11-5-2018

Examining the Cross-cultural Experience of Eight Chinese International EFL Students Studying STEM Disciplines in Doctoral Programs at a Large Public Research University

xiuyuan yang
xyang019@fiu.edu

FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

EXAMINING THE CROSS-CULTURAL EXPERIENCE OF EIGHT CHINESE INTERNATIONAL EFL STUDENTS STUDYING STEM DISCIPLINES IN DOCTORAL PROGRAMS AT A LARGE PUBLIC RESEARCH UNIVERSITY

A dissertation submitted in partial fulfillment of

the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

CURRICULUM AND INSTRUCTION

by

Xiuyuan Yang

2018

To: Dean Michael R. Heithaus
College of Arts, Sciences and Education

This dissertation, written by Xiuyuan Yang, and entitled Examining the Cross-cultural Experience of Eight Chinese International EFL Students Studying STEM Disciplines in Doctoral Programs at a Large Public Research University, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

_____
James Burns

_____
Teresa Lucas

_____
Kang Yen

_____
Eric Dwyer, Major Professor

Date of Defense: November 5, 2018.

The dissertation of Xiuyuan Yang is approved.

_____
Dean Michael R. Heithaus
College of Arts, Sciences and Education

_____
Andres G. Gil
Vice President for Research and Economic Development
and Dean of the University Graduate School

Florida International University, 2018

DEDICATION

I dedicate this work to my family, I cannot accomplish it without their support.

ACKNOWLEDGMENTS

I would like to express my great thankfulness to my advisor, Dr. Eric Dwyer. He provided me with constant help since we first met in his office, even before he was assigned as my advisor. He provided me with not only feedback on my research, but also suggestions on how to adjust to the U.S. culture, as well as my future professional developments. It has been a great time working, or even just talking with him. I hope I could be as thoughtful and knowledgeable as him, when I am at his age.

My excellent committee members: Dr. James Burns, Dr. Teresa Lucas, Dr. Kang Yen, and Dr. Allen Perkins who retired before my defense also provided me great along the research stage. They provided me feedbacks from various perspectives, so I was able to analyze the research question from different angles. They are knowledgeable, responsible, and considerate. Without the dedication of my advisor and my research committee, I could have never accomplished this dissertation.

I want to thank Yinhong and Wei, who are my colleagues and my friends, too. We met during the second year of my doctoral degree, and soon became friends. They are nice and knowledgeable people, and we always brainstorm for research ideas.

I also want to express my gratitude to all my participants. The idea of the research emerged from my own experience, but I could not accomplish without all their help. I hope this research can help them to smooth their study experience in the United States. I wish them all the best in their study.

Thank you all for your help.

致谢

在我读研究生的时候，我发现一本关于教科书在扉页上印着:“谨以此书献给我的家人”。二十一岁的我对此相当不解，甚至嗤之以鼻。当时的我认为作者应该在扉页上留下“献给整我如生命般热爱的教育学界”或“望莘莘学子以此书为本将所学弘扬光大”。而今，当我回顾这五年的求学生涯，我才真正明白，正是我身后的家人，一直支持着我对真理的探索。

因此，我想在此特别感谢我远在中国的父母与家人，你们一直以来的的支持与鼓励伴随我走完了这五年。当我低落的时候，沮丧的时候，想要放弃的时候，是你们的话语使我重拾信心。你们一直都是我的骄傲，而现在，我希望我也能成为你们的骄傲。姥姥，姥爷，如果你们现在能与我一起站在这美国的土地上，该有多好。

我也十分感谢我的同窗，我的挚友，亦是我未婚夫的适辰。在我忙于学习的时候，你帮我把家里照顾的井井有条。你用怀抱包容了我所有的坏脾气。同为在美求学的博士生，你的压力并不比我小，但你却从未表现出不满与抱怨。你在我面前展现的，永远都只是支持与理解。你使得我的生活充满了爱与希望。在这异国的土地上，你给了我一个家。

感谢你们一直以来的支持，帮助，与爱，你们是我人生中最宝贵的东西。

ABSTRACT OF THE DISSERTATION

EXAMINING THE CROSS-CULTURAL EXPERIENCE OF EIGHT CHINESE INTERNATIONAL EFL STUDENTS STUDYING STEM DISCIPLINES IN DOCTORAL PROGRAMS AT A LARGE PUBLIC RESEARCH UNIVERSITY

Xiuyuan Yang

Florida International University, 2018

Miami, Florida

Professor Eric Dwyer, Major Professor

Chinese international students' difficulties in adjusting to the U.S. classrooms has long been overlooked. They have been stereotyped as not experiencing any problems as a result of their excellence at all levels of education, which also implies that they have been succeeding at handling cross-cultural issues. Research which focuses on Chinese international students are usually generated in the area of second language learning or pedagogical methods, Chinese international students' cross-cultural experience has not been fully explored. The present study was hence conducted to fill the literature gap. Its results could lead to an improvement of Chinese international EFL students' studying abroad experience, as well as provide directions for possible future studies. The study investigated the research question: how does a group of eight Chinese international EFL students studying STEM disciplines in doctoral programs at a large public research university make meaning of their cross-cultural classrooms/lab setting experiences?

The study is a qualitative case study. Participants were recruited via purposeful snowball sampling. An interpersonal, semi-structured interview was used for data collection, and guidelines provided by Smith et al. (2009) were adopted for data analysis.

The results show that all eight participants have been experiencing culture-shock since they arrived in the U.S., and they held many erroneous assumptions about studying in the U.S.. Their major difficulties were generated by adjusting to the U.S. classroom culture and using/understanding cultural English. Causes of their cross-cultural experience could be traced to differences between the Chinese and the U.S. curricula and pedagogical methods; and the teacher centered, textbook oriented teaching methods adopted in their Chinese schools for English teaching. Besides, since most of the participants were top students when they were in China, considering the demand for academic excellence in the Chinese culture, participants' eagerness to maintain/obtain academic accomplishments severed the negative part of their cross-cultural experience.

On the basis of my findings, I recommend re-examining (and corresponding change) of the curricula, avoiding the expert blind spot while teaching, and a change in schools in China regarding its English teaching method. However, because this is a qualitative case study, when facing a different group of students other than my participants, these suggestions should be applied selectively.

TABLE OF CONTENTS

LIST OF TABLES

TABLE PAGE

CHAPTER I

PREFACE

Globalization and the Influx of Chinese International Students in the United States

Globalization has affected countries in different ways depending on distinctiveness in political, economic, technological, and social factors. In education, globalization has motivated students to pursue higher education overseas to prepare themselves for work in a multicultural environment with at least bilingual capabilities and cross-cultural competence (Zhai & Scheer, 2002). It was reported by many students that, in addition to degrees and linguistic skills, their studying abroad experience brings them increased awareness and abilities to behave differently with different culture, people, and ideas (Sheard, 2008). Researchers (Hu, Andreatta, Yu, & Li, 2010) here also suggested that studying abroad can enhance students' international perspective and cultural competence, as well as help them to understand global issues.

For the host countries (for example, the U.S., U.K., Australia, and New Zealand), an influx of international students can bring many benefits. First, they can generate knowledge, skills, and other academic input to the host country (Brainard, 1992; Le & Gardner, 2001). Second, in graduate schools, many international students also work as teaching or research assistants, thereby helping professors share the teaching load (Peterson, Briggs, Dreasher, Horner, & Nelson, 1999). Third, international students' participation may provide opportunities for host students to explore different cultures and views, while experiencing diversity without leaving the country (Dalton, 1999; Heyward, 2002). Finally, doing so can contribute significantly to the host country's economy. In the case of the U.S., international students and their dependents contributed $32.8 million to the

U.S. economy, creating or supporting more than 400,000 jobs in academic year 2015-16 (NAFSA, 2017).

Globally, in 2012, more than 4.5 million students were enrolled in postsecondary educational institutes outside their country of citizenship (OECD, 2016). Among these 4.5 million international students, 53% were from Asian countries. Among all Asian countries, China has been sending more students abroad than any other nation (OECD, 2016).

In accordance with a census conducted by the Institute of International Education, in the 2014-2015 academic year, the number of international students in the U.S. reached the highest rate of growth (10%) in the past 35 years, with a record high of 974,926 students (IIE, 2016). Among the top 25 places of origin of international students, China ranked first in international students enrolled in graduate programs—40% (IIE, 2016). Among all Chinese international students, 18.6% chose to study Engineering, 1.3% chose to study Health related professions, 14.1% chose to study Math/Computer Science, and 8.7% chose to study Physical/Life Science (IIE, 2016). In other words, 42.7% of Chinese international students are studying STEM (Science, Technology, Engineering, And Mathematics) disciplines in the U.S. (IIE, 2016)

However, pursuing degrees in another country entails that one be immersed in an environment where people's language, perspectives, worldviews, values, motivations, aspirations, habits, norms, and capabilities may not be fully congruent to one's own (Sen, 1993). Indeed, Chinese international students have been reported to have more issues during adjustment periods (both academically and socially) when compared with their

European peers, citing perceptibly more intense distinctions between Chinese and the U.S. cultures (Myers-Walls, Frias, Kwon, Ko, & Lu, 2008; Hanassab, 2006; Lee & Rice, 2007)

My Personal Story

Before coming to the U.S., I had this rosy picture of my life: that I will excel in academic performance, become friends with my classmates, and travel all over the States. However, after one week in school, I realized I was just too naïve.

I understood every single word the teacher said, but it made no sense to me when the words were put together: I know *common*, and I know *core*, but what is a Common Core? I know *open*, and I know *school*, but what is an open school? Why do people not need to come to class next week if they have an *open school*? What does "matching the pacing guide to the Common Core" mean? Furthermore, what is a pacing guide?

Early on, I found myself sitting in a class of 30 students, all host students, who had been educated under U.S. curricula via Western pedagogical methods since birth. I was so lost in that class, because we spent almost the whole class talking (for me, it was listening to them to complain) about the pacing guide and the Common Core. They were cutting into each other's words, and chewing burgers while others were talking. There was no need for them to stand up, or raise hands to ask questions: they just needed to open their mouth while comfortably sitting in their seats. Yet, everyone—including the teacher—seemed quite OK with it!

My initial attempt at friendship was also frustrating during the first semester. As a student, my primary goal was to study, to obtain academic excellence. Hence, I spent

most of my time with the coursework: reading the textbook; memorizing the names and theories; and Googling what is obvious to my classmates but confusing to me (e.g., pacing guide, Common Core). There was little time left for me to develop a social life. Furthermore, because I was living at the university dorms, without a car, my primary daily activities were situated around the campus with classmates or faculty, and our communication seldom extended to school tasks.

I decided to explore graduate level Chinese international EFL students' cross-cultural experience right after the first month of my school life. I wanted to study their experiences, examine their experience to identify difficulties, help them sooth their cross-cultural experience, and diminish their acculturation difficulties. As a result, unlike mine, I fancied their rosy pictures of the U.S. coming true.

CHAPTER II

INTRODUCTION

Overview of the Chapter

This qualitative study focuses on a group of eight Chinese international English as a Foreign Language (EFL) students who are studying at a public research university in STEM disciplines. It examines cross-cultural experience emerging among the group of students in academic settings (e.g., classrooms, labs), as well as their feelings, understandings, and reflections toward such experience. The study analyzes problems from the perspective of cross-cultural studies, EFL studies, and curriculum and instruction. The following sections present a conceptual framework of theories that underlie the problem, this study, and provide details about the purpose of the study, its significance, and the research questions. The research methods and assumptions underneath are also introduced, together with delimitations and definition of terms.

Conceptual Framework

Culture and Culture Shock

Following Bullivant's (1989) definition, *culture* is defined as "a social group's design for surviving in and adapting to its environment," influenced by the geographic environment, social environment, and metaphysical environment (Bullivant, 1989, p. 27). When people are deprived of their own culture (home culture) and forced to live and be immersed into a different culture (host culture), they are expected to experience a series of phenomena caused by cross-culture issues (cross-culture phenomena) (Oberg, 1960).

Notably, because of a series of both observable and unobservable cultural differences between their home countries and new (host) countries, international students are expected to experience a series of culture shock experiences upon arriving in the new (host) country/university. In other words, international students are expected to experience culture shock.

The concept of *culture shock* was introduced by Oberg (1960), as anxiety caused by not knowing how to react in an unfamiliar culture. This concept was further developed into by Pedersen (1995), to describe any situation when individuals are forced to adjust themselves into unfamiliar social systems, where previous knowledge may not be used as a reference in making proper reactions (Pedersen, 1995).

Oberg (1958) identified seven stages of adjusting into a new culture, yet his work was later criticized for its negative paraphrasing, leading Adler (1975) to develop a five-stage model deprived from Obers (Adler, 1975, p. 19), see Figure 1 and Table 1.

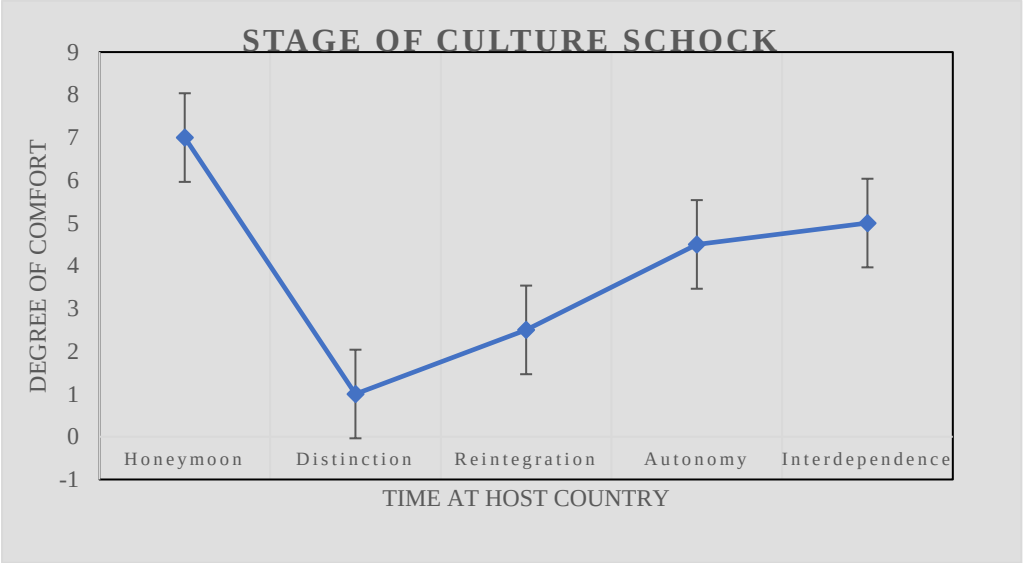


Figure 1. Stage of Culture Shock by Oberg (1958) and Adler (1975)

Table 1.
Stages of Culture Shock by Oberg (1958) and Adler (1975)

Stage	Description
Honeymoon/Contact	Experience only the positive part of the new culture.
Distinction	Detached from the home culture and overwhelmed by the new culture.
Reintegration	1. Experiences difficulties while coping with the new culture; 2. Usually accompanies with anger.
Autonomy	1. Gradually autonomy is achieved; 2. Able to see both the positive and negative aspects in both the new culture and the home culture.
Interdependence	1. Biculturality is achieved; 2. Comfortable with both the new and the home culture.

The degree of being affected, as well as the sequence of how these stages occur, could be quite different, depending on individual differences (Oberg, 1960). However, most negative influences are expected to occur in the Distinction and the Reintegration stages when people are detached from their home culture and overwhelmed by the new (host) culture (Oberg, 1960). Thus, new arrivals may tend to hold a holistic attitude toward the new environment, the people, and even themselves (Oberg, 1960).

One could possibly eliminate negative influences of culture shock and accelerate adjustment processes through *acculturation*: by increasing exposure to the host culture and continuous contact with the host people. There would be cultural and psychological change occurring within individuals, which can help them to adapt to the host culture (Bweey, 2005; Smith & Kbawaja, 2011). Such processes may require individuals to shift

their thinking patterns as well as adjust their social and academic behavior to better fit into the host culture.

Acculturation

Acculturation was originally developed in the discipline of anthropology (Redfirle, Linton & Herskovits, 1936). It was then adopted by sociology, epidemiology, and inter-cultural psychology (Redfirle, et al., 1936). Acculturation was broadly defined as the process by which individuals subsequently change their behavior (both psychologically and physically) to adopt the new cultural environment, as a result of continuously being exposed to different cultures (Redfield, Linton, & Herskovits, 1936).

Fu (2015) reminds us that the study of acculturation may be defined as long-term or short-term. *Long-term* refers to the studying of participants exposed to or even immersed in a new culture for a long or even life-time period, such as immigrants and refugees. On the other hand, *short-term* or *instant acculturation* targets people who have been voluntarily having first-hand contact with a new culture for a relatively short period of time. Though there are no fixed time criteria for short-term acculturation, researchers usually set six months to five years as parameters. For my research, the target population—eight graduate level Chinese international EFL students—falls into the category of short-term acculturation.

When the concept of acculturation was introduced, it was regarded as a unidirectional model that supposes that the newcomer will eventually accept all aspects of the new culture (host culture), and lose their old culture (home culture); such a model was vividly described as the melting pot approach (Alba and Nee, 1997; Bourhi, Moise, Perreault, & Senecal, 1997). On the other hand, a bidimensional model incorporating the

idea of pluralism, assumed that the newcomer will accept some parts of the new culture (host culture), as well as retain some of their old culture (home culture) (Berry, 1980, 1992, 1997). Berry's work suggests that the degree of acculturation varies among individuals, because of their personal status, such as the length and degree of being exposed to the host and the home culture (Cuellar, Arnold, & Maldonado, 1995).

On the basis of the extensiveness of relationship with the old (home) and the new (host) culture, Keefe and Padilla (1987) described four forms of acculturation: integration, assimilation, segregation, and marginalization:

1) for integration, newcomers welcome both the old and the new culture, having a positive view of the new culture but retain their old culture norms;
2) for assimilation, newcomers relinquish some of their old values, accepting the new culture and becoming part of it;
3) for segregation, newcomers retain their old culture and refuse to adapt to the new culture; and
4) for marginalization, newcomers reject both the old and the new culture (see Figure 2).

		Positive relationship to Dominant Society (host culture)	
		YES	NO
Retention of Cultural Identify (home culture)	YES	Integration	Segregation
	NO	Assimilation	Marginalization

Figure 2. Acculturation Model (Keefe & Padilla, 1987)

Cross-cultural Experience and Acculturation Difficulties Encountered by International English as a Foreign Language Students

The next paragraphs summarize current literature regarding cultural-shock phenomena and acculturation difficulties (e.g. Chen, 1999; Mori, 2000; Aubrey, 1991; Edgeworth & Eisemanm, 2007). By reviewing them, it was found that cross-cultural experience and acculturation difficulties encountered by international students usually emerge from five categories: a) language, (b) education, c) social adjustment, d) stereotypes and discrimination, and e) lifestyle. The following paragraphs defense how these factors have been exhibited among international EFL students in general. A detailed analysis with respect to Chinese international EFL students, in particular, is presented in the literature review.

Language. Upon arrival, international students may immediately encounter a major acculturation difficulty— the language barrier—since language helps build connections with people in both academic and social settings (Chen, 1999). In academic settings, language proficiency is directly related to understanding lectures, interacting with teachers and classmates, writing assignments, and taking exams (Chen, 1999; Mori, 2000). As a result, proficiency is positively related to one's academic performance (Poyrazli, Arbona, Bullington, & Pisecco, 2001; Stoynoff, 1997). Trice (2003) interviewed 27 academic faculty members (e.g., professors and administrative staff) in a midwestern university in the United States, and reported that language proficiency was a principal challenge for international students, affecting their living and studying experience and, accordingly, their acculturation process (Poyrazli & Kavanaugh, 2006).

Education. By summarizing current literature, aside from language, differences in learning and teaching styles are another difficulty for international students (e.g., Misra, Crist, and Burant, 2003; Misra and Castillo, 2004). Research suggests that students taught through rote learning at their home countries feel that adjusting to the Western style of interactive teaching can be difficult (Aubrey, 1991; Liberman, 1994). Students also reported difficulty in switching from teacher-centered learning to student-centered learning, as well as switching their orientation of the teacher's role from the-sage-on-stage to a facilitator (Edgeworth & Eiseman, 2007; Townsend & Poh, 2008). Because the teacher is now acting as a facilitator, some international students also expressed their concern about the informal atmosphere in host classrooms, as well as a lack of respect to teachers shown by the host classmates (from Chinese students' perspective) (Edgeworth & Eiseman, 2007; Townsend & Poh, 2008).

Social Adjustment. Some authors (e.g., Townsend & Poh, 2008; Zhang & Dixon, 2003; Klomegah, 2006) have reported international students' feelings of deprivation from their previous social supporting system, with many international students spontaneously seeking relationships with the host people upon arrival. However, most international students studying in the U.S., Australia, and New Zealand have expressed their absence of local friends in the host country during their stay (Townsend & Poh, 2008; Zhang & Dixon, 2003; Klomegah, 2006). They reported loneliness, isolation, and exclusion, especially in the beginning months (Poyrazli, Arbona, Nora, McPherson, & Pisccco, 2002; Sawir, Marginson, Deumer, Nyland, & Ramia, 2008), while feeling marginalized and experiencing difficulty engaging in social activities with the host people (Mallinckrodt and Leong, 1992; Sato & Hodge, 2009).

Aside from language proficiency, personality, and cultural norms, a key factor impeding the initiating or the maintaining of friendship is the acceptance of the home/host culture. Smith and Khawaja (2011) suggested that newcomers would like to maintain their home culture while adjusting into the host culture, while expecting the host people to value their home culture, or even make changes accordingly. However, the host people may expect newcomers to assimilate into the host culture, integrating their behavior such that it aligns with the host culture. Hence, efforts to develop friendships occasionally results in disappointment.

Racial stereotypes and discrimination. The U.S. observed the first decline in international students in 2004 (IIE, 2004), and one possible explanation is because of stereotypes, discrimination, and hostility toward international students (Lee, 2005). International students reported that they were perceived as inferior through both direct (immediate personal contact) and indirect (image delivered through mass media production) discrimination (Lee & Rice, 2007). Such behavior and information would arouse negative feelings about one's own culture, leaving the individual to feel lost in the new host culture.

Lifestyle. With respect to related woes, new arrivals also reported having difficulty in housing and transportation, such as finding places to live and determining daily commute routes (Bradley 2000; Proyzli & Graham, 2007). However, these issues became less severe among students staying in the host country for more than two years (Khawaja & Dempsey, 2007)

My Conceptual Model

On the basis of reviewed theories and literature, my conceptual framework was built (Figure 3). It includes major concepts of culture shock (e.g. Oberg, 1958, 1960; Adler, 1975) and acculturation (e.g. Redfield, Linton, & Herskovits, 1936; Keefe & Padilla, 1987; Berry, 1980, 1992, 1997), as well as research examining cross-cultural experiences of international EFL students. Explanations regarding the model include five notions, and detail with respect to each notion will be presented in *Chapter III Literature Review*. The five notions are:

1. The home culture and the host culture (the U.S. classroom culture) are painted into different colors (blue and green), indicating the differences between them;
2. The blue and the green do not melt into each other completely, as international EFL students are having cross-cultural experiences when entering a new culture (the host culture, or, in this case, U.S. classroom culture);
3. The five expanding arrows present the five categories, where most cross-cultural experiences and acculturation difficulties are generated.
4. The five expanding arrows indicate how international EFL students are acculturating with the host culture: they are acting actively to adjust to the host culture;
5. However, they are encountering acculturation difficulties, presented by the solid lines around the arrows.

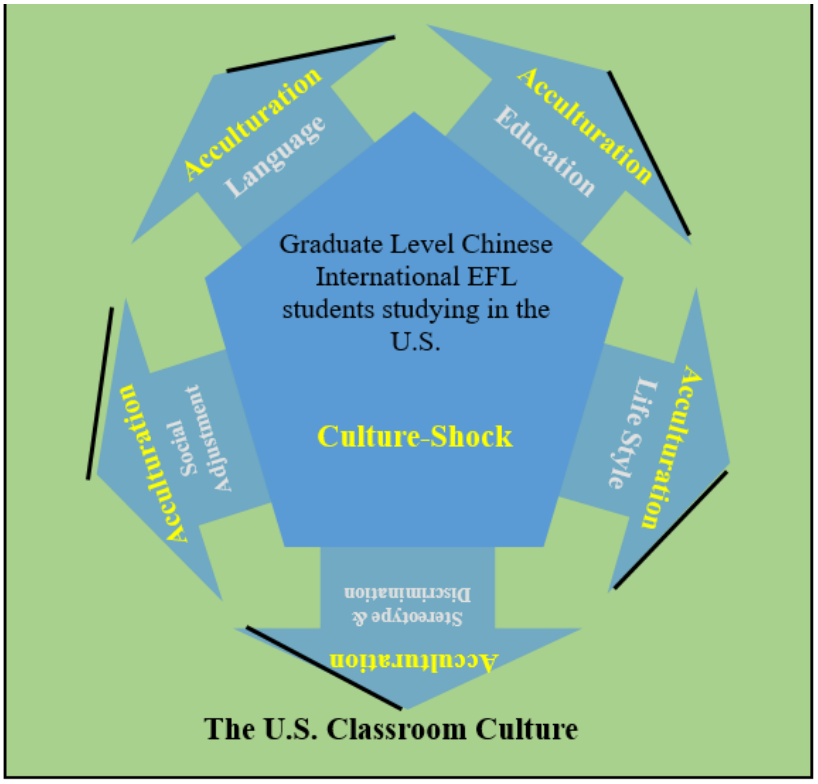


Figure 3. Dissertation Conceptual Model

Purpose of This Study

This research examines the cross-cultural experiences of eight Chinese international EFL students, who are pursuing their doctoral degrees at a public research university for STEM majors. It is an example of qualitative research, selected in order to understand not only students' detailed experience, but also their feelings, understandings, and reflections. The study is hence expected to contribute to the areas of cross-culture studies, EFL studies, and curriculum and instruction. The students are in their second year, studying at a public research university in the U.S.; thus, they are in a position to

reflect fairly immediately upon their initial year of overseas study. The study is additionally aimed at identifying and examining cross-cultural experiences and acculturation difficulties reported by them—in other words, situations emerging in university classroom and lab settings, together with students' interpretations toward these experiences. In addition, this research also sought reasons behind these experiences and interpretations. A key goal of the study is the development of corresponding suggestions for improving the participants' learning experiences in the area of curriculum and instruction.

Significance of This Study

The research is significant for three reasons: a) the participants have been long ignored by current researchers, and b) current literature only examined the topic from a limited perspective. The U.S. has always been a popular destination for Chinese graduate students, and approximately 42.7% of them choose to study STEM majors (Science Technology Engineer Mathematics) at the graduate level. In other words, nearly half of Chinese international students choose to pursue STEM majors for their graduate degree in U.S. universities.

However, this group of students' cross-cultural difficulties are often under reported in the literature, let alone for Chinese STEM majors. Chinese international students have been perceived as having no difficulties due to their excellent academic performance at nearly all levels of course work (Ho & Jackson, 2001; Lee, 1996; Lee & Joo, 2005; Ruble & Zhang, 2013). However, this does not necessarily mean they have not had any difficulties, but rather that they have had to overcome acculturation difficulties

on their own and at their own expense. As universities charge Chinese international students more tuition fee of domestic students, questions regarding the degree to which Chinese international students must fend for themselves are raised. Secondly, in most research, students from STEM and non-STEM majors have been mixed together and treated as single cases. Nevertheless, differences in course requirements, testing methods, and corresponding teaching/studying strategies, depending on the nature of STEM and none STEM disciplines, can be worthy of consideration. The requirement of lab experiments and research responsibilities also distinguish STEM students from non-STEM students. As a result, researchers may seek evidence teasing STEM students' experiences from and non-STEM students, thereby alleviating any temptation to make generalizations, which may apply to one group but not the other. A perusal into the literature regarding Chinese international students, particularly Chinese international STEM majors, is covered in *Chapter III Literature Review.*

In addition, the present research may contribute to research focusing on Chinese international students' cross-cultural experience\. There are numerous research projects examining Chinese international students' overseas study experiences. However, most of them focus on either Chinese international students' language difficulties (from linguistic and EFL perspective) or on differences between pedagogical methods employed by Chinese and U.S. instructors. These two are surely important aspects to examine, and I include them in my research since language is closely related to culture and pedagogical methodology includes presentation of classroom culture. However, since this research examined participants' cross-cultural experiences, it also focused on participants' unmet expectations, mis-assumptions, and how differences between Chinese and U.S. cultures

(in general) may affect participants' behavior, as well as their reflections/interpretations toward these behaviors. A detailed review of the literature together with literature gap is covered in *Chapter III Literature Review*.

My study may serve as a starting reference for research focusing on the cross-cultural experience of Chinese international graduate (especially doctoral) STEM majored students. Given that there is a plethora of graduate Chinese STEM students, but their affective experiences have gone unresearched, this study may also serve as a springboard into understanding these cross-cultural experiences, asserting ways in which any difficulties might be mended. Understanding their cross-cultural experiences, difficulties, and needs would help them to smooth their study experience. Furthermore, since a more comfortable study environment could potentially be created, students would likely be more productive in their studies and research, thereby providing universities with higher academic performance, and additionally satisfying research results.

Research Questions

The current research recruited a group of eight Chinese international English as a Foreign Language students. The eight students are currently pursuing their doctoral degrees at a public research university for STEM disciplines. This research focused on their cross-cultural experience emerged at classroom/lab settings, and it is aimed at answering the research question: How does a group of eight Chinese international EFL students studying STEM disciplines in doctoral programs at a large public research university make meaning of their cross-cultural classroom/lab setting experiences?

Overview of Methods

This research is a case study, using face to face, semi-structured interpersonal interviews for data collection. The interview has two rounds, 60 to 90 minutes for each round.

I designed the interview questions, using my research questions and literature review; a sample of them is attached in Appendix D. Since both the participants and I are Chinese EFL students, who speak both Mandarin and English, participants were invited to speak either Mandarin or English during the interview. Nevertheless, Chinese was spoken for most of the interview time.

Participants were recruited among first and second-year doctoral students studying at the same public research university in the U.S., majoring in either Science, Technology, Engineering, and Mathematic (STEM) disciplines. A total number of eight participants was recruited, and snowball sampling was used. The oral recruitment script and the verbal consent form are attached in Appendices B and C.

Assumptions

According to theories of culture and culture shock (e.g. Bullivant 1989; Oberg, 1960), I assumed my participants (doctoral Chinese international EFL students) to have experienced culture shock and have encountered acculturation difficulties studying at the U.S. (an unfamiliar culture, the host culture). Secondly, because of the nature of culture shock, I assumed my participants would have acculturation difficulties when trying to adjust to the unfamiliar environment. Nevertheless, at this stage, I did not want to make assumptions about which acculturation strategy they would apply.

Delimitations

The present study solely focuses on the eight participants: doctoral Chinese international EFL students, who have arrived in the U.S. within the last two years and majored in STEM disciplines. The findings hence may only apply to this group of participants (second year, doctoral, STEM majored). Secondly, since this study examines the exhibited cross-culture phenomena in classroom settings, it only reflects how the examined factors influence the participants' studying experiences; their living experience is not the focus of this study.

Definition of Terms

1. *Academic vocabulary:* words used for study at tertiary level (School of Linguistics and Applied Language Studies, n.d.)
2. *Acculturation:* the process of which individuals subsequently changes their behavior (both psychologically and physically) to adopt the new cultural environment, because of continuously being exposed to different cultures (Redfield, Linton, & Herskovits, 1936).
3. *Culture:* a social group's design for surviving in and adapting to its environment (Bullivant's, 1989).
4. *Culture Shock:* anxiety caused by not knowing how to react in an unfamiliar culture (Oberg 1960).
5. *EFL:* an abbreviation for English as a Foreign Language (Cambridge Dictionary, EFL, n.d.)
6. *Globalization:* the free movement of goods, capital, services, people, technology and information in a world-wide context.
7. *Home culture:* the old culture, in this research, participants' home culture means the Chinese culture.
8. *Host culture*: the new culture, in this research, it referred to the U.S. classroom culture.
9. *L1:* first language, the language that someone learns to speak first (Cambridge Dictionary, first language, n.d.). In this research, it refers to Chinese
10. *L2:* second language, "a language that a person can speak that is not the first language they learned naturally as a child." (Cambridge Dictionary, second language, n.d.) In this research, it refers to English

11. *One child policy:* a family planning policy introduced in China in 1979 and formally phased out in 2015. The Chinese except some ethnic minorities are restricted to have only one child during the policy period (Pletcher, 2017).
12. *STEM*: an abbreviation for the academic disciplines of Science, Technology, Engineering and Mathematics (Cambridge Dictionary, STEM, n.d.). In this dissertation, I used *the STEM Designated Degree Program List* (Home Land Security, 2016) to determine whether a participant's major is a STEM discipline.

CHAPTER III

LITERATURE REVIEW

Overview of the Chapter

Chapter II illustrates the cultural demand for academic excellence in China, and how Chinese students have been performing in world-wide tests. Chapter II also explains the reasons for why Chinese international EFL students put so much effort into overcoming acculturation difficulties hopefully becomes clear to the readers: a) how Chinese society has perceived education as a priority since the Han dynasty (200 BC) with the influence of Confucianism, and b) how this priority does not diminish as time passes by, but rather is still a belief and goal for all Chinees families, as observed by Chinese communities' reaction to the students' excellence performance on the GRE and the PISA tests today. The chapter then discusses culture shock phenomena exhibited among Chinese international EFL students while studying at Western universities, keying in on factors such as students' adjusting to U.S. classrooms while discussing why these factors might become impediments. The literature in this chapter encapsulates five perspectives: language, education, social adjustment, stereotypes and discrimination, and lifestyle.

Chinese Students' Performance in Two World-Wide Tests

Measuring students' academic performance globally can be difficult since each school has its own grading policy. There is no world-wide standard test at graduate level (apart from language tests such as the TOEFL or IELTS). The following paragraphs

hence examine the PISA and the GRE tests to illustrate Chinese students' academic performance.

The Program for International Student Assessment (PISA) is a triennial international survey regarding skills and knowledge of 15-year-old students with respect to science, mathematics, and reading (OECD, n.d.). Their surveys are conducted every three years, and China was divided into Mainland China (Beijing, Shanghai, Jiangsu, and Guangdong), Hong Kong, Macao, and Taipei (OECD, 2015).

For the 2015 PISA report, Mainland China has excelled, ranking number ten in science, number six in mathematics, and number 27 in reading, far above the average scores among 72 participating countries (OECD, 2015).

Considering such an excellent performance made by Chinese middle school students, unsurprisingly we see Chinese students also obtaining high scores on the Graduate Record Examination (GRE) General test. The GRE General Test is the only graduate-level admissions test, including three sections: verbal reasoning, quantitative reasoning, an analytical writing. Following a 2012 ETS report, according to the mean score, Chinese examinees ranked number 83 in Verbal Reasoning, number one in Quantitative Reasoning, and number 92 in Analytical Writing out of more than 200 countries (ETS, 2012). Chinese examinees' mean score in Verbal Reasoning and Analytical Writing was lower than the average mean score (145.9 to 151.1, and 3.1 to 3.7) (ETS, 2012). However, it should be observed that since the GRE test is conducted in English, which is a foreign language to Chinese examinees, and Verbal Reasoning and Analytical Writing have a relatively high requirement in English proficiency, it tests Chinese examinees' English proficiency level while attempting to assess content

knowledge. On the other hand, for Quantitative Reasoning, which, depending upon question design, can have a lower requirement in English proficiency, Chinese examinees' mean score is far higher than the average mean score (162.9 to 150.9) (ETS, 2012).

Cultural Demand in terms of Educational Excellence

The numbers reported in the PISA report are esteemed by Chinese authorities (OECD, 2015) and reflect attitudes toward education passed on in China over the generations. The emphasis on education by the Chinese may be traced back to the Han Dynasty (202 B.C. – A.D. 220) when emperors established a nationwide aspirant election system, which was regarded as a former foundation of the Chinese education system (Weinberg, 1997). Nowadays, the Chinese education system consists of voluntary kindergarten, followed by nine years of compulsory education, aimed at making its students fully prepared to obtain a satisfactory score on the *Gaokao* 高考 (the Chinese national college entrance exam) (Starr, 2012). The Gaokao has a similar merit-based examination system, and students are recruited by different colleges or universities on the basis of their Gaokao score (Starr, 2012). A good Gaokao score is perceived as a path to a good university, an entrance requirement to higher employment positions, which in turn may bring the family honor and wealth (Trueba, Cheng, & Ima, 1993).

From the perspective of social philosophy, academic excellence has been deeply rooted in each Chinese family since the times of Confucius, who viewed education as an important element for improving one's life and a necessary part of building one's character (Yan and Berliner, 2009; Weinberg, 1997). Such social structures and

philosophies can be identified in many social practices in China, such as (a) demanding improved social status though good education, (b) comparison with other families about children's educational achievement, and (c) because parents are taking care of their children, the children felt they are obligated to pay the parents back through academic achievement (Zhang and Carrasquillo, 1992).

Being raised under such a tradition, Chinese students have a cultural demand of academic excellence and tend to take personal responsibility for their own learning (Yan and Berliner, 2009). Beyond cultural reasons, Chinese and other Asian international students have tried to maintain academic excellence because of pressures related to their racial identity (Alva, 1993; Hu A. , 1989; Siu, 1996). Asian students have been generally perceived as smart, especially in STEM majors, leading to students' having to study hard in their attempt to keep up with the impression (Lee S. J., 1996). On the basis of such stereotyping, Asian students have exerted an extensive amount of time in knowledge learning, language practicing, and adjusting to the U.S. classroom culture (Lee O. , 1997; He, Phillion, Chan, & Xu, 2013).

In the meantime, Chinese and other Asian international students' difficulties have sometimes been overlooked. They have been stereotyped as not experiencing any problems as a result of their excellence at all levels of education, which seemingly has also implied that they have been succeeding at handling cross-cultural issues (Lee S. J., 1996; Alva, 1993; Siu, 1996; Hu A. , 1989; Nakanishi, 1995). Their devotion toward extensive time and effort has been masked by such academic excellence, leading to schools' overlooking their requirements of support in language and academic resources (Lee O. , 1997). In actuality, however, many Asian students have been neglected in the

process of making school and educational policies, in terms of financial, service, and assistance (Sue & Sue, 1999). The neglecting of Chinese international students' needs leads to a fact that some U.S. universities are viewing or even treating some Chinese (and other Asian) international students as commodity. Yet, if U.S. universities continue neglecting the voices of Chinese and other Asian international students, it may lead to the fact that the university itself would lose cultural competence.

Chinese International Students studying in Western Countries

When entering a new culture, international students face more cultural challenges than domestic students (Poyrazli, Arbona, Nora, McPherson, & Pisccco, 2002). In the context of the U.S., Asian international students have also reported experiencing more stress than their European peers, as there appears to be more salient differences between Asian and host Western cultures (Myers-Walls, Frias, Kwon, Ko, & Lu, 2008).

Following what was discussed in Chapter *II Introduction*, the following sections discuss current research examining cross-culture phenomena exhibited among Chinese international EFL students while studying in the U.S. colleges and universities. The section focuses on culture shock and acculturation stressors they have encountered. These cross-cultural experience and stressors, together with their causes, are categorized into five criteria: language, education, social adjustment, stereotypes and discrimination, and lifestyle. Although this research focuses on participants' cross-cultural experiences emerged in academic settings only, while reviewing the literature, I did not only include research examining academic settings. Firstly, in most reviewed research, the focus is on

Chinese international students' studying experience, which include both academic and none academic settings. Secondly, though some cross-experience are more likely to generate in none academic settings, *social adjustment* for instance, it does not mean such kind of experience cannot be emerged in academic settings.

Language

Host language (the language spoken by people living in the host country; in this research, it refers to English) has been suggested to be influential over one's adjustment to a new culture, having a long-lasting impact on one's self-perception, cognitive ability, emotion, and behavior (Chen C. , 1999; Aubrey, 1991). Because host language proficiency is a basic and necessary requirement for one to communicate with the host people, as well as perform academic tasks (which is the major task for international students), any perceptible lack of proficiency in the host language can make one feel inferior, confused, and even less willing to participate and explore the host culture (Ishiyama, 1989).

A lack of host language proficiency may impede new students from understanding and being understood by the host, thereby putting such students at a disadvantage when living in the host country. A student's lack of host language proficiency can also create negative loops: the less new students communicate, the poorer their language skills remain; the poorer their language skills are, the less likely they want to communicate. Thus, this lack of proficiency in the host country's language increases the likelihood of perpetuating any discomfort students experience in their new culture. In fact, Chen (1999) found language to be a major factor causing international EFL students stress while adjusting in North American universities (Chen C. , 1999).

Duan and Yang (2016) found that many Chinese international students experience being overwhelmed when studying in the U.S., a sensation perceived as a major barrier. The researchers found that "overwhelmedness" was not caused by lectures themselves, but rather because the students were deeply immersed in learning English while attending classes. They found that participants commented that "overwhelmedness" occurred under at least two conditions. First, all learning materials are presented in English: textbooks, handouts, PowerPoints, the lecture, and the audio and video clips shown by the lecturer. Second, English is also the means for Chinese international students interacting with their U.S. classmates in both class discussions and small chats during class intervals.

In classrooms settings, most Chinese and other EFL students reported having difficulties with listening and giving responses (Brown, 1998, Huang J., 2004, 2005, 2006). Similar phenomena have been noted by their professors, as well (Ferris & Tagg, 1996). Academic listening (which contains both listening and speaking tasks) has been categorized into *transactional listening*, whose primary focus is to communicate information (Brown & Yule, 1983). In contrast to *interactive listening*, which usually emerges in social settings to develop comfortable communication, transactional listening has less focus on participants' mood and aims to deliver and exchange information (Richards, 1994). It requires that the delivered information be accurate and coherent (Richards, 1994). Speakers, however, aside from mastering the content, need to be clear, direct, and exact while speaking (Huang, 2005). Meanwhile, listeners need to have relevant background knowledge, language skills, and micro listening skills, such as distinguishing between the important and the unimportant information, identifying topics, and following topic development (Huang, 2005).

As interactions are problematized with respect to both the skills of speaking and listening, difficulties are generated in terms of how English is spoken in real-life settings (Huang J. , 2004). To illustrate in particular the issues of academic listening, Huang surveyed 78 Chinese international students from a U.S. university, examining their difficulties in understanding lectures (Huang J. , 2004). Participating students identified issues that precluded their comfort with academic listening in their new language—namely that professors seemed to be speaking too fast with unclear pronunciation, including colloquial and slang expressions during the lecture, and failing to explain terms and concepts in detail (Huang, 2004)

In addition, although Chinese international students often come to the U.S. with high GRE (Graduate Record Examination) and TOEFL (Test of English as a Foreign Language) scores, they may still feel unconfident in terms of their own English proficiency. Huang J. (2006) surveyed 78 Chinese international Chinese students currently studying in the U.S. All subjects had obtained satisfactory GRE and TOEFL scores such that they could be admitted into U.S. universities; however, on a scale of 1 to 5, with 1 not confident at all and 5 very confident, 54.23% of them rated themselves a "three" for their listening skills (Huang, J. 2006). Huang found these results compelling while observing that most participants felt confident in grammar, vocabulary, and reading, albeit less confident in pronunciation, listening, and speaking. In other words, Chinese students expressed far superior confidence in terms of their literacy skills while indicating far less assurance in terms of producing or receiving impromptu spoken language.

Duan and Yang's (2016) study of Chinese international students also discussed their difficulties in coping with professors' lecture pace, as well as understanding slang and culture-related term. The recruited participants complained that some professors spoke too fast because they were fluent English speakers. Their speech rate may not be considered as fast by native speakers, while for Chinese EFL students, and other L2 learners as well, they needed extra time to digest any received information and construct replies. These results mirror those of Huang (2004) who also found that professors' and classmates' accents were considered communication barriers by participants, especially instructors with Russian and Indian accents. Finally, students reported difficulties in their own ability to provide responses when professors or peers told jokes because humor was heavily loaded with cultural elements.

Difficulties Chinese international students reported in the above studies could be the result of a distinction between what is expected by schools (for current students and prospective students) and what ultimately occurs naturally in academic settings. To better understand this concept, the follow sections illustrated how English is taught in China, and what the Chinese English textbook includes.

English Language Instruction in China. The current literature suggests that differences between how English was taught and spoken in Chinese English classrooms (as a foreign language), and how English was spoken in Western countries (as a language for communication) created acculturation difficulties for Chinese international students. The following paragraphs hence introduce English learning materials and the pedagogical approach adopted by Chinese college English teachers, to provide background information about Chinese students' English experience. Besides general information, it in an effort to provide a holistic view, it also includes literature examining these teaching materials and pedagogical methods.

English Learning materials. After entering university or college, students will start learning academic English. The Chinese College English textbook (CCE) has been one of the most commonly adopted English textbooks among universities and colleges in China since 1999 (Tang, 2014). It was also the textbook adopted by my participants' schools.

The Chinese College English textbook (CCE) includes 6,500 words in total: (a) 4,200 words in volume one, (b) another 1,300 words in volume two; and (c) another 1,000 words in volume three. Students are taking one volume per year, and the course is finished at their third year of college (Tang, 2014). Tang (2014) has compared the word lists provided in the CCE text book with A General Service Word List of English Words (GSWL) and the Academic Word List (AWL). The GSWL was developed by Michael West in 1953, including 2,000 word families serving communicative purposes (Giler, 2011), and almost 80% of the words in this list are high frequency words (Nation, 2001). The AWL focuses on academic words (words used for study at tertiary level), including

570 word families selected on the basis of their frequency of appearance in the Coxhead corpus, which is supposed to correspond with tests. Interestingly, none of them overlap with word families in the GSL list (Coxhead, 2000). By comparing the word list in the CCE textbook with GSWL and AWL, Tang (2014) found that (a) most words in volume one are in accord with the GSWL, though they exhibit low coverage in the AWL, and (b) words in volumes two and three have low coverage in both the GSWL and the AWL.

It could be concluded that volume one in the CCE textbook still focuses on frequent words for communicative purposes, while volumes two and three contain neither high frequency words nor academic words even though academic words are likely to appear in exams or in the national entrance examination for postgraduate students, known as the *Kaoyan* 考研 (Tang, 2014). It was also found that most English teaching tapes provided by the Chinese government were recorded in a noise-free environment, and speakers usually speak more slowly with a mild American accent[1]. Chinese students hence have become less aware of how English is spoken in real life with accents, personal habits (e.g., speaking speed, pitches), and background noise (Xinhua News, 2005). The gap of what English used to be (in the Chinese English classroom) and how English is actually used (in Western classroom) causes confusion with some Chinese international students (Wu, 2009; Robertson, Line, Jones, & Thomas, 2000). In fact, failure to understand professors and peers surely results in difficulties with respect to providing appropriate responses in classes. The failure to provide appropriate responses

[1] A mild American accent: it refers to the pronunciation schemes in academic English ESL recordings (which is similar to the Chicago accent adopted in the WGN radio).

in classes, still, might also be traced to the Chinese curriculum and pedagogy toward EFL teaching.

Teaching approaches. Schools in China (from primary school through college) have been adopting behaviorist approaches toward EFL learning (Shih, 1999; Starr, 2012; Jacobs & Farrels, 2001). Such approaches seemingly emphasize reproduction, mimicking, and memorization (Shih, 1999; Starr, 2012; Jacobs & Farrels, 2001). As a result, some authors suggest that learning remains superficial (Starr, 2012).

Behaviorists perceive learning as a result of observable environmental factors, requiring automatic responses (Schunk, 2012). Their approach emphasises stimulus and response, while the learning process is manifested as an unconditioned stimulus causing an unconditioned response, leading to conditioned stimulus causing a conditional response, which is similar to the original unconditional response (Schunk, 2012). Knowledge is acquired through habit formation, evoked by stimuli and strengthening through practice and reinforcement, with the ideal outcome being that students become able to respond to stimuli with little attention (automaticity) (Dolati, 2012).

For decades, English teachers in China have adopted a "teacher-centred textbook-analysis-based grammar-translation" pedagogy, which places strong linguistic focus on grammar, reading, and translations (Yang Y. , 2000, p. 19). The teaching approach typically starts with teacher demonstrations followed by student practice and memorization, a routine that yields an expectation of students producing error-free sentences and making immediate translations between Chinese and English (Shih, 1999; Yang Y. , 2000). It was believed to be a behaviorist since Chinese/English words serve as stimuli, while immediate translations are named responses. Because the process requires

an error-free immediate translation, it requires automaticity (Shih, 1999; Yang, 2000). Learning is reinforced though memorization and repeated exercises (Shih, 1999; Yang, 2000).

For a typical Chinese English reading class, the teaching of content is often delivered through an intensive reading approach: Textbook lessons are developed around a core text with a bilingual glossary and grammar explanations. Teachers use this approach in line with the grammar-translation method, a traditional language teaching scheme abandoned by many parts of the world but still found in favor with educators in China (Starr, 2012). At the beginning of the class, the teacher explains the to-be-learned grammar with exemplary sentences. Students then recite the grammar structure and then practice it by creating similar sentences through replacing words. The aim is to produce error free sentences (to be the closest to the exemplary sentences in the text as possible), and give quick translations for new sentences.

Though this grammar/translation lesson plan has been the dominant teaching method in China, it fails to promote students' English literacy because learning is reduced to memorization and mimicking (Shih, 1999). Resultingly, students are more likely to be passive recipients since there is little engagement and collaborative learning required in these classes (Gu, 2008; Heng, 2016). Such a method has been considered superficial; as a result, learning content has stayed at a knowledge level (knowing it), failing instead to help students leap to more advanced proficiency levels (Star, 2012). The result is that students have not translated their English routines into daily use since they have only been able to apply it into given in-class conditions or contexts.

The deficiency of Chinese international students' listening and speaking may also be explained by Craig's communication model (Craig, 1999). As Craig suggested, communication is an active information exchange process between the sender (speaker) and the receiver (listener). The sender generates thoughts and ideas, encoding them into words and sentences and delivering them to the receiver. The receiver then decodes the words and sentences into their own understanding, by using their language knowledge.

Second language users generally require a longer time in the encoding and decoding process (Braine, 1999). For them, neither the encoding nor decoding happens spontaneously. They need to recall the learnt language knowledge and use cognitive skills to encode/decode sentences (Chin, 2002). The encoding and decoding process hence explains difficulties Chinese and other EFL students have in Listening and Speaking, since all L2 learners really need additional time (than native speakers) to understand information and construct appropriate replies.

Any communication process is impeded with physical and psychological noise (Craig, 1999). Physical noise can include environmental and biological distractors, like background music, appearances of certain subjects, and one's personal health status. Psychological noise relates more with the sender/receiver's own psychological status, such as the degree of anxiety they feel (Craig, 1999). For Chinese EFL students, being unable to decode the received information and produce an appropriate reply immediately may arouse negative feelings such as anxiety and apprehension (Fu D. , 1995), which can further impede communication processes (snowballing).

Education

As the major purpose for international students going to the U.S. is to pursue a higher degree, it is not surprising that most of them view their academic adjustment as the first priority (Dillard & Chisolm, 1983). Students, their family members, and sponsors (e.g., companies, the government, a third party) may also expect students to perform better than, or at least maintain, the same academic performance as what they achieved in their home country (Smith & Khawaja, 2011; Chen C. , 1999; Mori, 2000). Chinese international students facing the stress of studying in a different language, as well as an immediate adapting to a new Western education pedagogy, is one of the major difficulties reported by most Chinese international students with respect to their adjusting to U.S. classrooms (Chen C. , 1999; Mori, 2000; Burns, 1991).

Countries in East Asia, especially China, have adopted a Confucian attitude toward education, deriving from the teaching of Confucius (551-479 BE) and his students (Starr, 2012). Such application emphasizes respect and tolerance, ruling and obedience, and results (Starr, 2012). It hence promotes a teacher-centered approach in Chinese schools, requiring of students only a low level of cognitive engagement and learner participation (Yang Y. , 2000). With the teacher-centered approach, learning results are achieved through rote-learning, repeated practices, and mimicking (Starr, 2012; Gu, 2008; Heng, 2016). Students are perceived as passive learners, and learning is highly dependent upon teacher instructions, with less required in terms of critical thinking or students' planning of their own learning (Robertson, Line, Jones, & Thomas, 2000; Zhao & Bourne, 2011).

However, in Western universities (e.g. North America, Australia, New Zealand, and the U.K.), which have promoted participation and personal engagement, learning is generally achieved through class discussion, groups work, and student engagement (Kingston & Heather, 2008; Gu, 2008). Students' perspectives, diversity, and differentiation are appreciated and the concept of multiple possible answers is promoted (Gu, 2008; Wu, 2009; Kingston & Heather, 2008).

One may note, throughout the following sections, that the differences between educational beliefs and requirements cause differences between Chinese and U.S. classroom cultures. Still, the aggregate of these sections is an effort to summarize current research examining cross-cultural phenomena emerging among college and graduate level Chinese international students studying in Western universities (especially in the U.S.).

It should be mentioned that though the U.S. shares many similarities with other Western countries (e.g. Australia, the U.K.) regarding educational beliefs and pedagogical methods, there are, of course, differences in the applications of these methodological processes that rise out of differences in classroom cultures. However, the literature seemingly fails to recognize such broad cultural perspectives, discussing rather only differences between the Chinese and the Western educational approaches, in general. In fact, many authors do not specify Chinese international students' origins, even mixing or conflating experiences or perspectives of Chinese international students from Mainland China with those from Hong Kong, Macau, and Taiwan.

Teaching and Learning style. As mentioned earlier, Chinese international students have been generally perceived as passive learners, reluctant in classroom

participation, have less interaction with the teachers, and hesitate to express their own opinion (e.g. Turner Y., 2013; Wu, 2009; Robertson, Line, Jones, & Thomas, 2000; Zhao & Bourne, 2011). The following paragraphs examine these issues one by one, with current research results and a review of the Chinese educational norms.

Passive learners and reluctance to participate in collaborative learning. Chinese international students are usually perceived as passive learners (Turner Y. , 2013; Robertson, Line, Jones, & Thomas, 2000; Zhao & Bourne, 2011), reluctant to participate in class activities and discussions (Ruble & Zhang, 2013; Bartlett & Karin, 2011). This phenomenon may be explained from three angles: the difference between the Chinese and Western learning strategy, the teacher's role, and the lack of practical experience.

Learning strategy: teacher-centred vs. student centred. In-class collaborative learning activities such as discussions, group projects, and learning communities are teaching techniques which emphasize participation, engagement, and two-way communication (Beckman, 1990; Collier, 1980). They are widely adopted pedagogical approaches in Western countries, that emerged from beliefs that learning is best achieved through active involvement and cooperation with peers (Beckman, 1990). However, most courses in China (from primary school to college) are teacher-centered, content-based, and test-driven (Wang & Kreysa, 2006). Learning content is delivered in a lecture format (Gu, 2008), where students asking questions or exchanging ideas is perceived as unnecessary; Chinese students, thus, are expected to sit quietly (Wu, 2009). Furthermore, as questioning or interrupting colleagues and teachers is perceived as disrespectful and as generating discomfort (Flowerdew, 1998; Kennedy, 2002), unlike the host students, most Chinese students are reluctant to speak up during lectures and are therefore labeled by

host students and instructors as passive learners (Robertson et al. 2000; Zhao & Bourne 2011).

Chinese preschools put tremendous emphasis on discipline and obedience as a response to the social concern that children born under the one-child policy may become spoiled and over-indulged (Heng, 2016). In turn, although it is not policy, most public schools in China adopt a teacher-centered pedagogy, directed under the behaviorist approach (Yang, 2000). Perceiving the teacher as "the sage on the stage" and believing it is the teacher's right to provide the right knowledge, Chinese students have been kept from the concept of multiple answers, which makes them hesitant to raise questions to challenge authority (Parris-Kidd & Barnett, 2011; Wu, 2009).

Wu (2009) interviewed students from three U.K. universities and found that most of them resisted speaking up in classes because asking questions in front of everyone was perceived as deterring the flow of the lecture, thereby impeding the teachers' ability to achieve their teaching objectives (Wu, 2009). Chinese international students reported that they would only open their mouth in class if it was something valuable, and only after careful consideration; meanwhile, host students did not hesitate to ask questions or lead discussions (Wu, 2009). Wu found, however, as a result of these interviews, that some Chinese international students occasionally found questions brought by the host students to be too simple and questioned their being raised at all (Wu, 2009).

Zhang's (2016) study with graduate students at a U.S. university reported the same phenomenon as the host students were participating actively while the Chinese international students tended to be silent. Although the Chinese students recognized that class participation was an essential measurement toward their grades, most of them found

the adjustment to participation challenging. In fact, the conflict between lack of willingness to jump into class conversation and a participation grade dependent upon speaking up ultimately created a "vicious circle" as expressed by one of Zhang's subjects, who confessed, "The more I blame myself (for not participating), the more hesitant I become to share my opinion with my classmates" (Zhang. Y., 2016, p182)

In the U.S., Chinese students' tendency to remain silent has also aroused attention to not only the academic world but also the entire society. From news reported by Bartlett and Karin (2011) in The *New York Times*, some school faculty members from the University of Delaware admitted that they altered some of their teaching strategies to adjust to Chinese international students' educational background (Bartlett & Karin, 2011). In this same report, host U.S. students also relayed their having a hard time studying with Chinese international students; in fact, in an intermediate accounting class where half of the students were from China (17 out of 35), three non-Chinese students dropped the class within a couple of weeks because the class was too quiet. Dr. St. Pierre, who embraced on-campus diversity, also agreed that "the [classroom] was pretty deadly" (Bartlett & Karin, 2011).

Practical experience: novice versus experts. As noted earlier (Wu, 2009), Chinese international students hesitate to express themselves or to explore other's opinions because of the uncertainty they feel about their opinions. In China, most Chinese students enter college right after high school graduation, and a handful of them depart to the U.S. to pursue their Master's or Ph.D. degree as soon as they have accomplished the Bachelor's (ICEF, 2013; Wang Z. , 2013). Chinese international

students hence might have not had many working experiences with the topic they were going to learn in the U.S. for their graduate degrees.

Wu (2009) suggests that the lack of personal and practical experience leads to Chinese international students' lack of confidence in their opinions. Worse yet, these students reported being afraid of being laughed at should their views come off as naïve or not new (Wu, 2009). Apart from language barriers, which have been discussed before, and because of the lack of practical experience, Chinese international students also report difficulties keeping up with discussions, engaging in them, and finding a time to pose questions (Wu, 2009).

Presenting of an Introverted Personality. One of the most reported phenomena observed among Chinese international students is that they present or create a perception of being "quiet" and "shy" among U.S. students and faculties (Ruble & Zhang, 2013; Bartlett & Karin, 2011). However, "quiet" and "shy" could be a misperception, or a nassumption.

Ruble and Zhang (2013) asked 100 volunteers (mostly Caucasian) from a Midwestern U.S. university what they observed from Chinese international students (Ruble & Zhang, 2013). Results indicated *quiet* and *shy* as the second and third most frequent words provided by the U.S. participants (*smart* was ranked first) among a total of 86 listed impressions. Being perceived as *quiet* and *shy* echoed previous studies among Chinese international students who similarly labeled themselves smart, hardworking, but quiet and non-assimilated (Ho & Jackson, 2001).

Such introversion is vivid in Hsieh's (2007) narrative study regarding her own experiences as a foreign student in the U.S. She claimed that her expression of an

introvert (keeping quiet and silent at all times) was because of the oppression she received from her U.S. classmates' (Hsieh, 2007). Being the only Chinese international student in her class, Hsieh wrote that her classmates rarely listened to her opinion, treating her, instead, as invisible, seemingly as a result of their ideology of cultural homogeneity. For her, such a behavior brought negative influence in her psychological well-being, as well as arousing in her a feeling of deficiency in her self-perception and a self-reorganization as being useless in the classroom (Hsieh, 2007).

Critiques of the host culture emerge in scholarship regarding popular narrative in light of students' actual experiences. Yeh & Drost (2002) point out ironies noted in U.S. culture promoting diversity and openness, while being dominated by White people and educated under a Eurocentric tradition, thereby implying an ideology of cultural homogeneity: perceiving its Eurocentric culture as superior to others, while requiring people from other cultures to assimilate into it (Yeh & Drost, 2002). Consequences arise, as well, with people failing to assimilate and ultimately being perceived as unparticipating and deficient (Yeh & Drost, 2002; Jansen & Wildemeersch, 1996). However, both studies failed to answer the question of whether the "quiet" and "shy" impression is (a) representative of the students' personality, or (b) a cross-cultural phenomenon caused by difficulties encountered when trying to adjust to the U.S. classroom culture.

Ho and Jackson (2001) asked U.S. students and administrative staffs about their impression of Chinese students: Again, the response was that they are quiet and shy. As with other studies, the researchers concluded that such a personality was a result of the Chinese teacher-centred teaching method. However, the researchers only asked for

bystanders' opinion—U.S. classmates and university staff—rather than asking the Chinese international students about why they seemingly present such an impression. The research did not account for the influence of culture into consideration: for some people could be extroverted when living their home country or when hanging out with fellow nationals (same culture), while being more introverted with host students (thus failing to adjust to the host culture). Hsieh (2007), on the other hand, provided new insights into current studies, revealing that homogeneity remained an ideology in the U.S. culture in spite of narratives promoting diversity. However, Hsieh identifies herself as an introvert before coming to the U.S.; thus, her narrative cannot help us define whether being immersed in the U.S. culture can lead to a change in exhibited personality.

Dependency on others. Both Chinese international students themselves and school faculty members have reported that Chinese international students tend to depend on others for studying. Such difficulty in taking responsibility of one's own learning was exhibited as the students are less likely to plan and organize their own learning, hence seeking help from the others constantly. Two narrative research pieces (Gu, 2008; Huang Y., 2014) illustrate such dependence.

When Huang (2014) first entered Flinders University in Australia as a nursing student, she did not know how to prepare for classes (Huang Y. , 2014). Although she later figured out that students in Australia were expected to learn through computer-based self-learning, finish required readings before classes, and borrow required books from the library, she still felt confused and frustrated about how to start. Huang was more comfortable with her study after talking about her problems with a school counsellor, but encountered difficulties and stress again when the final exam approached (Huang Y. ,

2014). At this time, she emailed a school faculty member to discuss her issues, and the professor offered her some exam-coping strategies. By implementing some of these strategies, Huang reported that she finally achieved satisfactory exam scores (Huang. Y., 2014).

Such dependency may be related to one's understanding of the course or English language proficiency, as well as a combination of both. Huang had been working as a nurse in both China (for 13 years) and Sydney (for almost two years). She had practiced her English during work and church activities, attended the International English Language Institute from her target university, and reached the university language requirement by obtaining a banded IELTS score of 6.0. Her difficulties in course content and language were expected to be far less intense than those of Chinese students who started their overseas study right after high school graduation. However, Huang still reported stress in terms of getting started with her learning, as well as preparing for exams.

Gu (2008) suggested that these phenomena may be explained from two angles. First, Western students are accustomed to the freedom of deciding what they wish to study from the time that they were young, while in China students are divided into fixed classes according to their major and attend classes on a received schedule (Gu, 2008). Hence, when facing the choice of deciding which course to take, as well as how to prepare for it, most Chinese students likely feel lost or do not know how to make proper arrangements.

Secondly, Jacobs & Farrels (2001) found that most Western education approaches are generated under a sociocultural or constructivist approach, which focus on

spontaneous learning and group work, where teachers are perceived as facilitators (Jacobs & Farrels, 2001). Students are more aware of their learning styles; thus, they are often able to set up learning strategies which assist them in exerting their strengths and seek opportunities to maximize them; conversely, these strategies seemingly help them overcome weaknesses and diminish possible threats (Jacobs & Farrels, 2001). In the meantime, in China, since a more behaviorist approach has been held, learning has been achieved through a teacher-directed, teacher-led chanting pedagogy, which eliminates levels of active knowledge seeking and active learner participation (Heng, 2016; Starr, 2012). As a result, Chinese international students are often less aware of their own pros and cons since they have been perceived as passive recipients for a great deal of their lives (Heng, 2016; Starr, 2012).

However, the above two narratives were generated at an Australian university. In the context of U.S., though "dependency" was identified as an item in quantitative studies examining phenomena among Chinese international students (e.g. Ruble and Zhang, 2013), it has not been explored in-depth through the lens of a qualitative study. In addition, though universities in Australia and the U.S. share many curricular approaches, we should not assume the above two students' experiences would represent Chinese international students studying in the U.S comprehensively.

Social Adjustment

Another factor influencing Chinese international students' adjustment to the U.S. classroom is the process of social adjustment, a concept denoting how newcomers develop social support networks in the host country, through acculturation and intercultural competence.

Social support network and friendships the host people/students. Deprived of their previous social supporting system, international students spontaneously seek relationships with host people upon arrival (Heggins & Jackson, 2003). Heggins and Jackson also noticed that most Asian international (including Chinese) students prefer not to use university social support services (e.g. student union, residence life, student mentors) as social support, but depend more on informal social networks (e.g. friends) (Heggins & Jackson, 2003). However, from research conducted with Asian international students studying in the U.S., Australia, and New Zealand, most students expressed an absence of local friends in the host country during their stay (Townsend & Poh, 2008; Zhang & Dixon, 2003; Klomegah, 2006).

In fact, students reported experiencing loneliness, isolation, and exclusion, especially in the beginning months (Poyrazli, Arbona, Nora, McPherson, & Pisccco, 2002; SawirE, Marginson, Deumer, Nyland, & Ramia, 2008). It is also worth mentioning that the influence of loneliness, isolation, and friendships did not exist in social settings alone, but in schools as well (e.g. during class intervals, group projects, and seminar discussions). Mallinckrodt and Leong (1992) concluded that that social support received from one's academic program was an essential element to the well-being of international students (Mallinckrodt & Leong, 1992).

In social support networks, though personality, traits, extroversion, and introversion personalities would have an impact over one's ability to make friends (Brisset, Safdar, Lewis, & Sabatier, 2010), one difference seems to be that social culture is considered a significant factor impeding Asian international students from making friends with host Western people. Thus, this is a possible reason why many Asian

students have encountered more difficulties making social adjustments than their European peers. Mori (2000) reminds us that Chinese social norms are on the basis of collectivism, promoting close-knit family/friendships, group honor, interdependence and relatedness; conversely Western culture emphasises individualism, which favors causal relationships, assertiveness, and self-reliance (Cross, 1995; Yeh & Inose, 2003). Such differences in social norms cause different understanding toward the definition of friendship, along with expectation and responsibility. Thus, for Chinese international students, Western friendships seem hard to maintain as compared with the Chinese interdependence friendships as their Western friends seem to prioritise privacy and independence, which seems to the Chinese students less permanent and more superficial (Bulthuis, 1986; Cross, 1995). One example raised by Bulthuis (1986) was that people growing with Western culture usually make offers without a definite time, such as "I will call you" or "come over anytime"—both of which may seem to be hospitable and approachable but unreliable and unrealistic to Asian international students. Besides, as introduced in Chapter I, upon arrival at a new culture, both the newcomer and the host are expecting the other to change: the newcomer wants the host to accept his/her home culture, while the host wants the newcomer to integrate into the host culture (Smith & Khawaja, 2011). If the newcomer and the host fail to reach a common understanding, their friendships will be difficult to maintain (Mori, 2000).

The failure to initiate or maintain friendships with the host hence turns into cross-cultural experience or a cross-cultural difficulty when trying to adjust to any new environment, as well as its culture. It this research, it leads the Chinese international students having difficulties adjusting to the U.S., and its classroom culture. It also creates

a vicious circle: the less exposure one allows oneself to the host culture, the more severe one's culture shock may be, thereby adding to the difficulty for that person to acculturate with the host culture.

In addition, the quality of a social support system is crucial not only to Asian students, but also to all international students' acculturation processes. Living in a different culture (the host culture) means being re-evaluated by people following rules established in the host culture, an activity which can potentially invalidate one's previous values, knowledge, accomplishments and self-esteem (Sen, 1993). In other words, esteemed practices or items at home may become unnecessary in the new place. Hence, even if students have formed social relationships with host people, if their heritage culture is not accepted or valued by their host friends, these relationships may not provide them any social support (Smith & Khawaja, 2011). This was also considered as another reason for why Chinese international students tend to stay with their fellow nationals (Smith & Khawaja, 2011).

Intercultural competence. Another factor impeding Chinese international students' adjustment to the U.S. classroom culture is their own lack of intercultural competence. Intercultural competence enables people to act appropriately and efficiently when interacting with people with different racial or cultural background (Deardoff, 2009). It helps promote inclusiveness, openness, and respectfulness toward other racial or cultural groups among people, which in turn prevents the growth of racism (Bennett, 2004). It may be examined from four dimensions: knowledge, skills, awareness, and attitudes (Byram, 1997).

In the last decade or so, the Chinese Ministry of Education reflected on cross-cultural issues in curricula regarding English language coursework (Xu, 2006). As a result, intercultural competence was introduced into EFL classes at all levels (Xu, 2006). However, the Chinese curriculum was criticised as lacking a holistic design for the program and providing insufficient training to promote multiculturalism among teachers and staff (Wang, 2012). Wang & Yu (2008) conducted research in Chinese contexts, finding that Chinese students' intercultural competency was still found to be low among all examined universities (Wang & Yu, 2008; Gao, 2006). In addition, Chinese students have also acknowledged that their knowledge of foreign culture can be inadequate (Fan, Wu, & Peng, 2013). They reported having difficulties when communicating with foreigners, not because of their language proficiency but because of their deficiency in cross-cultural communication skills and lack of awareness toward different cultures (Fan, Wu, & Peng, 2013).

To overcome such shortcomings, Chinese researchers have applied new pedagogical methods promoting intercultural competence in their classrooms (e.g. Cai, 2012; Zhao, 2013, and Ye, 2014). However, most of these practices focus on in-class work, containing less field experience (Wang & Kulich, 2015). Furthermore, they were conducted by graduate level students for research purposes; thus, Chinese students still have been found to be facing the challenge of applying the intellectualised knowledge to real-life situations (Roberts, Byram, Barron, Jordan, and Street, 2001). The lack of intercultural competence, especially the inadequacy of applying it when immersed in a different culture, has continued to be an impediment preventing Chinese international

students from adjusting into U.S. classroom culture. Indeed, as summarised above, research and pedagogical solutions created to solve such issues seem limited.

Racial Stereotypes and Discrimination

Asian international students reported feeling discriminated against and excluded when interacting with school faculty, staff, and host students, while their European peers reported feeling welcomed and comfortable (Hanassab, 2006; Lee & Rice, 2007). Such discrimination and exclusion are clearly not because of their foreign student status (otherwise their European peers would report the same feeling) but likely because of language barriers, cultural differences, and attention to race (Lee & Rice, 2007).

Aside from the negative stereotypes and discrimination, Asian students are also sometimes positively stereotyped as a "model minority" because of their excellence at all levels of education (Ho & Jackson, 2001; Lee, 1996; Lee & Joo, 2005; Ruble & Zhang, 2013). However, this positive stereotype has not necessarily accelerated Asian students' adjustment in to U.S. classrooms. As the extensive amount of time and energy Asian international students devoted into their study was masked by such an excellence, schools tended to overlook their requirements of support in language and academic resources (Lee, 1997). Together with what was discussed before about the cultural demand for academic excellence among the Chinese, such a stereotype though positive, may actually add pressure to students during their stay.

Lifestyle

Economics has long been a crucial reason for why Asian international students tend to stay with their fellow nationals, since doing so helps make rent cheaper (Chen C. , 1999). New arrivals also have difficulty in housing and transportation, such as finding

places to live and determining daily commutes (Bradley 2000; Proyzli & Graham, 2007). They may also face issues related to obtaining driving licenses, as well as switching from public transportation to car driving if staying in a city where public transportation is not well developed. However, these issues seem to dissipate among students who have been in the host country for more than two years (Khawaja and Dempsey, 2008). Nevertheless, the influence of a change in lifestyle has not been examined in academic contexts. We have discussed how differences between the Chinese and U.S. education methods have impeded Chinese international students from success, but have not considered possible difficulties were also caused by students' finances: disappointments like not being able to afford textbooks, or not being able to attend out-of-school activities because the location is far from home and the student has no access to transport.

Literature Gap and Research Need

The composite of the presented literature exposes gaps in studies exploring cross-culture phenomena reported by Chinese international students in the U.S. classrooms.

Firstly, only some of the research distinguished Chinese international students from Mainland China, from Chinese international students from Hong Kong, Macau, and Taiwan. Though there were common education beliefs and expectations among all Chinese families, the education systems in Hong Kong, Macau, and Taiwan are quite different from that of Mainland China, as they were once ruled by the U.K., Portugal, and Japan correspondingly.

Secondly, there was rarely a study focusing on doctoral students, and students majored in STEM disciplines only. Doctoral students themselves stand out from undergraduate and master students, considering the amount and degree of intensity of their study and research tasks, together with corresponding curricula and pedagogical methods. Also, a study teasing out distinctions between STEM and non-STEM majored student was not found when reviewing the literature.

Thirdly, among studies examining Chinese international students' cross-cultural experience, most of them examined questions from a linguistic perspective (e.g., English as a Foreign Language) or focused on differences in educational methods (e.g., classroom participation). Participants' cross-cultural experience in social adjustment, discrimination, and lifestyle were rarely explored. Exploring Chinese international students' difficulties from linguistic and educational perspectives is a good start since it enables educators to understand Chinese international students' learning styles better, eliminate misunderstanding, and alter teaching strategies to better fit Chinese international students' learning needs. However, we should not expect problems to be solved by solely focusing on language and education, since differences between Chinese and U.S. social-cultural norms, as well as cultural beliefs, are also influential (Kingston and Forland, 2008; Parris-Kidd and Barnett, 2011; Yang and Berliner, 2009).

In light of these conclusions, I conducted this study targeting on Chinese internal EFL students who are now pursing doctoral degrees for STEM disciplines.

CHAPTER IV

RESEARCH METHODOLOGY

Overview of the Methodology

The following section describes the research design I applied toward answering my research question: How does a group of eight Chinese international EFL students studying stem disciplines in doctoral programs at a large public research university make meaning of their cross-cultural classroom/lab setting experiences? This study is a sociological oriented case study, with all participants being treated as a single case.

Sociological Oriented Case Study

As with other case studies, a sociological oriented case study investigates a distinct phenomenon occurring at a specific setting (Yin, 2003). It helps the researcher to "understand an issue or a problem using a case as a specific illustration, … exploring it within a bounded system, … through detailed, in-depth data collection*"* (Creswell, 2007, p. 73). As I studied a specific group (Chinese international EFL doctoral STEM students studying at a public research university), within a specific boundary (a public research university), at a specific time frame (first or second year), by adopting this method, I attempted to provide a detailed portrayal (a specific illustration) of self-reported cross-cultural experiences of my participants, including an in-depth inquiry of their understanding toward these experiences (a distinct phenomenon).

Sociological case studies are common in educational research. They are often implemented to examine student-teacher interactions, classroom equity, and student achievement (Lecompte & Preissle, 1993). A sociological case study "focuses on society,

social institutions, and social relationships, examines the structure, development, interaction, and collective behavior of organised groups of individuals" (Hancock, 2006, p. 32). As I was interested in how participants experienced, correspond to, and make meaning of the encountered cross-culture phenomenon, the aim was not to present a holistic picture of their studying abroad experience: describing their studying environment, reporting their daily routine, collecting feedback from participants' classmates, and so forth, thereby creating an ethnographic study. The aim was, rather, to report and examine significant events reported by participants with respect to how they make meaning of these events. Indeed, the focus was on self-reported changes or lack of changes in behavior according to the change in cultural environment from Chinese classrooms to the U.S. classrooms. A sociological case study, which focuses on individuals' behavior and its relationship with the environment, hence became the approach to this study.

Precursory Studies

A good number of researchers have examined difficulties encountered by Chinese international EFL students studying in Western countries. Among all studies, Zhang (2016) and Valdez (2015) have raised a research question similar to mine, while other studies were either focusing on a more specific issue, nor adopted a different research method. I summarised Zhang (2016) and Valdez (2015)'s research into the following paragraphs. I introduced their research method, together with my own observation at two classes at the participants' university. Their method and my observation helped me to form my research design.

Zhang (2016)

Zhang's (2016) study focused on Chinese doctoral students from a mix of STEM and none STEM majors. She recruited ten participants by snowball sampling, and data were collected via two focus-group interviews (five participants each). Because Zhang is Chinese herself, the interview was conducted in Mandarin Chinese, audio recorded, then transcribed and translated into English.

During the interviews, Zhang used open-ended semi-structured interview questions. These questions were formed to gain information regarding participants' academic, social, and cultural experience while studying at a U.S. university. She explored participants' difficulties, applied strategies, and what they gained from such a studying experience. Zhang reported the following research findings:

1. Being an ESL learner: As ESL students, because of their English proficiency, participants remained silent during class activities, being treated as invisible by their professors and classmates, and a need for ESL support at graduate programs.
2. Tension in relationship: Studying abroad detached participants from their old friends, but because of language barriers, they were not able to make new friends immediately. They also reported that it was also hard for them to balance school work and social life because, as doctoral students, they have homework, research responsibilities, and lab experiments.
3. Changes of self-identification: Because of the experience studying abroad, participants consented that they were ultimately more aware of different cultures, more tolerant with differences, and more responsible as adults.

Valdez (2015)

Valdez's (2015) study focused on undergraduate Chinese international students' perceptions with respect to their classroom experiences in U.S. universities. She used snowball sampling to recruit 15 Chinese international students and used interpersonal interviews (20-30 minutes per person) to collect data. The interviews were conducted in English, as English was the second or a foreign language for both Valdez and the participants.

Valdez's interview questions let participants compare their classroom experiences in China and in the U.S., both positive and negative, as well as their perceptions of faculty and the U.S. students. Valdez summarised the following research findings:

1. Comparison between China and the U.S.: Participants agreed that U.S. teaching style is more active and has more group activity (e.g. discussion, teamwork), while in China it is more like "spoon-feeding". Students in the U.S. ask questions and go to professors' office hours, which usually does not happen in China. Because of the "spoon-feeding" strategy, participants perceived that Chinese instructors provide plenty of (sometimes more than enough) instruction.
2. Participants in the U.S.: While realising the differences between the U.S. and their schools in China, participants still did not like going to any professor's office hours. Furthermore, if they went, on most occasions, they wanted to talk about grades. Participants also said they did not share their experience in China with their classmates often, only if the class was international focused, or if the professor had international experience and wanted them to talk about

China. They reported that some classes rarely related to China at all, thus leaving them to feel that sharing Chinese examples in U.S. classrooms might be inappropriate, as they wanted to analyse issues from a more international perspective.

3. Perceived positive and negative classroom practices: Participants enjoyed the interactive classroom settings and valued interactions between their professors and classmates. They appreciated peer collaboration, oral presentation, and group discussion as they could practice their English as well as learn from their peers. Classroom practices which were identified as negative were culturally intensive activities, like those related to American celebrities. Also, when an oral presentation was grade related, it was perceived as negative by participants. As EFL students, participants usually needed more time when speaking; thus, they felt stressed when required to express their ideas in class.
4. Perception of faculty and the U.S. students: Most participants thought faculty and their U.S. classmates were holding negative feelings toward Chinese international students as a result of (a) They did not speak the best of English (it is their second language), and (b) they did not act in the U.S. way (different cultural norms).

My Observation and Pilot Test

I visited two graduate level STEM classes (a mixture of doctoral and master's students) in Spring 2017 semester. I noticed that among 20 students enrolled in each class, approximately one third were Chinese. There was also an overlap in numbers, as a

number of the observed Chinese students attended both classes. After the classes, I asked one of attendees to help me to test my interview questions, and she agreed.

We conducted the interview the following week, at a group discussion room in the library. After the first round of interviews, I asked her if she could bring someone else in to my research, and she provided me with the contact information of one of her classmates. After she talked with that classmate, I sent him an SMS message to check his availability. The classmate agreed to participate, but he said he would not be available after midterm. I then texted him again late March, but he was on holiday, celebrating the finish of midterm with his friends. My interview with this participant hence did not finished.

Using her feedback answers from the single student, I made the following reflections and changes on my research design, instituting the following rules:

1. Clearly state rules when scheduling interviews. Let subjects be aware of my timelines, and underscore the rigor of this research;
2. Bring a Chinese and an English version of interview questions to the interview, such that I would not need to translate during the interview;
3. Remove terminology from interview questions;
4. Probe as appropriate, particularly if subjects originally scheduled for round two pop up in round one (e.g., if participants start talking about stereotypes, which are scheduled for the second interview even though I might be asking about teaching styles, which are scheduled for the first).

Design of Research

The study is a sociological case study. I collected my data via face-to-face, one-on-one, semi-structured interviews, and analyzed the collected data by adopting guidelines provided by Smith et al. (2009) and echoed by Seidman (2006). Following my research question, as I was interested in participants' perception of their cross-cultural experience, which could only be authentic if reported by participants themselves, I chose interviews as my research approach.

I then chose semi-structured interviews. Semi-structured interviews allowed me to ask the same eliciting question to all participants, while probing differently depending on subjects' answers (Gall, Gall, & Borg, 2003). I first asked a *what* question (eliciting), and then a *how* question (probing). For example, "What do your classmates do for exam preparation?" and "How do you feel about the difference?" I attached a list of my interview questions in Appendix D. Compared with unstructured interviews, the semi-structured version provided me with chances to acquire a handful of standard answers (the *what* questions); and compared with structured interviews, the semi-structured approach allowed me an opportunity to gain in-depth and personalised information (the *how* questions) (Gall, Gall, & Borg, 2003).

I chose to conduct face-to-face interviews rather than telephone or web-based interviews because all participants are current students at the same U.S. university, living around the same campus. Therefore, it was convenient for us to meet in person. Meeting in person also theoretically ruled out some forms of misunderstanding and unclear message delivery caused by possible technical errors (e.g. poor signal) (Rubin & Rubin, 2012) or lack of nonverbal cues.

Participants / Sources of data

As introduced before, because many Chinese international students are pursuing degrees in STEM majors in the U.S. (Chow & Bhandari, 2010; IIE, 2016), I recruited my participants from these majors. Since the purpose of a qualitative study is to "elucidate the particular, the specific" not to "generalize the information," I did not aim for a large sample size (Creswell, 2007, p. 126). There is not a definite number for how many participants should be included in a case study; it depends, instead, on the research question, the level of analysis, and the richness of data of each individual case (Smith et al., 2009). For an undergraduate or a Master's student, the suggested number is three, but there was no suggested number of doctoral students (Smith et al., 2009). However, most scholars and researchers recommended that the maximum number of participants be less than ten (e.g. Creswell, 2007; Smith et al., 2009). In the precursory studies, Zhang (2016) has 10 participants, using focus groups; and Valdez (2015) has 15 participants using interpersonal interviews. However, since the number of participants also depends on the researcher's span of control and his/her previous research experience (Smith al et al., 2009), I only used these two precursory studies as a reference. After considering my own study/research experience in qualitative research, I decided to recruit eight participants.

Participants were recruited usingthe following requirements: Chinese international students who (a) were born and raised in Mainland China, (b) educated under that Chinese education system, (c) had no prior educational experience outside of China, (d) were full-time students holding a F-1 student visa, (e) had arrived within the last two academic years, and (f) were currently studying at their U.S. university for a doctoral degree.

These requirements were set for the following reasons. First, as discussed before, there are differences between Mainland China, Hong Kong, Macau, and Taiwan in the area of education system and social norms. To eliminate such differences, this study focused only on international students from Mainland China, who were raised and educated there. Secondly, since this study focused on cross-cultural experience, which happens more often when one was immersed in a new culture at the first time (Oberg, 1960), I wanted my participants to have no prior overseas educational experience. Thirdly, since cross-cultural experience usually happens more often when one has just been deprived from their home culture and immersed in the new (host) culture (Oberg, 1960), I wanted participants to be first or second-year students. Finally, I wanted participants to be current and full-time students so that they had more to discuss when referring to their studying experiences. I did not want to recruit students studying part-time or taking a gap year. Participants were recruit among all first or second year doctoral students majored in STEM. It was because in the reviewed literature, which focus on Chinese international students' U.S. studying experience, the influence of the nature of majors over one's studying influence was neither identifies nor examined.

Recruitment

Participants were recruited from a purposeful snowball sampling. The common of selection of participants in a qualitative study is neither random sampling nor convenience sampling (Maxwell, 2005). The selection was purposeful, involving a selection of participants following a series of criteria (Maxwell, 2005; Light et al., 1990). Such is a strategy in which "particular settings, persons, or activities are selected deliberately" in order to provide rich information to answer the research question"

(Maxwell, 2005, p. 88). Thus, participants were selected, qualifying for a series of criteria, to make sure they were "informative because they are expert in an area or are privileged witness to an event" (Weiss, 1994, p. 17). In my research, in order to answer my research question, I needed to recruit specific individuals (Chinese international EFL doctoral students), at a particular setting" (STEM majors), a "specific time" (first or second doctoral students) (Maxwell, 2005, p. 88). However, because I am not a STEM major, and I am not a first- or second-year student, I did not have frequent contact with this group of people. I hence chose snowball sampling as my sampling method. With snowballing sampling, I was able to recruit one or two people by myself, and then ask these initial participants to bring their friends in. In other words, I only needed to find the *gatekeeper*. Recruiting participants via snowball sampling helped me gain access to hidden participants, and likely saved me money and time (Gall, Gall, & Borg, 2003).

I did not recruit my participants after I passed my proposal. Since I wanted first or second-year PhD students, I started an informal recruitment process, which is more like an oral consent in Fall 2016 and Fall 2017. I noted that all newly hired Graduate Assistants (GAs) would need to attend an GA orientation meeting before school starts. Therefore, I waited outside the room for the orientation to finish and asked the Chinese students who were in the orientation to join my study. I also asked them to see if they could bring their friends or classmates join my study. In Spring 2018, when I started collecting data, I had my eight participants ready. Four of them are students I spoke with, and the others are people they recruited.

Instrumentation

I developed interview questions, which were then reviewed by two colleagues, and pilot tested once with a Chinese English EFL student studying at the participants' university (this student was not one of the eight participants). Though I conducted a literature review about cross-cultural experiences and possible acculturation difficulties for Chinese international EFL students, I did not create my interview questions following them, as I was not trying to test the current literature. Instead, as a case study, my goal was to provide an in-depth understanding of my participants' experience (Creswell, 2007). I hence wanted to promote an atmosphere where participants could talk freely and spontaneously, so I would have enough information about their experience (Creswell, 2007). A list of interview questions may be found in appendix D.

Procedure

All interviews were conducted at a group study room in a library at the participants' university. Such a location was chosen because it is familiar to the participants, and the library is a quiet environment. The interview has two rounds, approximately 40 to 90 minutes each round. Interviews started in February 2018 and finished in March 2018. The second round of the interviews was not started until the first round was finished. The second round of interviews was used to ask questions, which were not asked in the first round (because of time limits), as well as questions emerging while I was analyzing transcribes of the first rounds. I kept contact with the eight participants when the second round of interview were finished, and I called them once or twice to clarify questions I had while reading transcriptions of the second round of the

interview. I was doing so because I was trying to build my data inductively via notes and memos, as Smith et al. (2009) instructed.[2]

I gave participants the freedom to use either Mandarin Chinese or English for the interview. For most of the time, participants and I spoke in Chinese. I recorded interviews using my smartphone, and transferred them to my personal laptop immediately after the interview was finished. Both the smartphone and the laptop were password protected.

Risk and Safety

Participants were given pseudonyms for the interview. The research focuses on their cross-cultural experience only, and no identifying information was requested. Additionally, the reporting participants' information regarding their study tracks, research fields, and labs was also omitted in an effort to maintain anonymity.

The interview was conducted in a closed environment, and I was the only interviewer. Hard copies of data (e.g., transcripts) were stored in my apartment. I was the only person with access to the data, and the research was purely for academic purposes.

Validity

Validity is defined as "the appropriateness, correctness, meaningfulness, and usefulness of the specific interferences researchers make on data they collect" (Frankel & Wallen, 2007, p. 148). In the case of a qualitative research, it "depends on the relationship of research conclusion to reality" (Maxwell, 2005, p. 105), and threats by "rival hypotheses" (Sandler, 1979).

[2] A detailed description of my data analysing process may be found in the next section, *Data Analysis.*

Strategies Adopted to Increase Validity

There are two general threats to validity of a qualitative research: researcher bias and reactivity (Maxwell, 2005). I attempted to reduce these threats through the following approaches.

Reducing researcher bias. Researcher bias occurs when researchers tend to seek proof/disproof to existing theories; in other words, a researcher may report data selectively (Miles & Huberman, 1994). At my research, a possible threat to validity is trying to induce participants to say what has been reported in the literature, or what I want to hear from them.

I hence first discussed my interview questions with my colleagues and my committee members to ensure the questions are not leading, and I made changes on the basis of their opinions. I also want to avoid was the imposing of results of participant A onto participant B, as if they were to have the same experiences (Maxwell, 2005). To avoid that, I set a longer interval (five days) between two interviews, so that I remembered less about what another participant said.

Reducing reactivity. Reactivity refers to "the influence of the researcher on the setting or individuals studied" (Maxwell, 2006, p. 108). Reactivity may be controlled in a quantitative research; however, in a qualitative study, it is impossible to eliminate the actual influence of the researcher (Hammersley & Atkinson, 1995). Hence, in qualitative research, the goal is "not to eliminate reactivity, but to understand it and use it productively" (Maxwell, 2006, p. 109). Since all eight participants were known to me personally, and we are all students at this university, our conversations were carried in a

relaxed atmosphere. In other words, if the research was conducted by a stranger, participants may feel tense, hence less open to the researcher. In addition, if it was conducted by a person at a higher power level, like a professor or an administrative, the participants may become hesitant to express their opinions. Furthermore, unlike Valdez's (2015) research, as both the participants and I speak Mandarin Chinese (as our first language), there was no language barrier between us. Hence, it was easier for subjects to provide vivid descriptions of their experiences.

Other strategies. Other strategies I employed to increase validity included rich data, peer check, and comparison. I divided the interview into two rounds, so if participants forgot something during the first round, they could always bring it up in the second round. Doing so also enabled me more time to digest information in round one, and by reviewing the transcript and my memo, I was able to bring newly emerging questions to round two.

Secondly, because the interview was conducted in Chinese, but the dissertation was written in English, I went back to participants for a peer check for the translation. Such a check included the translation of the salient words and direct quotations. Doing so helped me to rule out misinterpretation (Maxwell, 2006), and participants sometimes suggested another word or way of translation, which described, in their mind, their experience/perception more accurately.

Since I treated all eight participants together as a single case, I was not able to do cross-case comparisons (Maxwell, 2006). Hence, I compared my result with the literature. In my research, data collecting, data analyzing, and literature reviewing is an ongoing process. When my findings supported the existing literature, validity was

expected to increase. However, when findings went against the literature, it did not necessarily mean validity was decreased, but pointed rather to a possibility of new findings.

Data Analysis

To review, I conducted semi-structured interviews with eight participants in the Spring 2018 semester. There were two rounds of interviews with each participant. Each round lasted approximately 40 to 90 minutes.

One participant quit the research as a result of personal reasons, after which I recruited a replacement to join the study. Participants' information is presented in Table 2. According to their disciplines, I categorized participants as majoring in Science, Technology, Engineering, or Mathematics. Participants' major and research areas were not listed in an effort to reduce their risk of being identified. All eight participants chose to speak in Mandarin Chinese, though some terminology (e.g., names of courses) were described in English. I conducted the initial analysis and coding in both Chinese and English. When analyzing direct quotations, I translated them from Mandarin Chinese to English. Participants' original words (in Chinese) were not included in this dissertation. Participants' information is presented in Table 2.

Table 2
Participants' Information

Participant	Age	Gender	Previous Degree	Previous Major	Status before came to the US	Discipline
Alex	25-30	Male	Bachelor	Technology	Student	Technology
Charlie	25-30	Male	Bachelor	Science	Employee	Engineering
Diana	20-25	Female	Master	Science	Student	Science
Edwin	25-30	Male	Master	English	Employee	Mathematics
Fiona	20-25	Female	Bachelor	Science	Research intern	Science
Gary	20-25	Male	Master	Science	Student	Science
Harry	25-30	Male	Master	Technology	Student	Technology
Ivy	20-25	Female	Bachelor	Science	Student	Science

After completing the interviews, I first used software called Xunfei Tingjian[3] to convert the audio data into transcripts. I registered an account on the Xuefei Tingjian website, uploaded the audio, and the documents were returned after approximately one to two working days, depending on the length of the recording. The converting process was completely confidential. Participants' names and personal information were not mentioned during any interviews, and the company's certification of data confidential could be found in its website. I uploaded the audio as soon as one interview was finished.

After I had all 18 interview transcripts in hand, I started an initial analysis. As a reminder, my research question was *How does a group of eight Chinese international*

[3] Xunfei Tingjian software developed by Keda Xunfei Ltd, China. The company focuses on recording converting and audio input. More information could be retrieved from https://www.iflyrec.com/.

EFL students studying STEM disciplines in doctoral programs at a large public research university make meaning of their cross-cultural classrooms/lab setting experiences? As stated in the research question, my research focused on cross-cultural experiences emerging in academic settings only (e.g., classrooms, labs). Experience emerging in other settings were not included in this study. However, excluding experience emerged in non-academic settings does not mean those experiences are not important or influential. For instance, difficulties students encountered with their roommates or landlord could also have an impact on their overall university experience. Cross-cultural experience emerged in non-academic settings could be a direction for future research.

During the data analyzing process, I did not use any computer software, but only colored pencils and notes (for memos). There is no single best way to analyze qualitative data, and in this research, I adopted strategy suggested by Smith et al. (2009) and echoed by Seidman (2006). Smith et al.'s (2009, p. 82) strategy toward qualitative data analysis is summarized into six steps:

1. Reading and re-reading
2. Initial noting/coding;
3. Developing emergent themes;
4. Searching for connection across emergent themes.
5. Moving to the next case;
6. Looking for patterns across cases.

In *step one reading and re-reading*, I firstly immersed myself in the data, making myself very familiar with the data set (including listening and re-listening to the recordings, reading and re-reading of the transcripts). After that, I started preparing for the initial noting. As indicated before, I did not use any computer software for the analysis—only colored pencils and sticky notes. I printed all transcripts in a format

suggested by Smith et al. (2009, p 92) leaving sufficient margins on the left and the right side of the paper, using the right side for notes and comments, and reserving the left side for emergent themes.

I then moved to *step two initial noting/coding*. To perform data analysis, I need to understand *How do the participants make meaning of their cross-cultural experience?* Yet, to understand this question, I first needed to learn about their cross-cultural experience. There is no conclusive definition for *a cross-cultural experience.* At my research, I defined it following Oberg's (1960) culture-shock theory, as when participants encounter a) a thing, which is new to them, after their arrival in the U.S., b) a thing, which exists in both China and the U.S. but has a different definition in the U.S., and c) a thing, which they expected to have when they were in China yet did not come to them after arriving in the U.S.. Participants' reactions (behavior and reflection) toward this "thing" hence became my body of analysis, as charted in Figure 4.

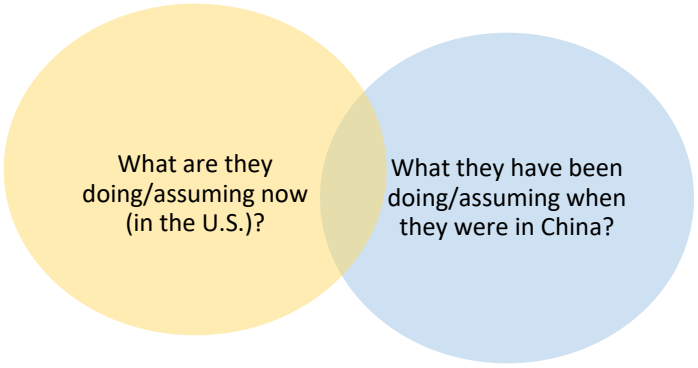


Figure 4. Cross-cultural experience

The two circles in the figures presented how participants changed/did not change their attitude/behavior. The overlapping between the *blue* and the *yellow* circle are behaviors which remained unchanged after participants have arrived in the U.S., and the isolated part in the yellow circle is the newly emerged behavior/assumptions. Using figure 4. I was able to identify when a change occurred, and once I identifies a change in participants' attitude/behavior, I then ask myself a series of questions to answer the question "what triggered the change?", including but not limited to "when and where did the change occur?", "is the participant forced to make such a change?", and "is the participant the only person who made the change?". Also, when I identified an attitude/behavior, which remained unchanged, I asked myself a series of questions to answer the question "why do the attitude/behavior remained unchanged?", including but not limited to "is it because the participant does not want to change?", "why is the participant hesitate to make the change?", and "what is impeding the participants from making the change?". More important, for both the changed and the unchanged attitude/behavior, I asked myself questions like "how do participants understand their changed/unchanged attitude/behavior?", "how do they feel about it?" to understand the ultimate research question: how do my participants understand their cross-cultural experience?

The above paragraph is an example about my coding process, and questions in the above paragraph are questions I asked myself as a means of delineating points of analysis, but they were never asked to the participants. Questions I asked myself during the analysis, answers to these questions, and my reflections together formed into my notes and memos.

While I was producing notes and memos, I categorized them into three types: descriptive, linguistic, and conceptual. The three types of notes and memos were written in three different colors. Dividing notes into three types was a suggestion made by Smith et al., (2009), because it helped the researchers to sort their notes/coding into a more organized was. Writing different types of notes in different colors also helped me to keep a track of my comments (Smith et al., 2009). I explained the differences among descriptive, linguistic, and conceptual notes/coding in the following paragraphs, with examples raised from my research:

1. The descriptive: This type of comment deals with how participants describe their experience, and the salient words are about the objects participants used to structure their thoughts and experience. For example, "professors' accented English" was an object I circulated out during my initial analysis. It was then developed into "professors' accented English impedes me from understanding the lecture".
2. The linguistic: This type of comment deals with the linguistic aspect, and I was paying specific attentions on metaphors, or words and phrases including "it is like", "it feels like", and words participants said with an air quote gesture. For example, nearly all participants perceived themselves as "good students", and in their understanding as well as the Chinese culture, a good student is one who obtains and maintains their academic excellence.
3. The conceptual: This type of comment deals with my interpretation, where I pay attention to my experiential and professional knowledge. At this stage, I asked myself questions in an effort to seek reasons and values behind

participants' words. In the accented English example, I asked myself: Why are they complaining about the accented English?

After *Step Two Initial Noting,* I produced a good number of notes and memos; and as explained in the previous paragraph, different types of notes/coding were written in different color. I then worked with my notes/coding and memos instead of the transcripts to develop themes in *Step Three Developing Emergent Themes.* I was working with all three types of notes/coding. By working with my notes and memos, I was trying to "deduce" my materials into themes.

In van Manen's (1990) definition, a theme is not a simplification nor an object, which occurred only once at a specific time, but an experience of focus and a capture of the phenomenon one tries to understand (p. 87). In this research, a theme provided a description of cross-cultural experiences, which were common among the participants. I hence reviewed my notes and memos, trying to identify repeated experiences within one participant, as well as repeated experiences across all eight participants. For example, when participants were telling me stories about how they have been collecting information regarding studying in the United States (usually about the academic atmosphere/teaching style), and conclusions they reached on the basis of the collected information, they were actually talked about their "assumptions and expectations toward the upcoming study in the United States". By examining the salient words, I circled out, and usually the descriptive comments I made, I further noticed that all of their assumptions toward studying in the U.S., were very positive, (e.g., good atmosphere). I hence further developed "assumptions and expectations toward the upcoming study in the

United States" into "I was positive about the academic atmosphere/teaching style in U.S. universities"

I initially generated more than ten cross-cultural phenomena from my data, yet on the basis of their relevance to my research question, some of them were not included in this research. For instance, cross-cultural experiences emerging in non-academic settings were not included. Ultimately, ten phenomena were found to be common among the eight participants, and I used them as my emergent themes. I used participants' own words to frame my emerging themes. They are the following:

1. "(Before I left China) I was confident about the upcoming coursework/lab tasks"
2. "(Before I left China) I was positive about the academic atmosphere/teaching styles in U.S. universities"
3. "A lot of subjects/courses are new to me"
4. "A lot of chapters matters are skipped"
5. "We are examined in a different way"
6. "I have difficulties understanding accented English"
7. "I did not get their jokes and cultural referenced terms"
8. "Being interrupted in a presentation is horrible"
9. "Even though my classmates do, I rarely ask questions during class times"
10. "Group work is not for me"

I then searched for connections between these ten cross-culture phenomena, and trying to subsume them into large super-ordinate themes (*Step Four Looking For Connections Across Emergent Themes*). I developed dialogues between myself, the data, and the literature. I tried to identify if there was a connection behind the ten-cross-

cultural phenomenon. In *Chapter III Literature Review*, I reviewed many research projects examining Asian international EFL students' life in Western universities, and categorized their difficulties into five aspects: a) English, b) education, c) social adjustment, d) stereotypes and discrimination, and e) life style. However, I was not trying to fit my data into these five categories since this research was not aimed at testing or developing hypothesis. Besides, since I did not ask the participants directly "How were you shocked by these five aspects?" or "What difficulties have you encountered in terms of these five aspects?" some of the aspects were not mentioned by the participants. However, I was not avoiding using the reviewed theories or research findings as names of the themes either. If they help to be the connections between some of the ten emerged themes (to contextualize the emerged themes in existing literature), they were adopted as references of names of my super-ordinate themes. Such a process was repeated in *Step Five Moving to The Next Case*. I then put themes (emergent themes and super-ordinate themes) on a large table and looked across them. I tried to find connections between themes, and how theme A could help to interpret theme B (Smith et al., 2009). Ultimately, I summarized my super-ordinate themes and emergent themes in Table 3.

Table 3
Super-ordinate and Emergent Themes

Super-ordinate themes	Emergent themes
Mis-assumptions about studying at my U.S. university	a. "(before I left China) I was confident about the upcoming coursework/lab tasks" b. "(before I left China) I was positive about the academic atmosphere/teaching styles in U.S. universities"" c. "A lot of subjects/courses are new to me" d. "A lot of chapters matters are skipped" e. "We are examined in a different way"
Cultural English in my U.S. university	a. "I have difficulties understanding accented English" b. "I did not get their jokes and cultural referenced terms" c. "Being interrupted in a presentation is horrible"
Classroom culture in my U.S. University	a. "My classmates do, but I rarely ask questions during class times" b. "Group work is not for me"

I started my research in Spring 2017. I spent approximately two months collecting interview data, and the whole data analysis process took me the better part of one month. I was the only person collecting and analyzing the data. I present steps I went through in Table 4.

Table 4
Data Collection and Analytical process

Step	Description
Semi-structured interviews	1. I conducted two rounds of semi-structured interviews with each participant. 2. Each round of interview lasts 40 – 90 minutes. 3. The interview was mainly conducted in Mandarin Chinese.
Data transcribing	I used Xunfei Tingjian for data transcribing.
Data screening	I used my research question, and research aspects to screen data I obtained during interviews.
Getting familiar with transcripts	I was listening to/ re-listening to, and reading /rereading to interview recordings/transcripts.
Initial analysis	1. I made notes via line-by-line analysis on margins of interview transcripts. 2. I went back twice to participants for clarifications. 3. I made further analytical notes, namely three types of them: descriptive, linguistic, and conceptual. 4. I wrote different types of comments in different colours.
Finding connections between participants' experience	I found similarities and differences across each participants' reported experience, on the basis of my notes and the raw data.
Finding emergent themes	1. I identified ten emerged themes on the basis of what I found in the previous step. 2. I wrote the abbreviation of the ten emerged themes on the other side of the margins.
Finding super-ordinate themes	On the basis of the connections of these ten emergent themes, I grouped them into three large super-ordinate themes.

Chapter V

RESULTS, DATA ANALYSIS AND INTERPRETATION

Overview of the Chapter

The following sections present the three super-ordinate themes, as well as the emergent themes within each. I started each theme with a presenting of the participants' experiences, followed by their own interpretations. I then ended up with my interpretations paying attentions to the reviewed literature. When literature gaps were encountered, I proposed directions for further research.

During the interviews, the eight participants provided me with detailed descriptions, vivid examples about their cross-cultural experiences in the U.S. university. To represent their stories, I hence included a large amount of direct quotation, in blocks and charts. Also, somce my research question was to examine participants' understanding of their cross-culture experiences, with respect to data analysis, I attempted to interpret their understanding, including the experience itself, and the way they report their experience (their perception and feelings toward the experience). While the participants discussed their cross-culture experiences, they sometimes follow these experiences by a personal reflection, or an explanation of why they were having such an experience. When they provided me with a reflection or an explanation, I interpreted their reflections and explanations with references to previous reviewed literature. When they did not provide me reflections or explanations, they usually said, "it is obvious" or "I don't know". In such circumstances, it was due to one of these reasons: a) it is a concept they take for granted (e.g. teacher in the U.S. employs Western teaching practices), or b) they have not

experienced it yet (e.g., “I don’t know if what I heard about journal publishing in the U.S. is true [because] I haven’t experienced any publishing yet).

Also, during the interviews, I noticed that culture exists at multiple levels: there is a U.S. culture existing in a historical and social context, there are classroom cultures existing in participants’ university, there are discipline cultures existing within each STEM disciplines, and there are individual cultures. In addition, I also noticed that each student and professor had their own learning or teaching style, which could be different on the basis of their past experience and personal preference. Hence, in the following sections, though I used the word “Western classroom culture” and “Western teaching/learning style”, I am not trying to centralize them or ignore the sub-differences. Such terms were used to refer to the general attributes of a U.S. culture or a Western teaching/learning style.

Mis-Assumptions About Studying My United States University

In the following sections, I present the eight participants’ feelings before leaving China in terms of their expectations of heir impending coursework/lab tasks, as well as the reality they experienced when they started attending classes at the university. Five emergent themes were generated under this section:

1. “(before I left China) I was confident about the upcoming coursework/lab tasks”
2. “(before I left China) I was positive about the academic atmosphere/teaching styles in U.S. universities””
3. “A lot of subjects/courses are new to me”
4. “A lot of chapters matters are skipped”
5. “We are examined in a different way”.

“I Was Confident About the Upcoming Study/Lab Tasks”

When talking about their past experience, all eight participants expressed a confidence in their ability to study. Most of the participants (except Edwin) said they were not worried at all about their upcoming study/research tasks when they were in China. Most of the participants (except Edwin) did not take actions to make them more prepared for their upcoming study/research tasks. The participants either focused on their current study/work tasks or enjoying their summer holidays before leaving China. With the exception of Charlie, Edwin, and Fiona, the participants were in their last semester of their Bachelor’s or Master’s degree before they left China. At the time, they were preparing for graduation and enjoying their summer holidays before coming to the United States. Charlie and Edwin were working as full-time employees, and Diana was pursuing an internship as a research assistant at a Chinese university. These three participants did not quit their jobs or internship until the end of July (one month before they left China). They spent their last month in China with family and friends.

Among the eight participants, only Charlie and Edwin changed their majors when applying to the U.S. university. Charlie had majored in science but applied for and was admitted to the Engineering program. Edwin majored in business English but applied for and was admitted to the Mathematics program. Because Edwin changed from a non-STEM major to a STEM major, Edwin was concerned about the upcoming coursework. He was worried that he would not be able to understand the professors as he had not learnt economic theory in his undergraduate degree. As a result, he participated in Massive Open Online Courses (MOOC) before he came to the United States. Edwin considered watching/listening to MOOCs as a better way for acquiring knowledge

compare with reading Chinese textbooks (English textbooks were not a choice for Edwin because they were expensive). Edwin said that while watching MOOCs, he not only learned theory but also relevant terminology, phrases, and expressions. He further reported that watching MOOCs helped him to understand how English was spoken in a Western classroom, which also alleviated his worry. As Edwin stated, "Once you know what [the class] is going to look like, you feel less concerned about it."

In contrast, Charlie was not as worried as Edwin. He did not watch MOOCs but spent most of his time with family and friends, because this might be his last summer holiday. In Charlie's understanding, he was not so much changing a major as much as he was "upskilling" (quotation from Charlie). He would still apply the knowledge and skills he had learnt in his previous major: "Applying theory into practice" was what Charlie perceived the upcoming study/research task to be like. Similarly, Diana, Fiona, Gary, Harry, and Ivy were not worried about the upcoming study/lab tasks because they were good students and had obtained excellent scores in their Chinese schooling. Their words are summarized in Table 5.

Table 5
Participants' Quotations for Super-Ordinate Theme #1 Emergent Theme #1

Participant	Quotations (translated by me from Mandarin Chinese)
Diana	a. "I have always been obtaining excellent scores when I was in China." b. "I am really hard working."
Fiona	a. "I have always been obtaining excellent scores (when I was in schools in China)." b. "I received positive feedbacks when I was working as a research assistant at a top Chinese university."
Gary	a. "I have been one of the top students." b. "I attended the best high school in my city."
Harry	a. "I am a good student." b. "I obtained A level scores (80 and above) when I was in China."
Ivy	a. "I have been good in study." b. "For my major, my university was the best in China."

Unlike the other students, Alex did not regard himself as a top student, though he expressed his determination to study:

> I was taking a gap year when I was in high school. Because of some personal reasons, I ended up in a community college in China. The academic atmosphere there was awful…Teachers did not fulfill their responsibilities and students were not studying at all. As a student who really wanted to study, I suffered awfully.

When he received an admission letter from the U.S. university, Alex made up his mind: "I will do whatever I can, study hard, and make progress every day."

Like Alex, other participants also expressed confidence and determination toward obtaining academic excellence at the university. Nevertheless, I noticed that none of the eight participants mentioned coursework or teaching methods they would employ to

accomplish such. They were confident about their ability to study because of their past performance (i.e., because they were good students) and they trusted themselves (e.g., "I will study hard"). While talking about the feelings they had before they left China, no one expressed concern about the upcoming study/research.

"I Was Positive About the Academic Atmosphere/Teaching Style in United States Universities"

In this section, I describe what participants viewed as facts of the Ph.D. programs offered in U.S. universities before they came to the United States, particularly focusing on academic atmosphere and teaching style, which were mentioned by four of the eight participants. Alex, Charlie, Edwin, and Gary did not mention their understanding of the academic atmosphere in the U.S., due to two reasons: a) we all know that the U.S. is more open than China, as more freedom is given to the students; I hence don't think I should mention it again (the concept is taken for granted), or b) I do not have a friend who can provide me with information about studying in the U.S.

It should also be noted that with respect to the four participants who provided an understanding of the U.S. academic atmosphere, their information did not seemingly come not the media (e.g., movies, TV), the Internet, nor consulting agencies. Instead, it came from their advisor, and xuezhangs[4], who share a similar academic background with them—indeed, from people they trust. Because the participants' advisor and xuezhangs hold similar academic backgrounds as the participants, and are closer to them in person, they would be more likely to believe more of their words. In other words, there is a larger chance for them to generalize the advisor's and the xuezhang's experience to themselves. However, it would be very dangerous for the participants to do so, because some of these experiences may only occur once, at a specific time or place. Table 6 summarizes the thoughts the participants held before leaving China on academic atmosphere, teaching style, and study/research tasks in U.S. universities.

Table 6
Participants' Quotations for Super-Ordinate Theme #1 Emergent Theme #2

Participant	Source of information	Quotations (translated by me from Mandarin Chinese)
Diana	My advisor	a. "I enjoy Western teaching styles" b. "(failed to reserve lab equipment) is less likely to happen"
Fiona	My xuezhang	a. "you have a life besides research" b. "I don't think it will be more difficult (compare with what I was doing now)"
Gary	My xuezhang	a. "advanced equipment"
Ivy	My xuezhang	a. "positive academic atmosphere" b. "The universities are rich" c. "(compare with PhD programs in China) it will be much easier for me"

[4] x*uezhang*: 学长 in Chinese. Xuezhang refers to a student who attended the same university as the participants, but usually one year earlier. A xuezhang is different from an alumnus, since he/she does not need to have graduated.

Here, it is important to note again that none of the students had any prior experience studying abroad or being instructed by non-Chinese teachers before arriving in the United States. As such, they had not experienced a Western teaching style before. During the interviews, Diana, Fiona, Gary, and Ivy discussed their understanding of studying/conducting research at U.S. universities. Diana was the only person whose advisor (for her master's degree) had studied abroad (he received his doctorate in the United States). Hence, Diana's understanding of the academic aspect of U.S. universities resulted from her experience with this professor and his guidance, including "His class includes many in-class discussions. He [the professor] is not like other Chinese teachers who just keep talking and leave us no time for personal reflection."

Fiona and Ivy reported that they thought study and research tasks would be easier in a U.S. university. Their understanding was a result of a comparison between their study/research experience at their Chinese universities and what their xuezhang's study/research experience had been at universities in the United States. Fiona explained:

> I was doing an internship at a top university in China as a research assistant. During that time, I needed to be in the lab from 9:00 am to 10:00 pm every working day, sometimes even on weekends. After the internship, they [the university] invited me to join them and pursue a doctoral degree. If I had stayed, I am pretty sure I would have been successful in my research area because of the large amount of time I would have needed to spend in the labs. However, it was not the life I wanted. I like doing research, but I also want to enjoy my life.

Fiona then consulted her xuezhang, who happened to be a graduate in the public university Fiona was attending:

I expressed my concerns to her and told her I was really stressed. She then recommended that I come to this university. She agreed with me that we needed to have a life. When introducing the university, she emphasised that the environment here is good, both the natural environment and the academic atmosphere. The professors were not as pushy as the Chinese professors.

Ivy also mentioned what she knew about the academic atmosphere in U.S. universities:

> In China, publication is everything and we emphasise both the quantity and the quality. In order to achieve that, you need to have plenty of data and your data needs to be *beautiful*. By *beautiful*, I mean you should be chasing perfection. You need to have a large amount of data to support your conclusion, and those data needs to be very significant, like above 90% significant. Professors in China thus push their students very hard to gain *beautiful* data. But for my major, good luck is an essential part in producing lab results. To produce plenty of beautiful data, you need to repeat the experiments over and over again, which is really exhausting. However, [my xuezhang told me] in the United States, it is not like that. You have a life beyond your research. You can also have publications with *not so beautiful* data, a significance above 85% is fine, as it tells the reader such a way does not work (85% stills means a fail in the research). Yet in China, you can only tell people which way works."

As these statements show, these three participants favoured a Western teaching style. However, none of their professors or xuezhangs had actually described what a Western teaching style is. Diana said she liked the Western style because students are

given a chance to state their own ideas and ask questions. Fiona and Ivy wanted to pursue their degrees in U.S. universities because the professors would be less pushy. They were not aware of how students would be taught or examined, or what learning strategies students would need to adopt to meet the expectations of the university. Their xuezhangs only told the participants about the good aspects of U.S. universities. They did not share any difficulties they encountered during their study or how to prepare for upcoming study/research tasks. In relation to the first emergent theme—"before I left China I was confident about the upcoming coursework/lab tasks"—participants were confident in themselves (an assumption made on the basis of their past studying experience), and here, in the second emergent theme, participants were not aware of difficulties they might encounter studying in the U.S. As introduced before, they focused on their present life (graduation, working, and summer holiday) as opposed to looking ahead. Their past performance helped them build confidence. Their source of information (advisor and xuezhangs) brought them comfort rather than awareness: xuezhangs only told the positive part of studying in the U.S., and Diana enjoyed her advisor's Western teaching style. Thus, they perceived the upcoming study to be less difficult. These contributions led to the fact that none of the participants, aside from Edwin, had prepared for their upcoming coursework before leaving China.

This lack of preparation did not benefit the participants. The participants were in a "pre-honeymoon" phase before they left China. They were immersed in an illusion that it would be easy for them to pursue a doctoral degree at a U.S. university, and they did not need to worry about upcoming study/research tasks. In other words, they were assuming

that their previous studying methods would continue benefit them in the upcoming study, hence made insufficient preparation.

As I discussed in the literature review, there is an internal demand for academic excellence in Chinese culture, and the participants echoed this idea by telling me that they had been good students all of their lives. However, because of the differences between Chinese and Western educational methods (e.g., passive vs. active learning, teacher-centred versus student-centred methods), the newly arrived students seemingly felt shocked, and needed time to adjust to Western teaching styles, especially for the first few months. Such shock was referred to as culture-shock by Oberg (1960), indicating when a newly arrived person does not know how to react in the new culture—a phenomenon occurring often because the recently arrived person feels what they used to know and do in their home culture no longer seems appropriate (Oberg, 1960). Such shock might be reduced if the recent arrival could find a reference to make proper reaction to the new culture. In the case of the eight participants, if they could gather some information about the Western classrooms—for example, teaching methods or adopted learning strategies—they may feel less shocked. Without proper preparation, the adjustment period may take longer, and students may encounter more difficulties.

Unlike what the participants were told by their xuezhangs, the participants found that they studied harder than they used to, much as Lee (1997) found, stating that Chinese international students in U.S. universities usually study harder than they did in China in order to maintain academic excellence, especially in the first few months. As such, students will likely need to spend extra time on study or work during class to cope with their professors' pace. Considering the Chinese culture of chasing academic excellence, if

the students were not able to maintain what they had achieved in China in the United States, they might feel stressed and believe that they need to "do whatever [they] need to," as Alex said, to achieve excellence again.

"A Lot of Subjects/Courses Are New to Me"

The participants reported that in their majors, for the U.S. public university they are currently attending, students usually sign contracts with advisors in their third or fourth semester (at the end of their first academic year or at the beginning of their second academic year). In the first academic year, students take general courses and conduct lab rotations. They do not need to do research before they sign contracts with their advisors (the major professor in their dissertation committee), as their research focus will often be the same as that of their advisors. Once the contracts are signed, they join their advisors' research group. Their advisors help them with course selection and provide guidelines for their research. Because students will conduct research in their advisors' area of specialization, there is a large chance that they will enter a new research field. If such occurs, the students will take new courses and learn new research skills. Because they have to learn new knowledge and skills, some participants reported feeling that they had, in essence, changed their major. Diana, Fiona, Gary, and Ivy described such an experience. Diana stated:

> I have been asking stupid questions during my class. If I look back at questions I asked during my first semester, I can answer them fluently now [because I have learned], but at that time, I was really naive. I was in a different specialization area in my Master's. I knew little about what the professor was talking about.

Fiona similarly reported:

> All my classmates were the same age as me, but it felt like I was an idiot. I felt huge pressure attending the lectures. I felt bad after attending the first class because I spent time there, and I understood nothing.

Gary said he was able to understand about "20% of the lecture" during his first semester at the U.S. public research university: "Language was a barrier because some of the professors have accents. But the biggest difficulty was the course content. If you do not know the basics, it is impossible for you to understand the graduate level courses." Ivy continued:

> For some courses, I needed to learn from the very beginning. When the professor is talking, it seems I am the only one who doesn't know what he is talking about. It is not because of my English proficiency. I wouldn't understand even if he [the professor] were talking in Chinese. It is because I had never learned those concepts and terminology.

As a result, participants who reported having such difficulty spent extra time reading to "catch up" (quotation from Diana, Fiona, Gary, and Ivy) with their classmates and professors. "Someone suggested to me to attend some undergraduate-level courses here, but it wouldn't work for me," reported Gary. "The university is only paying for the nine graduate-level credits. If I wanted to attend undergraduate-level courses, I would need to pay for them myself at a rate for an international student. I cannot afford that." Fiona also rejected such a suggestion:

> I don't have time to attend extra courses. As international students, we need to be enrolled in nine graduate-level credits, which equal three graduate-level courses.

> These three courses are enough for me. I don't think I have time to take extra courses.

Interestingly, the above four participants said they felt they had "changed their majors" (quotation from the four participants) though they were still within their major but in a different track or specialization area. For the two participants who did change their majors, Edwin (from English to STEM) and Charlie (from Science to Engineering), they did not report such difficulties. It seems that though Science, Technology, Engineering, and Mathematics were grouped under the name STEM, and thought they often treated together as a single subject, there are differences among them. The four participants who reported having severe difficulty with the introduction of new subjects all majored in Science. The two participants who did change their major but did not report having difficulty with the introducing of new subjects majored in Engineering and Mathematics. Does it mean Science is more difficult than Engineering and Mathematics, at least for these students? Ivy, Charlie, and Edwin provided their understandings as the following.

> I think my discipline required an extensive level of memorization. For example, if you did not know the structure of a heart, you would not be able to know how blood goes in and out of a heart, and you would not be able to analyses the circulation of blood in a human body… Also, there is no better way to learn such kind of knowledge besides reciting. Learning through understanding seemed impossible. How can you understand the structure of a heart? The reciting process is difficult too. It is easier for me to remember a thing if I have been using it or at least seeing it frequently. But do you see hearts, especially the structure of them

> frequently? Since I am using *heart* as an example, you may think I majored in cardiology, [but] no, I am not. I run into this because we were doing research on the influence of ingredient X [in medicine Y] on blood cells. The portion of ingredient X in medicine Y was the research focus. Yet, in order to examine that, I need to learn lots of new subjects. (Ivy)

Diana, Fiona and Gary majored in similar disciplines as Ivy's, and their answers echoed Ivy's. Charlie, who is an Engineering major, explained the following:

> As I said before, I was and I still perceive what I am studying now as an upskilling of what I learnt in my undergraduate [degree]. I am still learning new theories and equations, but the most important part is to apply them to practice. For instance, we learnt Newton's theory in gravity and force, and we are now using them [together with other theories] to design a bridge … We need to understand the theories and equations, to be familiar with them, but we are not required to memorise them. We can always refer to the cheating paper. … Also, once you understand the fundamentals [what was introduced in undergraduate level courses], it is easier for you to understand the advanced [what was introduced in graduate level courses]. There is something new, but usually, we do not need to do experiments, which cross subjects. If we need to do that, for example, when I need to examine the percentage of X in Y, using a machine belongs to another department, my advisor will introduce me to that department and let them do it for us. Because I may only need to use that machine once, and we don't have one in our department, there is no need for me to learn how to use it.

Edwin, who is a Mathematics, added:

> I don't think switching majors caused me great difficulty. Yes, I am entering a new field, but theories here seemed easy to understand. There are always real-life examples I can refer to. For example, when we were learning about values, I think about my closet. If I only have one pair of trousers, it means a lot to me. The market value for that pair of trousers is $35, but now it means more than $35 to me. But if I have five pairs of trousers, each pair means less for me now. The store is still selling them for $35 each, but it worth less than $35 to me now. Memorising these theories is not difficult for me. I may not able to write them in the exact words the textbook used, but since I understood them, I am able to grasp the ideas.

By examining the three participants' words, I found three differences between Charlie and Edwin's disciplines and Ivy, Diana, Fiona, and Gary's disciplines. First,
I found that because of the nature and of their disciplines, Gary and Edwin were learning things via understanding. However, for Ivy, Diana, Fiona, and Gary's disciplines, understanding was hard to achieve, and they were learning via rote memorization. Second, as Charlie and Edwin reported, their disciplines put less emphasis on memorization. Yet, a large amount of memorization was required by Ivy, Diana, Fiona, and Gary's disciplines. Thirdly, Charlie and Edwin were less likely to use knowledge outside their disciplines. Nevertheless, for Ivy, Diana, Fiona, and Gary, it was common for them to refer to knowledge outside their disciplines. These differences hence led to the facts that the four participants who are majored in Science perceived studying new subjects as more difficult (in their words "I felt like I changed my major"). This contrasts

with participants majoring in Engineering and Mathematics (who indeed changed their majors). However, there was no current research comparing difficulties encountered by Science students with other STEM disciplines. There was no research examining how the nature of a discipline would impact students' study either. Such a topic seems largely unexplored. Thus, this emerges as a direction for future research.

"A Lot of Subject Matter Are Skipped"

All eight participants reported that, at the public research university, the professors did not explain the learning content to them explicitly, and much subject matter is skipped. According to the participants, such skipping of materials did not occur when the participants studied in China (including with Diana's professor who studied in the United States). Participants' difficulty in this area was further explained as some fundamental knowledge was skipped.

Fiona and Alex described what they experienced at their U.S. university. Fiona stated:

> For example, we have Chapter 1, 2, and 3 in this book. Within each chapter, we have Sections A, B, and C. When I was in China, the professors would start with Chapter 1 Section A and go through Sections A, B, and C. When Chapter 1 was finished, we would start Chapter 2 following the same procedure. But here, we are learning Chapter 1 Section A today, but Chapter 2 Section B tomorrow. Chapter 1 Sections B and C remain untouched by the professor. However, in order to understand the next chapter, Chapter 2, we do need Sections B and C in Chapter 1—especially for me, since I've switched to a new research area.

Alex similarly reported: “For example, the professor will tell you to use normal distribution, but he will not explain what normal distribution is”. This caused serious difficulty for them, especially for Diana, Fiona, Gary, and Ivy (the four participants who majored in Science and switched to another research area after coming to the U.S.).

Five participants interpreted such skipping a skipping of fundamentals as they were now enrolled in graduate level courses, so the fundamental parts were skipped. In other words, it was assumed to be part of students’ previous knowledge (by Alex, Charlie, Edwin, Gary, and Ivy). In Alex’s words:

> I think it is because we are at the graduate level now that some fundamental knowledge is skipped. The professor thought we should have learnt it already when we were pursuing an undergraduate degree.

Other participants (Diana, Fiona, and Harry) admitted Alex’s notions might be part of the story, but it could also be a result of professors’ education beliefs and teaching methods. Fiona explained:

> When I was studying for my Master’s in China, the professor would only skip that which was very obvious to us [*us* referring to students who majored in my discipline, but not necessarily the same research track]. If he mentioned a concept, which was supposed to be learnt in our undergraduate program, he would double check with us to see if we still remembered it. Or he would give us a quick flashback of that concept in a few sentences. Because my major required us to memorise lots of things, it was very common for us to forget some of them if we stopped using them. For example, we learnt lots of diseases during our undergraduate program, their causes and what medicine could be used to cure

them. But for our graduate research, we are only focusing on one disease, or one medicine. So it is very common for a student to forget the causes and solutions to diseases apart from the one he/she is researching on. Hence, when a professor is talking about it, though we are supposed to know it, we cannot recall our memory.

Nevertheless, all eight participants agreed that "professors should not be talking about simple things during graduate-level courses" (quotation from Alex). As Edwin stated, "If the professor were still teaching us 1 + 1 = 2, I would drop the class."

By referring to participants' studying experiences, I found the five participants, who perceived the skipping of content as a difficulty caused by requirements for graduate-level courses, had not obtained a graduate degree in China. They left China with bachelor's degrees. On the other hand, the three participants who perceived the skipping of content as a difficulty caused by U.S. professors' teaching styles, had attended graduate courses in China, even leaving China with master's degrees. Their different interpretation of the encountered difficulty could hence be caused by differences in their studying experience. Still, when I asked the five participants if they had discussed such difficulty with their friends who were in China pursuing a graduate degree, none of them reported doing so. The primary reason, they reported, for not discussing such distinctions with their peers in China, however, was time zone differences.

I therefore focused on the three participants' words (those of Diana, Fiona, and Harry) and found that in their stories, they saw their Chinese professors as taking care of the students more actively than their U.S. professors. "Professors here are happy to answer my stupid questions, but they usually assume we know it [anyway]", reported Diana. Wiggins and McTighe's (2006) concept of the *expert blind spot* is useful here. An

expert blind spot is a knowledge point understood by the experts yet new to the novice, which was obscured to the experts when they too were novices. However, does it mean Chinese professors were more aware of their expert blind spot compared with U.S. professors? It could be, but what caused them to be more aware of their expert blind spots?

In the reviewed literature, the Chinese educational method and educational beliefs were examined by many researchers. They have all reached a result that, in China, students were perceived as passive learners and teachers were perceived as "sage on stage" (Edgeworth & Eiseman, 2007; Townsend & Poh, 2008). Students were perceived as ignorant and naïve, as empty accounts, which are waiting to be filled (Gu, 2008; Heng, 2016), exactly as what was described as a "banking education" (Freire. 2000). As a result, teachers were expected to take care of students actively and think ahead for them.

The belief that *teachers should take care of their students* was also echoed with an old Chinese saying "教不严师之惰", which means "if a student is not well educated, it should be due to their teacher's being lazy". Hence, if the whole society blames teachers for not educating students well, it would not be surprising to discover why teachers believe it their responsibility to think ahead for students. Here, taking care of students and thinking ahead for them was presented as a double check to see if they have understood the expert blind spots. Teachers have raised and answered questions before students have even asked these questions out. For example, if an equation was put on the blackboard, containing the use of a T value, a Chinese teacher would say, "Do you still remember how to get T?" followed by a brief explanation.

However, when participants arrived in the U.S., they experienced culture shock when discovering that they were not treated as empty bank accounts anymore. This was different between what their professors used to do for them in their Chinese schools, and what their U.S. professors are doing now. Furthermore, as none of the participants reported being aware of the skipping of knowledge points when they were in China, there was also a difference between what they were expecting for their U.S. professors and what their U.S. professors are seemingly doing now.

While talking about what participants have been doing to adjust to such a difference, most chose to spend more time on self-study, reading textbooks and research articles in their spare time to catch up with the class. Nearly all participants reported spending more than 50% of their spare time on studying the skipped content when they first arrived at the public research university (i.e., during their first semester). For example, Ivy shared:

> I need to do research before and after I go to the class. Because I switched to another research area, everything is new to me. I need to read the textbook before going to the class to make sure I understand the terminology and unknown concepts. Otherwise, I cannot understand the lecture at all. I need to do research after class as well when I am reviewing the day's lecture because the professors usually provide us with recent journal articles, which may contain a concept I have not learnt before. Or, the professors may mention a concept or a method, which has not been introduced in the textbook.

As the participants reported, at the U.S. public university they are attending, all STEM-major doctoral students may face the situation of switching specialization areas. Skipping

learning content hence may be a common problem not only among Chinese international students but among local students as well. As the eight participants reported, they have classmates, both host and international students, who were focusing on a research topic than differing from their original. Yet, from participants' observations, such adjustment did not seem to be an issue for local students. This could result from the differences between the learning strategies adopted by the Chinese versus local students, as I will further discuss in relation to a subsequent theme.

"We Are Examined in a Different Way (From Chinese Universities)"

In the previous sections, the participants reported that they spent time reading textbooks and journal articles after class because of newly introduced subjects and skipped subject matter. They also revealed that this study occurred because participants felt they needed to make sure they understood the learning content clearly with respect to how the knowledge may be applied to their own research fields to complete homework and achieve good scores on examinations. The participants reported that when they were in China, textbook memorisation was the primary requirement for them to finish their homework and gain high scores on exams. They also reported that because there were usually approximately 100 students in one class, the teacher rarely asked them questions during class time or held in-class discussion. Alex, Charlie, and Harry provided examples of how they completed their homework and prepared for exams while in China, as presented in Table 7.

Table 7
Participants' Quotations for Super-Ordinate Theme #1 Emergent Theme #5a

Participant	Quotations (translated by me from Mandarin Chinese)
Alex	"(in my school in China) to finish the homework, you just need to go back to the textbook. Teachers will give us somethings similar as the examples provided in the textbook. For example, in the textbook, the example was '1 + 1 = 2', in the homework, we will do '2+2 = ?', and in the exam, we will have '3+3= ?'. Because it is so simple, I don't need to review the lecture before doing my homework. I do need to review before the exams, but it won't take me a long time. One afternoon would be enough (for one testing subject)."
Charlie	"the homework and exams were really easy (when I was in China). Once you knew the equation, you were able to solve the questions. You hence have two choices: to simply memorize the equations; or to understand and master the equations. Of course, 'understand and master the equations' is a better way, but some students just memorize them. And it is fine."
Harry	"We have lots of math questions when I was in China. To solve a math question, if you know which equation to use, you are good to go. But there are lots of equations, and those equations are hard to memorize. As a result, there were students who cheat on the exam. I didn't see students being caught cheating, and I did not cheat myself. But I believe there must be some, like bring a piece of paper with equations on it."

Diana, Fiona, Gary, and Ivy majored in similar disciplines when they were in China. As their statements in Table 8 illustrate, memorization was the primary method they used to prepare for exams. They also stressed the amount of knowledge they needed to memorize, and thought it was very hard to memorize such a large quantity of content. Edwin majored in English; hence, his learning experience was different from the students who majored in STEM disciplines. However, even Edwin emphasized memorization, stating: "Learning language at a college level is basically learning/memorizing new vocabulary and terminology.

Table 8

Participants' Quotations for Super-Ordinate Theme *#1 Emergent* Theme *#5b*

Participant	Quotations
Diana	"There was a huge amount of knowledge to memorise. In exams, we were asked for 'what is' questions, like what is the structure for the X cell. If you did not memorise it while reviewing, you will not be able to answer it. The structure of a cell is usually very complicated, like drawing a graphic"
Fiona	"Actually, if you can memorise the whole textbook, you will get a 100 on the exams. (In the exam) There were multiple choice questions, fill in blank questions, and short answer questions. But even for the short answer questions, you can answer it through memorisation."
Gary	"Before the exams, I go to the library to re-memorize the knowledge points. I stay in the library from eight in the morning till eight in the evening. No one waits until the exams (to memorize the knowledge), it will definitely drive people crazy."
Ivy	"Someone calculated, we need to memorize 10 thousand words each week."

All eight participants' study experience led to an understanding that, in China, they passed exams through the memorization of course content. Such an understanding can be perceived as a result of the behaviorist approach adopted by schools in China, as well as the teacher-centred, passive pedagogical method utilized. Under such a method, students did not need to be active in the learning process, as they were perceived as recipients of knowledge (Gu, 2008; Heng, 2016). Participants' past experience in taking exams mirrored this, as they were not asked to apply what they had learnt but to repeat what the teachers taught. They responded to "what is" questions, which means the tester wanted to know "if the students knew it," rather than "how to" questions that test "if the students understand it." (quotations from Diana, Fiona, Gary, and Ivy).

Since their arrival in the U.S., most participants noticed memorization no longer helped them to obtain good scores in exams. For example, Ivy explained:

> In China, if you memories everything, you will get a 100, full score. But here, you can only get a 60, a pass. If you want the other 40 points, you will need to be creative; you need to know how to apply the learned content into reality. For example, we learned a new testing method, and in the exam, we needed to write how we would apply this testing method in research.

Edwin echoed Ivy's experience:

> Memorization is very important, but most exam questions cannot be solved by simple memorization. And for most questions, there are no right or wrong answers. For example, we were once asked to write a short paragraph to bargain with a competitor. There was no standard answer for that question.

Other participants (Diana, Fiona, and Gary) also provided similar thoughts when talking about their exam experience in the United States. Alex, Charlie, and Harry, who discussed the memorization of equations when talking about their exam experience in China (see Table 7), reported feeling "really shocked" and that it was "unbelievable" and "too good to be true" when their professor said they could bring a "cheat sheet" with equations on it to the exam. They were all appreciative of such a "grace." Furthermore, like the other participants, they also realized that the cheat sheet alone would not help them to obtain a good score on the exam. Table 9 presents their understanding of exams.

Table 9
Participants' Quotations for Super-Ordinate Theme #1 Emergent Theme #5c

Participant	Quotations
Alex	"I like the idea, but if a subject allows you to bring a 'cheating paper', usually, you will not pass the exam by copying what is on your 'cheating paper' to the answer sheet. I mean, it will not ask you 'what is' questions, it will ask you 'how to'."
Charlie	"(by bring a cheating paper) the memorization part of reviewing is reduced, but the questions are more complicated. Now we need to decide which equation to use. It was obvious anymore."
Harry	"I was very surprised that the professors allowed us to bring a 'cheating paper' with us (for the exams). I think it is a good thing, so there will be less people cheating. And you reviewed the knowledge when making the 'cheating paper'."

The statements show that participants were realizing that their current university had different requirement of them: memorization was no longer a primary requirement, and they needed to express their own opinions in homework and exams. However, the participants perceived what they learned from professors in class as limited. As Gary explained, because "each student has their own research area, the professor cannot talk about everyone's area during the class time. The professor can only introduce the knowledge point in general using [the professor's] own research area as an example." However, in homework and exams, the questions asked them to apply their learning to their own research area. Thus, they needed to do extra research in their spare time to answer the questions. Charlie further explained:

> I spent lots of time reading research articles, especially the methodology part. When a method was introduced in class, the professor provided us with some examples. However, since the professor tended to focus on their specialization area, the examples they provided were generated in their specialization area. If

> you wanted to apply it to your specialization area, and your area happened to be different from the professor's, you needed to spend extra time studying it after class.

The participants also mentioned that they needed to do research by themselves because the handouts and textbooks were no longer the only references required for homework and exams. Gary shared:

> When I was in China, the textbook was the only reference for the exam. But here, you need to know the industry, the product, and the latest research results. For example, we learned about Ingredient X during class and how it could be used in Medicine A, B, and C. You can find this information in the textbook. However, because the textbook was written 2 years ago, during these 2 years the industry started using Ingredient X in Medicine D. If I was in China, the exam question would be something like, "What is the performance of Ingredient X in Medicine A?" But here, the professor will ask us to "compare the performance of Ingredient X in Medicines A, B, C, and D." And D! If you do not know Medicine D, you cannot answer that question. This is also why I need to spend lots of time reading journal articles after class. The professor may have mentioned Medicine D during the lecture but not in detail, and [the professor] won't tell you Medicine D is going to appear in the exam. I thus need to do my own research after class to know more about it so I will not be surprised when I see it in the exam paper.

This need to study additional content was a source of complaint for the participants, especially how time consuming it became, as presented in Table 10.

Table 10
Participants' Quotations for Super-Ordinate Theme #1 Emergent Theme #5d

Participant	Quotations (translated by me from Mandarin Chinese)
Alex	"There is always a lot to research, for every single class, on a daily base."
Charlie	"The university requires us to take three graduate level courses, because we are international students. If the courses are not difficult, like 'introduction to (subject name)', I feel I can still handle it. Because there will be less research to do. But, if I need to take two advanced level courses at once, it is really stressful. Unfortunately, such a circumstance is very likely to occur at this university, because most advanced level courses are opened in Spring semesters, if you missed it, you can only take it again next Spring."
Diana	"Once, I almost cried out when I arrived home. I have a long 'to do list', but I am short in time."
Edwin	"I tended not to leave today's tasks to tomorrow, because you will have new tasks tomorrow. I need to do them tonight. Of course I feel tired, but I have to do them."
Fiona	"This is even more difficult than what we were required to do in China (memorization). I bring my tablet with me wherever I go (when I was on campus), so I can do the reading whenever I have a time, like when I was eating my lunch."
Gary	"It was fine when I was in my first year, because I hadn't signed the contract with my major professor; hence I didn't need to do experiments. However, in my second year, when the experiments started, I had little time for myself. And I needed to spend that 'little time' on researching what was taught by the professors during lecture time. I felt overwhelmed."
Harry	"It is the most difficult part for my study. I usually arrive home around seven. Unlike other people who turn on the TV, I start my computer, and open the library website."
Ivy	"I feel very tired doing this extra after-class research. After a whole day in the university, with my class, my research, my TA tasks, I just want to lay somewhere and die. But I cannot! I need to open my laptop and do further research about what the professor taught in today's class."

Their complaint of needing to do research in their spare time largely relates to the time demands it placed upon them. As a result, the participants wished for "the university to reduce the course load" for them, especially when they entered their second year (when they signed contracts with advisors and experiments started). Notably, participants used the word *wish* instead of *recommending* or *expect* when expressing this idea. Ivy later noted, "I don't think it is going to happen because being enrolled in nine credits is a requirement for international students." Other recommendations included Gary's "Let us take fewer courses so [the coursework] would be finished before the experiment starts", and Fiona's suggestion to "accept more transferred credits from my previous university".

While the Western examination methods gave participants a hard time, no one complained about the method itself. Instead they all expressed a fondness for the *how to* questions, the open-ended questions, and the possibility of multiple answers, and cheating papers. As they reported, these testing methods were rarely adopted in their schools in China in the core courses. Edwin was the only participant who raised an example of using open-ended questions in his core courses:

> We were asked to write a business letter to our supervisors, like a short seasonal report. There is no standard answer to that question. The open-ended questions we have are usually essay questions, the last question in the exam.

Again, Edwin was a STEM major in his undergraduate program. The seven students who majored in STEM disciplines, however, did not recall such a memory.

The participants thought the difference between the Chinese and U.S. testing methods was because of the difference between the Chinese and the Western educational method. As the literature suggests, schools in Western countries often adopt an active

learning approach, which encourage students to engage in the learning process. It appreciates students' opinions and promotes the concept of multiple possible answers (Gu, 2008; Kingston & Harry, 2008; Wu, 2009). Schools in China, on the other hand, often promoted a passive learning approach, and knowledge was obtained via rote learning (Gu, 2008; Kingston & Harry, 2008).

However, on the basis of participants' reported experience, aside from that of Edwin, all seven participants' examining experience in China seemingly points to the Chinese educational method introduced in the reviewed literature (passive learning). Edwin stands out as he was a major in a STEM discipline. Therefore, I started wondering if the nature of a subject helped predict whether passive learning or active learning was adopted by schools? No claims should be made as the seven participants were educated via a passive learning approach, because they attended schools in China, and the Chinese tend to adopt a passive learning approach. However, there was no literature examining differences in curricular and pedagogical methods between STEM and non-STEM majors, with a focus on the nature of the subjects.

I also wondered if the difference between participants' examination experience was because they are now learning graduate level courses, which have higher requirements. As a result, follow-up questions were asked to the three participants (Diana, Fiona, and Harry) who achieved their master's degrees in China. These three participants all agreed that they did not perceive any difference between examination questions they had while pursuing their undergraduate degree, and examination questions they had while pursuing their master's degrees. In other words, there was no difference between the examining methods adopted in the participants' Chinese undergraduate

schools and their Chinese graduate schools, but they did perceive differences between their undergraduate/graduate schools in China, and their graduate school in the U.S. However, since this study requires participants to have no previous studying abroad experience, none of them exhibited any experience in pursuing an undergraduate degree in the U.S. Future research comparing exam questions adopted by undergraduate U.S. schools and graduate U.S. schools may help to clarify this question.

Additionally, participants in this study only discussed their experience with homework and exams. The participants did not discuss other pedagogical methods such as in-class activities, discussion, or learning communities (Bartlett & Karin, 2011; Ruble & Zhang, 2013), as their classes occurred in lecture format with few hands-on activities, discussions, or group work. (I discuss participants' experiences in group work in relation to *Super Ordinate Theme No. 3 Classroom Cultural*) As such, participants' failure to report difficulties adjusting to Western pedagogical methods may result from the fact that they had not experienced a variety of methods other than homework and exams.

Cultural English in My U.S. University

"I Have Difficulty Understanding Accented English"

All eight participants, including Edwin who majored in English, identified their English proficiency as another barrier during their study. They reported that they were only able to understand approximately 30% of the professors' lectures during their first semester, largely because of their English proficiency. At the time of the interviews, after being immersed in English for more than one year, they said they understood 70 to 80%

of the lectures. This low level of understanding did not result, participants reported, from the language itself, however, but from the professors' accents: "The accent! Professors' accents were and are still a huge barrier for me," reported Harry. He continued:

> I was very excited when attending my first class, but really frustrated after it. I know I don't speak the best of English, but I have been learning it since primary school. I have passed the exams, the language tests, and I had a TOEFL tutor before I left China. But for that class, by listening to the professor alone, I learnt nothing. [The professor's] accent made the lecture very confusing.

If the professors spoke English with an accent that differed from what they regard described as "an American accent", the participants viewed it as accented English. They later explained "an American accent" as the pronunciation schemes in academic English ESL recordings (which is similar to the Chicago accent adopted in the WGN radio[5]). "It is kind of like the Voice of America, like the accents of those new reporters, but speakers (in the ESL recording) speak more clearly", explained Edwin[6]. Participants reported feeling "really frustrated" and "lost," and that they didn't "know what to do" when attending their first lecture, which was conducted by a professor with accented English (quotations from Alex, Fiona, and Ivy). Most participants who majored in Engineering and Technology complained about their professors' Middle-Eastern accents, and participants who majored in Science and Mathematics complained about European and

[5] WGN radio: WGN, 720 kHz, is a commercial AM radio station in Chicago, Illinois, United States (Wiki Pedia, n.d.).

East Asian accents, as illustrated in Table 11. This reflected the different staffing between the STEM faculties.

Table 11
Participants' Quotations for Super-Ordinate Theme #2 Emergent Theme #1

Participant	Quotation
Alex	"I have difficulties understanding Middle East accents, like those from India and Iran. Never heard them before."
Charlie	"Indian accent, I am still trying to adjust to it. And we have lots of Indian professors, and students from the Middle East, which caused me huge difficulties when communicating with them."
Diana	"I have a professor from Europe, and he cannot distinguish the 'L' and 'R' sound. It caused me huge difficulty, especially at the beginning of the terms, when I am not familiar with the subject, and the terminology."
Edwin	"I had a professor from Japan, and he is excellent in lecturing. His logic is crystal clear, and his handouts are neat and tidy. However, I do wish that he could reduce his accent a little bit. It is a barrier for him, to attract more students."
Fiona	"The Korean accent is really difficult for me. When selecting courses, I so want to avoid that accent."
Gary	"I used to have a Korean professor, and I could not understand a single word he spoke when attending his lecture at the first time. After one semester, I could understand about 50% of it. (……) And now, about 70%."
Harry	"The Indian accent is a barrier for me. In order to adjust to it, you need to be continuously immersed in it."
Ivy	"I have difficulty understanding European accents, especially countries where Russian is spoken. "

Participants thought their difficulty in understanding accented English was because they had not been exposed to it before. By referring back to their past experience, when they learnt English in schools in China (around the 1990s), all English

teaching/learning tapes were recorded by speakers with no accent or what they defined as "an American accent. Their English teachers did not provide them with an opportunity to explore how English is spoken in different ways in different countries or regions. In their English classrooms, they were never exposed to English in accents that were not American. Alex relayed:

> In China, I think the only channel I was exposed to that was accented English was via movies and songs. For most of the time, it was either British or American accents. It did not bother me much because there are subtitles for the movies and lyrics for the songs. . . . I was never exposed to an Indian accent. Yes, there are Indian movies, but very few of them are on Chinese screens, one or two per year at most. However, they are usually dubbed into Chinese to reach a broader audience.

Alex's explanation, echoed by other participant statements as well, illustrated why so-called accented English was a huge barrier for the participants. English instruction in China occurs as a foreign language (not a second language); students hardly use English outside of their English classrooms and are used to standard American English (from teaching tapes). When students encountered other English accents in cinema or music, the subtitles and lyrics facilitated understanding, so they were not aware of any difficulties in understanding the accents. However, when the participants entered U.S. classrooms/labs, they began to interact with professors and peers who did not speak the English of their English learning tapes. Fortunately, the handouts and textbooks served as subtitles and lyrics of sorts for the participants.

Participants' cross-cultural experience regarding accented English was because of the difference between what they used to hear (the pronunciation schemes common on academic English ESL recordings) and how English was spoken in their U.S. university by people from different countries in different accents. The students were using immersion to help them to understand the accents, as no one was absent from class. As Harry stated, "I did not miss a single class, though I understand nothing [the professor] said. . . . It was not because of the attendance. I feel it is necessary for students to attend classes." All eight participants echoed Harry's words. In their understanding, attending class was a measurement of being a good student and a responsibility. Ivy stated:

> My parents sent me to the United States for a study purpose. If I did not attend classes and spent the time somewhere else, like shopping or sleeping, they would be very disappointed. Actually, not only them! I would be disappointed in myself as well. . . . I will not spend my class time doing experiments either. If there is a conflict, attending class is the priority. I always make arrangements before so there are rarely such cases [where conflicts occur].

Other participants also expressed this understanding and reported feeling "comfort by sitting in the classroom [though I did not understand the professor]." (quotation from Harry, echoed by other participants). Participants used the word *comfort*, not *comfortable*, while expressing their feelings. In reality, none of them felt comfortable, but *bored* and *overwhelmed* (quotations from Diana and Gary).

The necessity and responsibility participants felt toward attending classes perhaps related to the demand for academic excellence placed upon the Chinese students, and the pedagogical methods long adopted by schools in China. As previously mentioned, there

is an internal cultural demand for academic excellence in Chinese culture (Weinberg, 1997; Yan & Berliner, 2009). Chinese students who chose to study abroad expect themselves to obtain or at least maintain the same grades in their overseas universities. Also, in China, the students are expected to sit quietly in the classroom and listen to the teacher's words (Wu, 2009). In other words, they are not expected to spend class time outside the classroom for whatever reason. As the participants had been educated in such a culture and had been used to obtaining excellent scores from doing so, attendance was viewed similarly as a necessity and responsibility.

I also noticed that none of the participants blamed the professors for their accented English. As Alex indicated before, they perceived the cause of their difficulty with accented English as they have rarely been exposed to it when they were in China. In other words, they were finding reasons in themselves, and their previous living/studying backgrounds than in the professors or their U.S. university. Edwin was the only participant who mentioned that it would be better if his professor could reduce his accent. However, it was not because doing so might reduce Edwin's difficulty, but because it may be a potential barrier for the professor to reach a broader audience. Edwin seemingly was making such a suggestion for the professor's own good.

Similarly, none of participants blamed the university for hiring professors with accents. Instead, they all agreed that if a university refused to hire a professor because of their accent, doing so would be discrimination. A more feasible way, as recommended by Diana, would be to introduce "accented English when students are learning English in China." Charlie added that it may not need to be introduced to every single Chinese student but would be beneficial for those who were planning to study/work abroad. Alex

also suggested such a solution, though in his opinion training or consulting agencies could provide the service of introducing accented English rather than schools.

"I Did Not Get Their Jokes and Cultural References"

Besides accents, jokes and cultural references presented another difficulty reported for participants during lectures. Fiona and Edwin provided two examples of such experiences. Fiona shared:

> Sometimes during afternoon or evening classes, the professor will tell some jokes during lectures. But I understand none of them. At the beginning, I asked my classmates to explain them to me, but I stopped doing such now. I feel tired [of about asking people to explain jokes to me].

Edwin similarly stated:

> Once the professor raised a real-life case as an example. It was about an athlete, and I had never heard of him. It seemed everyone understood the case immediately when the athlete's name came out, but I needed to read through the whole article to be able to grasp the key points. I think the professor intended to use this example to make his class more interesting, but unfortunately it was lost on me.

Other participants also mentioned that they could not understand the professors' jokes or cultural references while attending lectures, but could not provide specific examples.

In contrast to the accented English, which strongly impacted the participants' class experience, the issue of understanding jokes and cultural references was less bothersome. As Alex stated:

> Most of the time, I did not get [the jokes]. It didn't bother me though, because they were not related to the learning content. Why bother? I never asked people to explain them to me. I would rather use that 20 seconds to take a break.

Edwin also reported that if he could not get the cultural references immediately or as quick as his classmates, he could always Google them or spend time reading the description, stating, "It is bothersome, but not a big deal."

Outside of the classroom setting, jokes and cultural references also had an impact in labs, where students formed relationships with each other. As Diana explained:

> We used to have a visiting scholar, American, Caucasian. He was really active and wanted to make friends with all of us. He told jokes all the time. Unfortunately, most of my labmates were international students, and we understood none of his jokes. He was in our lab for about one month. He must have suffered because no one understood him. We suffered too; he tried so hard to make us happy, but we could not produce the desired reaction.

Harry similarly recounted:

> I was chatting with my classmates during a break. He told me a joke and I didn't get it. Then, I told a joke and he didn't get it. I felt embarrassment between us.

The participants' statements show that failing to understand cultural references and jokes impacts their relationships with their classmates/labmates. This was further evident in a statement by Ivy, who mentioned, "One of my labmates (American, Caucasian) said he would never get a Chinese girlfriend because she wouldn't understand his jokes." Other participants (Alex, Charlie, Harry, and Gary) did not perceive it as an issue, since their class or research requires nearly no interactions with other students, or

the participant was the only student in his/her advisor's lab. The failing to understand jokes and cultural references also impacted students' ability to understand their classes. However, in the eight participants' eyes, this issue was not as impactful in class as failing to understand accented English, as such did not prevent them from understanding the learning content.

Being unable to understand jokes and cultural references also appeared to be a barrier for the eight participants to forming relationships with host students as it impacted the students' relationships with peers. Participants perceive such as an unavoidable barrier as "we were growing up in different culture, watching different cartoon, listening to different music, and reading different news. All these helped us to build our database for 'terms of reference" (quotation from Alex). Ivy further added as "if there was a celebrity or a character we both knew, we may know it by their Chinese name (translated from English or some other language), and my host classmates may know it by its English name". Gary echoed Alex and Ivy, perceiving such as "a difficulty, which will not diminish as time pass by". Some participants reported they were trying to understand those jokes or cultural references at the beginning, as they were asking other students to explain them to them (reported by Diana, Edwin, and Fiona). Yet all participants reported that they had ultimately stopped doing so. Fiona said she was tired of doing so, since there are too many of them, and "once a joke is explained by somebody else, the humor is lost". Diana further added, "Even if someone explained it to me, I still cannot get it". As Edwin explained, this is common when the joke or the cultural references are riddles.

Since being unable to understand jokes and cultural references was perceived as an unavoidable barrier by participants, they did not think there is anything that could be done to solve it:

> The professor was using jokes and cultural references to make the classroom more active, so we should not ban him/her from doing so. Actually, the professor did reach his/her intention, as most host students understood those jokes and cultural references,

reported Diana. Ivy added,

> I know that [an inability to understand jokes and cultural references] was because we were growing up in a different culture, but I don't think introducing more Western culture to young Chinese children is a good idea. I may result in a loss of the Chinese culture in their lives,

Alex also suggested not addressing the issue at all. Actually, I think his words revealed why most participants did not take actions toward this difficulty as actively as other difficulties. Alex said,

> If it does not impact my study and research, I will not treat it seriously. Studying is the priority. Making friends can wait.

Future research could explore Chinese international EFL students' adjustment to U.S. culture in relation to understanding cultural references and jokes.

"Being Interrupted in a Presentation Is Horrible"

All eight participants considered delivering presentations to be very difficult for them. The participants reported that they could not "take care of logic and speaking at the same time" (by Alex). To address this, they would "practice the speech tons of times"

until they could “recite” the script and “say it without thinking” (quotation from Fiona) As a result, they became nervous if they were interrupted during their presentations, and panicked when asked questions, a situation for which they had not prepared. Though participants reported having difficulty giving presentations and feeling scared and nervous when their professors/classmates stopped them to ask a question, creating the presentation itself (e.g., searching for articles, designing handouts) was not difficult for the participants. Similarly, answering questions that they had prepared before was not a difficulty either. However, formulating responses in the moment in English was a major difficulty. Table 12 illustrates participants’ statements on this topic.

Table 12
Participants' Quotations for Super-Ordinate Theme #2 Emergent Theme #3

Participant	Quotations
Alex	"I can only focus on one thing, one thing at a time. When I focus on the logic, my English becomes weird. When I was focus on grammar, my logic sucks. When someone stops me while doing the presentation, and requires me to answer his question, I usually focus more on the logic side, because I want to make myself clear, and as a result, I speak poor English."
Charlie	"Sometimes, the interruption is really unnecessary. Once, a classmate interrupted me to ask a question, but I was just about to talk about it. It was on my next slide. Asking this question brings no benefits for the class, but arouses nerves in me. . . I was very nervous when he stopped me, but after he asked the question out, I was relieved. I prepared for that question [telling him that it was on my next slide]."
Diana	"I rehearse the presentation with our labmates. They will ask questions and provide feedback to me, so I will be more prepared. It is not a requirement, but [everyone in my lab] does it spontaneously."
Edwin	"Presentations are challenging, especially the Q&A stage. Sometimes people ask questions I have never thought of, so I need to think, construct my words, and speak it out. Although I majored in English, I still feel differences between me and native speakers. They do not need extra time to think. I mean, they can do the thinking and the speaking together, but I need time to construct sentences."
Fiona	"I need to practice tons of times before a presentation. I will make myself familiar with the scripts. I will think carefully about what questions the audience may ask me, and draft answers to those questions before the presentation. If someone asks me a question that is not on the slide, or I haven't think about it before the presentation, I became really nervous."

Gary	“I was trying to reduce my accent and produce grammatically correct sentences during the presentation. I can do such when presenting. But when people interrupt me, or when they ask me questions, I need to switch my attention to answering the questions, and I speak poor English.”
Harry	“Presentations were a huge barrier for me during my first year. I feel more confident about them now, because I have been talking about them so many times (my presentations are usually around my research). But still, I feel nervous when I’m interrupted by people and asked questions.”
Ivy	“Being interrupted is horrible! It is not a break of your presentation. It breaks your thoughts, your logical flow! I don’t know where I am, or where I am going to.”

By examining the interview transcripts and Table 12, I found most participants were and are still having issues with providing prompt answers to questions asked during presentations. Alex, Gary, and Edwin interpreted such as "We're not able to take care of logic and English as the same time", noticing differences between them and native speakers. Do they perceive the native speakers as unafraid of prompt questions then? In Gary's words, "Because they are good in English, they can always say something out, to fill that *gap time*". Edwin also mentioned that

> Native speakers can speak out his/her thinking process, then tell you the answer.
>
> But I need to focus on thinking, before an answer is reached.

Participants reported when they were giving presentations in China using Chinese, they never had had such a difficulty. I hence concluded that participants' inability to provide prompt answers was because of the fact that English was a foreign language to them.

Craig's (1999) listening and responding cycle further explains this issue, noting that second language users typically require a longer time to process received information and a longer time to construct responses compared to native speakers. There is a conflict between the need for an immediate answer (for the presentation audience) and the need for a longer reaction time (for the presenter). The participants hence felt scared and nervous when being asked unprepared questions (being deprived from their scripts). However, the need for immediate response may not be exclusive for U.S. classrooms. Participants explained it as "[It is) natural for people to expect an immediate response from the one he/she is speaking with." As a result, the participants rehearsed their presentations with labmates and "thought carefully about possible questions" before the

actual presentation (quotation from Diana). The participants tried to predict the questions they would be asked, so they would need a shorter time to construct an answer.

Although not mentioned by the participants, this issue seemingly relates to Chinese educational methods with respect to teaching English. In China, English is taught in a "teacher-centered textbook-analysis-based grammar-translation" pedagogy (Yang, 2000, p. 19), using a behaviorist approach. Students are trained to produce immediate translations between Chinese and English using memorization and mimicking. The participants' English learning experience echoed the literature. They reported being required to recite new words before each English class, which followed the grammar-translation method: the teacher explains the grammar to be learned with exemplary sentences, and students then practice it by creating similar sentences through replacing words (Starr, 2012). As a result, participants have had few chances to improvise their own sentences, only chances rather to mimic examples. This may explain why the participants could only focus on one thing at a time: without an opportunity to construct their own sentence, they could not articulate their own knowledge.

Classroom culture in my U.S. University

"My Classmates Do, but I Rarely Ask Questions During a Class"

All participants frequently mentioned issues they had regarding asking questions during lecture time. When participants were in China, their professors would ask them to "hold questions, and ask [questions] after class, when the professors had finished teaching today's lesson," often saying "I will stop after explaining, please wait until that

time" (quotations from Charlie and Fiona, which resembled descriptions by other participants). In contrast, in their U.S. classrooms, "the students ask questions whenever they want to" (quotation from Diana and Gary). "If [the students] have questions, they will stop the professor and ask," (by Ivy), sometimes even "interrupt the" (by Gary). Participants reported that they strongly disliked this tendency when they first arrived in the United States. They felt it was "impolite" and "disrespectful" to the professors and other classmates (quotation from Charlie and Diana, echoed by other participants). However, after 2 years of study, their thoughts have changed. This behavior became acceptable to them; they considered it "the U.S. way." As Gary stated:

> I found it is very common for a non-Chinese student to stop the professor to ask questions. It happens naturally. Neither my classmates (who are not from China) nor the professor express surprise when being stopped by a student.

Harry similarly stated:

> I was very shocked when I saw students interrupt the teacher during class time during my first semester, but now I am getting used to it. This is how the host students learn knowledge.

Though they have been immersed in such an atmosphere for 2 years, none of the participants reported following "the U.S. way (stop the professors to ask questions)". There were only two participants reported having begun to ask questions during class, and nearly half of the participants admitted that they rarely ask professors questions during or after class. This was not because they did not have questions, but because they were not used to asking questions in class, especially stopping teachers to ask questions. Table 13 illustrates participants' experiences in relation to asking questions.

Table 13

Participants' Quotations for Super-Ordinate Theme #3 Emergent Theme #1

Participant	Questioning method	Quotation
Alex	Haven't asked any	"My classmates ask stupid questions during class time. If I want to ask a question, I think before I open my mouth. I need to make sure the question is worth asking. Till now, I haven't asked any questions during or after class. I usually don't have any questions for the lectures. I have lots of questions while doing my own research though, and I will turn to my advisor for help, not the lecturers. But my classmates don't. I cannot say I dislike it. If they asked a stupid/simple question, I will use that time to have a rest."
Charlie	After class	"Yes, I ask the professors questions, but not during their class, usually after it. I won't stop the professor. First of all, I think it is impolite. Second, they may talk about it again later. If I still don't get it, I will ask the professor about it after class. Asking the professors is the most effective way, I think, because they are experts in this area. I am not used to asking questions during lecture time"
Diana	In class	"I was not doing that (asking question during lecture time) when I first arrived in the U.S. If I have a question, I will save it till the classes is finished. I will ask it to the professor when the class is finished. But now, I started to ask questions to the professor directly, during the class time. But I have never interrupted the professor to ask a question. I always wait till he/she stops. Sometimes, the professor will ask me if I have a question. I think it was because we have established eye contact, and they saw the confusion in my eyes. But most of my questions are 'stupid' questions, because I switch to a new research area."

Edwin	Haven't asked any	"For most of the time, I am able to understand the learning content. The professors will stop after finishing explaining a theory, and they will ask, 'Do you have any questions'? That is when people ask professors questions. Their questions are usually about what the professor has just explained, and the professor will explain it again in a different way, or with a detailed case. I don't think listening to these questions is a waste of time, even if I don't have difficulty understanding the theory. It is always good, or at least it doesn't hurt to listen to the professor's explanation again. Because the professors have been doing this, nearly all professors, if I still have questions, I think it could be due to me, not the professor. I would do more research about it at home."
Fiona	Haven't asked any	"I don't ask questions during class. It is because I think maybe I am the only person who has this question. It could be due to the fact that other students have learnt it before in their undergraduate [program], but I haven't. Or, it is because I didn't hear the professor clearly, especially when the professor has an accent. I usually look at the handout for a hint. If I still don't get it, I will do some research about it when I get home. I don't want to stop the professors; I think it is disrespectful. No matter how approachable and nice they are, they are still our teachers. Also, if I ask a question where everyone aside me knows the answer, I feel ashamed. It means I am not studying hard."
Gary	In class	"I started doing so after about one year, when I noticed everyone is asking questions during lecture time. I used to think it is inappropriate to ask questions during lecture time. If you asked a question, the professor would need to stop and explain it to you. This is a class, not personal tutoring. You are taking other people's time. But since it is a tradition here, I am going to follow it."
Harry	Haven't asked any	"First of all, I have never been able to understand the lecture completely, 100%. In most cases, if I understand the main content, details could be ignored. For instance, if I understand the method, but did not understand the case the professor raised, it doesn't matter. If I didn't understand the content, I will save it for myself, as homework. I just don't like asking questions during lecture time."
Ivy	Haven't asked any	"The class time is usually tight for me. There is usually lots of information. You have questions because you are thinking and reflecting on the content. However, I don't have time to think during lectures, I am busying acquiring the knowledge points."

Although participants provided many reasons for not raising questions during lecture time, their reasons for not stopping the professor to raise questions were the same: doing so is impolite and disrespectful. In Chinese educational methods, teachers are "the sage on stage" (Yang, 2000). Such a metaphor means, in the Chinese culture, teacher is perceived as an authority figure, Chinese students hence tend to remain silent during class and are afraid of asking questions (Parris-Kidd & Barnett, 2011; Wu, 2009). Participants echoed this belief, as they perceived stopping a professor to ask questions as "impolite" and "disrespectful" (quotations from Charlie, and Fiona). Besides words, participants also echoed such beliefs via body language. For example, when talking about himself or other students, Gary was looking at me, directly in the eyes; while talking about asking questions to the professors, when the word *professor* came out of his mouth, Gary raised his head a little bit, flipped his eyelids, and looked into the air. It was not a coincidence, as Ivy had the same facial expression. She also positioned her right hands higher when saying "the professors are here" and placed her left hand lower when saying "but we [the students] are here", thereby interpreting why she thought it was impolite to stop a professor to ask questions.

Three participants reported asking questions in and after class, and six participants who did not. The five participants provided various reasons for not doing so: they categorized questions into two types: A) I am confused because I did not understand the subject matter, and B) I have a thought that I want to share with the whole class. None of the participants have reported experience raising type B questions, and nearly all of them reported feeling hesitant when raising type A questions.

With respect to reasons for not raising type A questions, nearly all participants similarly thought, “Maybe I was the only student who had that question” (quotation from Fiona). Hence, they felt ashamed to raise it. In Edwin’s perception, this revealed his ignorance about the subject; and in Fiona’s eyes, it meant she had not studied hard in her undergraduate program. However, their classmates did not think so and sometimes asked “stupid” or “simple” type A questions. Alex and Ivy provided examples of such questions. Alex recounted:

> We were calculating an equation and the final result was 0.98. The professor then said, ‘It means 98% of this tissue is consisted by Ingredient X.’ One student stopped the professor and asked, ‘Why 98%? The result was 0.98, not 98%.’ . . . I don’t know how such a question could be asked from a graduate student. This is Grade 5 math! I feel sad for the student.

Ivy similarly reported:

> I was teaching undergraduate students about basic experiment skills [as a teaching assistant]. I was talking about sulfuric acid, and instead of ‘sulfuric acid’ I said ‘H_2SO_4’. Then, there were students asking me, ‘What is H_2SO_4’? . . . I was very shocked when the students asked me this, because for me this is very basic. Every student who has attended chemistry class should know it.

However, I found two participants, Diana and Gary, reported that they had begun asking type A questions during class time where they had not done so in China. It was because, in their U.S. classroom, they felt that “everyone is asking questions during lecture time” and it is “very natural” (quotations from Diana and Gary). They perceived such as beneficial because “your question gets solved in a timely manner” (Diana) and “it

is fast; questions got solved immediately" (quotation from Gary). Diana and Gary reported asking the teacher directly provided an appropriate way to address the issue of unknown and skipped content.

In prior sections, I discussed how the participants reported that when faced with the need to "catch up" or review unknown or skipped content, they researched it in their spare time. From the participants' experiences, it appears their host classmates preferred to ask the professor to explain or clarify any confusing points directly during lecture time, via type A questions. Instead, the participants who were hesitating to raise type A questions reported studying the content of these questions after class on their own. This highlights a difference between the participants and their classmates' learning styles.

However, to date, no research (which targeting on Chinese international graduate level students) has compared the effectiveness of the two methods (self-directed study vs. asking questions). Nevertheless, I found the results later showed that participants complained about the time they spent doing such extra study. I therefore thought that asking more questions during class time might help students reduce the amount of catch up work they might need to do after class, thereby reducing their course load.

The participants reported that good questions should be type B questions, which are constructive and creative. The participants reported that if they asked a question to the professor, they wanted it to be unique and creative. In participants' understanding, unique and creative questions were those addressing "a new research idea," "how we may combine this method and another method," and the "sharing of knowledge." (quotations from Alex, Charlie, and Gary). "It is a result of thinking and reflecting", concluded Ivy.

Still, as all participants regarded themselves as novice in their disciplines, they were not confident in raising such questions.

Another learning method, which was usually started by asking questioning, was in-class discussion. In *super-ordinate theme #1 emergent theme #2 "(before I left China) I was positive about the academic atmosphere/teaching styles in U.S. universities"*, Diana stated that her advisor was including discussions in his lectures. Diana expressed a fondness of it and was looking for it in the upcoming study. However, on the basis of their reported U.S. studying experience, I found they have nearly no experiences with in-class discussion, and participants reportedly learnt nearly nothing from their classmate's questions. The statements in Table 13, and examples raised by the participants in previous paragraphs, showed participants did not view their classmates' questions as creative or worthy of discussion. Edwin said his classmates would "ask the professor to explain [the point] again," and Alex regarded his classmates' questions as "simple." Other participants agreed that the questions asked by their classmates were very direct and had a correct answer. It was difficult for the professor to develop in-class discussion around questions students raised. Additionally, the participants reported that both their classmates and they asked their professors questions. They never helped the professor answer a question, and the professor never asked one of the students to answer a question raised by another student. Gary explained this, stating "because the student is asking the question to the professor, he is not asking me. If he asks me, I will be happy to answer it." Harry echoed this point: "The student wants to hear the answer from the professor, not other students." As the students were not answering questions raised by each other, the students may also have had difficulty forming in-class discussion.

“Group Projects Are Not for Me”

Three participants (Alex, Charlie, and Gary) reported having negative experiences in group projects (assigned as homework) and expressed their dislike of it. The other five participants either had not experienced group work or could not remember the experience. The three participants relayed that when being assigned a group project, they would divide it into separate tasks allocated to each group member, and everyone would finish their specific task. They would meet again 3 days prior to the deadline to assemble the project and submit it as a group. One person usually completed this latter task. Sometimes, the group would not meet in person but only via e-mail. Table 14 summarizes participants’ experiences with group work.

In the interviews, the participants complained about coordinating group members’ needs in relation to conflicts in scheduling and academic expectations. The three participants expressed that they would rather the professor assign individual work instead of a group project. Group work is an essential aspect of active/spontaneous learning that promotes the idea of learning from each other (Jacobs & Farrels, 2001). However, since the participants divided the whole project into several individual assignments, they did not experience the benefits of group work (learning from each other). As Alex reported, it was difficult for his group to find time to work together as each group member had conflicting schedules.

Table 14

Participants' Quotations for Super-Ordinate Theme #3 Emergent Theme #2

Participant	Quotation (translated by me from Mandarin Chinese)
Alex	"Because two group members need to work during daytime, it is very hard for us to arrange group meetings. Weekends seemed to be impossible too. I live near the university, and at that time, I don't have a car. Yet, they live really far from the university and have a family to take care of. As a result, we choose to divide the task, and everyone would be working individually. But if we do it this way, I don't think it needs to be a group assignment. It would be more convenient if it was assigned as an individual project."
Charlie	"Once, I was the group leader. I found one group member's work not so satisfying. I emailed him to ask why, and he said he was not aiming to be an A level student; he just wanted a B for that course. That was his last semester, and he was busy finding jobs. He spent most of his time on recruitment fairs and interviews. He said that was more important than spending time on studying, since for him, there was no difference between an A and a B. He has his own reasons, and I understand. I settled with him. I think we got a B+ or an A- for that project; I cannot remember clearly. I would rather do the project by myself."
Gary	"We divided the projects into individual parts, but we still want to meet before class to make sure we are on the same page. However, I am the only person who arrived on time. We set the meeting time as 15 minutes before class, and they were late by about 10 minutes. What can you discuss in five minutes? "

Alex's group members seemed to put their jobs and families before study, as evident in their excuses for not attending group meetings. Charlie similarly had a group member give priority to finding a job and obtaining A grades. Both Alex and Charlie expressed dissatisfaction toward their group members' behavior.

I hence asked the participants about their group working experience when they were in China, to see if there was any difference between their Chinese and U.S. experience. All eight participants, asides Edwin who was majored in a non-STEM discipline, reported having little experience with group work. From their memory, they

encountered similar difficulty as other students were aiming for A grades, and some were aiming for B grades. Actually, Gary and Harry revealed that they were one of those students who just wanted a B when they were in college. Gary explained,

> In the first year [of my college], I just wanted a B. I didn't want to study hard anymore. I had been studying hard for 12 years, aiming to succeed at the Chinese Gaokao. Since the Gaokao was over, I wanted to take a rest… but in my second year, I realised that I could not live like this. I felt awkward seeing those Bs on my transcripts.

Such an interpretation was echoed by Harry, as "I wanted a rest". When we were talking about group work, Alex admitted that his classmates who were not aiming for A grades, did not work hard for the project. Yet, Gary and Harry, who said they were not aiming for A grades either (at their first year of college), admitted that if it was a group project, they would work hard for it. As they explained, "It involves other people. I don't want people blaming me for 'dragging their legs'. Harry also echoed such a thought saying "I don't want to ruin other people's grades".

The participants also revealed that when they were in China, since classes were carried out at a large size (usually 30 to 100 students per class), they had the freedom to choose group members. As a result, A-grade students were working with A-grade students, and B-grade students were working with B-grade students. Participants also revealed that if a B-grade student wanted to work with A-grade students for a group project, they would work harder to fulfill their A-grade students' academic expectations. However, in their U.S. university, there are usually fewer than 30 students per class, and participants need to mix with other students for a group project. Participants were

working with students who have been obtaining A grades, as well as students who have not. Yet, by referring back to participants' experiences, as introduced in the previous paragraphs, they did not see students making extra effort in group projects.

By comparing their Chinese and U.S. experience in group work, I found that there were students aiming for B grades in both China and the U.S. Hence, different academic expectations should not be a cause for participants' cross-cultural experience regarding group work. However, students' attitudes and effort they put on group projects could be a cause. Participants words like "it involves other people" and "don't want to ruin other students' grades", in addition to their Chinese classmate's behavior in group work (putting more effort) all echoed with the Chinese collectivist culture, which emphasises group honor, interdependence, and relatedness (Cross, 1995; Yeh & Inose, 2003). However, when the participants came to the U.S., working with different people from different cultural backgrounds, collectivism may not be favored for everyone. However, the complaining was not generated among Chinese international students only, but also from a common complaint from many U.S. students. Hence, I cannot draw a definite conclusion. It could be clarified in a future research, interviewing Chinese and non-Chinese students working on the same group project. Questions could be generated around students' perceptions toward the project itself, and other group members' performance while conducting the project, paying attention to their own cultural backgrounds.

Chapter Summary

By analysing interview transcripts with the eight participants, I reached three super-ordinate themes: a) Mis-assumptions about studying at my U.S. university, b) Cultural English in my U.S. university, and c) Classroom culture in my U.S. university. Each super-ordinate theme has several emergent themes under it, which were cross-cultural experience reported by participants. The following paragraphs reprised each super-ordinate theme in detail.

In *super-ordinate theme #1, Mis-assumptions about studying at my U.S. university*, participants discussed their past education experience, what they were expecting to experience when they were in China, and their actual experience regarding Western teaching styles. They talked about the introduction of new subjects, the skipping of subject matters, and the assessment methods. The eight participants interpreted the cause of these cross-cultural experiences as differences between the Chinese and the U.S. teaching styles. By analysing their words and the literature, I found that the nature of their disciplines also played important roles: participants majoring in Science were experiencing more difficulties with the introduction of new subjects compared with participants majoring in Engineering, Technology, and Mathematics. Participants' solutions to these difficulties included spending more spare time on study, researching the skipped subject matter, and looking up newly published research findings.

In *super-ordinate theme #2, Cultural English in my U.S. university*, participants talked about their cross-cultural experience regarding English they learnt in China (home country), and English spoken in U.S. classrooms. Participants mentioned their difficulty in understanding accented English, jokes and cultural references, as well as providing prompt answers to questions being asked during presentations. Participants concluded the reason behind this as that they were less exposed to these situations when they were in China. Immersion was the adjustment strategy participants adopted toward accented English, and they perceived it as effective. They put less effort in understanding jokes and cultural references, since doing so created little impact on their study/research tasks. Providing prompt answers to questions during presentations was another cross-culture difficulty reported by participants. In the participants' opinion they have difficulties in providing answers to prompt questions was because they could not focus on both logic and English at the same time. Literature supporting their interpretation including the communication loop provided by Craig (1999), the attention capacity theory proposed by Kahneman (1975). It may also a result of the Chinese English teaching methods, as mimicking and translating was the primary focus for English teachers in China. Providing prompt answers was and still is a major difficulty for the eight participants.

In *super-ordinate theme #3, Classroom culture in my U.S. university,* participants revealed their experience in asking questions in class time, and completing group work with other students, in both China and the U.S. The perceived role of teachers and the collectivism were two major topics in this theme. The participants perceived teachers as authority figures and the source of knowledge, and they rarely reported having raised questions during class time when they were in China. Nevertheless, their host classmates

seemed to have a different perception, as participants found their host classmates commonly asking questions during class time; and they even stopped teachers to raise questions. After having studied in the U.S. for two years, two participants (Diana and Gary) started asking questions during class time, yet other participants still hesitate to do so. None of the participants have stopped a teacher to raise a question, and such behavior was disliked by the participants. The difference between their group work experience in China and in the U.S. was interpreted by the participants as a difference between the Chinese collectivism culture and the Western individualism culture. Here, I noticed that though participants have been making adjustments to U.S. classroom cultures, there are values that they did not or refuse to give up, such as perceiving teachers as authority figures.

While I was analysing the interview transcripts, I related participants' cross-cultural experience with current literature and research. However, there were also findings which contrast with the current literature, and even more that suggests future research for a further clarification. There were topics, which are noted in previous research, but were untouched by the participants (e.g. participating in discussion). In *Chapter VI Conclusion, Interpretations, and Recommendations*, I relay how I built connections between my data analysis and the review literature in an effort to reach conclusions. In the meantime, on the basis of the participants' suggestions, in this next chapter, I offer suggestions to schools in both China and the U.S. on how to promote a more positive studying experience for the participants, in the area of curriculum and instruction.

CHAPTER VI

CONCLUSION, INTERPRETATIONS, AND RECOMMENDATIONS

Overview of the Chapter

I conducted this qualitative research to understand how a group of eight Chinese international EFL students make meaning of their cross-culture experience emerged from their studying at a public U.S. university. I reviewed theories and research in culture-shock stages, acculturation difficulties, and the Chinese culture toward education. While reviewing research examining Chinese international students' acculturation difficulties in western universities, I organized their acculturation difficulties into five categories: a) English, b) education, c) social adjustment, d) stereotype type and discrimination, and e) life style. By analyzing interview transcripts, I identified three super-ordinate themes: a) Mis-assumptions about studying at my U.S. university, b) English (as a language) in Western classrooms/labs, and c) learning strategies in Western classrooms/labs. In this chapter, I related my data (interview transcripts) with literature I reviewed in Chapter III, and presented my own interpretations and conclusions. I also discussed my research implication in the area of curriculum and instruction, as well as research limitation, and direction for future research.

A Return to the Literature

Culture-shock stages went through by participants

By applying the culture-shock stage model suggested by Oberg (1958) and Adler (1975) to the eight participants' cross-cultural experience, I found that they skipped the honeymoon stage, and entered the distinction stage directly when school started. Yet,

they experienced the honeymoon stage when they were in China, as they have many mis-assumptions and expectations (I described it as a "pre-honeymoon stage in the following paragraphs"). By examining the transcripts, when participants discussed their first few months in the U.S., I heard numerous complaints. As they were talking about their recent study experiences, still, there were many complaints. Yet, when I asked them to recall their memories about how they felt and what they expected for the upcoming study/research provided in the U.S. university when they were still in China, I heard no criticisms or concerns, only appraise and positive attitudes.

By examining the interview transcripts, I found that the eight participants were in the distinction stage when school started. Furthermore, as time passed, participants' acculturation difficulties increased. This may be because they are experiencing more and more aspects of the U.S. academic culture. I divided their difficulties into three stages: a) at the beginning of their study, b) when the first half of their first semester has passed, and c) when they have signed contracts with advisors. I made such a distinction because they are the time points mentioned by participants specifically. On the basis of participants' interpretation, they were considered as significant because: a) everything is new to them when they firstly arrived in the U.S., b) they are more comfortable with "how English was spoken in U.S. classrooms" when the first half of their first semester has passes, and c) they have more research obligations when they have signed contracts with advisors.

Accented English, how students ask questions, jokes and culturally referenced cases, and professors' teaching methods were reported frequently by participants when talking about their initial culture-shock experience. Among these four difficulties, the

difficulty of understanding accented English was quite severe in the first few days, as the participants reported only being able to understand approximately 30% of the lecture during their first semester. Some participants (e.g., Heather) even reported having learnt nothing during the first class. However, the confusion and frustration caused by not being able to understand professors' accented English was diminished when participants were immersed in it after one semester, as the participants reported ultimately being able to understand about 70% to 80% of their professors. In other words, accented English was a huge shock for the new arrived students, yet the difficulty diminished over time.

Similarly, participants' shock caused by how host students asking professors questions seemingly dissipated. All eight participants expressed feeling shocked when they first saw their host classmates stopping professors to ask questions, as this would likely never happen in their Chinese classrooms. However, after studying in the U.S. university for more than one year, Diana and Gary have started doing the same thing. Diana and Gary explained it as because everyone else is doing so. Other participants (e.g. Charlie), though, have not asked questions during class time, also agreeing that asking the professors directly was an efficient way to solve questions emerging during class, and admitted they would do so if they encountered questions.

Unlike the above two, participants' difficulties with their professors' teaching styles (e.g. skipping of chapters and contents) did not diminish as time passed by, but has aggravated them as their study continues. As described in *Chapter V Results and Interpretation*, participants perceived the content difficult to understand because they were switched into a different research area. However, as they pursue their doctoral degrees, content, which assumedly was covered in undergraduate level courses, was

indeed not introduced. Because of financial restraints and time limits, participants did not choose to take some undergraduate level courses at the U.S. university. They chose instead to catch up via self-study: using their spare time to read textbooks and research articles. At that time, the time conflict between studying and spare time started to appear.

The inclusion of jokes and cultural referenced cases, though, was identified by the participants as a difficulty, though it was not perceived quite as serious as other acculturation difficulties. In the participants' perceptions, not being able to understand professors or labmates' jokes did not impact their study. For cultural reference cases, though, they reported that they were not able to provide reactions as quickly as their host classmates, though they felt they could figure out necessary details later (case from Edwin).

As time passed by—indeed, when the first half semester had passed—participants reported difficulties encountered when giving in-class presentations. Additionally, issues regarding the taking of exams also started to emerge. All eight participants said they were afraid of being stopped during presentations to answer unprepared questions. This was not because they had never been put on presentations or being stopped while giving presentations when they were in China. In actuality, all eight participants reported that a presentation was an assessment method adopted by their professors in China, and they were used to obtaining reasonable scores on such. They felt, instead, afraid because they were required to provide prompt answers to questions they had not prepared for, and those answers needed to be in English. As the participants explained, it was because "I can only focus on one thing at a time" (by Alex). The root of this problem may be traced back to the English teaching method adopted by the Chinese government. Both previous

research and the eight participants reported that they were required to mimic the exemplary sentences during their English class, and rarely given chances to construct their own sentences (Shih, 1999; Starr, 2012; Jacobs & Farrels, 2001). The eight participants hence felt difficulty in constructing prompt answers during presentations, because there were no exemplary sentences they could refer to. Their difficulty, as reported by the participants, was not because they did not know the answer to the questions. Their difficulty was because they could not find the most appropriate words to express themselves in a timely manner. Although some participants reported that they felt more confident about doing presentations and answering questions now (e.g. Heather), the reason behind such was because they had been talking about the content (their research topic) so many times. In other words, it was not because they now felt more confident about providing prompt answers to unprepared questions, but because there ultimately were fewer unprepared questions. As a result, I think such a difficulty could occur again, if the participants were assigned different presentation topics.

Participants reported solving this issue by rehearsing the presentation with their class/labmates, letting them ask questions so they could be more prepared. However, this did not solve the root of their difficulty, as it was not because they did not know the answers, but because they felt they could not construct answers with the most appropriate words in a timely manner. The participants' solution was to memories how they answered questions during the rehearsals, as if the same question might appear during the actual presentation. If such occurred, they could just recite these answers.

Obtaining excellent scores on exams was another cross-cultural experience reported by the eight participants, and they reported it in a complaining manner, as well.

Participants reported that they were shocked when taking exams because the "textbook was no longer the only reference to the exams", and "most exam questions could not be solved by simple memorization" (quotation from Gary and Ivy). These comments hence led to two results: a) participants needing to spend some of their spare time on researching and acquiring extra knowledge to prepare for exams, and b) participants needing to promote their ability in applying the learning content to their own experiments, providing their own opinions. Although the first also requires participants to use their spare time to do research, it was not the same as what I discussed in "*A lot of subject matters are skipped*" (a difficulty participants encountered when they were attending classes at the first time), because participants were using their spare time to do research in order to catch up with other students who have learnt the skipped content before. Still, while preparing for exams, the participants were researching the latest research results and development, which were new to both themselves, and their classmates, and perhaps even their professors. In other words, their research task was augmented because they needed to research a) what they should know before (the skipped the content), and b) what is happening within their discipline now (as it might appear on the exam). The augment of study/research seems to be common at the level of graduate study, as graduate level courses promote students to producing knowledge rather than just consuming it.

The second requirement for the participants exams (applying the learning content and providing own opinion) was not a complaint registered by the participants intensively. They instead complained about applying the learning content to their experiments because they needed to spend time collecting information about what other

scholars have been doing before, since the professors would only introduce the learning content in general. Again, participants argued that this caused a time conflict between studying and spare time. Providing personal opinion was mentioned as an examining method, though this complaint was never registered by the eight participants. It was, in fact, one of the few items participants gave praise for with respect to their U.S. university. For such a question, there were usually no standard answers. Therefore, participants could write freely to express their own opinion, as there was no right and wrong answer. Seemingly difficulties caused by taking exams became alleviated or even disappeared when participants finished their course work, probably at the end of year two. However, the requirement for them to do personal research would not disappear, as there seemingly always were new experimental methods emerging, and always new research results published. Participants said they needed to be alert to such news, so they might be able to conduct and correct their research and catch up with the latest trends.

During their second year, when participants had signed contracts with their advisors, they were required to fulfill research tasks. At that time, the time conflict between their study, research, and their spare time became even more severe. As participants, they may need to stay in the clean room for hours to assemble a cell, or go back to the labs frequently (including weekends) to check the status of a tissue (examples provided by Charlie and Ivy). Participants' culture-shock stages and acculturation difficulties emerged in each stage are presented in Figure 3.

Figure 3: Participants' acculturation difficulties in each culture shock stage

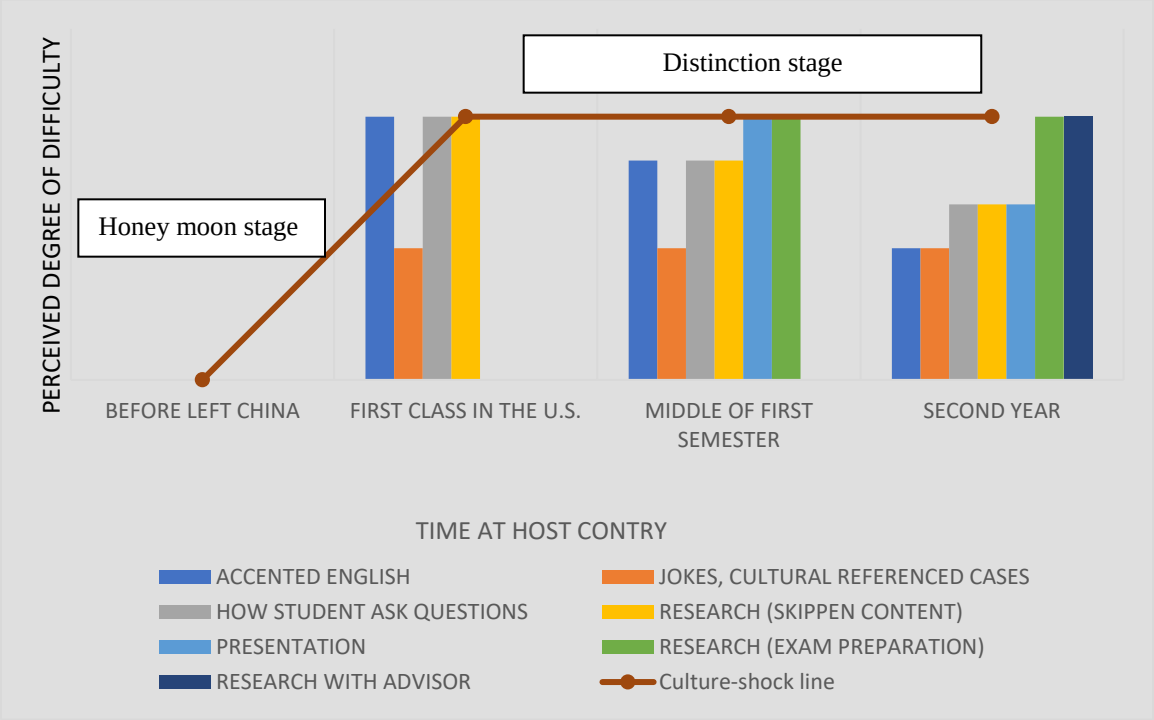


Figure 3 was composed, on the basis of interviews with the eight participants. It summarizes the above analysis into a figure, including the entering time of each acculturation difficulty, and how they change as time passed by. There was no culture-shock nor anticipated acculturation difficulties when participants where in China. When attending their first class at the U.S. university, they were shocked by a) professors' accented English, b) the including of jokes and cultural referenced cases, c) how students ask questions during class time, and d) the way professors teach classes (skipping learning content). As time passes by, when the first half of their first semester has finished, they start getting used to the professors' accented English, and the way host students ask questions during class time. Since they have been researching and reading during their spare time, they seem to be catching up with the background knowledge, so

less time is spent on researching skipped learning content. However, as assignments and exams approach, difficulties in providing prompt answers in English during presentations and preparing for exams started to emerge. In the second year, as participants have been immersed in English for a year, their difficulty with understanding accented English continued decreases. Since they have been attending class for a year, they were also get used to the way host students ask questions, the perceived difficulty and shock hence decreases. Two participants reported they were asking questions in class just like their host classmates. Difficulty with the skipping of learning content decreases as well, yet not to the degree as the decreasing in difficulty with accented English (there was a larger decreasing in difficulty with accented English). As participants enrolled in new courses, their research continued. The difficulty of providing prompt answers in English during presentations decreased as well, as participants have been talking about the same presentation topic for more than a year. Difficulty with understanding jokes and cultural referenced cases remained the same among all stages, as none of the participants reported either an increase nor a decrease in it. Additionally, as none of the participants reported that they now spend less time preparing for exams, it remained the same. Besides, as introduced before, research tasks (with advisors) started to take participants' time once they have signed contracts with advisors.

From Figure 3, I found that four acculturation difficulties were decreasing as time passed by, yet teachers and universities should not use it as an excuse for not making any changes. In other words, it should not be wrongly interpreted as "we do not need to do anything; the participants' difficulties will diminish automatically as time passes by". In Chapter II, I reviewed the internal demand of academic excellence in the Chinese culture,

the academic performance of Chinese students in two world-wide tests, and how they were perceived as not having any problems because of their excellence at all level of education. The participants together revealed that Chinese international students' difficulties were not diminished automatically, but because they were fighting hard to reduce it, in their own way, with strong determination.

In this research, the eight participants chose to force themselves to attend every single class conducted by professors with accents, even if they felt "tired", "bored", or as if they were "learning nothing". They were not complaining to the professors or the universities about the accented English. They chose to solve the problem themselves via immersion. This was actually an effective way, as participants who reported only being able to understand approximately 20-30% of the professor were able to understand about 80% of the professor by the time the semester was finished.

However, there are still strategies teachers can apply to help them to make the process less painful. As the participants said, schools cannot and should not only recruit professors who speak with a mild accent, as doing so would not only cause discrimination toward professors and be a loss of valuable academic sources. It would also not be appropriate to recommend schools in China to teach students to learn accented English. However, schools in China may let the students know that, aside from "an American accent", there are also other types of English (World Englishes). World English refers to how English is used in other countries of the world, aside the traditional base of English (Britain, Ireland, and their colonies), which could be a result of colonization (Brutt-Griffler, 2002). By including World Englishes to ESL pronunciation and listening, students may at least be more aware of not only other accents, but also how

English is used in other countries (or regions) of the world. For instance, Chinese English teachers could introduce or explain how an English word could be pronounced differently in different regions with different accents, followed by audio recordings. Students hence could have been more aware of different Englishes before they left China.

As Edwin reported that he was watching the MOOCs before came to the U.S., U.S. universities may also consider recording some MOOCs with professors who speak with accents other than "an American accent", so students are less shocked when hearing them at their first class. Per the participants' experience, accented English seemingly was solved by immersion. Participants perceived the difficulty because they had not been exposed to accented English when they were in China, and it was not mentioned by their English teachers. Hence, if they had been exposed to it more often before coming to the U.S., their degree of shocking might be reduced.

Acculturation Difficulties Reported by Participants

In the literature review section, I categorized Chinese international EFL students' cross-cultural experiences and their acculturation difficulties into five categories: education, English, social adjustment, stereotypes and discrimination, and lifestyle. As I interpreted in *Chapter III Research Methods* and *Chapter IV Data Analysis*, I resisted the temptation to ask participants directly "How is your cross-cultural experience in these five categories", some of them were untouched by the eight participants. Not mentioning some issues could be a result of: a) participants have not experienced that category yet, or b) they did not consider that category as a difficulty. Because I restricted my participants into "*first or second year, doctoral Chinese international students studying for STEM majors*", research results generated from research targeting on a different group of

students may not be seeing on my participants. Nevertheless, among these five categories, I found Education and English mentioned by the eight participants the most.

Education

In the literature, most research concluded that Chinese international students have been experiencing difficulty in adjusting to methods generally adopted at U.S. universities, which promote student engagement and active learning (Gu, 2008; Wu, 2009; Kingston & Heather, 2008). Chinese international students were usually described as reluctant to participate in class activities and discussions in the examined literature (e.g. Ruble & Zhang, 2013; Bartlett & Karin, 2011), and the reason behind was concluded as they were not used to such an educational method when they were in China. Yet, in this research, such a difficulty was not mentioned, as the eight participants reported that they hardly had any experience in in-class activities and discussions. They reported that most of their classes were carried out in lecture formats (much as their Chinese schools are), and it was hard to promote discussions since most of questions asked were direct, each having a definite answer (e.g. ask the professor to explain the theory again).

However, this does not mean participants did not have acculturation difficulty with pedagogical methods at U.S. universities. Besides in-class activity and discussion, another key aspect of Western educational methods, as proposed by Jacobs & Farrels (2001) was active learning. Active learning required students to study actively and spontaneously, by themselves, or via group work.

All eight participants reported that their current courses required them to do active learning, and I first thought active learning was a severe acculturation difficulty for the participants. However, after both rounds of interviews were finished, I found it was not the pedagogical method, but the design of the curriculum that caused the participants some suffering. As reported by participants, professors in their U.S. university were no longer providing detailed descriptions about every single subject matter. The participants hence needed to spend extra time studying skipped content in order to catch up. In addition, as professors now asked them "how to" questions in their exams, participants needed to spend time reading journal articles about how other scholars have been applying these theories and methods into their disciplines, in a specific research field. They also needed to be aware of the recent developments in their research field and the industry, as reference to such may appear in the exam questions. It should be mentioned that the participants never mentioned difficulties they had in applying spontaneous learning, like finding information, reading journal articles, or constructing their own ideas. They complained, instead, about the limitations they had for accomplishing such. In other words, the conflict lies between the amount of time participants need for spontaneous learning and the amount of time participants actually have by following the current curriculum. The reason behind I think was because graduate level courses requires students to produce not consume knowledge. In other words, curricular and pedagogical practices now existing in multiple spaces, not only inside but also outside the classrooms and labs. However, in the current literature, for research targeting on a similar participant, such a conflict has not seemingly been examined.

However, spontaneous learning does not necessarily mean bringing the questions home and studying on one's own. Learning from other students and the professors was also an important element. Nevertheless, all eight participants were not asking questions to professors actively during their first semester, and they admitted they hardly learnt anything from their classmates (from questions they asked, and from their groupwork experience). Participants explained it from two angles. Firstly, they were not used to doing so when they were in China, since their teachers required them to remain seated and silent during lectures. Secondly, it was because they thought good questions should be questions which promote further reflection or open a forum for further discussion. They felt ashamed asking simple questions, which to them have a definite answer. Both points were mentioned in previous literature (e.g. Zhang, 2016; Wu, 2009). Such a behavior leads to three results. First, it increases students' course load, as they bring the questions back home and need to study on their own after class. Secondly, remaining silent in class at all times creates an impression to professors and other classmates that the participants are introverted, shy, reluctant or unable to participate in class, a finding echoed in previous literature (e.g. Turner Y., 2013; Wu, 2009; Robertson, Line, Jones, & Thomas, 2000; Zhao & Bourne, 2011). Thirdly, as mentioned by many other authors (e.g. Ho & Jackson, 2001; Lee, 1996; Lee & Joo, 2005; Ruble & Zhang, 2013), it provides a false façade to the university that the participants do not have any questions in their study. The professors hence do not need to or do not know how to adjust their teaching style in an effort to satisfy students' needs. Such a false façade might be very hard to break. Considering participants perceive school's faculties as authority figures, they may hesitate to share their true feelings with them because of the power distance.

Participants also reported their experiences with group work (in the format of assignment) as unpleasant. As they reported, they would rather make it an individual assignment. Their difficulty with group work was not because the work itself was difficult, but rather because they found they had different academic goals from their classmates. As described in *Chapter V Results and Interpretation*, the eight participants perceived academic excellence as a primary goal, yet some of their group members seemingly had different priorities (e.g., job interviews, family obligations). The different perception toward education could be caused by differences in their background culture, since the eight participants reported having pleasant group work experience when they were in China, working with their Chinese classmates, where everyone was aiming for the same A grades (a possible result of collectivism and homogeneity).

The Chinese passive learning method, which was described by Freire (2000) as a banking education method, though in contrast to participants' U.S. university's active learning method, was not complained by participants. Banking education was first introduced by Freire in the book *Pedagogical of the Oppressed*, following such a method, students were perceived as empty bank account waiting to be fulfilled (Freire, 2000). According to Freire (2000), banking education was adopted as a form of oppression and a political/ ideological tactic, and according to Apple (2014), it was used to deliver "official knowledge". It indeed echoed with my participants' past educational experience in China, and they also admitted perceiving themselves as "naive" comparing with the teachers, who were perceived as "sage on stage". However, though participants expressed a fond of the Western active learning method, none of them complained about the Chinese passive learning method. From their perceptions, schools in China have to adopt

the passive learning method, especially in K12 and undergraduate courses, because there were too many students, passive learning may help the teacher to reach a larger amount of audience compare with active learning. I personally also perceive the adoption of passive learning as a result of the test-driven teaching/learning method adopted in China. Because in China, students' performances are presented in test scores, it would be very important to teach students about knowledge, which would help them to pass the exams. Yet, once the biggest exam in a Chinese student's life has passed, which is the college entrance exam, schools may consider move gradually to the active learning method, especially for graduate level courses. Firstly, it was because at graduate level, classes are usually carried at a smaller size compare with undergraduate level and K12 courses. Secondly, since Chinese student have long been learning what was required to learn (the "official knowledge"), it should be the time for them to pursue personal interests.

Other aspects in acculturation difficulties in the category of Education—including participating in in-class activities, the presenting of an introverted personality (from other people's description), and a tendency of depending on others—were not discussed by the eight participants. However, this result does not necessarily mean they were not a difficulty for other Chinese international EFL students. They could be areas of further studies with a different group of participants.

Language

My research results aligned with previous research (e.g. Brown, 1998, Huang J., 2004, 2005, 2006) indicating that using English in academic settings is a major barrier for Chinese international EFL students, especially in the area of academic listening, and provide prompt answers to questions. Participants reported professors' accents as a major

barrier for them, and they particularly named Indian, Russian, European, Japanese, and Korean accents. The including of jokes and culturally referenced terms was also reported, yet perceived as less threatening by the participants, since failure to understand jokes or culturally referenced terms usually did not impede the participants from understanding the lecture. Providing prompted answers during presentations was especially mentioned by participants as an acculturation difficulty, and they felt scared and horrible when professors or classmates stopped them to ask questions. Participants pointed toward such difficulties into two areas: a) they were not trained for such when they were in China, and b) they need more time to think before opening their mouths to speak. Such conclusions also echoed the reviewed literature regarding teaching materials and pedagogical methods adopted by Chinese college English teachers, and the communication model proposed by Craig (1999).

As introduced in the literature review section, the CCE textbook is one of the most commonly adopted English textbooks in colleges in China, and Chinese schools have long been adopting the behaviorist approach toward English as a Foreign Language education (Tang, 2014; Shih, 1999; Starr, 2012; Jacobs & Farrels, 2001). By interviewing the participants, they confirmed that they were using the CCE textbook; and via their description of their English classes, I also considered behaviorist approach was the pedagogical approach adopted by their English teachers. As suggested by the literature, participants' use of English remained at a superficial level, and they were not aware of how English was spoken in real-life settings, with different accents, speeds, and pitches. The emphasis on reproducing sentences, mimicking, and rote memorization (Shih, 1999; Starr, 2012; Jacobs & Farrels, 2001) also explained why participants were having trouble

providing prompt answers: there was no exemplary sentences for them to mimic; they found they need to construct language their own. Also, as further suggested by Craig (1990), people would need longer to react to questions and construct answers while speaking a second or a foreign language. This was also mentioned by the participants, as cannot taking care of logic (the answer) and the language (e.g. grammar, choice of words, accents) at the same time.

The acculturation of time might help to reduce such a difficulty. As suggested by Cummins (1981), when being fully immersed in an English only environment, it would usually take a ESL speaker about two years to gain conversational fluency in everyday situation, and another three years to catch up with native speakers in the academic area. However, it would be very hard for me to verify Cummins's findings because not all of my participants are immersed in an English only environment. Participants' courses are taught in English, but they have Chinese labmates and professors who can speak Chinese with them after class.

Other barriers in English, like difficulties encountered while participating in discussions, was not mentioned by participants. Once possible reason could be that participants rarely have any in-class discussion experience, so such a difficulty was not exposed yet. Still, one can certainly expect this to occur when students started attending and presenting at conferences, while discussing with other scholars about their research findings. The overwhelmedness of English was not mentioned by participants either. Such may be due to either a) not being difficulty for the participants considering their academic abilities or b) not being a difficulty for STEM majors, as the nature of their disciplines requires fewer words descriptions and more equations, tables, and figures.

Inquiry into this dynamic could be an area for future research, comparing the experiences of STEM majors and non-STEM majors, considering the nature of their disciplines as a variable, which influences their cross-cultural experience and acculturation difficulties.

Aspects not mentioned by participants

Among the five aspects I identified from previous literature, regarding Chinese international EFL students' cross-cultural experience and acculturation difficulties, three of them were not mentioned by participants directly: social adjustments, racial discrimination and stereotypes, and lifestyle. However, they were touched on by participants while speaking of other topics.

By examining participants' attitude toward academic excellence, a concept, which was regularly mentioned in the literature (e.g. Lee S. J., 1996; Alva, 1993; Nakanishi, 1995), participants' interview transcripts revealed why experience and difficulties in social adjustment and life was less important to participants: in academic settings, these two aspects have little direct influence on their academic performance. Their experiences of interacting with host students were touched on by participants when they were talking about their difficulty in understanding host professors and students' jokes and cultural referenced terms, not in terms of how difficult it was for them to initiate friendships with other students. Participant Diana emphasized that her being "unable to understand my labmates' jokes [did] not impact our professional relationship". The words *professional relationship* revealed that she was not looking for friendships with her labmates, as she further explained that she "was primarily aiming [her] learning from them, not playing with them".

Another possible reason was that most research examining international EFL students' experience in social adjustment did not distinguish research settings (e.g. Poyrazli, et al., 2002; Sawir, et al.s, 2008). As I focused on participants' cross-cultural experiences emerging in academic settings only (e.g. classrooms, labs), it could be overshadowed by other stressors. A future research direction could hence be how difficulties would have emerged in non-academic settings affecting participants' studying experience.

For negative racial discrimination and stereotypes, I am glad that none of those issues appeared in the interview transcripts, as participants perceived themselves as being treated equally with their classmates. However, from reflections and suggestions provided by participant Fiona and Ivy, I noticed that they were looking for a positive discrimination toward international EFL students, to achieve student equity. The two participants wished the university to reduce coursework for them for their first semester, when they were new to the environment, and needed more time than the host students to adjustment. They were asking for a different treatment from the host students, which is reasonable considering they were facing a different situation. Because Chinese international students, were at a disadvantaged level compare with the host students, in the area of host language proficiency, and familiarities with the Western active learning methods, the university may not provide "equal" treatment to all students. As treating everyone the same way though ensured classroom equality, yet ignored students' individual differences, which seemly implies that some students' needs were over looked. My suggestions to teachers and curriculum workers regarding how to solve conflicts

between participants study/research tasks and time available also echoed with such an idea.

Since this research focused on academic settings, it is hard to relate what was discussed in the literature to participants' experience. However, by examining stories they mentioned while complaining about the limited amount of time they have and the large amount of study/research task they have, I do not think there is a large amount of time left for them as spare time. Again, this is a topic worth studying, and by comparing their lifestyle and learning strategy in China and in the U.S., new findings are expected to be generated.

Participants' perceptions toward Teacher and Academic Excellence

As the literature suggested, the demands of academic excellence, as well as the belief that teachers have a definite power over students, are deeply rooted in the Chinese culture (Yan and Berliner, 2009; Weinberg, 1997; Parris-Kidd & Barnett, 2011; Wu, 2009). These beliefs were also reflected in participants' stories. Firstly, difficulties encountered during study and research were mentioned the most by participants. Also, while talking about why being unable to understand professors and class/labmates' jokes and cultural referenced terms did not really bother them, they explained such as "it will not affect my understanding the learning content". Furthermore, participants all reported that interrupting professors or classmates to raise a question is impolite. Such a phenomenon was also referred in Flowerdew (1998) and Kennedy's (2002) research, as questioning or interrupting colleagues and teachers was perceived as disrespectful by both of their participants.

The pursuit for academic excellence and viewing teachers as authority figures is an aspect of the home culture they would not like to give up, while adjusting to the U.S. Firstly, while talking about their group work experiences, participants reported that they were aiming to obtain an A for the assignment, though some of their group members did not similarly do so. Secondly, though some participants have started to raise questions during lecture times, they all admitted they would never stop others to raise questions. Thirdly, all participants expressed a firm belief in chasing academic excellence, and the respect to teachers among all interviews.

I also found that though my participants are holding such cultural beliefs while studying in the U.S., they did not force their classmates who are not Chinese to follow their beliefs. They complained about their group members and classmates, though they did not require them to change their behavior. They did not report experiences that their group members and classmates wanted them to change their behavior, either. This contrasts with the literature (for example, Smith & Khawaja, 2011), as usually, the newcomer would expect the host to accept his/her home culture, while the host wants the newcomer to integrate into the host culture. Nevertheless, I think it may only happen when the newcomer and the host are having more interactions. In the case of my participants, I expected to see such happening between them and their non-Chinese advisors. However, since most participants have just signed contracts with their advisors, and most of their advisors are Chinese, such a topic has not been raised.

Suggestions to Teachers and Curriculum Workers

By relating the research results, suggestions made by participants, and the current literature, I proposed the following recommendations to college teachers and curriculum workers, who have international students in their classes. However, it is worth emphasizing that the following suggestions are made primarily on the basis of results with a group of eight Chinese international EFL students pursuing their doctoral degrees in STEM disciplines. In other words, these suggestions may not be appropriate for undergraduate level courses or students from non-STEM disciplines.

Solve conflicts between study/research tasks and time available

Firstly, a detailed examination of participants' curriculum needs to be performed, including the availability of courses, and the requirements of each course. As reported by the participants, they felt that they needed to study and do research (including lab research and extra research for course content) for each of their classes. Studying and researching was not a barrier for them, yet they did not have sufficient time to spend on such, considering their course load and the research task. For graduate level studies, curricular and pedagogical spaces usually exist not just in the classroom, but also in many places outside the classroom as well, suggesting a focus on producing knowledge rather than just consuming it. Reduced course loads (taking less than nine graduate credits) would not be an option for the participants in this study, or any international students, as they were required to be enrolled in a minimum of nine graduate credits. Yet, the university may examine its course rotations and provide students more course options.

For instance, if difficulty of a course could be ranked from one to five, while one means very easy and five means very difficult, the university could provide students with two level one courses, two level three courses, and two level five courses each semester. Though students still need to take three courses, because they have more options, they can take one level five, one level three, and one level one. Yet, currently, because their choices are limited for some semesters, they may have to take three level five courses a semester. The university could also provide some workshops or extracurricular activities about how to perform study/research tasks more effectively for graduate level studies. Each school or depart can also host weekly coffee hours, providing students with free beverage and light food. The idea is to help students to relax and talk with each other. Weekly coffee hours may also help students to be more aware of world Englishes, since they would be meeting and talking with students from other countries.

In conclusion, to solve conflict between the study time requirement for each course and the limited amount of time left for the participants, I made three suggestions. Firstly, the university could take an exam in students' curricula. Secondly, the university could provide students with workshops or extracurricular activities to help to improve their study and research tasks. Thirdly, the university could host activities to help students to relax from their daily study/research tasks.

Avoid the Expert Blind Spot While Teaching

As reported by the participants, their U.S. professors sometimes assume the previous experience with some subjects that students initially sign up for. Indeed, their complaint is that professors often skip important subject matter. According to the participants, their professors made two false assumption about the students. Firstly, they

failed to recognize the possible difference between the undergraduate curriculum in schools in the U.S., and in schools in China. There hence could be subject matter, which was introduced in the U.S. curriculum but not in the Chinese curriculum. Secondly, professors may fail to recognize differences among students' backgrounds. For example, doctoral courses in bio-chemistry are taken by students majoring in biology, chemistry, and bio-chemistry. What is obvious to biology students may appear to be obscured to the rest. Hence, if the professors majored in biology themselves, they may fail to recognize students' difficulties in understanding the course content. The students reported that such assumptions seemingly caused great difficulty, especially for the four majoring in Science disciplines.

Since there are many Chinese international students in participants' university, and many professors who have been teaching Chinese international students in this university for years, the university could do a curriculum mapping to find out the overlapping between the Chinese and the U.S. curriculum, as well as what the missing parts are. On the basis of the result of curriculum mapping, professors would be more aware of participants' individual differences, thereby teaching accordingly. For example, if the majority of a bio-chemistry class consisted of chemistry students, the professor may skip some subject matters—that which was taught in undergraduate level chemistry courses—while not skipping too much biology-specific subject matter. Furthermore, the professor could make stops between chapters and ask students "Did I express myself clearly?" to ensure all students (both the participants and the host students) are on the same page.

Besides the above informative assessment, formative assessment might also help participants to better adjust to the U.S. classrooms and teachers. Example of forma assessment could be asking students to answer questions such as “what did you learn from this class?”, “how can the teacher better assist you in the next class?”. Formative assessment does not need to be carried out at the end of a semester, but perhaps at the end of each class, so the teacher can adjust his/her teaching style in time. Students could write their answers on a piece of paper, or via emails, but it should be anonymous. Yet student might still be unwilling to participants considering a possible or a revealing of personal identify. Also, because Chinese students perceived teachers as authority figures, they may afraid of telling their true feeling, especially at the first few classes, when trust between the students and the teachers has not been built.

Speaking, Not Learning English

On the basis of the above analysis of participants’ difficulties with using English in Western classrooms, I found that the majority of issues described referred to students’ previous English learning experiences in China. I hence want to recommend that their English teachers in China reassess and perhaps change teaching methods. Students should be given the chance to open their mouths to actually practice improvising English words, rather than sitting in their seats to learn the texts.

As previous literature has suggested, most Chinese international EFL students feel more confident in their reading and writing skills, and less confident in listening and speaking (Huang, J. 2006). Their English proficiency could be vividly described as “dumb English”, which means they are able to read, to write, and to understand words,

but are unable to produce many of their own. Indeed, such difficulty may not be overcome in a short time period. In fact, seemingly issues point to how Chinese teachers have been teaching students to use English: to pass state-sponsored exams.

I hence want to make my recommendations with a series of *if*s. If the participants' English teachers, from primary school to college, had included oral English practice in their curricula, thereby providing students chances to use what they have learnt from the textbooks, the participants might not feel so scared when questioned. If their schools in China had included authentic English materials other than the textbook (e.g. pop music, film clips, advertisements) (e.g. Sari, 2016; Liu, 2016; Dharanya, 2018) as teaching materials occasionally, participants might not have experiences such a degree of culture shock regarding how English is spoken in real-life settings. Also, if the participants' schools had included native speakers (who are trained teachers, and experience with EFL teaching is preferred) in the teaching teams, participants would be more familiar with the language environment when attending classes in the U.S. If participants' colleges or training agencies had provided them with MOOCs for their disciplines, they might have been more familiar with subject-specific terminology, as well as the Western teaching styles. Still, none of these notions were evident in the participants' narratives. As a result, participants, as well as professors in U.S. universities, would have to accomplish what was not done by Chinese English teachers earlier in the participants' English learning careers.

Questions for Future Research

By examining my research, as well as applying the results to the current literature, I propose the following research questions in future research:

1. How do Chinese international EFL non-STEM major doctoral students make meaning of their cross-culture studying experiences and acculturation?
2. How do Chinese international EFL STEM and non-STEM major students studying at the same university have differences and similarities regarding their cross-culture experiences and acculturation?
3. How would the nature of disciplines influence the choice of pedagogical methods for college teachers?
4. How would cross-culture experiences be emerging in non-academic settings influence Chinese international EFL students' academic performance?
5. How might Chinese values regarding academic excellence and perceptions toward teachers affect Chinese international EFL students' relationships with their non-Chinese advisors?

Research Limitation

In this qualitative case study research, I conducted semi-structured interviews with eight participants in the Spring 2018 semester. I examined their self-reported cross-cultural experiences and acculturation difficulties and provided corresponding suggestions in the area of curriculum and instruction. However, the result of this study, together with the suggestions, were generated on the basis of my participants' own

experiences [at one specific location]. Hence, these results may not be generalized to other students. As the literature suggests (e.g. Maxwell, 2005,; Creswell, 1998,; Manen, 1990), generalization is not the primary goal for a qualitative study. Because of differences in educational backgrounds, current majors, level of study, another group of participants could provide different stories and different interpretations of their stories. Furthermore, since qualitative aimed to present a snapshot of the current, research taken at a different time may also have different conclusions. To conclude, this research did not make generalizations of other Chinese international EFL student pursuing degrees in the U.S.; thus, it cannot predict their future experience either.

Conclusion

Looking back at my personal story: my cross-cultural experiences and acculturation difficulties while I was pursuing my degree at the same U.S. university, I found a large degree of overlap between my difficulties and those of the participants. Still, my story happened five years ago, and I am very sad to see not much has changed: both of the participants and I had the rosy dream of studying abroad before we left China, yet all of us were beaten by reality upon arrival in the very first class. We were unable to understand the professors, though we had been learning English since primary school second grade. We felt lost when professors and classmates started talking about culturally referenced terms or jokes, though we could understand every single word being said. We were shocked when fellow students stopped professors to raise their own question, as we had never seen such through all our lives.

China has been the country sending the greatest number of international students to U.S. universities, especially for STEM disciplines at graduate levels. There is also a great deal of research, including corresponding theories, investigating Chinese international EFL students' studying abroad experiences. However, by relating my past stories to the participants' current cross-cultural and acculturation experiences, I found that the research and the accompanying theories remained with the papers within the scholars' world, not necessarily translating into assisting action for the student groups being studied. I hence advocate that researchers treat their participants and students not only as research subjects but also as people experiencing difficulties and needing their help. School faculties and staff should also not only read research papers, but also actually apply them to their schools with their students. When compared to the host students, Chinese and other international students have devoted tremendous time, money, and intellectual assets to study at an overseas university. Yet, Chinese international students' situations (especially their difficulties) were not fully explored and their needs were not fully understood. If U.S. universities continue ignoring their experiences and their difficulties, there are also possibilities that this group of international students may switch to other universities, or even other countries, to pursue their degrees. Such would be perceived as a loss in our university, in the area of intellectual advancement, as well as financial attributes.

In this study, I offered stories about eight Chinese international EFL STEM major doctoral students' cross-cultural experiences and their acculturation difficulties. Nevertheless, this study is insufficient, and further study is warranted with respect to studying Chinese international EFL students' overseas studying experiences. Through the

study of their experiences, this research is aimed at providing practical suggestions and constructive feedback to teachers and curriculum workers, on how to reduce the negative culture shock experiences and acculturation difficulties of Chinese international EFL students. Hence, plans for more comfortable study environments for Chinese international EFL students may be considered, which in turn might accelerate these students' academic contributions to the university and society.

LIST OF REFERENCES

Adler, P. S. (1975). The transitional experience: An alternative view of culture shock. *Journal of Humanistic Psychology, 15*(4), 12-23.

Alba, R., & Nee, V. (1997). Rethinking assimilation theory for a new era of immigration. *International Migration Review*, 826-87431.

Alva, S. (1993). Differential patterns of achievement among Asian-American adolescents. *Journal of Youth and Adolescence, 2*(4), 407-423.

Apple, M. (2014). *Official knowledge : democratic education in a conservative age* . New York: Routledge.

Aubrey, R. (1991). International students on campus: A challenge for counselors, medical providers, and clinicians. *Smith College Studies in Social Work, 60*, 20-33.

Bartlett, T., & Karin, F. (2011). *The China conundrum.* Retrieved from The Newyork Times: http://www.nytimes.com/2011/11/06/education/edlife/the-china-conundrum.html?_r=0

Beckman, M. (1990). Collaborative learning: Preparation for the workplace and democracy. *College Teaching, 38*(4), 128-133.

Bennett, M. (2004). Becoming interculturally competent. In J. Wurzel (Ed.), *Towarding Multiculturalism: A reader in Multicultural Education* (pp. 62-77). Newton: Intercultural Resource Corporation.

Berry, W. (1980). Acculturation as varieties of adaption. In A. Padilla (Ed.), *Acculturation: Theory, models, and some new findings* (pp. 9-26). Boulder: Westview.

Berry, W. (1992). Acculturation and adaptation in a new society. *International Migration, 30*, 69-85.

Berry, W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 30*, 5-68.

Bourhis, R., Moise, L., Perreault, S., & Senecal, S. (1997). Towards an interactie acculturation model: A social psychological approach. *International Journal of Psychology, 32*, 369-386.

Bradley, G. (2000). Responding effectively to the mental health needs of international students. *Higher Education, 39*, 417-433.

Brainard, M. (1992). Foreign scientists' recruitment urged. *Chronicle of Higher Education*, 22. Retrieved from Chronicle of Higher Education.

Braine, G. (Ed.). (1999). *Non-native educators in English language teaching.* Mahwah, NJ, US: Lawrence Erlbaum Associates.

Brisset, C., Safdar, S., Lewis, J., & Sabatier, C. (2010). Psychological and sociocultural adaptation of university students in France: The case of Vietnamese international students. *International Journal of Intercultural Relations, 34*, 413-426.

Brown, B. (1998). Leanguage, lecture, and learning: A language-based approach to increasing understanding. *Education, 118*, 384-393.

Brown, G., & Yule, G. (1983). *Teaching the spoken language.* Cambridge: Cambridge University Press.

Bruner, J. (1975). Language as an instuument of thought. In A. Davies (Ed.), *Problems of language and learning* (pp. 61-88). London, UK: Hrinrmann.

Brutt-Griffler, J. (2002). *World English: A Study of Its Development.* Clevedon: Multilingual Matters.

Bullivant, B. M. (1989). Culture:Its nature and meaning for educators. In J. A. Banks, & C. A. Banks (Eds.), *Multicultural Education: Issues and Perspectives* (pp. 27-45). Boston: Allyn and Bacon.

Bulthuis, J. (1986). The foreign student today: A profile. *New Directions for Student Services, 36*, 19-27.

Burns, R. (1991). Study and stress among ® rst year overseas students in an Australian university. *Higher Education Research & Development,, 10*(1), 61-77.

Bweey, J. (2005). Acculturation: Living successfully in two cultures. *lnternalional Journal of lntercultural Relations, 2*, 697-712.

Byram, M. (1997). *Teaching and assessing intercultural communicative competence.* Clevedon: Multilingual Matrters.

Cai, Q. (2012). *An empirical study on critical for intercultural sensitivity development among collegenon-Englishmajors.* Shanghai, China: Shanghai International Studies University (master thesis).

Cambridge Dictionary. (n.d.). *EFL*. Retrieved from Cambridge Dictionary: http://dictionary.cambridge.org/dictionary/english/efl?q=EFL

Cambridge Dictionary. (n.d.). *first language*. Retrieved from Cambridge Dictionary: http://dictionary.cambridge.org/dictionary/english/first-language

Cambridge Dictionary. (n.d.). *second language*. Retrieved from Cambridge Dictionary: http://dictionary.cambridge.org/dictionary/english/second-language

Cambridge Dictionary. (n.d.). *STEM*. Retrieved from Cambridge Dictionary: http://dictionary.cambridge.org/dictionary/english/stem?q=STEM

Carson, J. G., & Nelson, G. L. (1994). Writing groups: Cross-cultural issues. *Journal of Second Language Writing, 3*, 17-30.

Chalmers, D., & Simone, V. (1997). Commonmisconceptions about students from South-East Asia studying in Australia. *Higher Education Research & Development, 16*(1), 87-99.

Chalmers, D., & Simone, V. (1997). Commonmisconceptions about students fromSouth-East Asia studying in Australia. *Higher Education Research & Development, 16*(1), 87-99.

Chen, C. (1999). Common stressors among international college students: Research and counseling implications. *Journal of College Counseling, 2*, 49–65.

Chen, V. (1992). The construction of Chinese American women's identity. In L. F. Rakow (Ed.), *Women making meaning: new feminist deretins in communication* (pp. 225-243). New York, NY: Routledge.

Chin, J. (2002). What secondary English to speakers of other languages (ESL) teachers know about social and academic language and instructional strategies for limited English proficient students. *Florida International University Dissertaion Seriers*.

Chow, P., & Bhandari, R. (2010). *Open doors 2010 report on international educational exchange*. Retrieved from Institute of International Education: http://www.iie.org/en/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2010/2010-11-08-New-Open-Doors-Data-To-Be-Released#.V0cSer7iutY

Collier, K. (1980). Peer-group learning in higher education: The development of higher order skills. *Studies in Higher Education, 5*(1), 55-62.

Cortazzi, M., & Jin, L. (1996). Cultures of learning: Language classrooms in China. In E. Coleman (Ed.), *Society and the language classroom* (pp. 169-206). Cambridge: Cambridge University Press.

Coxhead, A. (2000). A new academic word List. *TESOL Quarterly, 34*(2), 213-238.

Craig, R. T. (1999). Communication theory as a field. *Communication Theory, 9*(2), 119-162.

Cresswell, J. (2007). *Qualitative inquiry research design.* Thousand Oaks: Sage.

Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage .

Cross, S. (1995). Self-construals, coping, and stress in cross-cultural adaptation. *Journal of Cross-Cultural Psychology,, 26*, 673-697.

Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans - ll: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Science, 17*, 275-304.

Cummins, J. (1979). Cognitive academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers in Bilingualism, 19*, 121-129.

Cummins, J. (1981). Age on arrival and immigrant second language learning in Canada: A reassessment. *Applied Linguistics, 1*, 132-149.

Cummins, J. (2013). BICS and CALP:Empirical support, theoretical status, and policy implications of a controversial distinction. In M. R. Hawkins (Ed.), *Framing languages and literacies* (pp. 10-24). New York, NY: Routledge.

Dalton, J. (1999). The significance of international students and respoinsibilities in the contemporary work of student affairs. *Pacific Asian Education, 86*, 3-11.

Deardoff, D. (2009). *The Sage Handbook of Intercultural Competence.* Thousand Oaks: Sage.

Dharanya, B., & Saravanan, V. (2018). Using advertisements in ESL classroom as authentic material. *Language in India., 18*, 307.

Dillard, J., & Chisolm. , G. (1983). Counseling the international student in a multicultural. *Journal of College Student Personnel*(24), 101 - 105.

Dolati, R. (2012). Overview on three core theories of second language acquisition and criticism. *Advances in Natural and Applied Sciences, 6*(6), 752-762.

Donaldson, M. (1978). *Children;s minds.* Glasgow, UK: Collins.

Duan, Y., & Yang, X. (2016). Difficulties of Chinese Students with Their Academic English: Evidence from a China-United States University Program. *South Florida Education Research Conference (in progress).* Miami.

Edgeworth, K., & Eiseman, J. (2007). Going bush: International student perpectives on living ans studying at an Amustralian rural university campus. *Journal of Research in Rural Education, 22*(9), 1-13.

ETS. (2012). *A Snapshot of the Individuals Who Took the GRE® revised General Test.* Educational Testing Service.

Fan, W., Wu, W., & Peng, R. (2013). A survey on self-evaluation of Chinese college students' intercultural competence. *Chinese Foreign Language*, 53-59.

Ferris, D., & Tagg, T. (1996). Academic listening/speaking tasks for ESL students: Problems, suggestions, and implications. *TESOL Quarterly, 30*, 297-317.

FIU. (n.d.). *FIu University Graduate School*. Retrieved from Requirements and Program Contacts: https://gradschool.fiu.edu/admission-requirements.shtml

Flowerdew, L. (1998). A cultural perspective on group work. *ELT Journal, 52*(4), 323-328.

Frankel, & Wallen. (2007). *How to design and evaluate research in education.*

Freire, P. (2000). *Pedagogy of the Oppressed.* New York: Bloomsbury Academic.

Fu, D. (1995). *My trouble is my English: Asian students and the American dream.* Portsmouth, NH, US: Boynton/Cook Publishers.

Fu, K. (2015). A brief literature review on acculturation strategies of oveseas students. *English Language Teaching, 8*(8), 121-127.

Gacel-Avila, J. (2005). The internationalisation of higher education: A paradigm for global citizenry. *Journal of Studies in Internationsl Education, 9*, 121-136.

Gall, M., Gall, J., & Borg, W. (2003). *Educational research.* New York, NY: Pearson.

Gao, Y. (2006). Survey on Chinese college students' intercultural communicative competence. *Foreign Languages adn Foreign Teaching, 12*(11), 26-28.

Gibbons, P. (1991). *Learning to learn in a second language.* Newtoen, Australia: Primary English Teaching Association.

Giler, L. (2011). A primer on the General Service List. *Reading in a Foreign Language, 23*(1), 65-83.

Gu, Y. (2008). Chinese learner: My lived experiences of studying in Mainland China and Australia. *Critical Perspectives on Accounting, 19*, 217–221.

Hakan, A., & Akbarov, A. (2014). The four basic language skills whole language & intergrated skills approach in mainstream university classrooms in Turkey. *Mdeiterranean Journal of Social Studies, 5*(9), 672-680.

Hanassab, S. (2006). Diversity, international students, and perceived discrimination: Implications for educators and counselors. *Journal of Studies in International Education*, 157-172.

Hancock, D. (2006). *Doing case study research : a practical guide for beginning researchers.* New York, NY: Teachers college press.

He, M., Phillion, J., Chan, E., & Xu, S. (2013). Immigrant students' experience of curriculum. In F. M. Connelly, M. He, & J. Phillion (Eds.), *the Sage Handbook of Curriculum and Instruction* (pp. 219-240). Thousand Oaks, Califonia: Sage Publications.

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

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

Heng, T. (2016). Different is not deficient: contradicting stereotypes of Chinese international students in US higher education. *Studies in Higher Education*, 1-15.

Heyward, M. (2002). From international to intercultural: Readfining the international school for a globalized word. *Journal of Research in International Education, 37*(3), 9-32.

Ho, C., & Jackson, J. (2001). Attitudes toward Asian Americans: Theory and measurement. *Journal of Applied Social Psychology,, 31*(8), 1553-1581.

Home Land Security. (2016). *Eligible CIP Codes for the STEM OPT Extension*. Retrieved from Home Land Security: https://studyinthestates.dhs.gov/eligible-cip-codes-for-the-stem-opt-extension

Hsieh, M. (2007). Challenges for international students in higher education: One student's narrated stody of invisibility and struggle. *College Student Journal, 41*(2), 379 - 382.

Hu, A. (1989). Asian Americans: Model minority or double minority? *American Journal, 15*, 243-257.

Hu, J., Andreatta, S., Yu, L., & Li, S. (2010). A collaborative international community health nursing: Clinical experience in China. *Home Health Care Management Practice*, 499-506.

Huang, J. (2004). Voices from Chinese students: Professors' use of English affects academic listening. *College Student Journal, 38*(2), 212-223.

Huang, J. (2005). Challenges of academic listening in English: Reports by Chinese students. *college students journal, 39*(3), 553-569.

Huang, J. (2006). English abilitiesfor academic listening: How confident are Chinese students. *College Student Journal, 40*(1), 218-226.

Huang, Y. (2014). A Chinese Nurse's Socio-Cultural Experiences in Australia. *Journal of International Students, 4*(3), 292-295.

ICEF. (2013). *Reports indicate a significant drop in the average age of Chinese students abroad*. Retrieved from ICEF Monitor: http://monitor.icef.com/2013/09/reports-indicate-a-significant-drop-in-the-average-age-of-chinese-students-abroad/

IIE. (2004). *International student enrollments declined by 2.4% in 2003/04*. Retrieved from Institute of International Education: http://open-doors.iienetwork.org/?p=50137

IIE. (2016). *IIE Releases Open Doors 2015 Data*. Retrieved from Institute of International Education: http://www.iie.org/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2015/2015-11-16-Open-Doors-Data#.V0cTob7iutZ

Ishiyama, F. (1989). Understanding foreign adolescents' difficulties in cross-cultural adjustment: A self-validation model. *Canadian journal of School Psychology*, 41-56.

Jacobs, G. F., & Farrels, T. S. (2001). Paradigm shift: Understanding and implementing change in second language education. *TESL-EJ, 5*(1), 6-21.

Jansen, T., & Wildemeersch, D. (1996). Adult education and critical identity development: From a deficiency orientatin towards a competency orientation. *International Journal of Lifelong Education, 15*(5), 235-340.

Jenkins, S. (2000). Cultural and linguistic miscues: A case study of international teaching assistant and academic faculty miscommunication. *International Journal of Intercultural Relations, 24*(2), 477-501.

Jiang, X. (2014). Chinese biology teaching assistants' perception of their English proficiency: An exploratory case stud. *The Qualitative Report, 19*, 1-24.

Kahneman, D. (1973). *Attention and Effort.* New Jersey: Prentice Hall.

Keefe, S., & Padailla, A. (1987). *Chicano ETHNICITY.* Albuquerque: University of New Mexico Press.

Kennedy, P. (2002). Learning cultures and learning styles: Myth Mythunderstandings. *International Journal of Lifelong Education, 21*(5), 430-455.

Khawaja, N., & Dempsey, J. (2007). Psychological distress in international university students: An Australian study. *Australian Journal of Guidance and Counselling, 17*, 13-27.

Kingston, E., & Heather, F. (2008). Bridging the gap in expectations between international students and academic staff. *Journal of Studies in International Education, 12*(2), 204-221.

Klomegah, R. (2006). Social factors relating to alienation experienced by international students in the United States. *College Student Journal, 40*, 303-315.

Le, T., & Gardner, S. (2001). Understanding the doctoral experience of Asian international students in the science, technology, engineering, and mathematics (STEM) fields: An exploration of one institutional context. *Journal of Applied Social Psychology,, 31*(8), 1553-1582.

lEE, j. (2005). Experiences and satisfaction among international students. *American Educational Research Association (conference presentation)*.

Lee, J., & Rice, C. (2007). Welcome to America? International student perceptions of discrimination. *Higher Education, 381-409*, 53.

Lee, K., & Joo, S. (2005). The portrayal of Asian Americans in mainstream magazine ads: An update. *Journalism and Mass Communication Quarterly, 82*(3), 654-671.

Lee, O. (1997). Diversity and equity of Asian American students in science education. *Science Education, 81*(1), 107-222.

Lee, S. (1996). *Unraveling the "model minority" stereotype: Listening to Asian American youth.* New Yorl, NY: Teacher Congress Press.

Lee, S. J. (1996). *Unraveling teh "Model Minority" Stereotype.* New York, NY: Teacher College Press.

Lee, S.-K., Sobal, J., & Frongillo, E. (2003). Comparison of models of acculturation: The case of Korean Americans. *Journal of Cross-Cultural Psychology, 34*(3), 282-296.

Liberman, K. (1994). Asian student perspectives on American university instruction. *International Journal of Intercultural Relations, 18*, 173-192.

Light, R., Singer, J., & Willett, J. (1990). *By design: Conducting research on highereducation.* Cambridge: Hovward University Press.

Liu, J. (2016). Adaptation of authentic materials in English listening comprehension classes. *Theory and Practice in Language Studies, 4*, 1774.

Lu, W., Ye, Y., Lei, W., & Shimoda, K. (2015). The Impact of Class Discussions on Attitudes of Chinese Students in the US towards Culture and Sustainability. *China M.edia Research, 11*(4), 110-118.

Mallinckrodt, B., & Leong, F. (1992). International graduate students, stress, and social support. *Journal of College Student Development, 33*, 71-87.

Manen, M. (1990). *Researching lived experience : human science for an action sensitive pedagogy.* New York: State University of New York Press.

Martin, C., & Jin, L. (1996). Cultures of learning: Language classrooms in China. In E. Coleman (Ed.), *Society and the language classroom* (pp. 169-206). Cambridge: Cambridge University Press.

Martyn Hammersley, P. A. (1995). *Ethnography: Principles in practice.* London: Routledge.

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York, NY: Van Nostrand.

Maxwell, J. (2005). *Qualitative research design: an interactive approach.* Thousand oaks, CA: Sage publisher.

Merriam-Webster. (n.d.). *Merriam-Webster*. Retrieved from Merriam-Webster: http://www.merriam-webster.com/dictionary/presentation

Miles, M., & Huberman, A. (1994). Drawing valid meaning from qualitative data: Toward a. *Educational Researcher, 5*, 20-30.

Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling and Development, 78*, 137-144.

Myers-Walls, J., Frias, , L., Kwon, , K.-A., Ko, , M.-J., & Lu,, T. (2008). Living life in two worlds: Acculturative stress among Asian international graduate student parents and spouses. *Journal of Comparative Family Studies, 42*, 455-478.

NAFSA. (2014). *International Students Contribute $18.8 Billion to U.S. Economy*. Retrieved from NAFSA: Association of International Educators:

http://www.nafsa.org/search.aspx?searchtext=international+students+united+states

NAFSA. (2017). *New NAFSA Data: International Students Contribute $32.8 Billion to the U.S. Economy*. Retrieved from NAFSA: http://www.nafsa.org/About_Us/About_NAFSA/Press/New_NAFSA_Data__International_Students_Contribute_$32_8_Billion_to_the_U_S__Economy/

Nakanishi, D. (1995). Growth and diversity: The education of Asian-Pacific Americans. In *The Asian American educational experience: A source book for teachers and students.* New York, NY: Routledge.

Nation, I. (2001). *Learning vocabulary in another language.* Cambridge: Cambridge University Press.

National Bereau of Statistics of China. (2012). *2012 National Census Report. Retrieved 5 28, 2014, from National Bereau of Statistics of China:* http://data.stats.gov.cn/workspace/index?a=q&type=global&dbcode=hgnd&m=hgnd&dimension=zb&code=A030102&region=000000&time=2012,2012

NSTES. (2006). *The national standards for teaching English subject.* Beijing: National Academy of English in China.

Nunan, D. (2003). The impact of English as a global language on educational policies and practices in the Asia-Pacific region. *TESOL Quarterly, 37*(4), 589-613.

Oberg, K. (1958). *Culture shock and the problem of adjustment to new cultureal environments.* Washington, DC: Department of State, Foreign Service Institute.

Oberg, K. (1960). Culture shock: Adjustment to new cultural environments. *Practical Anthropology, 7*, 177-182.

OECD. (2015). *PISA 2015 Results.* OECD.

OECD. (2016). *Global Trends Revealed in Education-at-a-Glance 2015.* International Educator.

OECD. (n.d.). *About PISA*. Retrieved from PISA: http://www.oecd.org/pisa/aboutpisa/

Olson, D. (1977). From utterance to text: The bias of language in speech and writing. *Haward Education Review, 47*, 257-281.

Oztugut, O. (2013). Chinese students' perceptions of life in the U.S. *Juornal of College Teaching and Learning, 9*(1), 1-11.

Park, C., C., Goodwin, A. L., & Lee, S. J. (Eds.). (2003). *Asian American identities, families, and schooling.* Greenwich, CT: Information Age.

Parris-Kidd, H., & Barnett, J. (2011). Cultures of learning and students participation: Chinese learners in a multicultural English class in Australia. In *Researching Chinese learners* (pp. 169-187). New York: Palgrave Macmillan.

Pedersen, P. (1995). *The five stages of culture shock.* Westport, CT: Greenwood Press.

Peterson, D., Briggs, P., Dreasher, L., Horner, D., & Nelson, T. (1999). Contributions of international students and programs to campus diversity. *New Directions for Student Services, 86*, 67-77.

Pletcher, K. (2017). *One-child policy*. Retrieved from Encyclopaedia Britannica: https://www.britannica.com/topic/one-child-policy

Power, C. N. (2000). Global trends in education. *Internationsl Education Journal, 1*(3), 152-163.

Poyrazli, S., & Grahame, K. (2007). Barriers to adjustment: Needs of international students within a semi-urban campus community. *Journal of Instructional Psychology, 34*, 28-45.

Poyrazli, S., & Kavanaugh, P. (2006). Marital status, ethnicity, academic achievement, and adjustment strains: The case of graduate international students. *College Student Journal, 40*, 767-780.

Poyrazli, S., Arbona, ,. C., Nora, A., McPherson, R., & Pisccco, S. (2002). Relation between assertiveness, academic self-efficacy, and psychosocial adjustment among international graduate students. *Journal of College Student Development, 43*(5), 632-642.

Redfield, R., Linton, R., & Herskovits, M. (1936). Memorandum on the study of acculturation. *American Psychology,, 38*, 1149-1152.

Redfield, R., Linton, R., & Herskovits, M. (American Psychology). 1936. *Memorandum on the study of acculturation, 38*, 1149-1152.

Richard, J. (1983). Listening comprehension: Approach, design, procedure. *TESOL Quarterly, 17*, 219-239.

Richard, J. (1994). *The language teaching matrix.* New York: Cambridge University Press.

Richards, J. (1994). *The language teaching matrix.* New York: Cambridge University Press.

Roberts, C., Byram, M., Barro, A., Jordan, S., & Street, B. (2001). *Language learnersasethnographers.* Clevedon: Multilingual Matters.

Robertson, M., Line, M., Jones, S., & Thomas, S. (2000). International Students, Learning Environments and Perceptions: A case study using the Delphi technique. *Higher Education Research & Development, 19*(1), 89-102.

Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oak, CA: Sage.

Ruble, R., & Zhang, Y. B. (2013). Stereotypes of Chinese international students held by Americans. *International Journal of Intercultural Relations, 37*, 202-211.

Saldana, J. (2016). *The coding manual for qualitative researchers.* Thousand Oaks, Carlifonia: Sage punlisher.

Samuelowicz, K. (1987). Learning problems of overseas students. *Education Research and Development, 6*(1), 121-133.

Sari, D. (2016). Authentic materials for learning English: A study on EFL students in Aceh. *Studies in English Language and Education, 3*(2), 147.

Sato, T., & Hodeg, S. (2009). Asian international doctoral students' experiences at two American universities: Assimilation, accommodation, and resistance. *Journal of Diversity in Higher Education,, 2*(3), 136-148.

Sawir, E., Marginson, S., Deumer, A., Nyland, C., & Ramia, G. (2008). Loneliness and international students: An Australian study. *Journal of Studies in International Education, 12*, 148-180.

SawirE, Marginson, S., Deumer, A., Nyland, C., & Ramia, G. (2008). Loneliness and international students: An Australian study. *Journal of Studies in International Education, 12*, 148-180.

School of Linguistics and Applied Language Studie. (n.d.). Academic Word List information. Retrieved from Victoria University of Wellington: https://www.victoria.ac.nz/lals/resources/academicwordlist/information

Schultz, A. (2015). *U.S. Colleges Put China's Gaokao to the Test*. Retrieved from Baroons: http://www.barrons.com/articles/u-s-colleges-put-chinas-gaokao-to-the-test-1446188818

Schunk, D. H. (2012). *Learning Theories: An Educational Perspective.* Boston: Pearson Education.

Sen, A. (1993). Capability and well-being. In M. Nussbaum, & A. Sen (Eds.), *The quality of life.* Oxford, UK: Clarendon.

Sheard, W. (2008). Lessons from Our Kissing Cousins: Third Culture Kids and Gifted Children. *Roeper Review, 30*(1), 31-38.

Shih, M. (1999). More than practicing language: Communicative reading and writing for Asian setting. *TESOL Journal, 8*(4), 20-25.

Sit, H. (2013). Characteristics of Chinese students' learning style. *IPEDR-Language, Media, and Culture, 62*(8), 36-39.

Siu, S. (1996). *Asian American students at risk: A literature review.* Center for Research on the Education of Student Placed at Risk. Baltimore: Johns Hopkins University.

Smith, A., & Khawaja, N. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations, 35*, 699-713.

Smith, J., Flowers, P., & Larkin, M. (2009). *Interpretativve phenomenological analysis.* Thousand oaks, CA: Sage publisher.

Smith, R., & Kbawaja, N. (2011). A review of the acculturation experiences of international students. *International Journal of lntercultura/ Relations, 35*, 699-713.

Starr, D. (2012). China and the Confucian Education Model. *Teaching & Learning Position Paper*, 1-27.

Stoynoff, S. (1997). Factprs associated with internatinal students' academic achievement. *Journal of Instructional Education, 27*, 5-21.

Stringer, E. (2014). *aCTION RESEARCH.* Thousand Oaks, Carlifornia: Sage.

Sue, D. W., & Sue, D. (1999). *Counseling teh culturally different: Theory and pracice.* New York: Wiley.

Swagler, M., & W.E., M. (2003). Crossing the distance:Adjustment of Taiwanese graduate students in the United States. *Journal of Counseling Psychology, 50*(4), 420-437.

Tang, X. (2014). A contrastive analysis of Chinese college English syllabus word list with a general service list of English words and academic word list. *Studies in Literature and Language, 8*(1), 66-70.

Townsend, H., & Poh, H. (2008). An exploratory study of international students studying and living in a regional area. *Journal of Marketing for Higher, 18*, 240-263.

Trice, A. (2003). Faculty perception of graduate international students: the benefits and challenges. *Journal of Studies in International Education, 7*(4), 379-403.

Trueba, H. T., Cheng, L., & Ima, K. (1993). *Myth or Reality: Adaptive Strategies of Asian American in California.* Washington, D.C., US: The Falmer Press.

Turner, Y. (2006). Students from mainland China and critical thinking in postgraduate Business and Management degrees: teasing out tensions of culture, style and substance. *International Journal of Management Education, 5*(1), 3-11.

Turner, Y. (2013). Pathologies of silence? Reflecting on international learner identities amidst the classroom. In J. Ryan (Ed.), *Cross-cultural teaching and learning for home and international students* (pp. 15-26). London: Routledge.

UNPD. (1999). *World development report.* New York: UNPD.

Wang, V., & Kreysa, P. (2006). Instructional strategies of distance education instructor in China. *The Journal of Educators Online, 3*(1), 1-25.

Wang, Y. (2012). Ananalysis on intercultural teaching in college: Based on a survey from college English teachers' perspectives in Zhejiang Province. In X. Chen, & J. Guo (Eds.), *The theoretical exploration an practical innocation of foreign language teching in universities and colleges* (pp. 40-49). Zhejiang, China: Zhejiang University Press.

Wang, Y., & Kulich, S. (2015). Does contextcount? Developing and assessing intercultural competence through an interview-andmodel-based domestic course design in China. *International Journal of Intercultural Relations, 48*, 38-57.

Wang, Y., & Yu, W. (2008). A comparative study on intercultural communicative competence of non-English majors EFL learners in different contexts. *Journal of Nanhua University*, 103-106.

Wang, Z. (2013). Retrieved from China Daily USA: http://usa.chinadaily.com.cn/china/2013-08/02/content_16863875.htm

Weinberg, M. (1997). *Asian-American Education.* New Jersey, US: Lawrence Erlbaum Associates.

Weiss, R. (1994). *Learning from stragers: The art and method of qualitative interviewing.* New York: Free Press.

Wiggins, G., & McTighe, J. (2006). Backward design. In *Understanding by design* (2nd ed., pp. 13-35). New Jersey, NJ: Pearson Education.

WIKI Pedia. (n.d.). *WGN*. Retrieved from WIKI Pedia: https://en.wikipedia.org/wiki/WGN_(AM)

Wilson, S. (1979). Explorations of the usefulness of case study evaluation. *Evaluation Quarterly, 3*, 446-459.

Wu, Q. (2009). Re-examining the "Chinese learner": a case study of mainland Chinese students' learning experiences at British Universities. *Higher Education, 70*(4), 753-766.

Xinhua News. (2005). *Stories from three Chinese international students: difficulties with Australian English*. Retrieved from Xinhua News: http://news.xinhuanet.com/overseas/2005-02/07/content_2558442.htm

Xu, L. (2006). *Studying language and its use: An intercultural approach.* Shanghai, China: Shanghai Foreign Language Educaion Press.

Yan, K., & Berliner, D. (2009). Chinese international students' academic stressors in the U.S. *Colege Student Journal, 43*(4), 939-960.

Yan, K., & Berliner, D. (2009). Chinese international students' academic stressors in the United States. *College Student Journal, 43*(3), 939-960.

Yang, Y. (2000). History of English education in china (1919- 1998). Retrieved from http://files.eric.ed.gov/fulltext/ED441347.pdf

Yang, Y. (2000). *History of English education in china (1919-1998)*. Retrieved from ERIC: http://www.eric.ed.gov/PDFS/ED441347.pdf

Ye, W. (2014). *The application of intercultural sensitizer approach in English teaching in the foreign language schools context in China.* Shanghai, China: Shanghai International Studeis University (master thesis).

Yeh, C., & Drost, C. (n.d.). Bridging identifies among ethnic minority youth in schools. Retrieved from http://eric.ed.gov/?id=ED462511

Yeh, C., & Inose, M. (2003). International student's reported English fluency, social suppot satisfaction, adn social connectedness as predictors of acculturative stress. *Conselling Psyhoology Quarterly*, 15-28.

Yin, R. (2003). *Applications of case study research.* Thousand Oaks, Carlifornia: Sage Publisher.

Yuan, S. (2005). Globalization and "Asian Values": Teaching and theorizing Asian American literature. *College Literature, 32*(1), 86-102.

Zhai, L., & Scheer, S. (2002). The influence of international experience on agriculture student personal development. *Journal of International Agricultural adn Extension Education, 9*(3), 23-29.

Zhang, N., & Dixon, D. (2003). Acculturation and attitudes of Asian international students toward seeking psychological help. *Journal of Multicultural, 31*, 205-222.

Zhang, Y. (2016). International Students in Transition: Voices of Chinese Doctoral Students in a U.S. Research University. *Journal of International Students*, 175-194.

Zhao, J. (2013). *Taking Chinese–American literature as a teaching tool to improve the intercultural sensitivity of fresh man collegestudents.* Shanghai, China: Shanghai International Studies University (master thesis).

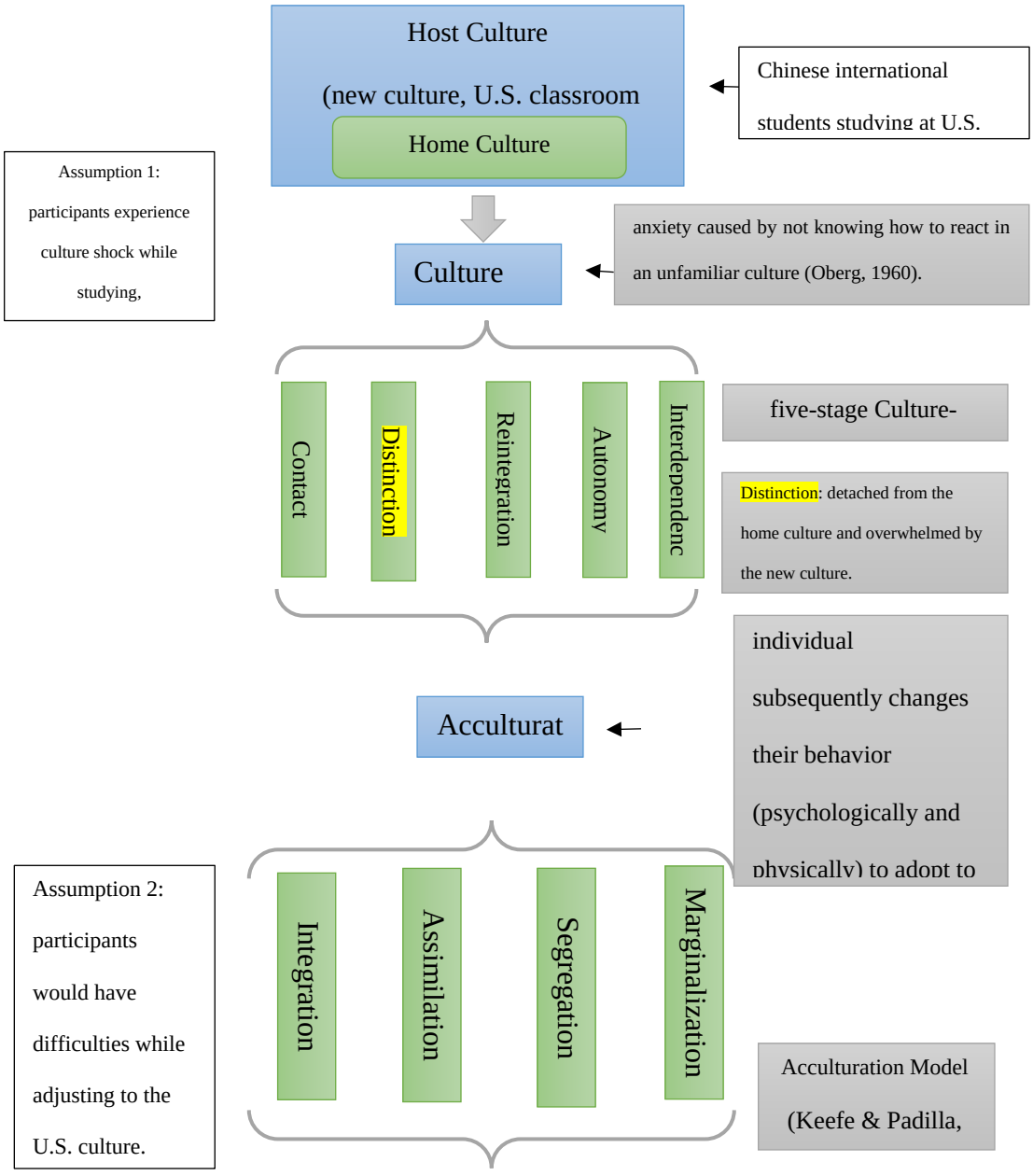
Zhao, T., & Bourne, J. (2011). Intercultural adaptation - it is a two-way process: Examples from a British MBA Programme. In L. Jin, & M. Cortazzi (Eds.), *Researching Chinese learners: Skills, perceptions, and intercultural adaptations* (pp. 250-273). New York: Palgrave MacMilan.

Zhao, Y., Zhou, X., & Huang, L. (2008). Chinese students' knowledge and thinking about America and China. *The Social Studies*, 13-22.

Zhou, M., & Gatewood, J. V. (Eds.). (2000). *Contemporary Asian American: A multidisciplinary reader.* New York, NY: New York University Press.

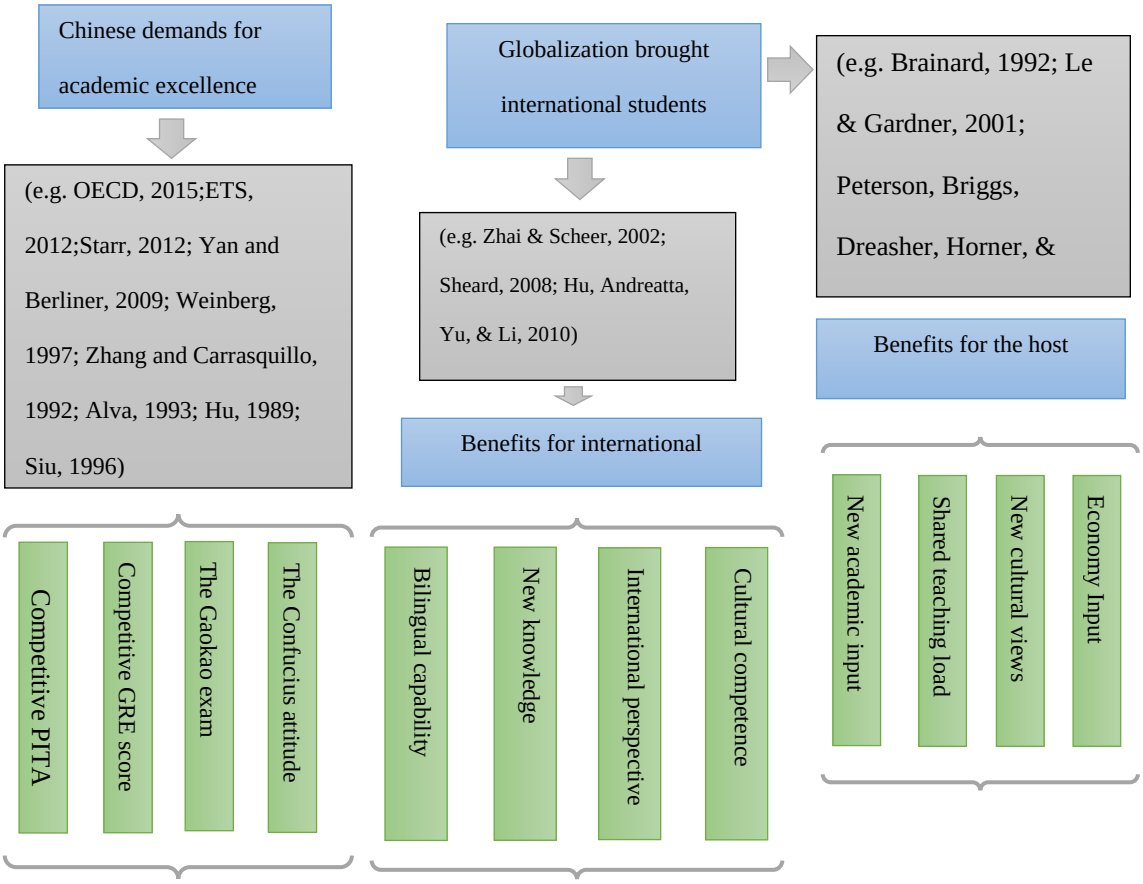
Appendix A

RELATIONSHIP BETWEEN THEORETICAL FRAMEWORK, LITERATURE REVIEW, ASSUMPTIONS, AND RESEARCH QUESTIONS



Appendix A

RELATIONSHIP BETWEEN THEORETICAL FRAMEWORK, LITERATURE REVIEW, ASSUMPTIONS, AND RESEARCH QUESTIONS (CONT')



Appendix B

RECRUITMENT ORAL SCRIPT

This is the script I used when recruiting participants, the mainly purpose of this script is to introduce my study. This script is written by me. I was speaking Mandarin when recruiting my participants.

(Mandarin)

同学你好，我叫杨修远，是咱们学校教育学院的博士生。我已经修完了所有课程，进入论文阶段了。我的研究主要是针对在美国读书的，第一语言非英语的学生的学习经历。我的博士论文呢，是关于在咱们学校学 STEM 专业的博士生的跨文化学习经验的。也就是因为中美文化的不同，你们在求学过程中，发生的一些事情和你们对这些事情的感悟。我希望你可以成为我的采访对象。

关于这个研究，我采用的是面对面谈话的方法来收集数据。谈话一共有两轮，有话则长无话则短。根据我之前的经验，基本是 40-90 分钟一轮。如果你累了可以随时停下。在谈话中，你所要面对的只有我一个人，用中文或者英文都可以。谈话中我会问你一系列的问题，这些问题都是我自己设计的。在整个研究过程中，我不会问你任何包含个人信息的问题，而在最终的论文中，我也会给你用化名，你的真实身份是不会被暴露的。不过我需要用手机录下整个谈话，录音不是录像，以便于我做数据分析。这些数据也只有我会接触到，我会把他们存在我的私人电脑里，密码保护的。

最后就是，这是一个纯学术性的研究，就像我之前说的，是为了我的毕业论文。如果你愿意的话，我可以把最终的论文发给你一份。你还有其他什么问题吗?

(English Translation)

Hi there, may I have a word with you?

My name is Xiuyuan. I am a PhD student from the education college, and this is my fourth year at this university. I am interested in helping international students, especially those whose first language is not English, and I am currently conducting a research examining the cross-cultural experiences of doctoral Chinese international students studying at FIU.

This research will be carried out in the form of face-to-face interpersonal interview. It will be two rounds, about 40 to 90 minutes each, but you can stop me at any time if you need a break. You will be interviewed by me, using a set of interview questions designed by myself, and you can use either Mandarin or English, or a mixture of both. I will give you a pseudonym, and I will not ask for identifying information. It is completely anonymous. The interview will be recorded, because I need to listen to them later to do the translation and the transcript. The data will be stored securely in my password protected laptop, at my apartment, and I will be the only person doing the analysis.

This research is completely for academic purpose, and if you like, I can send you the final report when I finished it. Do you have any questions for me? (answer questions)

Appendix C

ADULT VERBAL CONSENT TO PARTICIPATE IN A RESEARCH STUDY

This is the script I read out to participants before interview starts. It servers a different than Appendix B, Recruitment Oral Script. The purpose of this script is to gain participants' consent to join the research. The audio recording of me reading this script and participants words to consent was recorded in my smart phone.

Hello, my name is *Xiuyuan Yang*. You have been chosen to be in a research study about *Examining the Cross-Cultural Experiences of Graduate Level Chinese International Students Studying at FIU*. The purpose of this study is to *investigate graduate level Chinese international EFL students' cross-cultural experience*, so we can provide you with a better study environment. If you decide to be in this study, you will be one of the 8 participants. Participation in this study will take about 80 to 120 minutes of your time. It will be two rounds of interpersonal interview, about 40-60 minutes per round.

If you agree to be in the study, I will ask you to do the following things:

1. Have a face-to-face interpersonal interview with me using either Mandarin or English;
2. Agree that the interview will be recorded by me.

There are no foreseeable risks or benefits to you for participating in this study. It is expected that this study will benefit society by adding knowledge to Chinese EFL studies, cross-cultural study, as well as international education.

There is no cost or payment to you. If you have questions while taking part, please stop me and ask.

You will remain anonymous. In any sort of report, I might publish, I will not include any information that will make it possible to identify you as a subject. Research records will be stored securely and only the me will have access to the records.

If you would like to talk with someone about your rights of being a subject in this research study or about ethical issues with this research study, you may contact the FIU Office of Research Integrity by phone at 305-348-2494 or by email at ori@fiu.edu.

Your participation in this research is voluntary, and you will not be penalised or lose benefits if you refuse to participate or decide to stop. Do you consent to participate in this project?

Appendix D

SAMPLE OF INTERVIEW QUESTIONS

1. Can you give me a brief introduction about yourself, especially your educational background?
2. Based on your own experience, how is it like to study in classrooms in China?
3. Can you describe a typical class/seminar/lab session at your Chinese university?
4. How did you decide to study in the U.S. as an international student?
5. Now you have been studying here for more than one year, how is it like to study in the U.S.? Can you tell me a story about that?
6. Can you describe a typical class/seminar/lab session here?
7. What are the cultural difference you noticed in classrooms here?
8. How did you notice these differences? Can you give me some examples?
9. How do you feel about these differences?
10. How might you anticipate these differences when you were in China?
11. How might you prepare for/adjust to these differences/similarities?
12. How might you benefit from these preparation/adjustment strategies?
13. What are your difficulties?
14. How would you like the university to help you with these difficulties?

VITA

XIUYUAN YANG

2005-2007	B.S., Economy China Agricultural University Beijing, China
2007-2008	B.S., Human Resource Management University of Bedfordshire Bedfordshire, U.K.
2008-2010	M.S., Human Resource Management Sheffield University Sheffield, U.K.
2010-2011	Human Recourse Specialist Beijing Zhongkun-Jinxiu Real Estate Investment Co.,Ltd Beijing, China
2011-2013	Human Recourse Specialist Beijing Jiaming Real Estate Investment Co.,Ltd Beijing, China
2013-2018	Ph. D., Curriculum and Instruction Florida International University Miami, Florida
2015-2018	Graduate Assistant Florida International University Miami, Florida

PUBLICATIONS AND PRESENTATIONS

Yang, X., (2015) *Difficulties Encountered in Class by College Level Chinese Students in Academic English: A Focus on Chinese Students Who Are Enrolled in Beihang-FIU Program*. Paper presented at 2015 Annual Scholarly Forum. Miami, FL: Florida International University.

Duan., Y and Yang, X., (2016). *Difficulties Encountered in Class by College Level Chinese Students in Academic English: A Focus on Chinese Students Who Are Enrolled in Beihang-FIU Program*. Paper presented at 2016 Annual Scholarly Forum. Miami, FL: Florida International University.

Jiang, X., Yang, X., and Chen. Y., (2017). Chinese international students' perceptions of their language issues in U.S. universities: a comparative study. *Journal of Interdisciplinary Studies in Education, 63-80.*