard to helping students with problems, etc.

APPENDIX I

INFORMATION AND CONSENT FORM FOR INSTRUCTORS AND SUPERVISORS IN

THE INTERNATIONAL TEACHING ASSISTANT (ITA) TRAINING PROGRAM

Appendix I. Information and Consent Form for Instructors and Supervisors in the
International Teaching Assistant (ITA) Training Program

This consent form requests your permission to have the researcher access the records of your
ITA trainees' discussions, and conduct evaluations and focus group in two of classes in the
Fall, 2005.

Overall Purpose of the Research
         The purpose of this study is to examine the effects of ITAs' self-reported and
observed usage of language use strategies facilitated through peer-supported case-based
learning in online environments vs. face-to-face environments.

Procedures of the Study
1. Access to Data from the Course Requirements
         The study will be conducted in two classes in Fall, 2005. ITAs will be involved in
discussions with two topics on language use strategy in teaching situations during ten weeks.
The two topics are
    1) classroom presentation, and
    2) being an active listener.
In one class, instructions will be delivered online through the Blackboard Learning
System™. The researcher will post instructions, weekly announcement and learning tasks.
Each of the two topics will last three weeks in online discussions. The first week will be a
training week for online learning to ensure all students know how to use the Blackboard
Learning System™. ITAs will be taught how to log in/off the Blackboard Learning
System™, navigate between different sections, download/print materials, and post and edit
discussion messages. The other class of ITA trainees will be required to participate in
classroom discussions once every three weeks.
         After each topic, there will be a video-taped microteaching in which each ITA does a
teaching presentation on their discipline-specific topics. The discussions and presentations
are required in the course, and will be counted toward their grade. The researcher is
requesting access to ITAs' discussions and presentations in her study. Her evaluation of the
data will not be shared with the course instructor until after ITAs' grades are submitted. Her
use of the data will not be a part of ITAs' grade but only need for research purpose.

2. Research Requirements
         At the beginning of the class, ITAs will be asked to fill out a demographic survey.
During ITAs' microteaching presentations, the instructor will evaluate their observed usage
of language use strategies with the Evaluation Sheet for ITAs' Observed Language Use
Strategies. After the microteaching, individual ITAs will self-report their usage of language
use strategies by using the Language Use Strategy Survey for ITAs.
         In the end of the discussions, an online focus group will be conducted in the class
with online discussions for the purpose of instructional improvement. It will last
approximately one hour. The guideline questions for the focus group will center upon ITAs'
experiences in case-based learning, online discussions and strategy-based instructions, their
reflections on learning experiences, and suggestions for the improvement of this online
learning system.

Four American undergraduate students are invited to participate in an online discussion group. They will discuss the video cases that will be used in the ITA training program. There will be two video case discussions. Each discussion will take place in the Blackboard Learning System™. This will take approximately two hours per topic. Posted messages will be summarized and used in the ITA training program. The summaries of their reflections and comments will be shared with the ITAs so that ITAs can read reflections on those teaching cases from undergraduate students' perspective.

Number of Research Participants
There will be 24 ITAs enrolled in two classes in the Fall, 2005.
There will be 4 American undergraduate students involved in the Fall, 2005.

Potential Risks
There are no known risks from participating in this online/face-to-face strategy-based instruction using peer-supported case-based learning.

Benefits
ITAs are likely to increase their awareness of using appropriate English in teaching situations. They are also likely to improve language use strategies to overcome language barriers. In the class with online discussions, ITAs will learn to use electronic communication tools to improve their communication with their peers and the instructors.

Voluntary Consent
Permission to allow the researcher access the records of online discussions, and conduct evaluation and focus group is completely voluntary. You may withdraw from the study at any time by informing the study researcher.

Confidentiality
All research records and information collected in this study will be kept confidential. No personal identifiable information will be released in any publications resulting from this study. Any information regarding international teaching assistant trainees' participation and performance in this course will be kept confidential. Data will be stored in computer data files protected by a password known only to the researcher. The data will be kept only by the researcher, and won't be released without international teaching assistant trainees' written agreement.

Contact Persons
The researcher and her advisor's contact information include the following:
Shenghua Zha, Doctoral Student, School of Information Science and Learning Technologies, University of Missouri-Columbia, sz5wf@mizzou.edu, 573-884-4814
Gail Fitzgerald, Professor, School of Information Science and Learning Technologies, University of Missouri-Columbia, fitzgeraldg@missouri.edu, 573-882-0566

If you have questions regarding this study, please contact the researcher listed above. If you have any questions about Human Subject Research, you can contact the University of Missouri-Columbia Campus Institutional Review Board at 573-882-9585.

--Consent to Participate in the Technology-supported ITA Training Program--

You will receive a copy of this consent form to keep.

In signing this form, I state that:

- I have read about the information describing this study and students' participation in the technology-supported ITA training.

  _____
  Initials

- I understand that I may withdraw my permission to have the researcher access the records of discussions, and conduct evaluation and focus group at any time without any penalty.

  _____
  Initials

- I understand that all personal identifiable information from my students and myself will be kept confidential.

  _____
  Initials

- I agree to allow students in my class participate in this study as described above in voluntary consent.

  _____
  Initials

_____   _____
Signature of the instructor of the course   Date

_____   _____
Signature of the supervisor of the ITA training program   Date

_____   _____
Signature of the researcher   Date

APPENDIX J

INFORMATION AND CONSENT FORM FOR STUDENTS IN THE ONLINE

LEARNING ACTIVITIES IN THE INTERNATIONAL TEACHING ASSISTANT (ITA)

TRAINING PROGRAM

Appendix J. Information and Consent Form for Students in the Online Learning Activities in the International Teaching Assistant (ITA) Training Program

This consent form requests your permission to release your online discussions, and participate in evaluations and focus group in the technology-supported training.

Overall Purpose of the Research
　　　　The purpose of this study is to examine the effects of ITAs' self-reported and observed usage of language use strategies facilitated through peer-supported case-based learning in online environments vs. face-to-face environments.

Procedures of the Study
1. Access to Data from the Course Requirements
　　　　The study will be conducted in two classes in Fall, 2005. ITAs will be involved in discussions with two topics on language use strategy in teaching situations during ten weeks. The two topics are
　　　3) classroom presentation, and
　　　4) being an active listener.
In your class, instructions will be delivered online through the Blackboard Learning System™. The researcher will post instructions, weekly announcement and learning tasks. Each of the two topics will last three weeks in online discussions. The first week will be a training week for online learning to ensure all students know how to use the Blackboard Learning System™. You will be taught how to log in/off the Blackboard Learning System™, navigate between different sections, download/print materials, and post and edit discussion messages.
　　　　After each topic, there will be a video-taped microteaching in which you will have a teaching presentation on your discipline-specific topic. The discussions and presentations are required in the course, and will be counted toward your grade. The researcher is requesting access to ITAs' discussions and presentations in her study. Her evaluation of the data will not be shared with the course instructor until after your grades are submitted. Her use of the data will not be a part of ITAs' grade but only need for research purpose.
2. Research Requirements
　　　　At the beginning of the class, you will be asked to fill out a demographic survey. During your microteaching presentations, the instructor will evaluate your observed language use strategies with the Evaluation Sheet for ITAs' Observed Language Use Strategies. After the microteaching, each of you will self-report your usage of language use strategies by using the Language Use Strategy Survey for ITAs.
　　　　In the end of the discussions, an online focus group will be conducted for the purpose of instructional improvement. It will last approximately one hour. The guideline questions for the focus group will center upon your experiences in case-based learning, online discussions and strategy-based instructions, your reflections on learning experiences, and suggestions for the improvement of this online learning system.

Number of Research Participants
　　　　There will be 12 ITAs enrolled in one class in the Fall, 2005.

Potential Risks
There are no known risks from participating in this online strategy-based instruction using peer-supported case-based learning.

Benefits
You are likely to increase your awareness of using appropriate English in teaching situations. You are also likely to improve language use strategies to overcome language barriers. In the class with online discussions, you will learn to use electronic communication tools to improve your communication with your peers and the instructors.

Voluntary Consent
Permission to release the records of your discussions and evaluation results in this ITA training class is completely voluntary. As a part of your course requirement, you will discuss language use strategies based on video cases and make microteaching presentations. Voluntary research participation includes
1. allowing the researcher to read and analyze your online discussion messages.
2. allowing the researcher to have copies of your microteaching evaluations,
3. completing self-report surveys on your usage of language use strategies,
4. participating in an end-of-course focus group, and
5. completing a demographic survey about your background.
The research requirements of item 3, 4 and 5 will take approximately 1-2 hours in addition to your course requirement.

Confidentiality
All research records and information collected in this study will be kept confidential. No personal identifiable information will be released in any publications resulting from this study. Any information regarding international teaching assistant trainees' participation and performance in this course will be kept confidential. Data will be stored in computer data files protected by a password known only to the researcher. The data will be kept only by the researcher, and won't be released without international teaching assistant trainees' written agreement.

Contact Persons
The researcher and her advisor's contact information include the following:
Shenghua Zha, Doctoral Student, School of Information Science and Learning
        Technologies, University of Missouri-Columbia, sz5wf@mizzou.edu,
        573-884-4814
Gail Fitzgerald, Professor, School of Information Science and Learning Technologies,
        University of Missouri-Columbia, fitzgeraldg@missouri.edu,
        573-882-0566

If you have questions regarding this study, please contact the researcher listed above. If you have any questions about Human Subject Research, you can contact the University of Missouri-Columbia Campus Institutional Review Board at 573-882-9585.

--Consent to Participate in the Technology-supported ITA Training Program--

You will receive a copy of this consent form to keep.

In signing this form, I state that:

- I have read about the information describing this study and my
  participation in the research components of the technology-supported ITA training program.

  _____
  Initials

- I understand that I can withdraw my consent for the research
  components of this study at any time without any penalty in the course.

  _____
  Initials

- I understand that all personal identifiable information will be kept
  confidential and pseudonyms will be used in summarizing my discussion messages.

  _____
  Initials

- I agree to participate in the research components of this study as
  described above in voluntary consent.

  _____
  Initials

_____   _____
Signature of the student   Date

_____   _____
Signature of the researcher   Date

APPENDIX K

INFORMATION AND CONSENT FORM FOR STUDENTS IN THE FACE-TO-FACE

LEARNING ACTIVITIES IN THE INTERNATIONAL TEACHING ASSISTANT (ITA)

TRAINING PROGRAM

Appendix K. Information and Consent Form for Students in the Face-to-face Learning
Activities in the International Teaching Assistant (ITA) Training Program

This consent form requests your permission to release your discussions and participate in
evaluations in the ITA training class.

Overall Purpose of the Research
The purpose of this study is to examine the effects of ITAs' self-reported and
observed usage of language use strategies facilitated through peer-supported case-based
learning in online environments vs. face-to-face environments.

Procedures of the Study
1. Access to Data from the Course Requirements
The study will be conducted in two classes in Fall, 2005. ITAs will be involved in
discussions with two topics on language use strategy in teaching situations during ten weeks.
The two topics are
    5) classroom presentation, and
    6) being an active listener.
Your class will be required to participate in classroom discussions once every three
weeks. After each topic, there will be a video-taped microteaching in which you will have a
teaching presentation on your discipline-specific topic. The discussions and presentations are
required in the course, and will be counted toward your grade. The researcher is requesting
access to ITAs' discussions and presentations in her study. Her evaluation of the data will not
be shared with the course instructor until after your grades are submitted. Her use of the data
will not be a part of ITAs' grade but only need for research purpose.
2. Research Requirements
At the beginning of the class, you will be asked to fill out a demographic survey.
During ITAs' microteaching presentations, the instructor will evaluate your observed
language use strategies with the Evaluation Sheet for ITAs' Observed Language Use
Strategies. After the microteaching, each of you will self-report your usage of language use
strategies by using the Language Use Strategy Survey for ITAs.

Number of Research Participants
There will be 12 ITAs enrolled in one class in the Fall, 2005.

Potential Risks
There are no known risks from participating in this face-to-face strategy-based
training using peer-supported case-based learning.

Benefits
You are likely to increase your awareness of using appropriate English in teaching
situations. You are also likely to improve language use strategies to overcome language
barriers after the online instructions. You will learn to use electronic communication tools to
improve their communication with their peers and the instructors.

Voluntary Consent

Permission to release the records of your discussions and evaluation results in this ITA training class is completely voluntary. As a part of your course requirement, you will discuss language use strategies based on video cases and make microteaching presentations. Voluntary research participation includes

6. allowing the researcher to read and analyze your online discussion messages.
7. allowing the researcher to have copies of your microteaching evaluations,
8. completing self-report surveys on your usage of language use strategies, and
9. completing a demographic survey about your background.

The research requirements of items 3 and 4 will take approximately 1-2 hours in addition to your course requirement.

Confidentiality

All research records and information collected in this study will be kept confidential. No personal identifiable information will be released in any publications resulting from this study. Any information regarding international teaching assistant trainees' participation and performance in this course will be kept confidential. Data will be stored in computer data files protected by a password known only to the researcher. The data will be kept only by the researcher, and won't be released without international teaching assistant trainees' written agreement.

Contact Persons

The researcher and her advisor's contact information include the following:

Shenghua Zha, Doctoral Student, School of Information Science and Learning Technologies, University of Missouri-Columbia, sz5wf@mizzou.edu, 573-884-4814

Gail Fitzgerald, Professor, School of Information Science and Learning Technologies, University of Missouri-Columbia, fitzgeraldg@missouri.edu, 573-882-0566

If you have questions regarding this study, please contact the researcher listed above. If you have any questions about Human Subject Research, you can contact the University of Missouri-Columbia Campus Institutional Review Board at 573-882-9585.

--Consent to Participate in the Technology-supported ITA Training Program--

You will receive a copy of this consent form to keep.

In signing this form, I state that:

- I have read about the information describing this study and my
  participation in the research components of the technology-supported
  ITA training program.

  _____
  Initials

- I understand that I can withdraw my consent for the research
  components of this study at any time without any penalty in the
  course.

  _____
  Initials

- I understand that all personal identifiable information will be kept
  confidential and pseudonyms will be used in summarizing my
  discussion messages.

  _____
  Initials

- I agree to participate in the research components of this study as
  described above in voluntary consent.

  _____
  Initials

_____   _____
Signature of the student   Date

_____   _____
Signature of the researcher   Date

APPENDIX L

INFORMATION AND CONSENT FORM FOR AMERICAN UNDERGRADUATE

STUDENTS IN THE INTERNATIONAL TEACHING ASSISTANT (ITA) TRAINING

PROGRAM

Appendix L. Information and Consent Form for American Undergraduate Students in the International Teaching Assistant (ITA) Training Program

This consent form requests your permission to participate in the technology-supported ITA training.

Overall Purpose of the Research

       The purpose of this study is to examine the effects of ITAs' self-reported and observed usage of language use strategies facilitated through peer-supported case-based learning in online environments vs. face-to-face environments.

Procedures of the Study

       The study will be conducted in the fall class in 2005. Instructions are delivered online through the Blackboard Learning System™.

       Four American undergraduate students are invited to participate in an online discussion group. You will discuss the video cases that will be used in the ITA training program. There will be two video case discussions. The two topics are
   7) classroom presentation, and
   8) being an active listener.
Each discussion will take place in the Blackboard Learning System™. This will take approximately two hours per topic. Posted messages will be summarized and used in the ITA training program. The summaries of your reflections and comments will be shared with the ITAs so that ITAs can read reflections on those teaching cases from undergraduate students' perspective.

Number of Research Participants

       There will be 4 American undergraduate students involved in the Fall, 2005.

Potential Risks

       There are no known risks from participating in this online strategy-based video discussion group.

Benefits

       American undergraduate students are likely to increase their understanding of classroom teaching challenge faced by ITAs.

Voluntary Consent

       Permission to participate in this study is completely voluntary.
       You will be eligible for a $50 stipend for your participation.
       You will be required to view and meaningfully discuss the six video cases (2 discussion sessions) with three other participants and the researcher.

Confidentiality

       All records and information collected in this study will be kept confidential. No personal information will be released in any publications resulting from this study. Your messages will be shared using pseudonyms to protect your identity.

Contact Persons
       The researcher and her advisor's contact information include the following:
       Shenghua Zha, Doctoral Students, School of Information Science and Learning
              Technologies, University of Missouri-Columbia, sz5wf@mizzou.edu,
              573-884-4814
       Gail Fitzgerald, Professor, School of Information Science and Learning Technologies,
              University of Missouri-Columbia, fitzgeraldg@missouri.edu,
              573-882-0566

       If you have questions regarding this study, please contact the researcher listed above. If you have any questions about Human Subject Research, you can contact the University of Missouri-Columbia Campus Institutional Review Board at 573-882-9585.

--Consent to Participate in the Technology-supported ITA Training Program--

You will receive a copy of this consent form to keep.

In signing this form, I state that:

- I have read about the information describing my participation in the technology-supported ITA training.

  _____
  Initials

- I understand that I can withdraw from the discussion groups at any time, but I will not receive the $50 stipend unless I participate in all two video case discussion groups.

  _____
  Initials

- I understand that all personal identifiable information will be kept confidential and pseudonyms will be used in summarizing my messages.

  _____
  Initials

- I agree to participate in this discussion group as described above.

  _____
  Initials

_____   _____
Signature of the student   Date

_____   _____
Signature of the researcher   Date

References

Allen, J. D., & Lambating, J. (2001). *Validity and reliability in assessment and grading: Perspectives of preservice and inservice teachers and teacher education professors.* Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, WA.

Angeli, C., Valanides, N., & Bonk, C. J. (2003). Communication in a web-based conferencing system: The quality of computer-mediated interactions. *British Journal of Educational Technology, 34*(1), 31-43.

Bachman, L. F. (1990). *Fundamental considerations in language testing.* Oxford: Oxford University Press.

Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests.* Oxford, New York: Oxford University Press.

Bailey, K. M. (1984). A typology of teaching assistants. In K. M. Bailey, F. Pialorsi & J. Zukowski/Faust (Eds.), *Foreign teaching assistants in U.S. universities* (pp. 110-125). Washington, D.C.: National Association for Foreign Student Affairs.

Bauer, G. (1996). Addressing special considerations when working with international teaching assistants. In J. D. Nyquist & D. H. Wulf (Eds.), *Working effectively with graduate assistants* (pp. 84-103). Thousand Oaks, CA: Sage Publications.

Beauvois, M. H. (1992). Computer-assisted classroom discussion in the foreign language classroom: Conversation in slow motion. *Foreign Language Annals, 25*(5), 455-464.

Beauvois, M. H. (1994). E-talk: Attitudes and motivation in computer-assisted classroom discussion. *Computers and the Humanities, 28*(5), 177-190.

Bejar, I. I. (1985). *A preliminary study of raters for the test of spoken English*. Princeton, NJ: Educational Testing Service.

Bos, R. R., Zakrajsek, D. B., Wolf, V., & Stoll, S. (1980). Teaching assistant traits: Their influence on student ratings. *Improving College and University Teaching, 28*(4), 179-185.

Bramorski, T. (2002). The use of cases in teaching business courses in Central and Eastern Europe and the United States. *Journal of Teaching in International Business, 13*(3), 41-55.

Brown, D. H. (2000). *Principles of language learning and teaching*. New York: Pearson Education.

Burgstahler, S. (1997). *Peer support: What role can the Internet play?* Retrieved October 25, 2004, from http://www.rit.edu/~easi/itd/itdv04n4/article2.html

Canale, M. (1983). From communicative competence to communicative language pedagogy. In J. C. Richards & R. W. Schmidt (Eds.), *Language and communication*. New York, NY: Longman Inc.

Canale, M., & Swain, M. (1980). Theoretical bases for communicative approaches to second language teaching and testing. *Applied Linguistics, 1*, 1-47.

Chamot, A. U., & Rubin, J. (1994). Comments on Janie Rees-Miller's 'a critical appraisal of leaner training: theoretical bases and teaching implications'. *TESOL Quarterly, 28*(4), 771-781.

Chang, S.-J. (1991). *A study of language behaviors of Chinese students at the University of Georgia and the relation of those behaviors to oral proficiency and other factors*. Unpublished doctoral dissertation, University of Georgia, Athens, GA.

Chen, S. Q. (1990). A study of communication strategies in interlanguage production by Chinese EFL learners. *Language Learning, 40*(2), 155-187.

Chen, Y., & Lou, H. (2004). Students' perceptions of peer evaluation: An expectancy perspective. *Journal of Education for Business, 79*(5), 275-282.

Chun, D. M. (1994). Using computer networking to facilitate the acquisition of interactive competence. *System, 22*(1), 17-31.

Clark, J. L. D., & Swinton, S. S. (1979). *An exploration of speaking proficiency measures in the TOEFL context*. Princeton, NJ: Educational Testing Service.

Cliff, W. H., & Wright, A. W. (1996). Directed case study method for teaching human anatomy and physiology. *Advances in Physiology Education, 15*(1), S19-S28.

Cohen, A. D. (1998). Second language learning and language use strategies: Defining terms. In A. D. Cohen (Ed.), *Strategies in learning and using a second language* (pp. 3-23). New York, NY: Addison Wesley Longman Inc.

Cohen, A. D., & Chi, J. C. (2002). Language Strategy Use Inventory. In R. M. Paige, A. D. Cohen, J. Lassegard, J. C. Chi & B. J. Kappler (Eds.), *Maximizing study abroad: A students' guide to strategies for language and culture learning and use*. Minneapolis, MN: Center for Advanced Research on Language Acquisition (CARLA).

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). New York, NY: Addison Wesley Longman Inc.

Cumming, A., Kantor, R., & Powers, D. E. (2002). Decision making while rating ESL/EFL writing tasks: A descriptive framework. *Modern Language Journal, 86*, 67-96.

Damron, J. (2003). What's the problem? A new perspective on ITA communication. *Journal of Graduate Teaching Assistant Development, 9*(2), 81-86.

Daniel, A. (1983a). *Development of a perceived communication effectiveness scale.* Paper presented at the Annual Meeting of the International Communication Association, Dallas, TX.

Daniel, A. (1983b). *A demographic analysis of students and their GTA instructors.* Paper presented at the Annual Meeting of the Central States Speech Association, Lincoln, NE.

Darling, A. L. (1987). TA socialization: A communication perspective. In N. V. Chrism (Ed.), *Institutional responsibilities and response in the employment and education of teaching assistants* (pp. 91-94). Columbus, OH: Ohio State University Press.

Darling, A. L., & Staton, A. Q. (1989). Socialization of graduate teaching assistants: A case study in an American university. *International Journal of Qualitative Studies in Education, 2*, 221-235.

Davis, C. E., Tyler, A., & Koran, J. (1989). Face-to-face with English speakers: An advanced training class for international teaching assistants. *English for Specific Purpose, 8*(139-153).

De Berly, G. (1995). *The ITA trainer: Advocate or adversary.* Paper presented at the the Annual Meeting of the Teachers of English to Speakers of Other Languages, Long Beach, CA.

Dörnyei, Z. (1995). On the teachability of communication strategies. *TESOL Quarterly, 29*(1), 55-85.

Droge, C., & Spreng, R. (1996). Enhancing involvement and skills with a student-led method of case analysis. *Journal of Marketing Education, 18*(3), 25-34.

Duba-Biederman, L. (1994). Graduate student development: Problems of role ambiguity and faculty supervision. *Journal of Graduate Teaching Assistant Development, 1*, 119-126.

Ellis, G., & Sinclair, B. (1989). *Learning to learn English: A course in learner training*. Cambridge, UK: Cambridge University Press.

Ellis, R. (1984). Communication strategies and the evaluation of communicative performance. *English Language Teaching Journal, 38*(1), 39-44.

Faerch, C., & Kasper, G. (1983). Plans and strategies in foreign language communication. In C. Faerch & G. Kasper (Eds.), *Strategies in interlanguage communication* (pp. 20-60). London: Longman Inc.

Fitzgerald, G. E., & Semrau, L. P. (1998). The effects of learners differences on usage patterns and learning outcomes with hypermedia case studies. *Journal of Educational Multimedia and Hypermedia, 7*(4), 309-331.

Fitzgerald, G. E., Wilson, B., & Semrau, L. P. (1997). An interactive multimedia program to enhance teacher problem solving skills based on cognitive flexibility theory: Design and outcomes. *Journal of Educational Multimedia and Hypermedia, 6*(1), 47-76.

Flynn, A. E., & Klein, J. D. (2001). The influence of discussion groups in a case-based learning environment. *Educational Technology Research & Development, 49*(3), 71-86.

Forman, E. A., & Cazden, C. B. (1985). Exploring vygotskian perspectives in education: The cognitive value of peer interaction. In J. W. Wertsch (Ed.), *Culture, communication, and cognition* (pp. 323-347). New York: Wiley.

Fuller, B., Snyder, C. W. J., Chapman, D., & Hua, H. (1994). Explaining variation in teaching practices? Effects of state policy, teacher background, and curricula in southern Africa. *Teaching and Teacher Education, 10*(2), 141-156.

Ghaith, G. M. (2002). The relationship between cooperative learning, perception of social support, and academic achievement. *System, 30*, 263-273.

Gonzalez-Bueno, M. (1998). The effects of electronic mail on Spanish L2 discourse. *Language Learning & Technology, 1*(2), 55-70.

Gorsuch, G., Stevens, K., & Brouillette, S. (2003). Collaborative curriculum design for an international teaching assistant workshop. *Journal of Graduate Teaching Assistant Development, 9*(2), 57-68.

Gorsuch, G. J. (2003). The educational cultures of international teaching assistants and U.S. universities. *Teaching English as a Second or Foreign Language, 7*(3).

Griffith, P. L., & Laframboise, K. (1997). The structures and patterns of case method talk: What our students taught us. *Journal of Management Education, 17*(1), 114-117.

Gu, P. Y. (1996). Robin hood in SLA: What has the learner strategy research taught us? *Asian Journal of English Language Teaching, 6*, 1-29.

Guthrie, E. (2000). New paradigms, old practices: Disciplinary tensions in TA training. In B. Rifkin (Ed.), *Mentoring foreign language teaching assistants, Lecturers, and adjunct faculty: AAUSC 2000 volume* (pp. 19-39). Boston: MA: Heinle.

Hammrich, P. L. (1996). *Biology graduate teaching assistants' conceptions about the nature of teaching*. U.S.; Pennsylvania: April 5, 2005, from ERIC database.

Heggins, W. J., & Jackson, J. F. L. (2003). Understanding the collegiate experience for Asian international students at a Midwestern research university. *College Student Journal, 37*(3), 379-391.

Heift, T., & Caws, C. (2000). Peer feedback in synchronous writing environment: A case study in French. *Educational Technology & Society, 3*(3), 208-415.

Hoekje, B., & Williams, J. (1992). Communicative competence and the dilemma of international teaching assistant education. *TESOL Quarterly, 26*(2), 243-269.

Huang, S. C. (2003). *Training of foreign language learning strategies: Effects on learning process*. Taiwan.

Hyland, F. (2000). ESL writers and feedback: Giving more autonomy to students. *Language Teaching Research, 4*(1), 33-54.

International teaching assistant program. (n.d.). Retrieved June 1, 2005, from http://english.okstate.edu/ita/faq.htm

Jenson, J. D. (2004). It's the information age, so where's the information? *College Teaching, 52*(3), 107-112.

Johnson, L. R., Semrau, L. P., & Fitzgerald, G. E. (2000). *The impact of group v individual use of hypermedia-based instruction.* Paper presented at the Society for Information Technology and Teacher Education International Conference (SITE), San Diego, California.

Kear, K. (2004). Peer learning using asynchronous discussion systems in distance education. *Open Learning, 19*(2), 151-165.

Kellerman, E. (1991). Compensatory strategies in second language research: A critique, a revision, and some (non-)implications for the classroom. In R. Phillipson & E. Kellerman (Eds.), *Foreign/second language pedagogy research* (pp. 142-161). Clevedon, UK: Multilingual Matters.

Kern, R. G. (1995). Restructuring classroom interaction with networked computers: Effects on quantity and characteristics of language production. *The Modern Language Journal, 79*(4), 457-476.

Klein, J. (2002). The failure of a decision support system: Inconsistency in test grading by teachers. *Teaching and Teacher Education, 18*(8), 1023-1033.

Kolodner, J. L., & Guzdial, M. (2000). Theory and practice of case-based learning aids. In D. H. Jonassen & S. M. Land (Eds.), *Theoretical foundations of learning environments* (pp. 215-242). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Lam, W. S. E. (2000). L2 literacy and the design of the self: A case study of a teenager writing on the Internet. *TESOL Quarterly, 34*(3), 457-482.

Langham, C. K. (1989). *Discourse strategies and classroom learning: American and foreign teaching assistants.* Unpublished doctoral dissertation, University of California at San Diego, San Diego, California.

Leki, I. (2001). "A narrow thinking system": Non-native-English-speaking students in group projects across the curriculum. *TESOL Quarterly, 35*(1), 39-67.

Littlemore, J. (2003). The communicative effectiveness of different types of communication strategy. *System, 31*, 331-347.

Liu, M., Moore, Z., Graham, L., & Lee, S. (2002). A look at the research on computer-based technology use in second language learning: A review of the literature from 1990-2000. *Journal of Research on Technology in Education, 34*(3), 250-272.

Maarof, N. (2002). Watch me as I speak: Peer observation and feedback as a learning tool. *The English Teacher: An International Journal, 5*(2), 137-144.

MacIntyre, P. D., Noels, K. A., & Clement, R. (1997). Bias in self-ratings of second language proficiency: The role of language anxiety. *Language Learning, 47*(2), 265-287.

Matsumura, S., & Hann, G. (2004). Computer anxiety and students' preferred feedback methods in EFL writing. *The Modern Language Journal, 88*(3), 403-415.

McDowell, E. E. (1993). *An exploratory study of GTA's attitudes toward aspects of teaching and teaching style.* Paper presented at the Annual Meeting of the Speech Communication Association, Miami, FL.

Meyers, C., & Holt, S. (2002). *Success with presentations.* Burnsville, MN: Aspen Productions.

Miller, S. M. (1995). *Vygotsky and education: The sociocultural genesis of dialogic thinking in classroom contexts for open-forum literature discussions.* Retrieved July 27, 2004, from http://psych.hanover.edu/vygotsky/miller.html

Murray, M. G., & Peterson, T. K. (1993). *Diversity in the classroom: Gender related examples.* Paper presented at the Joint Meeting of the Southern States Communication Association/Central States Communication Association, Lexington, KY.

Myers, S. A. (1998). GTAs as organizational newcomers: The association between

    supportive communication relationships and information seeking. *Western Journal of*

    Communication, 60(1), 54-73.

Office of the University Registrar. (2005). *International student enrollment summary (1989-*

    2004). Retrieved July 11, 2005, from http://registrar.missouri.edu/Statistics-

    Student_Information_and_Reporting/resources/04Enroll/page15.html

Oxford, R. L. (1996). Employing a questionnaire to assess the use of language learning

    strategies. *Applied Language Learning, 7*(1&2), 25-45.

Oxford, R. L., & Anderson, N. J. (1995). A cross-cultural view of learning styles: State of the

    art article. *Language Teaching, 28*, 201-215.

Pae, T.-I. (2001). International teaching assistant programs and world Englishes perspectives.

    Journal of Graduate Teaching Assistant Development, 8(2), 71-77.

Paige, R. M., Cohen, A. D., & Shively, R. L. (2004). Assessing the impact of a strategies-

    based curriculum on language and culture learning abroad. *Frontiers: The*

    Interdisciplinary Journal of Study Aboard, 10, 253-276.

Park, G. (1994). *Language learning strategies: Why do adults need them?* Unpublished

    manuscript, University of Texas at Austin.

Parks, S., & Raymond, P. M. (2004). Strategy use by non-native-English-speaking students

    in an MBA program: Not business at all. *The Modern Language Journal, 88*(3), 374-

    389.

Phillips, V. (1991). A look at learner strategy use and ESL proficiency. *CATESOL Journal*,

    57-67.

Rasor, R. E., & Barr, J. (1998). *Survey sampling of community college students: For better or for worse.* Paper presented at the Annual Conference of the Research and Planning Group for California Community Colleges, Lake Tahoe, CA.

Rees-Miller, J. (1993). A critical appraisal of learner training: theoretical bases and teaching implications. *TESOL Quarterly, 27*(4), 679-689.

Respect on the line. (2004). [VHS]. Storrs, CT: University of Connecticut Center For Instructional Media and Technology.

Riedel, J., Fitzgerald, G. E., Leven, F., & Toenshoff, B. (2003). The design of computerized practice fields for problem solving and contextualized transfer. *Journal of Educational Multimedia and Hypermedia, 12*(4), 377-398.

Rossi-Le, L. (1989). *Perceptual learning style preferences and their relationship to language learning strategies in adult students of English as a second language.* Unpublished doctoral dissertation, Drake University, Des Moines, IA.

Rounds, P. L. (1987). Characterizing successful classroom discourse for NNS teaching assistant training. *TESOL Quarterly, 21*(4), 643-671.

Rubin, D. L. (1993). The other half of international teaching assistant training: Classroom communication workshops for international students. *Innovative Higher Education, 17*(3), 183-193.

Scenes from a classroom: Conflict management. (2004). [Flash movies]. Twin Cities, MN: University of Minnesota, Center for Teaching and Learning Services.

Schoonen, R. (2005). Generalizability of writing scores: An application of structural equation modeling. *Language Testing, 22*(1), 1-30.

Selinker, L., & Douglas, D. (1989). Research-based methodology in contextually-based second language research. *Second Language Research, 5*, 93-126.

Semrau, L. P., & Fitzgerald, G. E. (1995). Interactive case studies in behavioral disorders: Looking at children from multiple perspectives. *Education and Treatment of Children, 18*(3), 348-359.

Shannon, D. M., Twale, D. J., & Moore, M. S. (1998). TA teaching effectiveness: The impact of teaching and learning experience. *Journal of Higher Education, 69*(4), 440-466.

Sheskin, D. J. (1997). *Handbook of parametric and nonparametric statistical procedures*. Boca Raton, FL: CRC Press.

Singhal, M. (1998). *Computer-mediated communication (CMC): Technology for enhancing foreign language/culture education*. Retrieved March 28, 2005, from http://www.cltr.uq.edu.au/oncall/singhal121.html

Smith, B. (2003). The use of communication strategies in computer-mediated communication. *System, 31*, 29-53.

Smith, K. S. (1993). A case study on the successful development of an international teaching assistant. *Innovative Higher Education, 17*(3), 149-163.

Smith, K. S., & Simpson, R. D. (1993). Becoming successful as an international teaching assistant. *The Review of Higher Education, 16*(4), 483-497.

Spolsky, B. (1989). Communicative competence, language proficiency, and beyond. *Applied Linguistics, 10*(2), 138-156.

Stepich, D. A., Ertmer, P. A., & Lane, M. M. (2001). Problem-solving in a case-based course: Strategies for facilitating coached expertise. *Educational Technology Research & Development, 49*(3), 53-69.

Stoynoff, S. (1997). Factors in associated with international students' academic achievement. *Journal of Instructional Psychology, 24*, 56-68.

Struc, N. (2002). *Recontextualizing experience and practice in teaching English as a second language.* Paper presented at the Linking Research to Educational Practice II, University of Calgary, Canada.

Sykes, G., & Bird, T. (1992). Teacher education and the case idea. In G. Grant (Ed.), *Review of Research in Education* (Vol. 18, pp. 457-521). Washington, DC: American Educational Research Association.

Tang, L., & Sandell, K. (2000). Going beyond basic communication issues: New pedagogical training of international TAs in SMET fields at two Ohio universities. *Journal of Graduate Teaching Assistant Development, 7*(3), 163-172.

Text, sighs and videotape: Sample conferences that present special challenges to teachers. (1992). [VHS]. Madison, Wisconsin: University of Wisconsin-Madison.

Tillman, B. A. (1995). Reflections on case method teaching. *Action in Teacher Education, 17*(1), 1-8.

Time series analysis and forecasting with SPSS trends 9.0. (1999). Chicago, IL: SPSS Inc.

Topping, K., & Ehly, S. (1998). Introduction to peer-assisted learning. In K. Topping & S. Ehly (Eds.), *Peer-assisted Learning* (pp. 1-23). Mahwah, NJ: Lawrence Erlbaum, Inc.

Usuki, M. (2000). A new understanding of Japanese students views on classroom learning. *Independence, 27*, 2-6.

Vygotsky, L. S. (1978). *Mind in society : The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal, 13*(2), 7-26.

Watanabe, Y. (1990). *External variables affecting language learning strategies of Japanese EFL learners: Effects of entrance examination, years spent at college/university, and staying overseas.* Unpublished master's thesis, Lancaster University, Lancaster, UK.

Weaver, S. J., & Cohen, A. D. (1998). Strategy training for learners and the role of the teacher. In A. D. Cohen (Ed.), *Strategies in learning and using a second language* (pp. 65-106). New York, NY: Addison Wesley Longman Inc.

Weiss, L. B., & Levison, S. P. (2000). Tools for integrating women's health into medical education: Clinical cases and concept mapping. *Academic Medicine, 75*(11), 1081-1086.

Williams, J. (1990). *Evaluating ITA preparation program: Intensive versus concurrent.* Paper presented at the annual meeting of the Teachers of English to Speakers of Other Language, San Francisco, CA.

Williams, J. (1995). Planning, discourse marking, and the comprehensibility of second language speakers. *TESOL Quarterly, 26*, 693-709.

Yang, N.-D. (1995). *Effective awareness-raising in language learning strategy training.* Paper presented at the annual meeting of the Teachers of English to Speakers of Other Language, Long Beach, CA.

Yang, N.-D. (1999). The relationship between EFL learners' beliefs and learning strategy use. *System, 27*, 515-535.

Yildiz, S., & Bichelmeyer, B. A. (2003). Exploring electronic forum participation and interaction by EFL speakers in two web-based graduate-level courses. *Distance Education, 24*(2), 175-193.

Ying, Y.-W. (2003). Academic achievement and quality of overseas study among Taiwanese students in the United States. *College Student Journal, 37*(3), 470-480.

Yule, G., & Hoffman, P. (1990). Predicting success for international teaching assistants in a U.S. university. *TESOL Quarterly, 24*(2), 227-243.

Vitae

Shenghua Zha was born on November 4, 1976 in Anqing, a city near the Yangtze River in China. She completed her undergraduate study at Huazhong University of Science and Technology majoring in English for Science and Technology. Then she went to Shanghai JiaoTong University to get her master degree in the field of Computer-assisted Language Learning. She came to the University of Missouri-Columbia to pursue her doctoral degree at the School of Information Science and Learning Technologies in 2001. She currently works in Dr. Fitzgerald's VRCbd project.