A QUALITATIVE STUDY OF *GONGLI DAXUE (*CHINESE PUBLIC HIGHER EDUCATION INSTITUTIONS) GRADUATES PURSUING ADVANCED DEGREES IN THE USA: PERCEPTIONS OF *GONGLI DAXUE* PREPARATION AND APPLICATION

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

With a

Major in Educational Leadership in the

Department of Graduate Education

Northwest Nazarene University

by

Ruth Gao

May 26, 2020

Major Professor: Russel Joki, Ed.D.

AUTHORIZATION TO SUBMIT

DISSERTATION

This dissertation of Ruth Anne Gao submitted for the degree of Doctor of Philosophy with a major in Educational Leadership and titled "A Qualitative Study of Gongli Daxue (Chinese Public Higher Education Institutions) Graduates Pursuing Advanced Degrees in the USA: Perceptions Of Gongli Daxue Preparation and Application," has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

Major Professor DocuSigned by: Russ Joki 45AC6A80594840E... Dr. Russell Joki Date 4/8/2020 | 13:44:28 MDT

Committee Members DocuSigned by: E Michael Poe 21E4593C5F3F45D... Dr. E. Michael Poe Date 4/8/2020 | 14:42:51 MDT

DocuSigned by: Kristen Ferguson C1C4889B44DB4A3... Dr. Kristen Ferguson Date 4/17/2020 | 16:18:42 PDT

Program Director DocuSigned by: Heidi Curtis 18C507285A124B4... Dr. Heidi Curtis Date 4/19/2020 | 22:22:59 MDT

Discipline's College Dean DocuSigned by: Lori Sanchez 1F6287564ACC4DC... Dr. LoriAnn Sanchez Date 4/20/2020 | 20:55:12 MDT

SY

ACKNOWLEDGMENTS

I want to thank Dr. Studebakers and Dr. Curtis, who were the first professors for me to work with at NNU and influenced the beginning direction of my research more than anyone else. The classes I took with them were vital in creating a foundation for me in understanding doctoral level research.

Dr. Joki deserves huge thanks for being my chair and taking on guiding me through a research study dealing with international students and an international education system. From the beginning of our discussion about my research topic, Dr. Joki was there with encouragement, challenging questions, and helpful insights into my research and writing. Finding out Dr. Joki had a history with the city in China I grew up in gave us a connection as this research unfolded. Throughout this project there were difficulties and changes that were discouraging and intimidating to me. Dr. Joki always sought to provide encouragement and point me to the next steps so that I could finish one step at a time. I would not have been able to finish my research and graduate on time without his encouragement and support.

Dr. Poe has been a listening ear and an encouraging voice. With his connection to China and international education, he has taken a real interest in this research. His encouragement and feedback provided support as this research took shape.

Special thanks goes to Dr. Ferguson, who was a dear co-worker and friend before kindly agreeing to be on my committee. Dr. Ferguson was an example to me of the perseverance and determination to finish a doctoral degree. I knew her while she was pursuing her doctoral degree, and her example of juggling life, work, and school gave me confidence that I could do it too. Thank you for being on this journey with me!

I want to thank my husband, Gao Mengen, who has been there to encourage me every step of the way. You always supported and encouraged me when the going got tough. When I verbalized feelings of wanting to give up, you were always there to talk me out of it and remind me why I was doing this. You prayed for me and brought a smile to my face when I was worn out. You thoughtfully help take tasks off my plate so that I could focus more on research and writing. Even when I was not always able to spend a lot of time with you, you were there to encourage me to keep going. Thank you for always being there and for supporting me in pursuing my dreams!

DEDICATION

To my husband, Gao Mengen, for praying for and with me, encouraging me, and believing in me when I was ready to give up. Your love and prayers are what carried me through the hard days. I love you!

ABSTRACT

Higher education in China, as we know it today, began in the 1970s. Coming out of the changes of the Cultural Revolution, universities were formed, and areas of study took shape following a Western model. Since then, higher education in China has continued to modernize, preparing a generation of people to work in a modern and global world. With the advancement of higher education in China, research into this field has grown as well. Much of this research has looked at student achievement or governmental issues. As education in China has advanced, the number of Chinese students studying overseas has also increased. Today, Chinese students make up about 33% of the American international student population. However, even with these numbers, research into Chinese students studying in America has generally focused on language and culture adjustment. No research has yet looked at a broad range of skills and listened to student perceptions. Through personal interviews, this study examined Chinese HEI, *Gongli Daxue,* student perceptions of preparation for graduate study in America, and whether or not students learned the skills needed for graduate study in American in their undergraduate studies in China. Results from this research showed a disconnect between what skills students need to succeed in university in America and what skills they are taught in college in China. Thus, recommendations are made as to how educators in China and America can bridge this gap. Recommendations include preparing students in college for a global world, as well as American graduate programs, understanding cultural and educational differences to better engage in conversations with their international students. The goal of the study was to provide research to assist in ensuring that as more Chinese come to study in America, they find themselves well prepared for the experience.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter I

Introduction

Throughout history, China has generally, as a culture, valued education. Formal education in China began, as we know it, well before 0 AD, most likely around the time of Confucius (Fan, Wen, Yang, & He, 2017; Yang, 2013). Education was formalized in China during the Zhou Dynasty, where children went to formal school and then were evaluated to see if they could be admitted into public universities that provided eight years of education (Fan et al., 2013). Jixia Academy was a public university established in the 3rd century BC and existed for around 150 years (Fan et al., 2013). Modern Chinese public higher education institutions (HEIs), 公立大学 *Gongli Daxue*, were reshaped into the institutions they are today during the education reforms of 1978 when the Chinese government began to open up and look at ways to make the country's higher education institutions align more closely with similar international higher education institutions (Chen, 2013; J. Li, 2012). Research of higher education in China did not begin until the 1980s (Chen & Hu, 2012; Sun, 2014).

For generations, Chinese university students have often looked to the USA for pursuing graduate studies. Due to the number of Chinese students in US graduate programs, many pieces of research have examined various aspects of Chinese student integration into US universities. Most research to date looks at either quantitative numbers gauging student success, or qualitative analysis specifically looking at language and culture adjustments (Huang, 2012; Huntley, 1993; Li & Stodolska, 2006; Nelson, Jacquelyn, & Bobby, 2004; Park, 2016; Wang & Falconer, 2005; Zhou, Frey, & Bang, 2011). However, there has been limited qualitative study of how well students have felt prepared to succeed in their graduate studies in the USA in a broader range of skills (Chen & Hu, 2012, Sun, 2014; Wang, 2004).

As China changed over generations, its educational system changed as well, in order to be viewed as a public good in China (Chen, 2013; Chen & Hu, 2012; Tian & Liu, 2018). Following the opening of the country in 1978, education in China had to prepare the next generation for a changing and evolving society and workplace (Chen, 2013; Chen & Hu, 2012; Lei, 2012). As the student-aged population in China has grown, so has the demand on the HEIs, *Gongli Daxue*, leading to growth in number and types of HEIs (Yu and Ertl, 2010; Qizong & Yizhong, 1997). Not only has there been an increase in HEI public universities (*Gongli Daxue*), but other universities that are private (*Minban*) and independent (*Duli*) have sprouted up throughout the country, providing additional options for students who may not test into *Gongli Daxue* (Fengqiao, 2009; Hua, 2009; Kai & Ertl, 2010; Qizong & Yizhong, 1997; Rosecky et al., 2004; Wang & Secombe, 2004). *Gongli Daxue* are state universities owned and financed by the Chinese government (Ma & Malcom, 2016; Pan & Law, 2006; Wang & Secombe, 2004). In China, these *Gongli Daxue* are overseen and run by the Ministry of Education in Beijing and the *Gongli Daxue's* Provincial Department of Education (Dongmei & Jiangbo, 2009; Yubu, 1970; Zhong, 1997).

Researchers have sought to better understand the history of higher education in China. Many of these studies look at events before the Communist Revolution to examine education in pre-1949 China (Fan, Wen, Yang, & He, 2017; Yang, 2013). Previous research on Chinese HEIs examined the original purpose of Chinese HEIs, which was to prepare students for public service, and traced how the HEI purpose was slowly influenced by Western thought and the Western ideal of higher education (Berger, Hudson, & Ramírez, 2013; J. Li, 2012; Yang, 2013). Some of the other studies looked at the post-1989 era and the increase in demand for higher education and what that meant for higher education in China (Fan et al., 2017; Yang, 2013; Yalun & Du, 2019). After the Communist Revolution in 1949, the Chinese government closed all of the private (*Minban*

Daxue) in China (Wang & Liu, 2011). While *Gongli Daxue* remained opened at this time, they were restructured to reflect Chinese socialist ideals instead of Western ideas (Chen, 2013; Fan et al., 2017; Hu & Seifman, 1997).

The Chinese government has tightly regulated education in China with each university having a Communist Party Chief who represents the Party and ensures the university is teaching the required ideas (Berger et al, 2013; Onsman, 2012; Zhong, 1997). For universities, this means that they have to balance the educational needs of their students while also ensuring they follow all mandates from the government (Berger et al., 2013; Chen, 2013; Li, 2012; Lin, 2015; Sun, 2011; Yang, 2015). Not only does the government regulate what the universities in China teach, but it seeks to ensure higher education in China is meeting standards (Dongmei & Jiangbo, 2009; Huang et al., 2014; Li & Wang, 2014; Lin, 2015; Wang & Liu, 2011). However, while the government values evaluation, it does not always implement changes in light of these evaluations (Dongmei & Jiangbo, 2009; Huang et al., 2014). Research into higher education in China, while encouraged to meet international competition, is tightly regulated by the government to ensure it shares the Party's message and ideology (Chen & Hu, 2012; Hu & Seifman, 1997; Kang, Wang, Shi, & Sun, 2014)

Statement of the Problem

A critical area that needs more qualitative research in *Gongli Daxue* is the question of how well students believe their undergraduate public university experience prepared them for graduate studies in the USA. Analysis of student perceptions regarding their level of undergraduate preparation for study at the graduate level in the USA may shed light on how the *Gongli Daxue* students are prepared for American graduate studies. To date, most scholarly research of *Gongli Daxue* looked more at theory, not practice, and examined foundational topics such as policy, while

not giving much attention to what students need to know, versus what students are taught, and examining how this might affect students level of preparation for studies abroad (Chen & Hu, 2012). This gap in research is partly because educational research is a relatively new field in China (Chen & Hu, 2012; Sun, 2014). Research regarding Chinese graduate students in the USA has predominately looked at cultural adjustments and language abilities. While one research study did examine critical thinking, a study focused on multiple skills based on student perceptions has not been done.

While the history of higher education in China and governmental policy have been researched adequately, a literature review reveals limited studies relating to Chinese, and specifically *Gongli Daxue*, students who are pursuing graduate studies in the USA. (Sun 2014; Wang, 2004). While understanding history and policy is helpful, it is important to understand if *Gongli Daxue* are successful in preparing students who desire to continue their education in the USA. Such studies may assist both Chinese and American educators to identify gaps that may hinder Chinese students pursuing higher education internationally, and may assist the Chinese government in ensuring the *Gongli Daxue* curriculum is preparing students for international education. Such research may also identify gaps in the quality of *Gongli Daxue* education and allow educators to better understand student beliefs about their education, ensuring a *Gongli Daxue* is meeting the real needs of students.

Background

Chinese education has a rich history dating back to the first century (Fan et al., 2017). Early traditional Chinese education sought to prepare students to serve the state in some form. This focus on preparation for service led to education centered on teaching skills needed for life, including moral principles that would help guide the student to be successful in service to the country.

However, such educational opportunities were not available to all; thus, many members of Chinese society did not receive a formal education. Student success, and therefore the success of the education, was measured by the student's ability to pass a test, or series of tests, before being admitted into government service (Fan et al., 2017).

After the Communist Party gained control of the government around 1949, education in China changed drastically. Today little remains of traditional Chinese education in the system (Fan et al., 2017). Mao Zedong, also known as Chairman Mao, was the communist revolutionary and founder of the People's Republic of China in 1949. Mao sought to model HEIs after the Soviet Union system with a focus on sciences and engineering studies, believing it would bring the most practical benefits to society (Fan et al., 2017; Zhang, 2017). During the Cultural Revolution, 1966-1976, Mao tightened his control over the country, closing HEIs for about ten years (Fan et al., 2017). After Mao's death, HEIs began to operate again, with an emphasis on copying Western education. After becoming China's new leader in 1978, Deng Xiaoping enacted the "Open Door" policy that sought to modernize and Westernize China (Berger et al., 2013; Chen, 2013; Fan et al., 2017).

As HEIs expanded and grew in number, the government acknowledged a need to better understand how the Chinese education system is preparing the next generation (Fan et al., 2017; Yang, 2013). With this acknowledgment, research into higher education in China increased (Chen & Hu, 2012; Sun, 2014; Yang, 2015). Most research to date examined Chinese government policy and understanding the role of the government in higher education (Hua, 2009; Huang, Adamson, & Lee, 2014; Ma & Malcom, 2016; Pan & Law, 2006; Rosecky et al., 2004). However, not much research was conducted on issues relating to *Gongli Daxue* student readiness, especially in terms of pursuing graduate education in the USA (Sun 2014; Wang, 2004).

This lack of research is a gap needing to be explored, especially considering the number of Chinese students currently pursuing studies in the USA. The Department of Homeland Security recorded 478,732 SEVIS IDs (Student and Exchange Visitor Information System) from China in 2018. More specifically, the 2019 *Open Doors Report* puts the total number of Chinese students in universities in the USA for the 2018/2019 academic year at 369,548 (Institute of International Education, 2019). Of these, 133,396 are graduate students (Institute of International Education, 2019).

Figure 1 *Total number of Chinese students in the USA in 2019*

Figure 1. Figure of the total number of university students from China in American in the 2018/2019 academic year. Reprinted from International student totals by place of origin, 2018/2019. *In Open Doors Report on International Educational Exchange*. Retrieved from https://www.iie.org/opendoors.

Figure 2 *Number of Chinese graduate students in the USA in 2019*

Figure 2. Figure of the total number of graduate students from China in America in 2018/2019

academic year. Reprinted from International students by academic level and place of origin, 2018/2019. *Open Doors Report on International Educational Exchange*. Retrieved from https://www.iie.org/opendoors.

According to the U.S Department of Education, in 2017, Asian students made up 11 percent of postbaccalaureate enrollment in degree-granting postsecondary compared to 6 percent in 2000. These numbers reflect an increase in Chinese students in the USA that will not slow down. This study seeks, therefore, to examine Chinese student perceptions on how well they were prepared to succeed as graduate students in the USA. This study can provide insight on how to increase student competency in Chinese public HEIs.

Figure 3 *Percentage distribution of postbaccalaureate enrollment in degree-granting postsecondary institutions, by race/ethnicity: Fall 2000, fall 2010, and fall 2017*

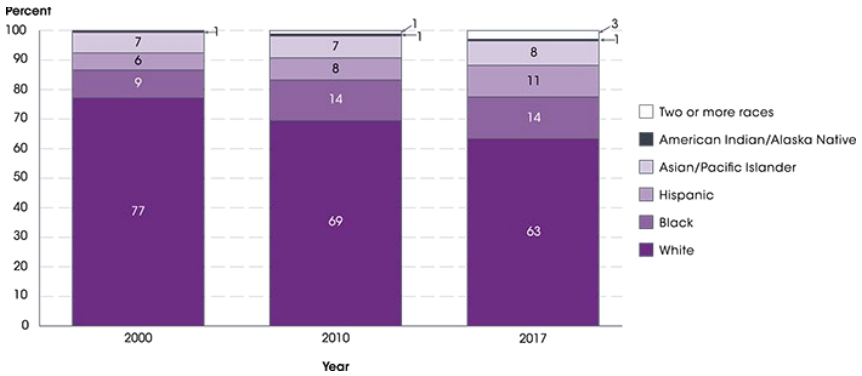


Figure 3. This figure illustrates the difference in percentages *between* postbaccalaureate enrollment in degree-granting postsecondary institutions, by race/ethnicity for Fall 2000, Fall 2010, and Fall 2017. Reprinted from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2001, 2011, and 2018, Fall Enrollment component. See *Digest of Education Statistics 2018,* table 306.10.

Research Questions or Hypotheses

This study seeks to answer questions regarding public Chinese HEI, *Gongli Daxue,* student

perceptions of preparation for graduate study in the USA. This study may reveal the foundation beneath these perceptions answering two research questions:

1. What are the perceptions of Chinese *Gongli Daxue* graduates regarding study skills and content knowledge instruction received from their Chinese undergraduate *Gongli Daxue*?
2. What are the perceptions of Chinese *Gongli Daxue* graduates regarding the application of their Chinese undergraduate *Gongli Daxue* education in American graduate studies?

Description of Terms

The following terms are used throughout this study. Effort has been made to ensure these definitions align with the most common and recognized definitions.

China's Education Modernization 2035. A plan intended to be the framework for China's education development in the coming years. The plan contains eight concepts: ethics, well-round development, people-orientation, lifelong learning, personalized teaching, integration of knowledge and practice, integrated development, and co-construction and sharing (Zhu, 2019).

Communism. A political philosophy and theory that originated with Karl Marx. Also known as socialism. The foundational government and political belief in China following 1949 implemented by Mao Zedong and the Chinese Communist Party (Zhang, 2012).

Confucianism. The teaching of Confucius taught and believed by his followers. Based on the *Four Books and Five Classics of Confucian* thought, it is a philosophy informing all aspects of one's life about learning how to be a human (Wang, 2004).

Donation. Funding of an institution where the donator gives the money and does not expect a return in profit or look for the money to be paid back (Daguang, 2009).

***Duli Daxue*.** The Chinese term for an independent university. This is an institution set up by a public university. These are invested in by private investor/s (Chen, 2013; Kai & Ertl, 2010). The *Duli Daxue* is differentiated from the *Minban Daxue* as it is connected to, and founded by, a public university. A *Minban Daxue* is independent of a public university.

Eastern. Eastern refers to anything that is from the East of the world including Asia and the Middle East (Barratt-Pugh, Zhao, Zhang, & Wang, 2018).

Education quality management. The administration and organization of learning and teaching that seeks to follow best practices to reach the goal of seeing students educated successfully (Cao & Li, 2014).

***Gongban Daxue*.** The Chinese term for a public university. These are institutions that are run by the government. They are administrated by the Department of Education and are funded by the government. (Kai & Ertl, 2010).

Higher education. Education that is beyond the high school, or secondary high, level. This education seeks to prepare individuals in skills that allow them to contribute to society by specializing in an area (Huixin & Haibing, 2016).

Higher education institution (HEI). Refers to institutions where higher education is conducted which are often known by the terms college or university (Li, Granizo, & Gardó, 2016).

Investment. Funding of an institution where the investor expects to see a return on the investment with the institution making money and being able to pay back on the initial investment.

Minban Daxue. The Chinese term for a private university. These are institutions that are not run and organized by the government. They are founded and administrated by private individuals. They are funded by private investor/s. (Kai & Ertl, 2010).

Regulations on Academic Degrees in the People's Republic of China. A set of regulations drawn up around 1970 that served as a guide for higher education in China and to encourage the growth of HEIs in China (Siming, 2003).

Second generation middle class. The children of Chinese who were some of the first to become middle class in China. The parents of the second-generation middle class did not have parents who were middle class (Tsang, 2013).

Tongshi. The Chinese term for "General Education" (Kai & Ertl, 2010).

Western. Refers to anything from the West part of the world including North America and Europe (Barratt-Pugh et al., 2018).

Significance of the Study

This study seeks to provide answers regarding perceived student success in their graduate studies in the USA. These insights may be useful to administrators and leaders of public HEIs, the *Gongli Daxue*, in China. Currently, the administrators and leaders have access to research that would help direct their policies and relationship with the Chinese government. However, they do not have much information regarding how successful their students are in graduate programs in the USA.

This research is shaped by educational theories of adult learning rooted in John Dewey and Mao Zedong, with some reference to other adult educational philosophers. Both Dewey and Mao influenced Chinese education. Mao believed in the importance of practical life and work skills being taught through education (Mao, 1917, 1964; Price, 1970; Qingjun, 1994; Scalapino, 1982).

He also saw education as a tool for instilling the desired political and life views to the next generation (Mao, 1939; Niu, 1995; Price, 1970; Qingjun, 1994). Dewey believed that all should have the opportunity to be educated, regardless of their social status (Zhang & Sheese, 2017). He also found, as he sets forth in his adult learning theory, that students should study in an environment of collaboration (Zhang & Sheese, 2017).

Shaped by adult learning theory, this research is focused on *Gongli Daxue* graduates who are currently pursuing graduate degrees in the USA and their perception of their level of preparation for study in the USA. Chinese *Gongli Daxue* administrators may benefit from student perceptions when making decisions that shape student success. This research may also help Chinese *Gongli Daxue* leaders evaluate which educational methods will best prepare their students to pursue graduate studies in the USA.

By engaging students, this research may provide *Gongli Daxue* administrators with insight into what students think about their education. When deciding on educational methods, *Gongli Daxue* administrators need to understand what students hope to gain from their education and what students feel they need to be prepared for. While students rarely have a comprehensive grasp of what they need to succeed, their insights may encourage *Gongli Daxue* administrators to listen to student perceptions and take them into account.

Overview of Research Methods

This research was conducted using qualitative methods. Interviews were used to engage students in understanding their perceptions of their educational experience in *Gongli Daxue* in China, and how prepared they perceived their education made them for their graduate education experience in the USA. This research was conducted with Chinese graduate students who had attended Chinese *Gongli Daxue* and were pursuing graduate studies at either a private or public

university in the mid-east of the USA. The participant pool for the surveys consisted of four (4) graduate students, two (2) from an American private university and two (2) from an American public university.

For this research, all interviews were conducted in English. However, the participants were encouraged to use Chinese if they felt more comfortable describing themselves in Chinese. If they wanted, they were allowed to answer all questions in Chinese. The researcher grew up in China and is fluent in Chinese and fully understands the Chinese spoken by the participating students. Thus, the researcher did not need a translator, even when the participants chose to answer in Chinese. A research quality control was having a native Chinese speaker transcribing any sections of the interviews that were in Chinese and then translating these sections of the transcriptions. The researcher also reviewed the translation of the transcripts to ensure the English translation accurately conveyed the participant responses.

The purpose of this study was to analyze *Gongli Daxue* undergraduates who are pursuing graduate studies in the USA and their perceptions of their level of preparation for studies in the USA. It also examined student perceptions regarding their application of their *Gongli Daxue* education in their graduate studies in the USA.

Chapter II

Review of Literature

Introduction

While education has been a key piece of Chinese history, modern Chinese education has only been in existence since the 1970s (Fan et al., 2017; Hu & Seifman, 1997; Siming, 2003). During the 1950s and 1960s Chinese education generally followed a Soviet Union model, and it was only in the 1970s that the Chinese government began to encourage a more Westernized model of education (Fan et al., 2017; Hu & Seifman, 1997; Siming, 2003; Ying, 2015). The 1970s also saw the *Regulations on Academic Degrees in the People's Republic of China* (中华人民共和国学位条例 *Zhonghua renmin gongheguo xuewei tiaoli*) become the guiding set of regulations for higher education in China. This document also encouraged the growth of HEIs in China (Siming, 2003). However, due to the youth of Chinese HEIs, not much research has been done on Chinese higher education because it is considered a new field of study in China (Chen & Hu, 2012; Sun, 2014). This study examined four (4) *Gongli Daxue* undergraduates who are currently graduate students at private and public universities in the USA for their perception of how well their *Gongli Daxue* undergraduate education prepared for their graduate studies in the USA.

To provide a backdrop and insight into current public higher education institutes (*Gongli Daxue*) in China, this literature review examines five (5) critical topics with supporting components. These five topics include 1) a theoretical framework founded in Dewey and Mao, 2) a history of higher education in China, 3) issues relating to public higher education in China, 4) a current overview of issues surrounding Chinese students pursuing graduate studies in the USA, and 5) an examination of skills needed to succeed in graduate education in the USA.

The supporting components for each of the key topics include the following:

Part 1: Theoretical framework addresses a) the influence of Dewey, and b) the influence of Mao

Part 2: History of higher education in China

Part 3: Issues relating to public higher education in China a) modern-day trends in Chinese higher education, and b) the current state of Chinese higher education

Part 4: An overview of current issues surrounding Chinese students pursuing graduate studies in the USA

Part 5: An examination of the skills needed to succeed in graduate education in the USA.

Part 1: Theoretical Framework

Ravitch and Riggan (2017) explained a theoretical framework as a structure that ties together one's research study. A theoretical framework helps provide the guidelines and focus to ensure research is successful (Aubrey & Riley, 2016; Ravitch & Riggan, 2017).

Malcom Knowle's adult learning theory serves as part of the theoretical framework for this research as all the participants are adult learners. Adult learning theory states adults are invested in their education and so have a sense of self-direction and that because of this, they should be included in the learning process collaboratively (Pratt, 1988). This sense of investment is often because adult learners have profound life experiences they bring to the learning process, a need to learn things that apply to society changes, and a desire to learn something they can apply to life quickly, and are motivated by their internal desire to learn (Merriam, 2001).

An education environment for adult learners will foster an environment where the adult student and the teacher work together to plan and manage the education experience (Pratt, 1988). By working collaboratively, there is a shared responsibility in the educational experience so the teacher is not solely responsible for the learning process (Pratt, 1988). Collaboration is a key piece

that is seen to set adult learners aside from younger learners (Merriam, 2001; Pratt, 1988).

John Dewey is relevant to this study because he spent about two years in China. While this was not a long time, those two years helped shape Dewey as a philosopher, and he left a mark on the future of Chinese education that remains strong (Stroud, 2013; Zhang & Sheese, 2017). Dewey believed that education was influential in shaping a democracy, and therefore everyone should have access to education (Stroud, 2013; Vaughan, 2018). Dewey wanted education to address real-world problems by having students learn through real experiences (Daykin, 2014). For Dewey, education was the way social barriers were removed (Gregoratto, 2017).

While in China, Dewey saw many opportunities to use education to influence the future of China (Daykin, 2014). At this point in history, China was developing as a new republic, and Dewey found eager learners who were ready to take his philosophy and educational theories, and apply them to the Chinese society (Youzhong, 1999). Dewey did not see an immediate change in Chinese education and society as he was hoping, but he did see a shift in the thinking of people who listened to him, and this would go on to influence more change in the future (Ching-Sze Wang, 2005).

The 1950s saw Dewey's educational thought rejected as it was viewed as Western during a time when China was turning to the Soviet Union (Zhang & Sheese, 2017). However, as China began to implement the Open Door policy around 1978, Dewey and his educational thought were revisited as China began to reevaluate Western education (Zhang & Sheese, 2017). Because of his time in China, and his emphasis on practical learning, studying Dewey was revived (Zhang & Sheese, 2017). Today, some educators see the value of moving away from test centered education, towards instruction that focuses on solving real-world issues through collaboration and problem solving (Zhang & Sheese, 2017).

During his time in China, Dewey gave a series of lectures in which he detailed his vision

for education and how he saw that vision in China. Dewey believed that humans need education because people cannot merely develop physically. Instead, humans need to develop morally, psychologically, and emotionally (Dewey, 1973, p. 183-184).

> Each of us goes through the gradual process of infancy, childhood, and adolescence before reaching maturity; education is the means of the qualitative improvement of this process, the means by which development in each phase of maturation is facilitated and enhanced. It follows that in a human society education, rather than being a luxury, is a necessity (Dewey, 1973, p. 183).

For Dewey, education is how culture is passed on to future generations. Therefore he stated, "All that we call culture would disappear if we did not have education as a means to transmit it to oncoming generations" (Dewey, 1973, p. 185). While Dewey believed that education was important, he warned of dangers if with education was isolated from everyday life. These dangers included creating an elite section of society, focusing on knowledge and culture and ignoring practical instruction, and education becoming so isolated from society that it does not teach to meet the needs of the society it should be serving (Dewey, 1973, p. 186-187).

Because of these dangers, Dewey advocated for subjects to be taught in connection to the lives of the students (Dewey, 1973, p. 192). In talking about why education should not merely teach subjects independent from practical life, Dewey argued:

> Those who try to defend the use of this kind of subject matter argue that even though the child cannot grasp the significance of the material at the time he "learns" is, he will come to understand it and apply it in the future. All too often the bald fact is that the child cannot, and never will understand material so learned, let alone make use of it. Such subject matter makes little sense to the child, even though it may be regarded by adults as unassailable

> knowledge or incontrovertible truth. It is easy enough to understand why the child does not grasp subject matter which is irrelevant to, and does not occur in, the experiences he has in life. And it follows that what he cannot understand he is not likely to use" (Dewey, 1973, p. 192-193).

Dewey argued that education done in such a way that the subjects learned related to practical actions in life will lead to students becoming interested in learning instead of fearful (Dewey, 1973, p. 194-195). For Dewey, higher education was about creating specialized abilities, thus providing industries with specialists (Dewey, 1973, p. 267).

Mao Zedong's (毛泽东) vision for education has, naturally, shaped modern Chinese education (Mao, 1937; Mao, 1939; Mao, 1964). While historical influencers, such as Confucius, left their mark on Chinese learning to this day, Mao shaped modern Chinese education in a way none of the others have (Price, 1970; Qingjun, 1994). Because of how Mao influenced Chinese education, this study included his theoretical framework.

Mao was trained as a teacher himself, something few other political leaders have been in history, and he taught at the First Provincial Normal School of Hunan province in China (Price, 1970; Qingjun, 1994). He continued to gather personal experience in education through founding a night school for workers, working as assistant librarian at the University of Beijing, being headteacher of the primary school attached to the university he graduated from, and even founding the Open University of Hunan (Qingjun, 1994). During this time, he also became involved in the Chinese Communist Party movement (Qingjun, 1994). Even during WW II, Mao continued to stay involved in education by chairing the Pedagogical Committee of the Anti-Japanese Military and Political College (Qingjun, 1994). During this time, he also gained a desire to save China from the oppression of the West and Japan and saw education as a tool towards this end (Niu, 1995). After

the war and the creation of new China, Mao played an important role in the education of the new country by creating policies governing schools, and also by personally going on school visits to judge the quality of the education (Qingjun, 1994). This personal experience helped Mao understand the importance of education in society and gave him the skills and information needed to form his theory of education (Qingjun, 1994).

Mao believed that schools, including HEIs, were teaching their students theory, but not the skills needed for work and life (Qingjun, 1994). Because of this, Mao did not believe in an education system that emphasized testing but instead called for a system that taught practical knowledge (Qingjun, 1994). Mao also felt that classes were too long and full of knowledge that did not apply to life (Mao, 1964). Mao believed in learning by doing, and so he aimed to have schools that taught topics related to every day, practical life so that the masses would benefit and be best able to benefit society (Price, 1970). Mao wanted to see practical skills taught that would benefit society by building up and strengthening the economy (Hu & Seifman, 1997). Mao saw subjects such as engineering and science as important, but he believed the arts to be a waste of time. Concerning this, Mao taught:

> Generally speaking, the intellectuals specializing in engineering are better, because they are in touch with reality. Scientists, pure scientists, are worse, but they are still better than those who specialize in art subjects. [Liberal] art subjects are completely detached from reality. Students of history, philosophy, and economics have no concern with studying reality; they are the most ignorant of things of this world (Mao, 1964).

For Mao, physical education as vital for society stating, “Physical education complements education in virtue and knowledge. Moreover, both virtue and knowledge reside in the body. Without the body, there would be neither virtue nor knowledge” (Mao, 1917).

Mao also believed in education as a tool to help instill what he saw as the correct political thought and beliefs in the young people of the nation (Price, 1970; Qingjun, 1994). He believed that education was vital to his ability to successfully install a new government (Niu, 1995). Because of this, Mao valued intellectuals and the knowledge that they could impart to the next generation (Mao, 1939; Qingjun, 1994). Political education was something that all schools were required to incorporate to ensure unity in society (Hoiman, 1992). Tied into Mao's thoughts of education were core qualities and principles that he called people to follow, which were: selflessness, persistence, modesty, and ability to learn from others (Price, 1970). Mao believed that education taught one to serve society, and he believed this was something everyone could, and should, do (Niu, 1995).

As a revolutionary, education was vital to Mao as he rightly understood that through education, the hearts and minds of the next generation of Chinese would be shaped:

> We must educate a lot of people — the sort of people who are the vanguard of revolution, who have political farsightedness, who are prepared for battle and sacrifice, who are frank, loyal, positive, and upright; the sort of people who seek no self-interest, only national and social emancipation, who show, instead of fear, determination and forwardness in the face of hardships; the sort of people who are neither undisciplined nor fond of limelight, but practical, with their feet firmly on the ground. If China possesses many such men, the tasks of the Chinese revolution can easily be fulfilled (Mao, 1957).

Even though China has changed in many ways, Mao is still respected, and his views on education continue to shape how leaders in the country envision education fitting in society (Chen, 2013). As universities were reformed with the Open Door policy in 1978, Deng Xiaoping saw universities as important because they trained students to contribute to society (Chen, 2013). This

perspective was a continuation of Mao's understanding of and vision for how education would serve the People's Republic of China (Chen, 2013).

Table 1 *Theoretical framework thinkers*

Theory	Key Concepts
Knowle's Adult Learning Theory	Education theory based on the idea that the investment and drive of adult in their education means that adult learners should be involved in their learning process.
Dewey Educational Theory	Education theory formed on pragmatism that saw education as the means to improve society and bring about societal change.
Maoist Educational Theory	Emphasized education is for the success of the general citizen and worker, gaining the skills needed to benefit society.

Part 2: History of Higher Education in China

Pre-1949

In the past, HEIs in China have traditionally looked different than what one thinking with a Western perspective might expect. Even in Western higher education several hundred years ago, education tended to focus on the intellectual preparation of students for specific tasks. In contrast, Chinese HEIs tended to focus on the instruction of the student as a whole person (Fan et al., 2017). However, though they looked different than Western HEIs, history points to the existence of HEIs, both public and private, in China well before the first century (Fan et al., 2017). Researchers must not discount the HEIs in Chinese history because these institutions look different than modern education institutions. (Fan et al., 2017)

Education was formalized during either the Zhou or Qin Dynasty (around 250-220 BC), where children went to formal school and were evaluated for admissions into public universities that provided eight years of education (Fan et al., 2017; Yalun & Du, 2019). The Jixia Academy, a public university established in China in the 3rd century BC and existing for around 150 years, is

an example of one such HEI (Fan et al., 2017). Confucianism strongly influenced traditional Chinese education with students at the higher education level often being required to read the *Four Books and Five Classics of Confucian* thought (Fan et al., 2017; Jiang & Guo, 2017; Onsman, 2012; Price, 1970).

Confucius (孔子 Kongzi) was a Chinese politician and philosopher who lived from 551-479 BC. He believed people being life the same, but it is their experiences and steps in life that lead them to become so different, and education was seen as one of those experiences that shaped one's life (Price, 1970). Confucius' belief meant one could even change one's social standing and status through education (Weizheng, 1992). Thus, the education also tended to focus on bettering the individual by teaching virtues and preparing students for service either socially or politically instead of solely transmitting facts and knowledge to the students (Fan et al., 2017; Jiang & Guo, 2017). This view of education has had a significant effect on the Chinese traditional education mentality, wherein education is seen as something that helps to develop people in all aspects of life so that they can then contribute to society (Jiang & Guo, 2017).

It was around the 1850s that the first Western universities were established in China (Fan et al., 2017). This establishment came on the heels of the Opium Wars as intellectuals in China realized much of the world was more advanced than China (Fan et al., 2017). The University of Peking was the first Western-style university founded, and its president, Cai Yuanpei, had studied abroad in a Western-style education system at the University of Leipzig (Fan et al., 2017). Around 1919, the Chinese May Fourth Movement, an anti-imperialist reform, issued a call for scientific research in universities. This movement tended to discount tradition, wanting to see a see total Westernization of education in China (Fan et al., 2017).

Post-1949

Following the Communist movement coming to power in 1949, the Soviet model of education began to have the most significant influence on Chinese education as there was a movement against Western thought (Yang & Frick, 2009). Soviet experts were brought in to help restructure the higher education system in China (Fan et al., 2017; Zhang, 2017). This assistance led to the Chinese HEIs being modeled after the Soviet universities (Fan et al., 2017; Hu & Seifman, 1997; Zhang, 2017). To follow the Soviet model, compulsory political classes were introduced and required for all university students (Zhang, 2017). Another emphasis at this time was the focus on education and topics of study that were seen to be of practical value to society (Hoiman, 1992; Hu & Seifman, 1997; Price, 1970; Qingjun, 1994). During this period of history, education was based on the idea that it needed to be ethical, democratic, and scientific so that all citizens could be educated as needed, and the Chinese historical culture could be honored (Jiao Yubu, 1970).

Following this time of growth in Chinese HEIs came the Cultural Revolution lasting from 1966-1976. The Cultural Revolution was a movement seeking to purge traditional and capitalistic elements from Chinese society to preserve Chinese Communist thought. (Hoiman, 1992; Yang & Frick, 2009). During this time in Chinese history, all universities ceased functioning (Hoiman, 1992; Hu & Seifman, 1997). Universities closes because Mao did not see the education system of the day as effectively serving the people (Fan et al., 2017; Mao, 1964; Qingjun, 1994). Formal degrees were also seen as capitalistic, and so to be avoided at all costs (Siming, 2003). Instead, people were encouraged to educate themselves in practical areas of life. Participation in the People's Liberation Army was how people were more formally educated at this time (Hoiman, 1992).

It was not until the 1970s that HEIs in China began to function again (Fan et al., 2017; Chen, 2013; Sun, 2014). At this time, the *Regulations on Academic Degrees in the People's Republic of China* was drafted and implemented as the guiding set of regulations for higher education in China (Siming, 2003). Graduate programs began to operate after the year of 1977 (Hu & Seifman, 1997). Deng Xiaoping was the leader who oversaw these changes as he believed that education was an important way for China to catch up to the rest of the world (Hu & Seifman, 1997). Since the 1970s, HEIs in China have grown so much that China's higher education system has the largest population of students enrolled in its higher education system (Yang, 2015). In the 1970s, China saw the beginning of research in education that slowly developed into a field of study that has led to China being the third largest source of scholarly research articles (Yang, 2015; Sun, 2014; Chen & Hu, 2012). These universities sought to copy the success of Western HEIs by replicating the modern research model of the university found in the West (Fan et al., 2017). This trend towards Westernized research continues today, with the noted difference that Chinese HEIs continued to be influenced by the tradition of preparing officers of the state.

This traditional purpose influences Chinese HEIs today, specifically in that it has led to HEIs being closely tied to the government and having the government closely inform and dictate what they teach (Onsman & Cameron, 2014; Wang, 2007; Yang, 2015). This integration with the state is seen in the organizational structure of universities that have an operational management arm and a policy arm that is under the Communist Party Chief. Having these two arms means two levels of supervision and organization in the school that seek to work together in administrating the university (Berger et al., 2013).

Figure 4 is a diagram of the difference between the Western education system, which is not integrated with the state, and the Chinese education system, which is closely integrated with

the state. Not being integrated with the state allows Western education to have greater academic freedom and autonomy. Academic freedom means absolute freedom for one to pursue searching and to understand the world but may not allow freedom for application (J. Li, 2012). The intellectual freedom the East has can be seen as the freedom to think and apply solutions to life and is viewed as a more holistic way of knowing things (J. Li, 2012).

Figure 4 *Western vs Eastern integration with the state*

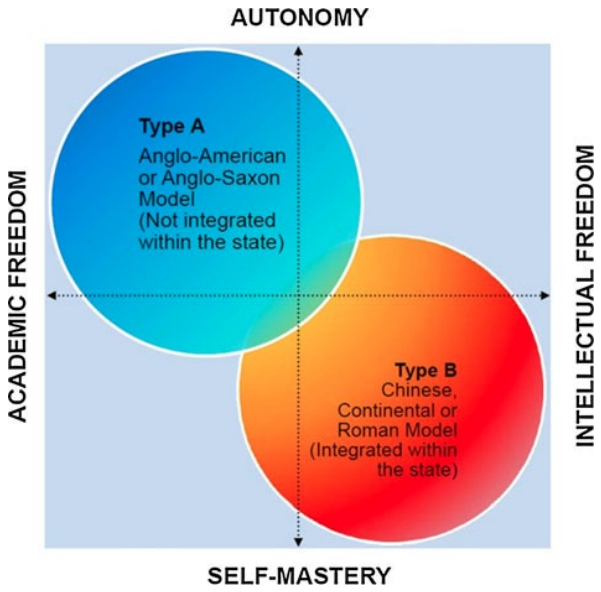


Figure 4. Figure 4 illustrates the differences between Eastern and Western education and their level of integration with the state. Reprinted from World-class higher education and the emerging Chinese model of the university, in *Prospects.* Retrieved January 20, 2018, from https://doi.org/10.1007/s11125-012-9241-y.

Looking to the future - 2035

In February 2019, China released a policy blueprint called *China's Education Modernization 2035* (中国教育现代化 2035 *zhongguo jiaoyu xiandaihua 2035*) which looks ahead to China's plans for education in the years to come ("Every trade has a master," 2019;

Zhu, 2019). In this plan, eight concepts are set forth. They are ethics, well-round development, people-orientation, lifelong learning, personalized teaching, integration of knowledge and practice, integrated development, and co-construction and sharing (Zhu, 2019). The goal of this plan is to see China become a fully modernized country with an education system that ranks among the best in the world (Zhu, 2019). However, this plan is a general outline and does not give specific procedures to meet the goals outlined in it by 2035 (Zhu, 2019).

Part 3: Issues relating to public higher education in China

Modern-day trends in Chinese higher education

Trend – General, or *Tongshi*, Education

Following the revitalizing of HEIs in the 1970s, the 1980s saw Chinese scholars beginning to look at the importance of 通识教育 "*Tongshi jiaoyu*," or general education (Zhang, 2012). Traditionally, "general education" was important in Chinese learning as this type of education is what helps prepare the whole person to effectively serve the state (Fan et al., 2017; Zhang, 2012). The Communist government of China initially removed all "general education" type studies from HEIs, as it enacted its various education reforms, because this type of education was not seen as helpful to the goals of the government (Zhang, 2012). However, the government has now begun to understand the importance of such learning and include it again in education (Zhang, 2012). While the direction and aim of *Tongshi* education are helpful, the implementation of *Tongshi* education has had difficulties (Zhang, 2012). Many of today's Chinese educators and students still tend to view specialized knowledge as ultimately more important in their education (Xiong & Niu, 2018; Zhang, 2012). Even when school administration values *Tongshi* education and pushes to see it implemented, they can find they met resistance from faculty, which can slow down the process of implementation (Xuehong, 2012). This resistance means while general education is

intellectually acknowledged to be a good thing, in practice, specialized knowledge is what is practically seen as important. *Tongshi* education is more than an educational reform but is a change of culture and what is believed to be important (Xiong & Niu, 2018; Zhang, 2012).

Trend – Jobs require higher education degrees

Due to higher education becoming more common and more accessible to students, degrees began to be more and more vital for employment as degrees have almost become a requirement for obtaining a job (Sheng, 2017). Because of this high emphasis on education, even as higher education is now far more accessible for youth in China than ever before, unemployment has begun to be a major negative issue for university graduates (Sheng, 2017). This, in turn, means that families tend to see higher education as even more necessary, that middle-class children tend to be told from their youth that they should be going to college and university to succeed in life, and that these children generally plan on attending a high-ranking college (Sheng, 2017). For many of these middle-class children and their families, the ranking of the university was more important than the exact subject to be studied as this is seen to increase their employability (Sheng, 2017). In contrast, for working-class students, attending a university is not something that they even necessarily consider. At best, most of them would only think of or be able to attend a regular level university (Sheng, 2017). The education they receive then affects their likelihood of being employed in a society that prizes education from high ranking universities (Sheng, 2017).

Trends – Women pursuing higher education degrees

Another trend in modern Chinese higher education is the role of women in leadership. Historically, pursuing a career was something that only men in China did and influenced by Confucian thought, which contributed to the idea that women were to submit in life and pursue virtues specific to women and thus were not to pursue careers (Zhao & Jones, 2017). The

Communist Revolution removed many of these traditional barriers and sought to provide women with equal rights and opportunities (Yakaboski, 2013). However, despite this change, the number of women in the workforce and management has grown throughout China, the number of women in academic leadership roles is relatively small, only around one-third of faculty are women (Rhoads & Gu, 2012; Zhao & Jones, 2017).

Women who do seek to engage in administration and leadership in education tend to have to work hard to prove themselves. In China, men were seen to be more rational and emotionless, and women were seen to have more emotion and be more sensitive. There was no middle ground for men and women to express a mixture of traits (Zhao & Jones, 2017). These perceptions lead to stereotyping, which can mean women end up feeling incredible amounts of stress in work and life (Rhoads & Gu, 2012; Zhao & Jones, 2017). Women also often find themselves balancing the demands of their jobs with the demands of their families (Rhoads & Gu, 2012). For many women, they feel like they sacrifice their career opportunities because of this pressure (Rhoads & Gu, 2012). Because of this, women who do end up in leadership are typically high-achievers, and many had leadership opportunities when they were growing up as well as many examples (Madsen, 2010; Yakaboski, 2013).

Trends – E-learning

As education in China continues to progress, it has fallen in line with much of the rest of the world by expanding into the field of e-learning (网上学习 *wangshang xuexi*). Developing e-learning is currently a major project in China when it comes to education, as e-learning is seen to provide members of society with opportunities to continue to learn throughout their lives (Zhou & Xie, 2010). Educational technology centers (ETC) were formed in many Chinese universities in the 1980s. These centers have continued to change and adapt, especially with the advent of e-

learning (Zhou & Xie, 2010). While ETCs and e-learning are growing in China, there is a clear gap between these in China in other nations around the world. China will need to develop more models and standards to help guide the development of ETCs and e-learning in its universities (Zhou & Xie, 2010).

The current state of Chinese higher education

Achievements of Chinese higher education

A significant achievement of modern Chinese higher education is the increased access to education. Such access has meant more people, who otherwise may never have had the opportunity to obtain a higher education degree, have been able to pursue higher education due to the increase in options and opportunities (Fan et al., 2017; Sheng, 2017). This has become especially true for peasants in China who now have access to the education they never had before (Qingjun, 1994).

A second notable achievement is modern Chinese higher education has helped to create the educated workforce needed for modern China, which in turn leads to an increase in the return seen in the society from the education an individual receives (Fan et al., 2017; Huixin & Haibing, 2016). A final achievement is that modern Chinese education has helped improve women's status in China. Previously not many women had attended university, but they began to attend universities around 1941 and become educated members of society (Yakaboski, 2013). Today, it is often still hard for rural women to attend university, and those who do are often viewed as "strong women" in a negative way (Wang, 2017). However, the opportunity is still there for women who work hard and desire to pursue higher education (Wang, 2017). Once women graduate, they go on to join the educated work-force of the country (Fan et al., 2017; Wang, 2017; Yakaboski, 2013). In summary, modern Chinese higher education has made great achievements in providing education for all and for creating a valuable workforce of educated citizens, including educated women.

Negative consequences in Chinese higher education

While Chinese HEIs have had significant achievements to celebrate, there have also been significant negative consequences that have affected the Chinese HEIs of today. One significant consequence is the abandonment of traditional Chinese educational thought. This abandonment has led to Chinese education being without roots that connect it to its history and its historical methods of teaching and instruction (Fan et al., 2017; Onsman, 2012). Western education does not value tradition as much as most Eastern cultures, and modern Chinese education has followed in these footsteps (Fan et al., 2017). This discounting of tradition can affect education in various ways, depending on the aspects discounted. One practical outcome of tradition being discounted in China is that classes in traditional Chinese thought have been removed from the HEI classroom. These classes that allowed students to feel connected to their history have been replaced by compulsory political courses (Zhang, 2017). These classes, and the ensuing environment, prevent Chinese students from learning critical thinking skills. In contrast to these classes, traditional Chinese thought has the potential to encourage students to critically think for themselves (Zhang, 2017).

A second negative Chinese high education has faced is many Chinese students who go overseas to receive education chose to stay abroad instead of returning to China (Xian, 2015). Students are looking for universities with the best rankings and opportunities and often find those options overseas (Li et al., 2016). China has sought to counteract this by working to attract some of the top talents from around the world and help these people build stable careers in China (Onsman, 2012; Xian, 2015). In some recent studies, it appears this is working and is attracting more students to return to China once they have completed their degrees abroad (Onsman, 2012; Xian, 2015). However, while changes are happening for the better, this “brain drain” of educated

students not returning to China remains a factor that influences China to this day (Tang, Collier, & Witt, 2017; Xian, 2015).

Literature also points to another negative in modern Chinese education: teachers struggle to think about the developmental needs of the students when they think about their educational methods and styles (Zhang, 2014). Sadly, Chinese teachers are rarely taking into account what employers are looking for as they are focused on primarily preparing their students to pass a test (Hora & Blackburn Cohen, 2018). While some teachers seek to be there for students and encourage students to do well, another group of teachers does not care about the students as individuals. Instead, they teach in their way and tend to teach to the test (Meng, Muñoz, King Hess, & Liu, 2017; Zhang, 2014). Even when teacher attitudes change, they are most often not thinking about the needs of the students. Additionally, the teachers who genuinely want to prepare students for employment and the real world are often unaware of what is demanded on the job (Hora & Blackburn Cohen, 2018). Such lack of awareness can lead to the development of students being slowed down as teachers do not consider these needs, and ultimately it can affect student employment opportunities (Hora & Blackburn Cohen, 2018; Zhang, 2014).

Another negative in modern Chinese education is the lack of humanities and liberal arts studies in higher education. Instead, there is near worship of science (Fan et al., 2017; Jiang & Guo, 2017). There has not been a balanced appreciation of the benefits of both areas of study. Fields of study that can lead to specific careers have tended to receive the most attention (Jiang & Guo, 2017). This combination has led to a decline in the morality of students in the current education system (Fan et al., 2017). During the cultural revolution, education was about the advancement of the country and professional and vocational studies, which meant that liberal education was, and often continues to be, lacking in Chinese education (Jiang & Guo, 2017).

However, the government has noted this weakness. It now encourages universities to teach culture and have a stronger focus on some aspects of traditional Chinese education, even though politics is still ultimately more important that culture (Jiang & Guo, 2017). The overemphasis on science has also led to the evaluation of current HEIs based on quantitative data alone, without incorporating qualitative data, which could give complete insight into the state of the institutions and the success of the students, since quantitative data alone does not reveal the needs of students (Fan et al., 2017).

A practical negative found in Chinese HEIs is the lack of emphasis on practicums. Students in programs required to have practicums, such as social work, share that practicums often lack objectives or a clear definition of goals from the instructors (Cai, Bo, & Hsiao, 2018; Chen & Fortune, 2017). While professors may emphasize certain points in the classroom, these are not necessarily brought into the practicum. This disconnect between what students learn in the classroom and what they need for their practicum leaves some students feeling they did not learn what was needed to function in their chosen career effectively (Cai et al., 2018; Chen & Fortune, 2017).

A final negative is that current Chinese HEIs focus on theory, which leads to students not learning how to connect knowledge with practical life, which, in turn, leads to issues of unemployment among graduates as they are not prepared for the workforce with practical skills (Fan et al., 2017). Instead, education tends to focus on exams and providing educational opportunities based on how students do on the exams instead of based on students' ability to use the skills they have learned (Deng & Zhao, 2014; Jiang & Guo, 2017). The literature revealed the abandonment of traditional Chinese thought in education and near worship of science in today's Chinese classrooms are negative consequences that affect modern Chinese HEIs.

Democracy and Chinese higher education

One final area of interest related to current public HEIs, the *Gongli Daxue*, in China has to do with the relationship between higher education and democracy in China. Generally, internationally-focused higher education has led to students, from any country, being more democratically oriented and taking action on these ideals (Onsman & Cameron, 2014). However, since the 1989 Tiananmen square uprising, China has not followed this general trend, and Chinese students are generally not seeking to support democracy (Onsman & Cameron, 2014). This largely has to do with the fact that the Chinese Student Affairs Office, which is closely connected to the government, keeps records on all students and any history with their families. This information can then be passed on to employers in the future, which can influence whether or not these employers are willing to hire certain individuals (Onsman & Cameron, 2014). Thus, while the students know their country has problems, they are proud to be Chinese and typically will not try to do anything to change the problems they encounter (Onsman & Cameron, 2014). Most students are generally happy with their circumstances and do not want to disrupt their social peace, which might well bring negative social consequences (Onsman & Cameron, 2014).

Western vs. Chinese Educational Thought

Eastern and Western educational thought and practice tend to find themselves at odds more often than they agree. One example of such odd has to do with the burden of responsibility for student success. In a Western mindset, the student is the one responsible for success (Chen, 2014). This mindset means that the student is viewed as responsible for his or her success or failure. However, students who succeed are not always viewed in a positive light by society and their classmates (Chen, 2014). It is generally the opposite in the Eastern mindset. In the East, the parents and teachers are the ones seen as responsible for the success or failure of the student (Chen, 2014).

They are the ones who must keep the student motivated to succeed and help the student succeed. However, students who are successful in the East are typically looked up to, and other students are often called upon to follow their example (Chen, 2014).

There is also a significant difference in the Western and Eastern perspectives of what a teacher is to do. In the West, teachers are generally seen as guides (Barratt-Pugh, Zhao, Zhang, & Wang, 2018). This view means that Western teachers will often choose not to give their students all the answers but instead show their students how to find the answers. They want to teach students how to use the knowledge they already have to gain more (Barratt-Pugh et al., 2018). For Eastern teachers, they see themselves as givers of knowledge (Barratt-Pugh et al., 2018). They generally believe that they should give students the answers, and students should listen and believe what the teacher says. Eastern teachers do not view their role as that of a guide, but they see themselves as the teachers of knowledge (Barratt-Pugh et al., 2018).

The status of teachers is also seen differently in the West versus in the East. In the West, teachers are not held to be of high value as they were are one time (Shao & Tamashiro, 2013). This lack of value can lead to a lack of incentive for teachers to inspire their students or continue in the profession of teaching (Shao & Tamashiro, 2013). In contrast, in the East, teachers are valued and viewed as role models for their students (Shao & Tamashiro, 2013). In China, such a view is rooted in the Confucian belief that education leads to the betterment of society, and teachers are to be respected (Lu, 1997; Shao & Tamashiro, 2013; Shibao, 2005). Society's respect for teachers encourages teachers to perform well, which can have positive influences on the students (Shao & Tamashiro, 2013).

Testing in Chinese higher education

A characteristic of Chinese education is the reliance by the Chinese higher education on testing. One example is the dependence of the system on a nationwide test (高考 *Gao Kao*) for placement in positions in society (Rosecky et al., 2004; Jiang & Guo, 2017). The *Gao Kao* determines whether or not a student gets into college, and if they do pass the test, it determines which level of college they then enter. The *Gao Kao* keeps many HEI students out of the public schools due to not having tested high enough for admissions, which means these students must look elsewhere for education, often to private universities (Rosecky et al., 2004; Daguang, 2009). However, these exams do not truly represent learning potential and favor students who have strong test-taking skills (Jiang & Guo, 2017).

Outside of the *Gao Kao*, schools in China tend to focus on tests as their primary method of evaluation of student learning and success (Claxton & Lucas, 2016; Jiang & Guo, 2017; Yuchtman, 2017). Part of this emphasis may stem from the competitiveness of the Chinese education system, where everyone is seeking to be at the top (Jiang & Guo, 2017). Chinese education has also historically been based on memorization and testing, going back to the time of Confucius (Yuchtman, 2017; Zhang & Sheese, 2017). Another reason for this emphasis may originate in the fact that China historically relied on highly competitive tests for the ability to obtain positions in society (Rosecky et al., 2004; Yuchtman, 2017).

Critical thinking in Chinese higher education

Education in the West is a tool to encourage students to think on their own; however, in general, Chinese students struggle with critical thinking and debate more than their Western counterparts do. This struggle shows when Chinese students are asked to engage in Problem-Based Learning (PBL). When faced with critical thinking in a Western education setting, founded on

PBL, many Chinese students are confused by critical thinking and struggle to use it in their studies (Frambach, Driessen, Chan, & van der Vleuten, 2012; Lucas, 2019; Zhang, 2017). Some researchers believe this struggle comes from the differences between Western and Eastern cultures, which affect student thought patterns. Historically, it appears that, while Chinese culture did not use the same methods of debate and critical thinking as the West did, Chinese thought was not less critical. Chinese thought tended to build upon connections and relationships in thinking. Today, this can mean students tend to rely on outside sources and tradition to help them learn instead of using PBL methods relating to critical thinking to teach themselves knowledge (Frambach et al., 2012). However, students who are exposed to critical thinking and PBL tend to be positively influenced and are generally able to learn to use these tools in their learning (Frambach et al., 2012).

Looking at higher education in China today, it is the Chinese authoritarian party that affects students' ability to think critically (Zhang, 2017). Mandatory political and Communist thought classes taught in the universities are part of how student thinking is influenced. This weakness is true for all HEIs in China, as both are required to teach these political courses to students. In the environment created by these classes, students are not allowed to think critically about the government and the actions of the state. Students are not guided to develop the strong skills of critical thinking as they are not taught how to interact with and reason through the materials. They are also referred to a limited selection of sources for the materials they study and are limited in the type of knowledge they could even use to think critically (Zhang, 2017). Without being taught to think, students become more likely to accept beliefs taught in these classes as fact, and most of them never think through what they have been taught to see if it is true. Instead, they are taught to accept information at face value, and many of them do just that (Lucas, 2019; Zhang, 2017).

Part 4: Current Issues Surrounding Chinese Graduate Students in the USA

As international students, Chinese students arriving in the USA for graduate studies often find themselves struggling relationally, culturally, and skills-wise, to fit in with the people around them (Cheng & Erben, 2019; Huntley, 1993; Nguyen, 2013; Wang & Falconer, 2005; Zhou, Frey, & Bang, 2011). The increase of Chinese graduate students in US schools is helpful to the US economy, but the schools, professors, and fellow students are often underprepared to help these students succeed (Park, 2016; Wang & Falconer, 2005). Differences in culture and educational expectations often mean that teachers in the USA do not tend to understand their Chinese students and the Chinese students do not tend to be comfortable in a Western education setting (Huang, 2012; Jian, Marion, & Wang, 2019; Yang, Dunleavy, & Philips, 2016).

Universities are aware of these struggles for international students and look at various ways to help bridge the gaps with their students (Nguyen, 2013; Yang et al., 2016). Some universities have tried mentorship relationships between international students and faculty to facilitate assimilation (Yang et al., 2016). Others do not have specific mentorship roles but do have dedicated advisors available to assist international students with education-related issues (Nguyen, 2013). Language struggles are often emphasized, and while important, research has found that other aspects can have more impact on international students' likelihood to succeed and graduate (Nelson, Jacquelyn, & Bobby, 2004). While universities are becoming more aware of the struggles of Chinese international students, instructors need to be more aware of these difficulties so that they can ensure all their students, including Chinese graduate students, are learning the materials they need to succeed (Huang, 2012).

Skills Issues

Language

One of the first skills to come to mind when thinking of international student study skills is language. Students go into an environment where all their education is now in English, which is a second language for them, and they tend to struggle in their language proficiency (Cheng & Erben, 2019; Huntley, 1993; Nguyen, 2013; Zhou et al., 2011). While they may have passed the TOEFL, that does not mean that they are ready to be comfortable learning in English (Huntley, 1993). This can lead to language anxiety as students who were able to communicate very well in their native language find themselves struggling to express themselves even in simple ways (Cheng & Erben, 2019).

Many Chinese students have not spent much time studying spoken English in their past education and thus struggled to feel confident speaking English in class or asking questions (Cheng & Erben, 2019; Wang & Falconer, 2005). Chinese students may not feel confident. as they fear what they say will not be understood or may not be appropriate for the specific situation (Huntley, 1993; Wang & Falconer, 2005). Due to language anxiety, students tend to try and keep conversations short, and they also avoid conversations with classmates and professors, even if these conversations could help them (Cheng & Erben, 2019).

Not only is spoken English hard for many Chinese students, but they also struggle with listening and written communication. While the students often can understand most of the words spoken, students may not be able to understand what was being communicated (Wang & Falconer, 2005). Grammar, design of sentences, and other syntax rules are very different in English and Chinese, and this can lead students to feel frustrated with writing (Wang & Falconer, 2005).

Critical Thinking

A second skill Chinese graduate students often struggle with is critical thinking (Lucas, 2019; Zhang, 2017). Critical thinking is a skill that educators in the USA tend to see as vital to graduate student success, yet other cultures in the world do not always teach it or view it as important for success in life (Lucas, 2019; Zhang, 2017). In graduate education in the USA, teachers believe that critical thinking, where a person has his/her own thoughts and opinions on an issue, helps to create independence for the student (Lucas, 2019). Because of this, US teachers tend to agree that those who think critically are likely to question people and knowledge without blindly accepting things (Lucas, 2019). However, in China, students are not taught or expected to use critical thinking while they are learning (Lucas, 2019). Instead, college students are expected to memorize material for tests, not to analyze material critically, and to do as they are told (Lucas, 2019; Nguyen, 2013).

This difference in expectations can make adjustments to the US education system difficult for Chinese graduate international students (Lucas, 2019; Zhang, 2017). When they arrive in classrooms in the USA, Chinese graduate students are expected to think independently, something they have little to no experience doing (Huang, 2012; Zhang, 2017). American teachers may become frustrated with the students for not engaging in class with critical thinking, and students may feel frustrated as they do not understand how they are expected to engage in class (Lucas, 2019; Nguyen, 2013; Zhang, 2017).

Academic Integrity

Due to cultural differences, the skill of practicing academic integrity, specifically with regards to plagiarism, is often a skill Chinese graduate students in the USA do not understand (Jian et al., 2019; Nguyen, 2013). Chinese students tend to dislike cheating on tests, but are okay with

plagiarism and benefiting from other team member's work without putting anything in (Jian et al., 2019). Students have a clear personal moral set of standards but do not see academic ethics as important for them to consider in connection to their personal ethics (Jian et al., 2019). They tend to see each other as a connected group of "insiders" who have each other's backs, and so do not tell on someone who has violated a code of ethics (Jian et al., 2019). This attitude may be because the Confucius ideal of community contributes to this mindset of "insiders" and ethics that allow sharing without it being plagiarism (Jian et al., 2019). Classmates and teachers may become frustrated as there is a clash of differing views of plagiarism (Wang & Falconer, 2005).

Relational/Cultural Issues

When someone enters into a culture not their own, there is a tendency to judge others by one's own culture. Similarly, those in the culture one has entered judge the new person based on their own culture (Wang & Falconer, 2005). Chinese students coming to the USA experience the same thing as they tend to judge Americans based on their Chinese culture. American teachers and students, in turn, tend to judge and evaluate Chinese students based on American culture. These judgements can lead to misunderstandings and potential cultural conflicts as both sides struggle to understand each other (Wang & Falconer, 2005). Misunderstandings can be made worse by the fact that since most students will only be in the USA for the duration of their studies and then return home, they lack a reason to try to learn American culture or help Americans learn Chinese culture (Wang & Falconer, 2005).

Communication

Because of cultural differences, communication can be difficult between Chinese international students and their teachers and classmates in the USA. One key struggle is that Chinese students tend to stay quiet in conversations and class rather than choosing to clarify or

explain thinking, something generally expected in American communication (Wang & Falconer, 2005). In classroom engagement, Chinese students do not feel comfortable participating in classroom discussions. because they are not taught to engage in conversations previously in school (Huntley, 1993). However, this participation in generally expected in education in the USA (Huntley, 1993).

Also, because of some of the language barriers mentioned above, Chinese students tend to avoid using English to interact in class (Cheng & Erben, 2019). Because of this, these students tend to try and keep conversations short, and they would also avoid conversations with classmates and professors, even if these conversations could help them (Cheng & Erben, 2019). Surprisingly, it was found that science students tend to assimilate more slowly, partly because they have most of their interactions in the classroom and lab (Cheng & Erben, 2019). In contrast, art students tend to assimilate better by the end of their program, likely because most art programs require more interactions and class participation on the part of the students (Cheng & Erben, 2019).

Relationships

In general, Chinese international students feel isolated during their time of graduate study in the USA (Huntley, 1993; Nguyen, 2013). One practical way this happens is that most graduate students have to find their own housing, which leads to them living with others from their own country and thus being separate from American students who could help them learn the language and the culture and feel more connected (Huntley, 1993). Even when they are out of school, many Chinese students prefer to speak Chinese during their time off and to hang out with those of the same ethnic group (Li & Stodolska, 2006).

However, some students have either the ability or opportunity, to form relationships that enable them to succeed (Nguyen, 2013; Zhou et al., 2011). Some universities work to have advisors

that are specifically responsible for international students, and these students tend to feel more connected and do better in their studies (Nguyen, 2013). However, in most mentorship relationships, the mentee is the one who is expected to reach out to the mentor most of the time (Yang et al., 2016). Because of cultural stresses, students may not always take the initiative to reach out to their advisors as they should (Yang et al., 2016). In one study, students who had difficulty fitting into the culture and struggling with communication often did not use resources that were available to them because they were too reluctant to reach out, while students who had a higher intercultural communication competence level tended to do better in maintaining their relationships with their mentors (Yang et al. , 2016; Zhou et al., 2011).

View of Adulthood

In the USA, college and graduate students are viewed as adult learners, and therefore it is expected that the teachers take students' needs and desires into account (Huang, 2012). In the USA, adulthood is viewed as the time when one is responsible for one's own needs, especially financially (Huang, 2012). Adulthood is often happens between the ages of 18 and 25 (Huang, 2012). However, in China, adulthood is often associated with responsibility to other people and the ability to exercise self-control, not so much a specific age (Huang, 2012). This view of adulthood means that Chinese students in college usually are not considered adult learners because they are not expected to fulfill any adult responsibilities (Huang, 2012).

However, when these Chinese students enter graduate school, this changes, and they are met with huge expectations to fulfill their adult responsibilities (Huang, 2012). Most Chinese graduate students have no work experience but begin to experience pressure to find jobs before they are too old (Huang, 2012). They also experience great pressure to marry before they pass the age of 30 and become "leftover" adults and miss their chance to marry (Huang, 2012). These

factors, and others, often mean that Chinese international graduate students are transitioning to adulthood during their time of studies in the USA (Huang, 2012). Educators in American tend to expect that graduate students have certain work and life experiences that Chinese graduate students most likely have not had (Huang, 2012). Chinese students can have a tough transition for students as they struggle to learn in an environment built on student-centered learning rooted in experiences these students have rarely if ever had (Huang, 2012).

Part 5: Skills Needed to Succeed in Graduate Education in the USA

Narrowing the skills successful graduate students in the USA require is made difficult by the absence of a single resource to collect this information. However, many universities have posted ideals of what they hope to see in graduate students. It is vital that students be prepared for graduate studies if schools are to retain these students and see them graduate (O'Clair, 2013). Students who lack these skills struggle to be able to complete their degree (O'Clair, 2013). Despite this, many graduate department leaders assume that students have the skills they need to succeed, which is often not true (O'Clair, 2013).

At the top of most lists of skills is the skill of hard work as graduate school is time-consuming (Association of College & Research Libraries, 2011; Concordia University Portland, 2018). Other skills would include that students are self-disciplined, responsible, and care about doing their job well (University of Illinois, 2010). Such students usually feel a personal responsibility for learning, which means they are fully invested in the process (Beaumont, 2012). Faculty also tend to see hard work as one of the most important skills for students to have to succeed (IUPUI, n.d.).

Another skill often mentioned is internal motivation, where students have an inner desire to pursue learning, which will help them maintain this motivation throughout the program

(Concordia University Portland, 2018). These students are driven to understand how things work and to learn more about the world around them (Beaumont, 2012). There is a level of investment that helps carry the student through even the hard days (Association of College & Research Libraries, 2011).

Yet another skill commonly referred to is organization (Association of College & Research Libraries, 2011). Organization means a student can look ahead to roadblocks in study and plan accordingly (Concordia University Portland, 2018). Students with this skill can keep on top of their homework and by managing their homework assignments and planning to ensure they complete what they need to on time (University of Illinois, 2010).

Intelligence, or a love of learning, is another skill successful graduate students need to have (IUPUI, n.d.; University of Illinois, 2010). Students need to have a natural curiosity and desire to learn if they are going to be successful as students (University of Illinois, 2010). Intelligence is necessary for students to succeed as graduate students (Beaumont, 2012). Through a love of learning students will be able to absorb information quickly and remember it well as they progress through their studies (University of Illinois, 2010).

The last main skill is communication and includes both written and spoken communication (Association of College & Research Libraries, 2011, IUPUI, n.d.). Writing skills are so important, teachers express concern at student writing skills and what it means for students' ability to learn and comprehend information. Some of the difficulties with writing come from a lack of classes in written communication in college (Ondrusek, 2012). Graduate writing requires advanced writing competencies and organization (Ondrusek, 2012). Graduate students will be required to write at different levels and to write pieces such as grant and fellowship proposals (University of Illinois, 2010). They will also be expected to speak publicly, and engage in and lead class discussions

(University of Illinois, 2010). Without these skills in communication, graduate students in the USA will not succeed (Ondrusek, 2012).

Figure 5 *What the Research Reveals about Graduate Students' Writing skills*

Table 1: Core Competencies of Advanced Writing.

	Articles on Advanced Writing Skills								
Core Competencies	**Bynum and Ferguson, 1981**	**Casanave and Hubbard, 1992**	**Koncel and Carney, 1992**	**Jones et al., 1995**	**Shaw, 1999**	**Caffarella and Barnett, 1997**	**Rose and McClafferty, 2001**	**Linder, Murphy, Wingenbach, and Kelsey, 2004**	**Lavell and Bushrow, 2007**
Organization	✓	✓	✓	✓	✓		✓		
Argument / Evidence / Logic		✓	✓		✓		✓	✓	
Audience / Voice					✓		✓	✓	✓
Content	✓	✓	✓			✓			
Mechanics / Grammar	✓			✓			✓	✓	
Conceptualization / Developing ideas / Pre-writing		✓		✓			✓		
Process		✓				✓			✓
Accuracy				✓	✓				✓
Scholarly identity							✓	✓	
Sources				✓				✓	
Expression	✓	✓							
Critique						✓	✓		

Figure 5. Core competencies that must be present in graduate student writing. Reprinted from What the research reveals about graduate students' writing skills: A literature review, In *Journal of Education for Library & Information Science.* Retrieved August 27, 2019 from https://search.ebscohost.com.

Conclusion

With over four thousand years of history, China brings rich tradition and culture to many aspects of its modern functions. Education is no different, with some of the first HEIs having been founded around 250 BC (Fan et al., 2017; Yalun & Du, 2019). This chapter tracks the growth of Chinese HEIs looking at modern-day trends in HEIs in China, such as general education and

women in higher education. Strengths and weaknesses in Chinese higher education are also evaluated. Specifics are looked at, such as democracy, testing, and critical thinking in Chinese HEIs. Finally, this chapter looks at issues surrounding Chinese graduate students in China and what skills the American graduate schools are looking for in their students. These topics build a framework for this study by setting it within the Chinese education discussion.

Chapter III

Design and Methodology

Introduction

Much of the research done regarding HEIs in China today has tended to focus on government regulations, policies, and university-government relationships (Fan et al., 2017; Rosecky et al., 2004; Hua, 2009; Yang, 2013). Little research has been conducted that examines skills taught to undergraduate students in *Gongli Daxue*, and how these skills affect their success as graduate students in the USA. (Wang, 2004; Sun 2014). With the government's continued push to reform education with *China's Education Modernization 2035,* there is still a lack of clarity on how well HEIs are preparing students to succeed in future studies internationally (Zhu, 2019). This is a gap that needs research. Educators and leaders in Chinese public HEIs must understand what they need to do to see their students succeed in a global world.

Research Questions

This research has sought to help fill this gap by answering the following questions.

1. What are the perceptions of Chinese *Gongli Daxue* graduates regarding study skills and content knowledge instruction received from their Chinese undergraduate *Gongli Daxue*?
2. What are the perceptions of Chinese *Gongli Daxue* graduates regarding the application of their Chinese undergraduate *Gongli Daxue* education in American graduate studies?

Research Design

This research used a qualitative research design. The researcher used the foundation of adult learning theory, Dewey's visions for practical education that solves world issues, and Mao Zedong's theory of education to build the theoretical framework for this study (Daykin, 2014; Mao,

1917, 1939, 1964; Merriam, 2001; Pratt, 1988; Stroud, 2013; Zhang & Sheese, 2017; Vaughan, 2018). The skills needed for success in graduate studies in the USA were examined, to compare the skills students were taught in university in China to the skills they found they needed for their graduate studies in the USA (Association of College & Research Libraries, 2011; Beaumont, 2012; Concordia University Portland, 2018; IUPUI, n.d.; O'Clair, 2013; University of Illinois, 2010).

In this research, using qualitative interviews allowed the researcher to connect with the participants to understand their educational experience in a *Gongli Daxue*, and how the skills they either learned or did not learn, influenced their graduate studies in the USA. (Maxwell, 2013). Interviews allowed the participants to feel safe as they could share experiences in confidence without worrying about their identity being revealed, or others hearing their stories (Milena, Dainora, & Alin 2008). Such a connection allowed the researcher in this study to draw connections that informed conclusions concerning the success of students in pursuing graduate degrees in the USA (Maxwell, 2013). Because the researcher speaks fluent Chinese and understands the culture, the researcher was able to use the language and cultural connections to gain the trust of the students to encourage them to share their true thoughts (Brayda & Boyce, 2014; Hampshire, Iqbal, Blell, & Simpson, 2014).

Qualifications of the Researcher

The researcher grew up in China as the researcher's parents moved to China when the researcher was one and-a-half years old. At that time, there were few Americans in China which meant that the researcher's family was forced to learn Mandarin and develop relationships with the Chinese. As the researcher grew older, her parents began to use their Chinese skills to represent an American company in China.

With a good foundation in Chinese, the researcher's family continued to foster

relationships with the Chinese, either connecting with neighbors or friends of friends. For the researcher, this meant growing up, most of her friends were Chinese, not America. Thus, outside of the home, the researcher nearly always spoke Chinese. Weekends were spent playing with Chinese friends and having friends in the house for food. For many years, the researcher took weekly Chinese classes mostly focusing on literature and idioms, which provided the researcher with a deeper understanding of the language. This experience led the researcher to often be more comfortable expressing herself and her emotions in Chinese.

After graduating high school, the researcher remained in China and completed college through an online American university. The researcher continued to be immersed in the culture and have conversations daily with her Chinese friends. Because the researcher did all her education in English, she struggled with reading and writing in Chinese and its complicated characters. However, since her friends were almost all Chinese, the researcher is fluent in spoken Chinese and able to read and write sufficiently to text and email back and forth with her friends in Chinese.

After graduation from college, the researcher decided to stay in China which enabled her to continue immersion in Chinese culture and language. It was not until December 2015 that the researcher moved back to America. In June 2016, the researcher married her husband, who was a Chinese graduate student in America. Thus, even though the researcher currently lives in America, she continues to speak Chinese daily in the home with her husband. The researcher has a unique ability not only to speak Chinese fluently, but to have a deeper emotional connection to the culture that allows her to understand and read non-verbal ques one can only understand after growing up in a culture.

Participants

For this research project, participants were gathered using the snowballing method

(Snowball sampling; Snowball sampling, 2017; Snowball sampling: Definition, advantages and disadvantages., 2017; Naderifar, Goli, & Ghaljaei, 2017). The researcher used her pool of Chinese acquaintances to assist in recruiting participants. Through this method, the researcher was able to find four participants in a matter of days as these participants trusted the researcher since they either already knew her or were friends of people who knew her.

The researcher used email and *WeChat* to contact potential participants to verify they met the requirements for the study. Requirements included the participant completed undergraduate education in China and were currently enrolled as graduate students in the USA. Once this was confirmed, the researcher continued to communicate with the participants to set up a time to meet in person or video call them via *GoToMeeting*. Before the actual interview, the researcher sent the participants the informed consent form and the skill sheet found in Appendix E. Participants then read over the consent form at their convenience and were prepared with the skill sheet to understand what the researcher was referring to during the interview questions.

Skills List Validation

A list of skills needed in graduate education in America was developed by the researcher and tested via pilot interviews. This list is referenced in the study as the "American Graduate Skill List." These skills came from an analysis of what skills are needed for success in graduate education in America, as listed in the sources used in the literature review. The researcher did not find in the research process any authoritative list already created. Because of this, the researcher used sources from universities and research groups in America about what they were looking for in graduate students (Association of College & Research Libraries, 2011; Beaumont, 2012; Concordia University Portland, 2018; IUPUI, n.d.; Ondrusek, 2012; University of Illinois, 2010). These skills included technology, English language, math/financing, relational, public speaking,

written communication, problem-solving, career growth, team leadership, and time management skills. This list can be found in Appendix E of this study.

Interview Validation

Before the interviews, the researcher used content validity index (CVI) and pilot interviews to validate the interview questions. For the CVI, the researcher sent the interview questions to professors who had taught Chinese graduate students in the USA. These students had completed their undergraduate studies in China. The researcher looked for teachers with experience teaching Chinese graduate students from any undergraduate institutions in China. Three content experts responded to the request for a review of questions.

For interview Question #1, there was one sub-question that received a CVI result of 67% strength. This question asked participants why they might not have felt prepared in the specific skill in China. One of the content experts felt this question might lead to too simple of an answer. To help clarify the question, revisions were made. Additions were made to the interview protocol to ask participants why they felt they were not taught specific skills. The interviewer also asked probing questions as needed. All other sub-questions for question one received a CVI result of 100% strength.

Question #2 and all its sub-questions received a CVI result of 100% strength. Questions three and four received a CVI result of 67% strength. One of the content experts felt these questions were too vague and should look at focusing on each skill. However, since two of the content experts thought these questions were reliable, the researcher decided to keep them as they were. The goal was to provide participants with space to share what they thought might be relevant, a post-interview thought, or something that was not asked regarding a specific skill.

Two pilot interviews were conducted with Chinese graduate students at a local seminary.

Both students had attended public universities in China. These pilot interviews were both conducted in person and in English. Both interviewees agreed that the questions made sense, and they were able to answer all the questions and provide meaningful feedback. While the researcher recorded their interviews and took notes for practice, no data from the pilot interviews was used in the research.

Data Collection

Interviews were recorded using *GoToMeeting* software. The interviews were saved online in *GoToMeeting* in a password-protected account. The researcher also downloaded the recordings to the researcher's computer, and they were stored in a password-protected file. Students were given a list of skills to reference during the interview to help provide a foundation for the discussion. All questions were designed to better understand how well students felt prepared in these skills in their undergraduate studies, and if they had found themselves using these skills in their graduate studies in the USA. During the interview the researcher took notes by hand of key statements and words. Interviews lasted around 70-120 minutes in length. All interviews were conducted in-person and recorded with *GoToMeeting*, or online through the video call function in *GoToMeeting*.

The first two questions in the interview protocol included related sub-questions. The interviewer explained each question to the participants. The explanation helped participants understand the direction of the questions and allowed the participants to use an uninterrupted narrative format in answering. The researcher guided the participants to answer any sub-questions that were relevant to their answers.

All of the research questions were addressed through the interviews. For the first research question: "What are the perceptions of Chinese *Gongli Daxue* graduates regarding study skills and

content knowledge instruction received from their Chinese undergraduate *Gongli Daxue*?" the researcher used the American Graduate Skill List (Appendix E) to discuss student perceptions of preparation. Students were asked if they perceived they were prepared in each specific skill, and to then expound on their answer. They were also asked to discuss how they were taught each skill in their undergraduate experience. The researcher then coded and themed the interview data for analysis.

For the second research question: "What are the perceptions of Chinese *Gongli Daxue* graduates regarding the application of their Chinese undergraduate *Gongli Daxue* education in American graduate studies?" the researcher used the same list of skills (Appendix E). Students were asked about how they had used this skill in their studies in the US, and if they had felt more or less prepared than classmates in these skills. Information collected via the interviews was then analyzed by codes and themes to look for key factors that stood out.

The researcher collected demographic information including the age of the participant and how long each participant had been in America. Participants were also asked whether or not they had worked in China and, if so, for how long.

Analytical Methods

Qualitative analytical methods were used to analyze the data collected through interviews. *GoToMeeting* has a transcription feature that transcribed each interview fairly accurately. The researcher then downloaded this transcript to a file folder on the researcher's password-protected computer. The researcher then listened to each interview and checked each transcription for accuracy. Transcripts were edited for correction where needed. After all interviews were transcribed, the researcher went through the transcriptions using the methods of coding, categories, and themes.

Initial coding was first used by the researcher to look for similar thoughts and themes throughout the interviews (Saldana, 2016). Having found key themes, the researcher then went through the interview transcripts to look at one skill across all four transcripts and coded using descriptive and *in vivo* coding. In descriptive coding, the researcher looked for words, phrases, thoughts, and nouns that summarized the basic idea of what the participants were saying (Saldana, 2016, p. 105-106). These became the main codes for the data. For *in vivo* coding, the researcher specifically looked for sections that would allow the participants to speak for themselves, so honoring each of their voices and experiences (Saldana, 2016, p. 115).

Limitations

In this research, several potential limitations had to be prepared for and taken into account throughout the research process. One limitation for this researcher was the limited amount of time that could be spent with the participants. Since the researcher was working with graduate students, and only conducted one interview with each, personal interactions were limited. The researcher was limited in the amount of personal connection and trust that could be built with the research participants. This was offset by the fact that for three of the participants, the researcher personally interacted with them on at least one occasion previously so the researcher was not a complete stranger to them at the time of the interview. One participant and the researcher had never met; however, they had mutual acquaintances. Having some level of relationship with the participants, even if it was through mutual friends, enabled the participants to feel safe and able to share freely in the interviews.

To further counter this limitation, the researcher looked for other connections that would help bridge the gap and enable the research participants to feel a secure connection to the researcher, which would, in turn, lead to more accurate results. The researcher worked to also connect with

the participants over language and culture. While being a white American, the researcher grew up in China, speaks Chinese fluently, and has a firm grasp of Chinese culture. The researcher used these facts to deepen the connection with the participants. The participants were relaxed and willing to share as they knew the researcher could speak directly to them in their mother language and understood how they thought and communicated.

A second limitation the researcher faced was the Chinese cultural tendency to always give the right answer, or the answer they think one wants to hear. The educational system and methods in China tend to train students to provide the correct answer the teacher wants. Students are not trained to think outside the box, but to give the answer they believe to be the right one (Lucas, 2019; Zhang, 2017). Students often feel constrained to some degree to provide the correct answer whether or not they believe it is the right answer. The researcher had to be very aware that the participants, would be likely to answer interview questions in the way they thought the researcher would want them to answer, and not according to what they truly thought.

The researcher actively sought to counteract this. During the interviews, the researcher began by letting the participants know that all information gathered would be confidential and that she truly wanted to know their thoughts. Since the researcher was in tune with Chinese culture, she was also able to sense when the subject was likely giving an answer that was not in line with their thoughts on the issue. The researcher was then able to follow up with a question to ask the subject to share their thoughts on the question. Having at least some level of relationship with these participants also meant that the participants felt more at ease, and this helped counteract some of their potential tendencies to give what they perceived to be the “right” answer.

Delimitations

A delimitation of this study was that the selection of students for the interview used the

snowballing method. This delimitation meant that participants came from a small pool of students. Snowballing could not account for students who were in other schools or not known by the acquaintances the researcher asked help find participants. Because of this, the researcher had little control over the backgrounds of these students or the ability to select participants who evenly reflected the Chinese graduate student population in America.

A second delimitation of this study was the sites students were recruited from. The participants the researcher was able to recruit came from a small religious school and a public university in one town in the Mideast of America. The researcher could not interview students from all universities in the nation or even just the region of the mid-east USA. Participants were selected from these two institutions as these were where the researcher knew friends who could assist in finding participants through snowballing.

Control of Researcher Bias

Having grown up in China and spent time discussing education with friends there, the researcher already had a personal bias towards how effective the college education system in China is. To counter this, the researcher sought to ensure that all interview questions were general and open-ended. The researcher also gained IRB approval as well as guidance and insight from the committee chair to ensure that interview items did not display bias. In the analysis of data, the researcher asked for the insight of the committee members who reviewed the dissertation, to ensure that the data analysis was fair and not corrupted with bias. The researcher also used triangulation, bracketing, reflexivity, and member checking to ensure the data was fair. These are examined below.

Triangulation

This study used data, or data source, triangulation. This method of triangulation looks to

obtain data from different people, different communities, or different times (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014; Fusch, Fusch, & Ness, 2018). For this study, participants were from two HEIs, one a public university, and one a religious HEI. The students experienced education in America differently due to the differences in these two schools and meant that the four participants did not share the same experiences in America. This triangulation allowed the researcher to test the validity of the conclusions by looking at how the information from these four participants converged (Carter et al., 2014).

Bracketing

In this study, the researcher practiced bracketing. Bracketing is both an act and a state of mind on the part of the researcher (Drew, 2004). The act is that of the researcher seeking to put aside assumptions (Rolls, & Relf, 2006). "Bracketing typically refers to an investigator's identification of vested interests, personal experience, cultural factors, assumptions, and hunches that could influence how he or she views the study's data" (Fischer, 2009). In this case, having grown up in China, the researcher had the experience of friends who had been through the Chinese education system. This meant that the researcher already had assumptions based on what she has learned in these past friendships. Through bracketing, the researcher consciously sought to set these experiences and assumptions aside. Bracketing allowed for an open-minded approach to interviews. The researcher also did not share the purpose of the research until after the interviews. These practical steps allowed her to keep her bracketing during the actual interviews.

Reflexivity

From the inception of this research idea to the conclusion of the study, the researcher sought to engage in reflexivity. Reflexivity appears to still be debated in the field of research today, which makes it difficult to define in detail (Darawsheh, 2014). For the researcher, reflexivity meant

always to be aware of how actions or perceptions might influence the findings of the study (Cain, MacDonald, Coker, Velasco, & West, 2019; Darawsheh, 2014). Researchers have noted that reflexivity is important in international research since the researcher's knowledge and experiences shape how they approach the study but are often significantly different from their participants' experiences (Yao, & Vital, 2018). For the researcher this meant reflection on how personal experiences growing up in China may have differed, due to location and time, with the experiences of her participants. Care was taken to ensure questions and interactions did not assume participants' experiences but asked for them to share their experiences. The researcher was educated in a Western format and reflected on the differences in what could be considered successful education so participants would feel comfortable sharing their experiences without researcher judgment.

Member Checking

After the research was collected for this study, the researcher used member checking. This step was taken to seek to ensure that the research presented accurately represented the perceptions and experiences of the participants and thus can be viewed as accurate (Naidu & Prose, 2018; Thomas, 2017). In the interviews for this study, the researcher let the participants know she would be sending them her research. She informed them she would be looking to verify that the things she presented them as stating and sharing were understood correctly and were indeed their perceptions and experiences in either China or America. None of the participants shared any concerns about how the research was presented. They did find a few small mistakes, such as the specific years worked at a job, which the researcher corrected.

Chapter IV

Findings

Introduction

The purpose of this study was to gain an understanding of student perceptions of how well their undergraduate education in China prepared them to study in American graduate school. The research questions for this study served as the framework around which two interview questions were crafted.

1. What are the perceptions of Chinese *Gongli Daxue* graduates regarding study skills and content knowledge instruction received from their Chinese undergraduate *Gongli Daxue*?
2. What are the perceptions of Chinese *Gongli Daxue* graduates regarding the application of their Chinese undergraduate *Gongli Daxue* education in American graduate studies?

Snowballing was the sample selection process used for this research. Using the method allowed the researcher to quickly find participants through contacts the researcher already had. Contacts already trusted the researcher, which is an important consideration for Chinese students who value privacy and face the potential for recriminations, directly and indirectly, in China, as they were friends of her friends (Snowball sampling; Snowball sampling, 2017; Snowball sampling: Definition, advantages and disadvantages., 2017; Naderifar, Goli, & Ghaljaei, 2017).

The researcher conducted interviews with four students currently in American graduate studies. Three of the students were female, and one was male. Two of the students were pursuing master's degrees at a religious institution, and two of the students were pursuing doctoral (Ph.D.) studies at a state university. One of the students had graduated from a Chinese university fifteen plus years ago, and the others graduated from Chinese colleges around six to eight years ago. All of the students had completed their bachelor's degrees in China and had come to the United States

for graduate degrees.

Two of the interviews were conducted in person, and two were conducted via *GoToMeeting*. All interviews were mostly in English, though the participants did use Chinese in a few occasions to clarify or better convey what they were sharing. The researcher speaks fluent Chinese and was able to understand and engage with the participants when they chose to use Chinese expressions.

Before the interviews began, each of the participants was curious about the study. However, the researcher did not share details with them about what the goal of the study was until after the interview. This was one practical way the researcher sought to ensure researcher bias did not influence the tone of the interview and allowed the participants to truly speak for themselves.

Profiles of Participants

For reporting, the researcher created the following fictional names for the participants:

Table 2 *Profile of Participants*

Fictional Name	**Gender**	**Age**	**Previously Worked in China**	**Years Worked**	**Years in US**	**US Degree candidate**	**Enrolled in US public or private college**
Huang	F	49	Yes	25	2	Master of Arts	Private
Yang	F	29	No	NA	5	Master of Arts	Private
Wu	F	28	No	NA	6	PhD	Public
Zhou	M	31	Yes	2	10	PhD	Public

Huang

Huang, age 49, was the oldest of the group of participants for this study. She had completed her college education in China before pursuing a career in China. She completed her college via distance (函授 *Hanshou*) in China. However, her school was based in Beijing. It was a public

university that was science focused. Not all of her career experience was discussed. However, she talked about a job she held where she worked for a Canadian employer in China. She was able to point to her work experience with the Canadian employer as a key to her personal growth and preparation for her graduate studies in America.

Huang is not married and is currently in America pursuing a master's degree from a private religious school in the Mideast of America. She is working part-time on the campus of her school to help cover her financial needs. The researcher had also obtained a degree from this Mideast school. Huang has been in America for two years and can converse fairly clearly in English. Huang did not have to rely on Chinese, only choosing to use Chinese one or two times in the entire interview. She does have an accent, but the researcher was able to track and understand everything that Huang was communicating.

The researcher and Huang met each other before at Chinese New Year events at the school, but the interactions did not go beyond greeting each other. Huang and the researcher were able to meet in person for the interview on a Sunday after church. Huang came to the researcher's house for lunch and the interview. While the interview was conducted in person, *GoToMeeting* was used to record the meeting and produce an initial rough transcript. At no time did Huang seem shy or hesitant to share about her experiences and perceptions. In China, *guanxi* 关系, or relationships, are important for trust. Since the researcher and Huang had a relationship through school and friends, Huang trusted the researcher and was willing to be open and honest in discussions.

Yang

Yang, age 29, completed her college education in China. She went to a public university in Beijing, China, that focused on the sciences. Yang has been in America for five years and is currently working on completing a master's degree from a private religious school in the Mideast

of America. Yang came to America soon after completing her undergraduate studies and did not have career experience in China.

Yang has been married for about four years to a Chinese man she knew in China who is currently in America studying at the same religious school. From 2014-2016 she worked part-time on the school's campus to help provide income for her family. Yang does not currently work. Having been in America for five years, Yang's English is clear, and the researcher was able to understand her and only needed to ask her to repeat herself on a few occasions. Yang did use Chinese one or two times to express a word or thought, but other than that communicated in English. She did have an accent but was easy to understand.

Yang and the researcher were friends from when the researcher was at the Mideast school and been roommates for one semester. Because of the Chinese cultural emphasis on *guanxi* 关系, or relationships, this meant that Yang trusted the researcher deeply and was relaxed and very open in sharing details related to the questions the researcher asked.

Yang is a cancer survivor, and her battle with cancer informed some of her answers as her cancer meant she had slowed down her studies over the past two years to focus on recovery. The researcher met with Yang in her apartment on the school campus and brought coffee to share. For the entire interview, Yang sat comfortably on her sofa in her home. Being in her own home allowed her to be physically and emotionally comfortable, so it was a chat between friends. While the interview was conducted in person, *GoToMeeting* was used to record the meeting and produce an initial rough transcript.

Wu

Wu, age 28, is a sweet and bright woman who had completed her college education at a public university in China's Sichuan province. She has been in America for six years and

completed a master's degree at Berkley in California. She is currently working on her Ph.D. in Computer Science from a public university in America's Mideast. Wu came to America right after receiving her undergraduate degree and had no career experience from China.

Wu is engaged to an American man and will be getting married this year. Having already completed a degree in America, and being around Americans, such as her fiancé, Wu's English was very good. Wu also works part-time off campus to pay for school and help provide for the family. While she had an accent, it was very light and not noticeable during the interview. Wu had an incredible grasp of English vocabulary and did not end up using any Chinese words or expressions in her interview. The researcher and Wu did connect some in Chinese at the end of the interview while discussing Chinese New Year celebration preparations, but no Chinese was used during the actual interview session.

Wu and the researcher had never met. The researcher knew others at this public university, and using the snowballing method, had reached out to others and been connected with Wu. While Wu and the researcher did not know each other, Wu was very comfortable throughout the interview. This was likely because the researcher grew up in China and had common friends with Wu and thus a level of *guanxi* 关系. The interview was conducted via *GoToMeeting* and recorded for reference as well as to produce an initial rough transcript. Wu was in her home for the interview.

Zhou

Zhou, age 31, is a graduate of a public university in China. He attended a military academy in China and has a unique experience and perspective because of this. Zhou has been in America for ten years, the longest of any of the participants interviewed. He completed a master's degree from the University of Buffalo in New York. Zhou is currently working on his Ph.D. in Mathematics from a public university in America's Mideast. He did have about two years of career

experience in China but did not speak of this during the interview.

Zhou is not married and currently working full time as he completes his Ph.D. After being in America for ten years, Zhou has a good grasp of the English language. While he does have an accent, it is not hard to understand what he is saying. The researcher did have to ask for clarification a few times but was able to understand what was being communicated. Zhou did choose to use Chinese expressions and words multiple times in the interview. This was mostly because certain words and phrases in Chinese are hard to translate to English and maintain the same feel to the meaning. For example, when at the end of his interview Zhou talked about *tian ya shi jiao yu*“*填鸭式教育,*”a Chinese expression that means “stuffing the duck method education,” there is no English expression that carries the same feel as this Chinese expression.

Zhou and the researcher had met on several occasions at student events where there were mutual friends. However, Zhou and the researcher did not know each other. There still was a level of *guanxi* 关系 since both had met each other and had a group of mutual friends. This meant Zhou felt safe to share his experiences and thoughts with the researcher. The interview was conducted via *GoToMeeting* and recorded for reference as well as to produce an initial rough transcript. Zhou did the interview from the comfort of his home and was relaxed during the interview.

Findings

The interviews were formed around two groups of questions: Experiences and skills required to complete undergraduate education in China and, secondly, application of those skills in American education.

The first group of questions focused on the participants’ experiences during their education in China. A researcher designed skills sheet (Appendix E) was provided to each participant for the first set of questions. The researcher walked the participants through each skill one at a time. The

researcher asked the participants if they believed (perceived) they were prepared in each skill in China, to explain reasons for their perception, and how they were prepared.

For the second set of questions, the researcher probed for perceptions about how participants used these skills in graduate studies in the USA; if so, how, and how well the Chinese undergraduate education in skills had prepared them to function as graduate students in the USA. Two final questions provided the participants with an opportunity to add anything else related to their educational experiences in China or the USA that they wanted the researcher to know.

All four interviews were coded, allowing the researcher to look for themes and categories. Coding began with initial coding where the researcher looked at questions about either Chinese education or USA experiences and examined each skill in each set of questions, looking for similar thoughts or themes and deciding on groups or ideas to use for the second coding (Saldana, 2016, p. 102). Following this, the transcripts were examined a skill at a time, looking at one skill across all four transcripts, and coded using descriptive and *in vivo* coding. Descriptive coding allowed the researcher to use words, phrases, thoughts, and nouns that summarized the basic idea of what the participants were saying (Saldana, 2016, p. 105-106). *In vivo* coding looked at the transcripts specifically seeking to identify sections that either should be quoted, or used in writing, as words and phrases to honor the participant voice in this study (Saldana, 2016, p. 115).

The following table shows the general themes and codes gathered from these interviews:

Table 3 *Themes and Codes*

Theme	Code	Frequency				Total
		Huang	Yang	Wu	Zhou	
Not Taught in China	Technology	1	1	1	1	4
	English			1	1	2
	Math/Financing	1	1	1	1	4
	History		1	1	1	3
	Relational	1	1	1		3
	Public speaking	1	1	1	1	4
	Written communication	1	1	1	1	4
	Problem solving	1	1	1	1	4
	Career growth	1	1	1	1	4
	Team leadership	1	1	1	1	4
	Time management	1	1		1	3
Taught in China	English	1	1			2
	History	1				1
	Relational				1	1
	Time management			1		1
Not used in USA	Math/Financing	1	1			2
	History		1			1
	Relational	1	1			2
	Public speaking	1	1			2
	Career growth	1				1
	Team leadership	1				1
Used in USA	Technology	1	1	1	1	4
	English	1	1	1	1	4
	Math/Financing			1	1	2
	History	1		1	1	3
	Relational			1	1	2
	Public speaking			1	1	2
	Written communication	1	1	1	1	4
	Problem solving	1	1	1	1	4
	Career growth		1	1	1	3
	Team leadership		1	1	1	3
	Time management	1	1	1	1	4
Prepared	English		1			1
	History	1		1		2
	Technology				1	1
	Math/Financing			1	1	2
	Written communication	1				1
	Career growth		1			1

	Time management	1				1
Less prepared	Technology	1	1	1		3
	English	1		1	1	3
	Math/Financing	1	1			2
	History		1		1	2
	Relational			1	1	2
	Public speaking			1	1	2
	Written communication		1	1	1	3
	Problem solving	1	1	1	1	4
	Career growth			1	1	2
	Team leadership		1		1	2
	Time management		1		1	2
Perceptions: Positive	Help from school in America		2	2		4
	America more diverse			2		2
Perceptions: Negative	Anything not in major not taught	3	2	2	3	10
	Chinese education theoretical not practical	2	3	1	2	8
	Taught to test/conform		3	7	4	14
	Schools not care about students		2	2		4
	Spoken English hard		2	5	2	9
	Lack of help				2	2
Perceptions: General	Learned in middle/high school	1	2	2	1	6
	Learned in America		2	2	7	11
	Learned life skills from family	2	1	1		4
	Learned skill through work or on own	7	5	1	3	16
	History was political classes		2	2		4
	Independence not teamwork		1	4		5
	Fixed schedule in college in China			3	2	5
	Chinese students finances cared for by family			4		4
	Credit system in America different			2	2	4
	Textbooks used		1	2	1	4
	Handwritten homework		1	2	1	4
	Email not used in China		2	2		4
	Communication in America less formal		2	2	2	6
	Grading system different			2	3	5
		44	64	83	68	
					Total	**259**

The researcher did the initial analysis following the natural progression of looking at each skill individually. This analysis allowed for a more cohesive and natural progression through the data. However, these themes are found throughout the interviews, and the researcher seeks to emphasize them and will discuss them in the summary of this chapter.

Skills Learned in China

Technology Skills

Technology skills looked at whether or not students felt they were prepared in practical areas such as being able to use the web for homework, using word processing software, and installing needed software. All of the participants shared they did not feel they had been prepared in technology skills through their studies in China. Huang shared her perception that her lack of preparation may have been related to the fact that she attended college before technology became a real part of everyday life. Three of the participants all learned technology skills on their own or in middle school. Each of them had used technology but did not feel that they had learned this skill in college.

Zhou wondered aloud why technology was not taught, and it seemed to be that the school focused on its program and needed curriculum and nothing outside of this scope. “Each program in college has its own curriculum to teach…it’s not a college level knowledge, I think…they don’t belong to the curriculum of the college” (Zhou).

Zhou noted that his college assumed he knew technology information. In his case, this was true as he had learned technology skills himself in middle school as computers were becoming popular and he had personal interest in learning them.

Another reason technology seemed not to be taught was that participants stated it was not needed for class. Both Yang and Wu shared that they used physical books and handwrote most of

their homework. “All our homeworks are written by handwriting, pen and paper. We need to handwrite. …we just, all we need just books. And yeah, each homeworks are written on paper” (Yang).

> So, like one thing I noticed when I was in China, everyone use textbook like all everything in paper in physical book…. First my friend joke about me “Yeah, you are from China.” It is still always like very traditional kind of teaching way. People like to take notes in their notebooks. We don’t even like to Google the answer for the homeworks. (Wu)

Wu’s expression and confident tone of voice conveyed her negative feelings about this experience, and she made an interesting observation about how this differed from what she saw in the USA. “But I came to here I went to school, no one’s using textbook. Everything is in the iPad, on their laptop” (Wu).

Wu studied mechanical engineering in college. However, she noted that even for this major, they rarely used computer tools to help with design or other assistance. Instead, they did mostly hands-on projects.

Because these participants did not learn or use technology in college in China, technology was more for personal use. Yang shared this perception with a laugh. “So, computer, my PC, mostly are for entertainment honestly…. for watching movie and stuff” (Yang).

English Skills

Participants were asked if they perceived they were well prepared with English skills to do tasks such as read a newspaper, respond to an email, have a conversation, or write an essay in English. Huang and Yang felt that they were prepared in this skill, while Wu and Zhou did not feel prepared in their education in China.

Both Wu and Zhou perceived their college education in China to focus on preparing them

to take and pass tests, and not on preparing them to use English in real life. Because of this, these participants shared that they learned a lot of grammar but were only taught what the teachers knew would be on the test. Indeed, passing this test was required if these students wanted to graduate from college. “Everything we learned, everything we learned for English knowledge is for those exams. ...When I was in college, I cannot get the degree if I don’t pass those tests…. it’s very test orientated not for real life practicing purpose” (Zhou).

Wu’s experience was similar, and she eagerly shared her struggles once she arrived in the USA due to having not learned to speak English skills in college.

> Like I can take the exams. I can take full scores all through my whole life or or any English test, but this, me to say to speak, I cannot…. My friend met me the first month, the first three months. They cannot believe I can survive my spoken English was too bad. (Wu)

Both Wu and Zhou felt that they had been taught English grammar and vocabulary but had not been taught the specific English skills they later found they needed for daily life and school in America.

Huang and Yang shared different experiences. Huang was an unusual case in that she had received her degree in English, so she had more classes and education in this skill. Huang shared her experience of having teachers who had studied abroad and sought to teach their students reading and listening skills, not just grammar and test information. She shared a specific example of how she was pushed in her reading ability.

> They gave us like the authentic articles…. Original articles from English world from the newspaper here to read…. I remember the advanced English class, the article that we read actually I am clueless at the beginning….do it’s pretty difficult at the beginning but after we learn it becomes easier for me. (Huang)

For Yang, when she entered college, she found herself testing into a higher level of English classes due to her having been well prepared in high school. She shared that her high school specifically helped prepare students for future study abroad. Yang also shared that in college, she had foreign teachers. “I think those classes aren’t challenging. But they are, they gives me a very good opportunity to develop full range with them, become and learn the cultural stuff” (Yang).

All of the participants seemed to perceive that English was important in their college education. However, their different experiences with how they were taught affected whether or not they perceived they were prepared in this skill.

Math/Financing Skills

Math and Financing skills focused on practical skills such as budgeting, tracking expenses, and creating financial tools. All four participants agreed they had not been prepared in this skill at all through their education. Yang’s perception was particularly interesting, as she had been a math major in college. After she informed the researcher that she did not feel prepared in this skill, the researcher asked her about this since her degree was in math.

Yang shared that her experience was learning only theoretical knowledge. “We as mathematics major, we were taught very theoretically, but none of them are about financial things and help you to manage your life” (Yang).

Instead of an education with a mix of theory and practice, Yang shared a glimpse into what she learned. “To prove things…I remember the first class it might even be like why one plus one equals two, very abstract” (Yang).

While Zhou was not a math major, his experience echoed what Yang shared. “I don’t think that you learned this from school actually in China…The math in college is very theoretical, so which help you get into an advanced degree” (Zhou).

Zhou also lamented that he found in school that students did not learn things needed for real life. He wondered if finance major students might have such a course. “It somebody, I think there are some students major in finance. They probably got a very theoretical so-called very, the radical course for the financing, but unfortunately general student we don’t learn those things especially for real life purpose” (Zhou).

Both Zhou and Huang shared that instead of learning math and financing skills in school, they learned these skills on their own. “No, the school that doesn’t teach you how to balance your budget, it’s actually something you learn by yourself” (Zhou). “Nothing at all, I learned them through my own life experience” (Zhou).

Wu had a perspective on financial skills that none of the other participants raised. She did not believe that being good at math correlated with being good at finances. “We are good at mathematics but doesn’t mean we are good at financing” (Wu).

Getting excited about this point, Wu went a bit off-topic from talking about being prepared in college for math skills to talking about how her family did not prepare her either and why. Her experience was that her family desired her to focus on school and do well, so she did not need to worry about finance. Unlike Zhou and Huang, who learned financial skills in life, Wu did not have the same opportunity as her family took care of all her financial needs.

> So financial part, they have been supporting us, so we don’t need to worry…So I don’t worry about that much in general. Entire life we are just such students. But here, the students from the first year, second year, they have been working part-time or whatever, they can related with the society a lot. (Wu)

History Skills

History skills involved having learned major Chinese and Western historical events. All

but one of the participants did not perceive they had been prepared in this area. Huang shared that she did feel prepared in history as she had taken classes on history. These classes were in English as part of her major. "I remember we have class…called American culture and history…And we also have a class about Chinese history. Okay, both are taught in English though" (Huang).

However, while Huang did remember having classes on history in college, she did concede that most of her knowledge of history, especially about China, was learned in high school, not college.

Yang, Wu, and Zhou all agreed they were not prepared to understand history through their college education. Wu and Zhou shared they learned most of their history in high school. This observation was similar to what Huang shared as well. "So, we learn…a lot of history from high school…But in college, we just more focus on a modern, modern world. So, we don't, we don't study history that much" (Wu). "I learned a brief very brief Chinese history in the high school. But I didn't learn Western history at all in, in school either in high school or college…That's not that is not part in my curriculum" (Zhou).

With this statement, Zhou also brought up the idea seen earlier that if something is not part of the major curriculum, it is not taught in college in China.

Because history was not taught, Wu shared she would have had to learn on her own. However, she was too focused on her classes and tests.

> If you want to learn that is just based on your own interests…I'm just the only focus on one thing, that the class. I take the class and pass the exam…I don't think that I have a real connection with society or even with the country that much. (Wu)

In talking about history, both Wu and Yang spoke about the *zhengzhi* 政治 political classes Chinese college students have to take. "Especially in college, we don't have history class, in

general we have the politics class. That's the mandatory for all the university no matter what your major is…It's more about politics, history of politics" (Wu).

Yang got excited about history and talked about how she purposefully did not want to take history classes because of the emphasis on politics. "I intentionally resist that part because I don't believe what are taught in class about world view or about history or political things. So, I intentionally resist those occasions and the only things, the only history nature class are about Marxism" (Yang).

Relational Skills

Relational skills had participants think about skills like building relationships with classmates, solving relational problems, and contributing to your team. Three of the participants did not perceive they were taught these skills. Zhou did believe he learned these skills in college; however, he was quick to point out that since he went to a military school his experience might have been unique from other college students. He felt that his time in college prepared him to work with co-workers after graduation.

> Yes, importance of contribute to, to contributing to my team is kind of one thing I learned in college…So we have some military practice, military tasks so we have to help each other…They didn't show you the specific way to how to solve the problem, but very very imprecise the effort of being a team. (Zhou)

Huang, Yang, and Wu did not feel they were taught relational skills. Yang explained that she learned these skills at work, but not in school. "I learned this when I start to work…We've been taught that in the in company, but not in the university, not in my university" (Huang).

Yang was not taught relational skills in college in the classroom, though she did feel she learned these skills outside of school. "Yeah, when you are doing sports, or you are joining drama,

drama club…but these are negative, not active instructions…You learn by failures that you see among other people or you experience yourself" (Yang).

Wu brought the most in-depth look at this skill of all the participants. She agreed she was not taught relational skills in college but went on to share her view on why this was the case. Her experience taught her that teamwork in college was discouraged and viewed negatively by professors. Wu believed this was because students were expected to all strive to be the best in the group, and working as a team would diminish the competition that was encouraged by teachers and administration.

> In school we don't have the study group. Professors they don't like it. If the students have it the professor will think, "Oh you guys are cheating with each other" …The professor want us to finish everything on our own and they were very strict…I think if you work in a team you cannot tell which one, is hard to be in that competitive in team. (Wu)

Wu did feel like she learned relational skills in her daily life but was clear and certain this was not a skill she learned in college.

Presentation/Public Speaking Skills

Presentation/Public speaking skills asked participants about whether or not they had been taught skills such as writing and giving a speech, creating a presentation slide show, or critically observing a speech. Each of the four participants shared they were not prepared in this skill in their college education in China.

While Zhou shared that he was not taught this skill, he did wonder aloud if his experience was different than other Chinese college students due to having gone to a military university. His college was not trying to prepare him to speak or inspire others. Instead, it was mainly seeking to instill obedience and discipline. "It's a military college. And so, being a soldier, you only have one

purpose, it's following orders" (Zhou).

Huang did not have much to say on this skill other than she did not learn this skill in her education in China. When asked if she ever had to do a presentation project in class, she shared: "No, we don't have, class is pretty much like lecturing" (Huang).

Similar to some of the other skills, Yang did not feel like she was prepared in college for public speaking, but she did receive instruction in high school on this skill.

> My high school is very special in China. It's a, one of the few schools that's willing to be International and…evolutionary in education so that my high school gave me a lot of opportunity to do, do presentation on teaching and year stuff like these are listed, but not in my college. (Yang)

Yang remembers having assignments in high school where she was on a team that had to study a topic and present on it. Yang was naturally a leader, and was often the one to make these presentations. In college, Yang had the opportunity twice to help host, which would include public speaking. However, this was something she was asked to do, and not something she was taught or coached in.

Wu did not perceive that she was prepared for public speaking in college. She shared that she felt this was because teachers were focused on what would be tested. "Majority of the score are the credits from the exam…I never had a grade, no grade on a presentation…The grade is only from the exam" (Wu).

While Wu was not taught or coached in public speaking, she was given opportunities to speak, something not all students were given.

> So, the presentation sometimes is just volunteer and there may be only a few students, not all the students will do the presentation…We never have this kind of feedback or people

trying to give you some guidelines or some feedback for the presentation. (Wu)

Because Wu did not learn in college, she shared that her first year in California, she took a class on presentation skills because she felt the need to learn this skill.

Written Communication Skills

When it came to written communication in Chinese skills, such as drafting an email, replying to emails, and writing a formal proposal, Huang, Yang, Wu, and Zhou all felt that they had not been prepared in this skill in their college education. Zhou felt these skills were not taught because they didn't relate to his major. "No, those things have not been, are not part of in our program curriculum…I don't think that is relevant, relevant to our major and the school usually doesn't provide those courses for program irrelevant… [to major]" (Zhou).

Yang and Wu both made an interesting point that part of why they were not prepared for this skill is that email is not a tool used in China, and instead, the Chinese use instant messaging.

> And email is not used very widely in common, yeah frequently among, in China. I remember I start to frequently use and check emails when I go accepted [to school in America] …But in China, I think people use instant message. (Yang)

"One thing, we don't use email that much…And emails, I don't think students use emails that much, they would rather just go to the office meet the professor in person…And we don't have a school email address" (Wu).

Wu was the only participant who had experience with social media in China. She was not specifically taught these skills, but working in the student union, she was expected to post things to social media, and she shared what that looked like for her. "Everything you write, something, it's not only about your school, it's about the party, then Communist Party, and about the country…In general, we don't post things without other, like people faculty, review, they have to

review" (Wu).

The researcher followed up, asking Wu why she thought this skill was not taught. In response, Wu sat up even straighter and got very excited and opinionated and shared her thoughts:

> I don't they care about us as a person, like well what's this student gonna be in the future, what's the potential for this student. They treat us like a general group, as a whole group this whole year maybe 3,000 students in this whole year. Did they get 90% of them got a good job offer? (Wu).

The intensity with which Wu shared this led the researcher to believe Wu had not felt cared for and valued in college but had felt like she was just another number.

Huang talked about this skill by talking about how she learned these skills but in relationship to English. So technically, Huang did learn some of these skills in college, but she did not learn them in a Chinese context, but in a business English class. "We have learned something related to that, like how to write a mail. I mean in our time it was mail, they had not come out with email…we learned the format of letter things" (Huang).

Problem Solving Skills

Problem-solving skills looked at skills such as identifying issues, providing solutions to issues, working with a team to solve issues, and tracking issues and solutions. After thinking about these examples, all the participants agreed they had not been taught these skills in college, though Wu did feel that Chinese students are good at problem solving in general. "I think we have good at solving problems. If they are, everyone has to be given a task, we are good at taking care of it" (Wu).

Wu does, however, share that she believes colleges in China assume their students have these skills and have learned them in middle school or high school. "I think they assume we can

do it…a lot that we learned a lot of when we were in high school, middle school" (Wu).

Huang agreed that she did not learn problem solving skills and believed that this was because her major was English and the college's emphasis on theory instead of practice. Zhou shared a similar thought that this skill was not important. "No, we don't have such practical class. We talked pretty much like theories" (Huang). "I think it's not important to the curriculum…So we didn't do any projects in college" (Zhou).

Yang provided her thoughts as to why she thinks colleges in China do not teach practical skills like problem-solving skills. Yang shared her thoughts, from her own experiences, about what colleges in China care about.

> College, they, it's all about just fulfilling those necessary tasks…they will call your name…make sure you present and make sure you are handing your homework to make sure you pass the exam…and make sure not say or do something against a law or against the party. (Yang)

Thus, Yang came to the following conclusions: "Nobody cares about things otherwise…I don't think they care about making you a better person for independent life" (Yang).

Career Growth Skills

Career growth skills asked participants about skills such as being to school, or work, on time, communicating about goals, and communicating about being late, or missing deadlines. All four of the participants agreed they did not feel prepared in these skills in their college education.

Zhou believed that the reason he was not taught these skills was tied to the fact his school was a military college where a career path was decided for students, not by students. By this point in the interview, he seemed a little frustrated that so many of these skills had not been taught to him. This led to him further emphasis with his tone of voice and facial expression that he felt his

case was special among Chinese college students.

> We did not have a career goals in the military school…Because my case is very special, most of my classmates, they have designated jobs after graduation because it's a military school…they gonna be appointed to some position in the military. (Zhou)

Yang and Huang did not have much to share, though they, too, were in agreement that these skills were not taught. Both felt they had learned skills such as being on time and communicating but had learned them in situations outside of college. For Huang, she learned these skills from work, family, and teacher examples. Yang shared she learned these skills in high school as her school taught skills to prepare students for college. "No, I just from my parents to be on time…I mean the teachers, they are always punctual…I learned those things from work experience, not from school" (Huang). "Yes, in my high school. Yeah, that they assign us a teacher actually just focusing on the…career development, and all that. But in college I can't remember any specific teacher that is assigned and responsible for that" (Yang).

Wu too, agreed that she had not been taught career skills in college. She then went on to share a bit about deadlines and how she felt they were an American thing.

> I've been thinking about that lot of time, so deadlines also America thing. So, before there's no deadline in China…the professor gave you this assignment you do it right away. You don't do it right away and there's no chance to make up for it all. (Wu)

Instead of deadlines, Wu shared that Chinese students have learned the rules since they were young and, as a result, already know how to be good students. "We know what we are supposed to do…we having been good students from the very beginning…We've been strict from the parents and the teachers are very strict about the rules…We don't need extra teaching in college" (Wu).

Team Leadership Skills

Team leadership skills focused on skills that required working with a team like communicating a vision, assigning tasks, and following up with people. When it came to this set of skills, all the participants were clear that they had not been taught these skills, and most of them did not have much to say. Huang mentioned she learned some of this at work, but that was all. "No, not in the university, but the company have that training" (Huang).

Wu briefly returned to the idea that Chinese education focused on competitiveness in education, so there were no teams. "No, it's very competitive. They aren't in a team" (Wu).

Zhou saw classmates who were assigned to be group leaders in a more military-style structure, but he was not. "No, I was not a leader…I have some classmates who was appointed as leaders, so they probably know how to assign tasks to a team, but not me" (Zhou).

Yang shared that she felt that there were not opportunities for team leadership due to the lack of friendship among classmates. "No because…the situation that I meet my classmates is just in class, and I think that after four years I'm, I remain, I still remain strangers to most of my classmates" (Yang).

Yang could only think of two situations in college where she worked with other students as a team, but even in these situations, she was not a team leader.

> One scenario we have sort of team thing is the military training that every university freshman year before the first year start…I think that we have some sort of like basketball game. That's the only thing that I can think of that has some team. (Yang)

Time Management Skills

Time management skills looked at skills such as creating and managing a calendar, creating and using a to-do list, and planning out responsibilities to complete needed tasks in the day. Huang,

Yang, and Zhou all quickly concluded they did not feel they had been prepared in these skills. Huang simply shared she had not learned these in college. “I learned these things from the work experience, not from school” (Huang).

Yang shared that while she had good time management skills, this was something she had learned on her own. She stated it was “a self-taught thing.” Because of the lack of training in time management skills, Yang reflected on her observation of other students in college in China. “For a lot of other people, I don’t, I don’t think they have very good time management…they are watching drama TV shows all the time or sleeping very late…It’s a waste of time for most people” (Yang).

Zhou’s shared how his structured life in military college meant he was told what to do and did not get opportunities to create his own schedule. “Military school is pretty, is pretty fixed…so we do everything as a team…so we are going to have like very fixed window for doing certain things…so it’s not something you can make a schedule by yourself” (Zhou).

Wu’s experience in college in China sounded similar to the experience of Zhou. However, her perception of that experience was completely different. At this point, she shared her college had some military influence, and students were held to strict schedules. Wu felt that this experience taught her successful time management skills.

> Yeah, the schedule is very tight…they are extremely strict…they will give you the class schedule will be from 8 AM to 9 PM. You have all the classes, you only have really only have time to have a lunch, a small nap, and dinner and you keep on rolling...during the nights is usually your selected class. (Wu)

Skills Used in the USA

Technology Skills

All of the participants agreed that they used technology in their studies in America. Yet, because each of them was in different programs, they had different experiences of what this looked like. For Huang and Yang, this use of technology looked like using Word and interacting with classes on Canvas. “I could manage to survive…But if I could do it better, I hope I could learn how to use One Note, like, yeah, but still I am not familiar with it” (Huang). “Very basic is how to use templates to write papers through Word. And also, how to quote and cite things…You got to use some very helpful software like Zotero…I learned it after I got here” (Yang).

The researcher asked Yang if she felt comfortable with technology when she first arrived. As Yang shared her initial struggles, the researcher could see her reliving this experience in her mind. “I, at first, I was very anxious, I’m afraid…I feel very nervous and anxious because I think, oh, this is very basic things and I’m gonna get these. If not, I can’t even finish my homework” (Yang).

Yang also brought up a specific example of the use of technology that led her to feel like American students generally knew more about how to use technology.

> For example, after I finish my first papers, I sent it to my American friends and ask them to help me to proofread. When they got back to me, I just like discover new things that Word, than you can leave comment and corrections…even that I don’t know how to do it. (Yang)

Yang did find good support at her school with lectures specifically for helping students learn technology. “Because our school has lectures regularly rotation of teaching you how to, how to use that [technology] basically from ground zero…So once I learned it I yeah, I feel like, I feel

good" (Yang).

Huang found Canvas to be pretty straight forward. "I don't need to go to tutorial…it's [Canvas] pretty straight forward. I like it…it's user friendly" (Huang).

Regarding her comfort level with technology, Huang felt herself weaker than American students but attributed this to her age. "I'm much older than them, so I feel king of…weaker comparing to them in using those new technologies" (Huang).

Wu felt she had access to help and the tools she needed to succeed. "So actually, I go to school very often and they are very generous…And also the first thing I get to America I bought an iPad, so I go to school with my iPad with my digital textbook in it" (Wu).

However, Wu did share she struggled at first due to the expectations of how the internet was used.

> Very struggling in the very beginning. Everything is about internet…It's not just Google the answer that easy. We had to go through the internet, go through the pages, pages to search for things and to write to get the information from the internet. (Wu)

Zhou shared that in America, he either used technology for research or used major-specific software.

> I need to do some research so I gonna get some information from it, from the web…and some of my major require certain specific software…I use, oh there's a very specific software used that is use in my major is called CPLEX. (Zhou)

Zhou took a minute to further reflect on his experience and then shared that he learned most of the technology he needed for classes in America on his own. This experience was unlike what Yang and Wu shared, where they both found the support they needed to learn technology at their schools. "I'd say, the curriculum here…they won't teach you how to use a specific software,

but it requires you to, for me get familiar with those software. So, you have to learn how to use them by yourself" (Zhou).

When asked about his experience with a learning management system, he shared what he had experienced with Blackboard. "Yes, Blackboard, I use it a lot. Yeah, and this is kind of something I would struggle with when I first came here, because my college didn't have that" (Zhou).

This discussion of technology lead both Wu and Zhou to refer back to a theme earlier of homework in China being submitted via paper, not online, thus explaining part of why all four of these participants would have felt a lack of preparation in this area.

English Skills

Since all of the participants were in America pursuing graduate degrees, it was not surprising to the researcher that all four participants agreed they used English skills often in their studies. Because of this, the researcher focused with the participants at thinking about where they either struggled or felt like they were well prepared in this skill.

Even though Huang's major was English in college, she sighed as she shared she did not feel like her college education has prepared her for studying in America. The only area she felt her degree did help was in vocabulary. "It helps me a lot because I mean I have a large pool of vocabulary" (Huang).

She felt spoken English and listening were not too hard for her since she had worked for a Canadian boss. However, she found reading to be challenging for her at first.

> I had a boss from Canada and talk, to talk, to the boss every day, pretty much every day in English…but fir the reading it is hard for me because I haven't done that for quite a long time…So first semester, the reading is really challenging. (Huang)

Wu lamented that she struggled a lot when she first arrived in America, partly because she was so surrounded by Chinese that she didn't have to learn to speak English.

> My first year in California, so my school Berkley they have 30% Chinese. And include if we include the people can speak Chinese is more than that…I don't speak English during a day actually, and I can only listen to the professor and do the homework and I should, I don't need to speak English. So, I actually, my English improved when I arrived in [current city]. (Wu)

To help herself at first, Wu would read her textbook ahead of class so she knew the information needed to track what was being taught in class. She did find help keeping up by connecting with the TA's on campus. "TA is also very helpful. I've went to all that TA sessions because I also hard to keep up with the things" (Wu).

Zhou shared about his initial experiences with English when he came to America. He was willing to share some very specific details about how this influenced his grades. "For the first two months…I didn't understand a word…My first test only got 20…I have no idea what the test is going to be like…it's a big learning curve" (Zhou).

Zhou went on to talk about how he struggled most with *kouyu 口语* spoken English, typically referring to idioms or daily expressions not used in formal speaking or writing, as he didn't understand or know many phrases that he heard used. "Yes, like 'break down boxes' …And 'you are all set'. I don't even know what that mean" (Zhou).

Later on, in the interview, as Zhou was sharing about relational skills, he returned to language barriers and talked about what these barriers meant practically for him and other international students. "I'd like to point to the language barriers…significant factors because for US students probably only need one hour to read. And for that same amount of reading we have

to spend like 3-4 hours" (Zhou).

Because Yang had a strong foundation in high school and college, she found she did not struggle with English, whereas her other friends struggled a lot. "Because I have a better foundation…I'm not that struggle as other people…I think I got 80%...I'm not everyone. I heard my friends, other friends from China, they can barely understand" (Yang).

Yet, even though Yang felt she could understand English, she lacked the confidence to engage in class due to a lack of confidence in her ability. "But I'm not confident enough to the, to engage in class…no confident about my English expression" (Yang).

Similar to Zhou, Yang struggled with some of the more informal aspects of spoken English, specifically for her, jokes. "Jokes are also very hard. So, when the teachers say some jokes…And all the classmates are laughing…But you also want to laugh with them and understand why they laugh" (Yang).

Surprisingly, Yang shared there was one area she felt more prepared in English than her American classmates. She discovered this in Greek class, where grammar became important to success. "That's in Greek class…. When they teach about grammar, I find out that my English grammar knowledge is better" (Yang).

Yang believed this was the case because, in China, grammar is tested on and is vital to college admissions. She explained: "It depends which college you and enter, that's real like and death matter, English grammar" (Yang).

Math/Financing Skills

In discussing math and financing skills, Yang stated she did not use these skills in America, but believed that was because of her major.

The other three participants did not talk much about these skills in classes. Instead, they

shared some interesting experiences and observations of using math and financial skills in their daily lives in America.

Huang shared with sadness that she struggles with math and does not know how to finance. “I just…manage to survive…So for the past two years there’s my skills. To make sure that I didn’t make a mistake” (Huang).

She then went on to share that being in a religious school, she didn’t worry about calculating a budget, but instead had faith in God that her needs would be provided. This seemed to be a perspective shared by her Chinese neighbor at school.

> The difference between our school, or us, is that we kind of living by faith. So, we don’t do a lot of calculations about the budget…just okay, we step out and just trust Him…I talked to a Chinese neighbor…about finance, but we all kind of agreed we live by faith. We don’t know what’s going to happen tomorrow. (Huang)

Zhou shared he did not feel like he had to learn many new financing skills after coming to America. Zhou had already learned these financial skills on his own through life. He felt finances in America were pretty easy because money is generally the same idea. “Well, this actually I learned my, by my daily life…no matter you spend renminbi 人民币 (RMB) or US dollars, they are just numbers” (Zhou).

Wu felt a personal need to understand finances better and took a class at Berkley to help her learn these skills.

> I took a class called “the missing part of your life: financing” …But my still be honest, still like I may only know 40% after I took all the classes...I think this is the thing, not only classes not enough, but without class I don’t know where to start. (Wu)

Wu speculated that because American students tend to start making money at a younger

age, this influenced their understanding of finances and how to handle money. “I think they do more…They start making money younger and they have to use their money they have” (Wu).

Both Zhou and Wu brought up credit cards and credit scores as something they were not familiar with. “Credit cards, they care about their credit score…not, not me, only, just check my balance in my bank account” (Wu). “The credit card system in the US is very unique…in China we don’t use credit card that much” (Zhou).

History Skills

Yang shared she had not found herself using these skills in America. To lay a foundation for her struggle, Yang went back to how a decision in her high school years in China affected what she learned: “So, you know in China you choose your major in high school. Like you want to be an art 文科 (wenke) student or science 理科 (like) student. I choose science…so that was my worst subject, history is” (Yang).

Yang then expanded on her initial observation to share what her struggle with history looked like in class in America. “Church history is a huge challenge to me…I still don’t like it (history)” (Yang).

Hearing Yang share, it sounded like there would have been opportunities for her to use history skills in America, but she found herself unprepared in these skills from her college experience.

Zhou, Huang, and Wu all shared they used history skills in their classes and lives in America. Zhou shared he came to learn a lot more about history once he arrived in America. From what he shared, Zhou seemed to enjoy having conversations and learning about the world.

> Sometimes…the system being US and China, is so different. So sometimes that makes me wondering why, why this difference happens...So that that makes me to learn about history

> and learn about the culture and stuff. And I also think most, a lot, of Americans, they have a lot of misunderstanding about China as well. So sometimes I have to get prepared to answer those questions. (Zhou)

As an example of this misunderstanding, Zhou mentioned a conversation he had with someone about the Chinese one-child policy. During this exchange, Zhou felt that the person offended him in the way that person spoke about the policy. Zhou shared that this exchange: "Makes me want to know about the culture and of the history, why these things happens, and what happens, what, what similarly things happens in the USA as well" (Zhou).

Similar to Zhou, Wu talked about how she wanted to learn from the people around her about history. While Wu stated she did use history in class, she focused more on the way she used history in her life in America, and how she found herself both learning about history and teaching others history.

> It always be a good like topic to open conversation… I enjoy showing my American friends cool stuff like very different stuff to them…I'm learning more about the Western history from them, but they learning more history of China from me. (Wu)

Wu's experience with her classmates led her to perceive America as far more diverse than China. She felt this affected the historical knowledge of most American students. "Here is some more diverse and more international. So, when I was in China, I'm just pure Chinese…Here they get, they have access to maybe, they have classmates is from Middle East they know, and I don't know" (Wu).

Similar to Zhou and Wu, Huang stated, "history isn't required for my studies." However, Huang did share how she was able to use her knowledge of history to connect with people in America.

> I learned about slavery system, and learned about the Civil War of America, back in the classroom in China, and when I came here, and I could…talked to some people…that helps me to understand this place and the tension between different people groups. (Huang)

Relational Skills

When questions about relational skills, both Yang and Huang did not feel they used these skills in their classes in America. Yang mentioned she used these skills in church, but not at school. Huang felt she had not used these skills due to being introverted and also because she was a woman in a male-dominated school "I'm quite introverted…I don't talk a lot. Plus, in our school…it's the majority brother and we are the minorities…I mean, we don't take the initiative to talk, and even we talk it is just general greetings" (Huang).

In contrast to Yang and Huang, Wu and Zhou both felt they used relational skills in classes in America. For Wu, this looked like teamwork and team projects. As she had shared previously, teamwork was discouraged and frowned upon in China. Because of this experience, collaboration did not come naturally, but she learned to appreciate it.

> So, every class at least have some team project…Yeah, firstly I'm very worries that I been the free ride or other people are being a free ride person. I often worry about that. But later I started to trust each other, and have the group thinking of this is a group…gradually I'm being more comfortable with it, but before, at first, I'm so worries about it. (Wu)

Similar to Wu, Zhou stated that for most of his classes in America, he had group projects he had to participate in to receive a good grade.

> Almost every class in the, in the university in the US, they have project you have to do…and typically that takes more than two or three people to finish the report. So, in order to get that grade you have to cooperate with your teammates to finish it. (Zhou)

While Zhou had mentioned he used team working skills in China, he felt the way the skills were used in America were quite different.

> I think it's a very different…I think this skill in China, I learned it was very superficial…here it's more, in order to get it, the grade, you have to deeply corporate with your teammates…It's very very hard. I remember the first semester. I only, I didn't get an "A" in any classes because I couldn't follow any, couldn't find the rhythm of the classes. (Zhou)

Presentation/Public Speaking Skills

Huang and Yang both said they had not had to use public speaking skills in America as students. Yang simply stated she had done no presentations or speaking. She did mention small group discussions but no presentations. Huang also shared she never had to do any presentations or speak for a class in America. She felt that part of this was how the class was conducted. "It's almost all lectury, we have interaction question/answers, but we don't need to, we are not asked to go there and just stand in front of everyone to give a public speech" (Huang).

Zhou and Wu had a very different experience as both of them did presentations for classes in America fairly regularly. Zhou did presentations for almost every class, and multiple times throughout each class.

> Yes, everything, almost every class…Have to do presentation in front of class in the middle, in the middle and in the end of the semester…And typically have to, I have to take three to four classes each semester…Especially with the PhD career, you have to present the, your research in front of conference. (Zhou)

But, since Zhou had not done public speaking and presenting during college in China, he shared it was not easy for him at first, and he relied on others to learn. "It's hard, it's just, it's a

learning curve…so I just, you know, look at other students in the class, how they organize their PowerPoint and how to do a presentation" (Zhou).

Wu had a specific class that required weekly presentations. It was her capstone project class that required the most from her as far as public speaking and presentation.

> The most important thing is I did my capstone project for my master's degree. So, we had to do the final presentation at a very open event. So, professors from the, from our school, and also people from other companies, they will come they'll show up and listen to your presentation. It's like a conferment. (Wu)

Not only was the class a lot of work, but Wu reflected on the detailed feedback she got and how that made her feel intimidated. She used the word "nightmare" to express her feelings on the class at the time.

> It was like a nightmare, the professor video recorded you…And they will give you all the details feedbacks and they will ask you to play back minute by minute to find your problems and feedbacks again again. It's very embarrassing to me to watch myself in that position. (Wu)

Though the class was hard at the time, and she did not enjoy it, Wu felt it led to a positive outcome that made her happy in the end. "I can do a presentation anytime. Before it is like I was like just being so nervous I cannot even talk, but now I feel like this is an easy thing" (Wu).

Written Communication Skills

Regarding written communication, all four participants knew they had had to use these skills in their time in school in America. A common thread that Yang, Wu, and Zhou all brought up was the use of email in America. "Communication with school department, different departments. Yeah, even maintenance requires, and all that, needs emails a lot" (Yang). "I used

email a lot…When I was looking for jobs, I write my cover letter, I emailed lot of companies. And I was looking for like academic positions, also email a lot of professors" (Wu). "Chinese people don't use email that much, as much as US people do…so how to write a formal email and make it clear and polite is definitely something we have to learn after we came to US" (Zhou).

After discussing email, Yang mentioned social media, and also commented she has not yet had to write a for school in America. "And uhm, social media post to sell things and ask for help" (Yang).

One area of communication Yang noted she had to adjust to in America was how students were expected to communicate their needs or requests with their teachers. Contemplating these differences in communication, she said:

> Yeah, the way they communicate with their professors, I just always view them as pretty like has this hierarchical thing in myself. And in Chinese language we the respectful term to refer to them [she was referring to the Chinese term 老师 "laoshi" which means teacher], and yeah, it's like you and I difference. But here they just talk with the professor like equally human being…that I struggle with that at first to speak out your needs and requests and not feel guilty about it. (Yang)

Huang spoke of using communication skills in writing papers for class. While she did not struggle with the concept of writing an essay, Huang did mention she didn't know how to research and didn't have the time to do it. Because of this she struggled as she had to write her first research papers.

> That's something really hard…I don't have the time to do the research…I just don't know how…because we've never done research paper before…So I'm clueless at the beginning of where to find the resources and how to do the research paper…I remember the first paper

takes me a week and it's only five page. (Huang)

Huang also found herself making grammar mistakes due to not being a native English speaker. "Comparatively to native speakers, I'm not, I'm not so good…and also my professor will notice that…I'm a foreigner and I make grammar mistake and things, but it's OK, they are very gracious to me" (Huang).

Wu shared she is currently working on her proposal. However, she struggles in this area as she is not given as much guidance as she would like. "A formal proposal I'm working on it actually for my this semester…I really wish my professor could give me more guide on this" (Wu).

When the researcher asked Wu about struggles in written communication, Wu mentioned she is often too formal and struggles to: "Build connections…that's a real person there" (Wu).

In talking about emails, Zhou mentioned the cultural difference in communication was something that took him time to learn.

> Writing email is not hard, but the hardest part is the language and the culture behind the language…you have to write everything in a very polite way that is kind of a different manner with if you are using Chinese. (Zhou)

Thinking about his proposal, Zhou reflected on why he struggles with the research. "It's very hard…specifically, I think, the modern research system is comes from US or come from recent, the concept of modern research come from Western countries" (Zhou).

Zhou reflected that this would cause challenges for students who were not from a Western education background.

Problem Solving Skills

All four participants used problem solving skills in America, though Yang and Huang only mention these skills in the context of life and not school. For Huang, in her first two years in

America, she struggled but shared that over time, and with help, problems were resolved. However, while Huang's problems were solved, she did not talk about how she used problem-solving skills.

Yang did talk about using problem-solving skills at work but did not mention anything about it in class. However, what she had to say about work was insightful.

> As a customer service person, but a lot of time you need to decide what to do in a given situation, and I feel terrified and I'm afraid of making mistake and so I don't know what to do except what my boss the manager told me. That's why I asked me one back, to the back and ask for help, what should I do in this? Whereas my other colleagues, they handled it independently…they will give suggestion to the customers. A lot of they are better than me solving problem…That's not even an option that I would know the answer yeah. (Yang)

For Wu, problem solving at school looked like teamwork projects with classmates. "It's not like your job is only do the homework, you have more other things, you run into different problems, your teamwork problems, or any kinds of problems we have to solve" (Wu).

Zhou shared a little bit about what using problem solving skills in class looked like for him.

> Most of the experience that I have here is…in classes, as so I have to propose my plan or project, I have to track progress of, I'll have to give solution of project…So these kinds of things. Yes, in order to get an "A" we have to do these things. (Zhou)

Like the other participants, Zhou found a lot of the problem solving he had to do in America related life issues, and he struggled to find help with these problems.

> How to live in the US, surviving the US. I think it's another problem solving skills…I can't find a good, very good help for some specific tasks…I have to figure out by myself…I was afraid of asking people…I don't think most people here are that well willing to offer help…that's probably my main struggle, it's trying to get help from others. (Zhou)

Career Growth Skills

Huang stated the classes she attended in America so far had been traditional lectures, she had not had opportunities to use career type skills in class. However, Huang did reflect that her previous work experience in China and the skills learned then, was beneficial to her work on campus. “I have a career before I came here…I learned how to solve problems…I have a job on campus…So those work experience helps” (Huang).

Zhou, Wu, and Yang all shared they used these career skills in their classes in America, though how these skills were used looked different for each participant. Asking about goals and reaching deadlines prompted Zhou to talk about syllabi. Zhou could not remember what these were called at first but was able to describe it as an agenda and something the teacher gives out on the first day of class. The researcher suggested it might be “syllabus” he was looking for, and he agreed. Concerning syllabi Zhou shared: “Syllabus is very important things for a class…but in China, we, we don’t, I don’t think we use that…I think when I first came here, I didn’t really realize how importance of that thing” (Zhou).

Wu was not able to think of examples of career skills in the classroom, but she shared that in looking for a job in America, interviewers highly valued teamwork. “Doing the interviews, they would like to talk about what is my team, teamwork experience, how it think, think about the teamwork. They appreciate them very much” (Wu).

Yang saw her past life experiences and work as preparing her to be more confident about why she was in school and connecting school with life. Yang did not talk about how she used these skills in class. Instead, Yang shared how her career experience shaped how she felt and interacted in class.

If you know what you want to do later, you will ask questions very specifically and you

> ask good questions…It helps you better see your study…I am thankful that I know what I want…but not everyone knows what they want…if you know, you know what you want and when the teacher is teaching something and you immediately make connection, and that gives you a whole other experience. (Yang)

Team Leadership Skills

When the researcher asked Huang about team leadership skills, Huang shared she had not had to use these skills in classes in America. She stated this was because: "We all do our class, do our class by ourselves. There is no class so far I remember that require us to need to do anything like that" (Huang).

All of the other participants did feel they used team leadership skills either in their classes or at work in America. Wu shared about what working in a team looked like for her in America at work. She was not necessarily in a leadership role at work but shared about what she learned and that these skills would enable her to better lead in a team.

> At work, having the communication is very important…I can be there from 8-5, but how much work I can do, and much the good conversation can make with the team, how much I can push this whole project…is more important at the end of the day…they are more good at communicating. (Wu)

Not only did Wu see that communication is valued in work in America, but she also spoke about teamwork where colleagues stepped in to help each other instead of focusing solely on their own work.

> Sometimes I feel like I noticed all the teammates they make further moves to helping each other solving each other, or maybe pointing out other problems. That the thing, they show other issues, and I maybe only focus on my part…I want to be contribute that, very

contributive like, like them. I'm trying to be like that. (Wu)

When asked about team leadership in specific, Wu had nothing more to add than these perceptions she had shared.

Similar to Wu, Yang shared that while she had used these skills in America, she had not used them in the classroom but at work. Yang did not go on to expand on what that looked like at work. Instead, Yang shared her reasons for why she did not practice leadership skills in the classroom when she did mention opportunities such as small group discussions. Indeed, Yang admitted: "If I in the Chinese contexts, okay, I will feel more compelled and more motivated to do that and more confidence" (Yang).

But, while Yang stated she would have confidence in a Chinese context to lead, she admitted that in her current school in America, certain factors keep her from leading. "If I identify myself as oh, I'm the only international, or I will ten to just wait somebody comes, or if there's a lot of males there, I'm a female" (Yang).

These factors led Yang to "feel anxiety and fear to be a leader." Yang felt she should not lead because she was afraid she would not be able to lead in her program in America.

As Zhou was sharing about team leadership, he reminded the researcher that in China, he had not had the opportunity to lead since in military college he was expected to learn to follow orders, not lead. However, Zhou shared that in America, he did have the opportunity to engage in team leadership. For Zhou, this looked like using his class tools well so he could be a leader in his class. "I use a syllabus a lot. You have to break down your syllabus and make your plan ahead…if you have plan in your mind and it, it makes it easier for you to take the lead" (Zhou).

When it came to taking the lead, Zhou explained this was difficult for him since he had not learned to lead, so he did not know this was expected of him, and he did not know what to do. "No

one tells me that I have to take a leadership, I have to make a plan…No one was gonna tell you, you have to make a plan" (Zhou).

Time Management Skills

When participants were asked about time management, they all four agreed they did use these skills in America. For Zhou, time management was something he found he used in his work in America.

> I'm working right now. So, like everything, every meeting I gonna have is on my calendar…Especially in a company the manager typically doesn't oversee you that much, you have to do the project by yourself. If your manager ask you to do something and you just do it by yourself and report to him every week. So, every working hour is yours, you have to make very good time management. (Zhou)

However, Zhou did share that these time management skills were different for him at first, and he had to get used to using these skills.

When talking about career skills, Zhou brought up his perceptions of schedules in America. He felt that how Americans viewed and used schedules differed from how the Chinese did. "I think everything in US is about schedule, it about appointment, but we don't use appointment that much in China" (Zhou).

Huang's past years of work experience prepared her well in time management skills. She shared the methods she used in classes to help keep herself on track.

> I always have a table calendar on my table…I'll list what I need to do this week and I'm working on the table calendar…I don't use a phone to do that. I like to have a paper for a while. (Huang)

Huang did open up about how different American education was in pace, and that because

of that, it took her about one and a-half years to feel like she knew how to manage her time to fit the pace of her classes.

> After two years of study here, kind of getting get used to the pace here…I have more time for myself and it's hard to manage the time. It's something for me at the beginning and I mean I have a planner said I needed to such and such readings tonight…Sometimes I just cannot finish…that makes me frustrated because I feel like I'm always trying to catch the deadline…last semester I started to get things better organized. So, it's not always like, like to submit on the deadline. (Huang)

Yang spoke about how she used her class syllabus, similar to Zhou, to plan out her semester in a planner, a method similar to Huang. "So, what I would do is at the beginning of every semester, I just look at the syllabus and put all the due dates on the calendar…yeah, just a planner" (Yang).

While Yang had developed a system of using a planner for time management, she reflected that this was not something she believed most Chinese students did.

> I don't see other people in China use, other yeah college students. I'm thankful because I don't remember how I starts, maybe somebody give me a new year present, a planner. Ever since the first planner, I been using them every year. (Yang)

Wu felt she was very well prepared in time management skills and was able to plan out her classes and homework effectively. "I never worry about it. I always finish my homework as soon as possible…Yeah, in this I'm more prepared" (Wu).

Instead of struggling with managing her time to get schoolwork done, Wu shared she struggled with taking the time to take a break because she would push herself too hard. She saw herself as competitive, but competition also helped her get good grades. "But the thing is like my husband always say I need to slow down, I need to take a break…he's very worries I'm pushing

too hard…I'm very competitive because now my grade is also very high" (Wu).

Other observations

Throughout the interview, some of the participants shared interesting information on their educational experiences either in China or America that did not fit within skill being discussed at the time. These reflections are organized here, as well as final observations participants shared when asked if they had any final thoughts to share on their education in China or America.

Huang

Final thoughts on Chinese college experience. As Huang generally reflected on her college experience in China, she lamented that the theoretical emphasis in Chinese education often meant that students were not truly prepared for life after graduation.

> My generally understanding of the Chinese education is like it's pretty more about the theory or academic…So that's why all these skills that you mention, they don't teach them in our class. That's something really, so a lot of students, they are not ready…because, for Chinese education system, the target is the academic itself. (Huang)

Final thoughts on America education experience. Thinking about her experience in graduate school in America, Huang did not have much to share, but she did feel her experience was good. When pressed for more, Huang briefly mentioned that she saw efficiency and appreciated it. "The efficiency is something I noticed…the whole country not just school…wherever I go, it's very efficient to do something….it could be done fast and like in China is different" (Huang).

Yang

Negative perception of Chinese education. Yang shared she had a generally negative perception of her educational experience in China. "Generally, I have a very negative views about

education in China" (Yang).

However, she did share one general benefit that she saw through her Chinese education. With her major in China being math, she felt she had learned how to think abstractly, and she saw this benefiting her in her religious studies in America.

> I think one benefit is my math major is to think abstractly…that benefits me a lot now…my thinking is very logic if I write a systematic theology paper, if I cannot convince myself and I will not just think of something and then put it in my paper. (Yang)

Final thoughts on Chinese college experience. When asked about her college experience in China, Yang got quiet and sad for a moment before sharing a feeling of regret at the choice of her school in China. While Yang did not know if choosing another college would have made her experience better, she reflected with sadness on her choice.

> I regret to choose the college, that I mean, it's a very scientific oriented…I don't know if it's problem of the broader education or just…that specific college, that type of college…I will not say that I wasted four years in China, that my college was worth nothing. But it's also not a memory that a good memory or as yeah, as something I missed…no. (Yang)

Final thoughts on America education experience. In contrast to this generally negative experience in China, Yang spoke glowingly of her education in America, going so far as to say it felt as close to heaven as one could get on earth. "It's very ideal…I sometimes think…here is probably very close to the heavenly community…and the facilities like gym and recreation center…just very peaceful…I want to forever be a student" (Yang).

Wu

Creativity in homework in America. Wu found the creativity expectations in homework in America a struggle for her as she was used to clear instructions of steps in homework to prepare

her for the tests. “So, I expect everything is writing down in paper or anything like straightforward like one, two, three, four…but here the homework is not listed…is very creative” (Wu).

She shared an example of what this looked like for her early on and how she felt she was completely unable to complete what was required of her in class.

> The professor has us to read a lot of papers and make presentations and the generate your own journal…like mostly you need to go beyond it, this textbook and go to learn something by yourself and share with others. I cannot do it. I just try really hard, like no matter how I prepare it’s not my thing. (Wu)

When talking about problem solving, Wu brought up something interesting as she talked about her growth in being independent. “I think we’ve been protected too well in China from the family…we didn’t exposed to a lot of difficulties of the like of life. Here, I feel the students are stronger in general” (Wu).

Wu told a story detailing her personal growth in seeing her need for independence and what that looked like.

> My friend point out this before, I was so mad. I think he, I think he look down on me, he think I am not strong enough. But the, this is so true. My parents didn’t expose me to any of the life difficulties they faced ever. The only think I have to worry about is the school and the exam…You know, I can take all the pressure from the school. But everything, life and school and everything together, I feel like I’m being protected so well before. (Wu)

Final thoughts on America education experience. Talking about her time in America, Wu spoke of some of her difficult experiences in America and shared her desire for what she wants to become as a student…independent and strong.

> I wish I could be more independent. Be more independent and I’ll be stronger…I forgot to

> tell you, the first, first half year in Berkeley I cannot keep up with the class and…my mind almost broke…But then the, the I realized this is me should being strong and independent I should have no rely on others to help me out and everything. Then think I later realized this like being just a little bit more independent and there are small discipline and I'm hard-working I can achieve it achieve the goals…I wish I was a little bit more like less innocent more strong. (Wu).

Zhou

Registering for classes in America. Zhou took a few minutes as he talked about technology in America to remember what that meant for his signing up for classes. This was not so much a technology issue for him as it was being used to having courses chosen for him in China and he now had to do that on his own.

> I was not familiar with the whole system…selecting your courses every semester like, it's like an, an online shopping you have to select the courses for each year…in my college every semester courses of, for every semester is fixed…but here it's like you have to shop your class by yourself…and then no one tells you. (Zhou)

Thankfully, Zhou had a great roommate when he first arrived in America who was able to help him with this. "I got lucky because my roommate when I first came to the US…He is a transfer student from another state and he is Chinese, so he knows bunch things" (Zhou).

American grading system. As Zhou shared about his experience with English in America, he seemed to suddenly remember his initial experience with the American grading system, and he eagerly shared how different that was from what he had experienced of the grading system in China.

> So, you have to calculate your grade, final grading by your homework and tests…when I

> was in college the only things I want to get is a pass like 60…60, as long as you pass 60, the score line, you're fine, you can graduate…But here is kind of different, you have to, have work, work very hard to get A. (Zhou)

At the end of this interview, Zhou went back to the difference in grading systems. It seemed like this difference was important to him and something he paid attention to.

> Here, in order to get a graduate school, you have to have a good grade. In China it's not, as long as you can pass those classes you get a 60 out of 100 and…you're good to go…you don't have to have a good grade. (Zhou)

Sales tax in America. Talking about finances in America, Zhou shared his experience with the sales tax system in America. In many places, taxes are included in the final price the buyer sees, but most of the time in America, the final price is different than the listed price due to tax. Zhou shared a story of what this looked like for him.

> So, I remember the first time I went to McDonalds and it said combo was $4.99 and I take a five dollar, five bucks, hand it to the cashier and the casher says, "no, it's five, like $5.33," something. I said, "Why is says for $4.99?", and they were like "Oh, there's a tax," and I was like "Oh". (Zhou)

Final thoughts on Chinese college experience. Reflecting on his education in China, Zhou shared how he felt it was a style of education that sought to make students fit a certain mold, and because of that, he didn't learn to lead or think on his own.

> Education in China is very "fit it". Women jiao "tian ya shi jiao yu 我们叫“填鸭式教育” [explained below] …follows teachers' lead in the wherever, whatever teacher tells you, you have to memorize it, and typically we don't raise the question for them, the only problem that we have is for the exams. (Zhou)

Tian ya shi jiao yu *“填鸭式教育”* is a Chinese expression that means “stuffing the duck method education.” This expression is derived from duck farming and refers to force-feeding the animals. Force-feeding ducks a high protein feed with make the animal fat but will not make it heathy. Similarly, force-feeding information to students will not necessarily make them healthy adults. In this situation, the students do not have to work hard on their own to learn and grow. Information is forced into their minds through lectures and memorization.

Final thoughts on American education experience. Zhou did not have much to say about his experience in education in America other than he enjoyed it and learned a lot, though he did mention the expense and stated it is “very pricey.” “I think the US…. especially high, high education system in the US is very good. At least I learned a lot, I learned a lot from the US higher education…system” (Zhou).

Summary

This analysis of the data from the researcher’s four interviews is laid out by skill. When coding, the researcher found multiple themes and codes. However, the interview method allowed participants to speak on each theme, and presenting the data a theme at a time allowed the individual experiences and words to speak in a way that allowed the research to better present the big picture of what participants were sharing. In analyzing the themes and codes that appear in Table 3, the researcher did not find any significant differences by age or gender. Looking at skills taught or not taught, in China, there was nothing that stood out as to why certain participants did or did not learn certain skills. Most of the participants felt they were not taught most of the skills. There was no pattern the researcher saw from these participants as to why they were taught certain skills.

Table 4 *Student perception of skills taught or not taught in China*

Skill	Huang		Yang		Zhou		Wu	
	Taugh	Not Taught	Taugh	Not Taught	Taugh	Not Taught	Taugh	Not Taught
Technology	☐	☑	☐	☑	☐	☑	☐	☑
English	☑	☐	☑	☐	☐	☑	☐	☑
Math/Financing	☐	☑	☐	☑	☐	☑	☐	☑
History	☑	☐	☐	☑	☐	☑	☐	☑
Relational	☐	☑	☐	☑	☑	☐	☐	☑
Public speaking	☐	☑	☐	☑	☐	☑	☐	☑
Written communication	☐	☑	☐	☑	☐	☑	☐	☑
Problem solving	☐	☑	☐	☑	☐	☑	☐	☑
Career growth	☐	☑	☐	☑	☐	☑	☐	☑
Team leadership	☐	☑	☐	☑	☐	☑	☐	☑
Time management	☐	☑	☐	☑	☐	☑	☑	☐

The researcher noticed a trend of whether or not the participants felt they used a skill in school in America based on whether they were in a public or private school in America. Zhou and Wu both attend a public university in America, and both of them felt they used all, or almost all, the skills. Huang and Yang both attended a private university, with Huang perceiving she used six of the skills examined and did not use five of the skills and Yang perceiving she used seven of the skills studied and did not use four of the skills discussed. Of these, they agreed they used five of the same skills and did not use three of the same skills. This variance may point to a difference in educational methods used between the public and private schools.

Table 5 *Student perception of skills used or not used in America with a comparison of school being public or private*

Skill	Huang (Private)		Yang (Private)		Zhou (Public)		Wu (Public)	
	Used	Not Used	Used	Not Used	Used	Not Used	Used	Not Used
Technology	☑	☐	☑	☐	☑	☐	☑	☐
English	☑	☐	☑	☐	☑	☐	☑	☐
Math/Financing	☐	☑	☐	☑	☑	☐	☑	☐
History	☑	☐	☐	☑	☑	☐	☑	☐
Relational	☐	☑	☐	☑	☑	☐	☑	☐
Public speaking	☐	☑	☐	☑	☑	☐	☑	☐
Written communication	☑	☐	☑	☐	☑	☐	☑	☐
Problem solving	☑	☐	☑	☐	☑	☐	☑	☐
Career growth	☐	☑	☑	☐	☑	☐	☑	☐
Team leadership	☐	☑	☑	☐	☑	☐	☑	☐
Time management	☑	☐	☑	☐	☑	☐	☑	☐

Throughout these interviews, it was interesting to note the discrepancy that often arose between the skills participants had been taught or not taught in China and the ones they used in their education in America. More details will be examined in Chapter V. It was clear through the

interviews that for these four participants, there were often gaps between what skills they had learned in China and what skills they perceived they needed to be successful students in America.

Conclusion

While Chinese education has grown over the past 60 years, it is interesting that these interviews revealed gaps. Student perceptions revealed a lack of preparation for study abroad. With the focus on testing and performance these participants spoke of, there was a lack of focus on skills. Chapter V will take a more in-depth look into codes brought up by these four participants and seek to provide suggestions to Chinese and American educators based on these observations.

Chapter V

Discussion

Introduction

This research sought to assess Chinese students' perceptions of their preparation to pursue graduate study in the USA. To better understand these students' perception across many areas, a list of skills was examined in interviews to see how students felt they were prepared in each skill area. These interviews enabled the researcher to answer the research questions of this study.

1. *Gongli Daxue* education in What are the perceptions of Chinese *Gongli Daxue* graduates regarding study skills and content knowledge instruction received from their Chinese undergraduate *Gongli Daxue*?
2. What are the perceptions of Chinese *Gongli Daxue* graduates regarding the application of their Chinese undergraduate American graduate studies?

Chinese education has been through significant changes over the past 70 years. Around 1949 China sought to move away from a Western style of education to a Soviet model, which involved doing away with degrees and higher education as the rest of the world knows it (Chen, 2013). Today, degrees are awarded again in Chinese HEIs, and China is pushing hard to create an education system that meets the needs of everyone in the country (Chen, 2013; Chen & Hu, 2012). However, as more and more Chinese students are going to the USA for graduate studies, the question arises as to whether or not they feel as prepared as they should have been for this transition.

The theoretical framework of this study calls for Chinese college students to be treated and viewed by educators as adults who are invited into the education experience (Merriam, 2001; Pratt, 1988). These interviews examine whether or not the participants were educated according to adult learning theory. In addition, the theoretical framework considers Dewey and Mao, who have

influenced the approach in education in China to this day. While they disagreed on many issues, both Dewy and Mao taught that education should be about teaching students practical knowledge to enable them to solve real-world issues (Daykin, 2014; Dewey, 1973, p. 192-193; Mao, 1964; Price, 1970). This framework will be used as one tool to study the themes presented in this chapter.

This chapter examines some of the themes that emerged based on the perceptions of the participants. This chapter discusses what results mean for Chinese universities seeking to prepare students to study abroad, and for American Universities receiving Chinese graduate students. Based on emerging threads in the themes examined, suggestions will be made of where future research can go from here.

Summary of the Results

This study produced a total of twenty-two themes outside of the individual skills themselves. Due to a large number of themes, this study will examine themes that are used by three or more of the participants and appear over five times across all four interviews which leaves a total of eight themes that meet both these criteria. The researcher identified these themes as significant since these themes are mentioned by multiple participants several times. Thus, these themes are not merely one person's opinion or experience but are representative of the experiences of at least most, if not all, of the participants.

Figure 6 *Twenty-two themes found in interviews*

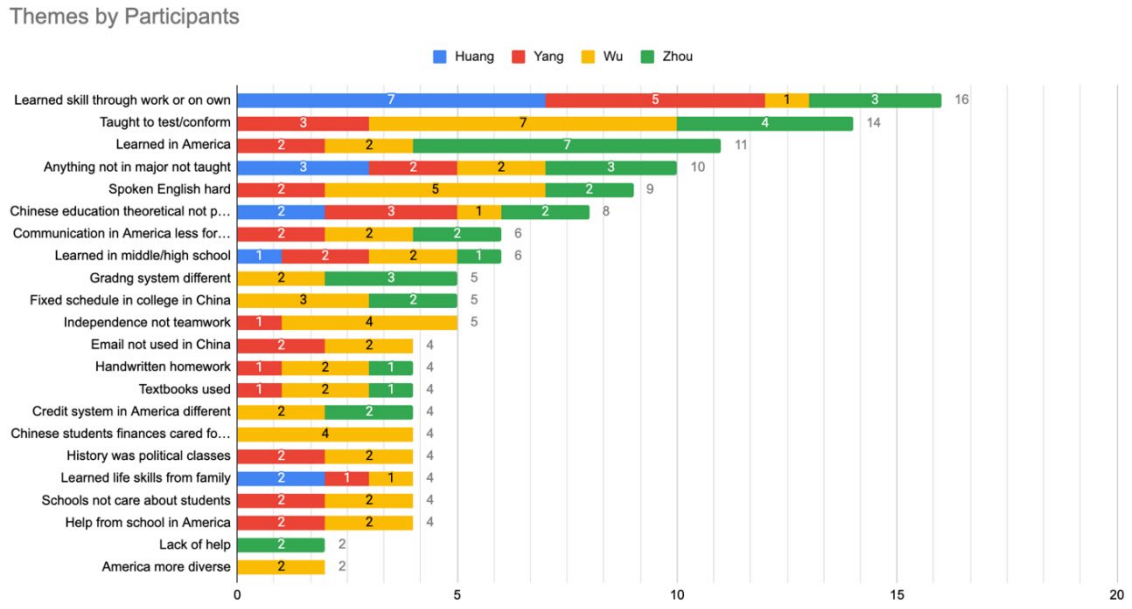
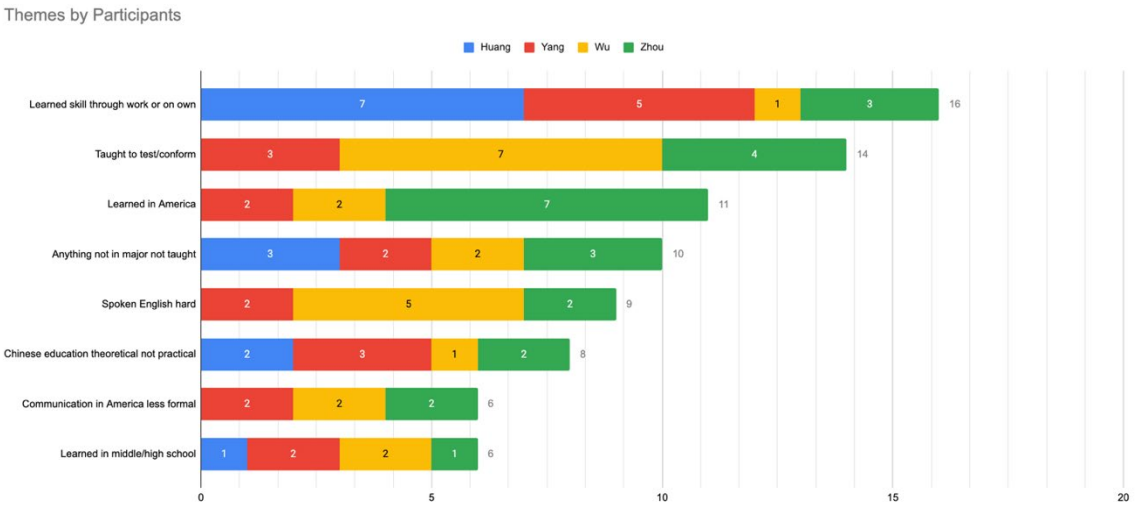


Figure 7 *Eight themes examined in Chapter V*



These eight themes best categorize the findings of this study. There is no apparent correlation between gender and the participants' mention of these themes. Of these eight themes, there are four which Huang does not mention at any time in her interview while Yang, Wu, and Zhou each touch on all at least once. A reason for this difference may be because Huang was the oldest in the group of participants and attended college years before the other four participants.

Another possible reason may be that Huang has only been in America for two years while Yang has been here five years, Wu for six, and Zhou for ten. Her lack of mention of these four themes could also be a simple difference in experience since she went to a different college in China than Yang, Wu, and Zhou.

This chapter first examines the contrast between skills participants were or were not taught with skills used in America, and second studies more in-depth these eight major themes.

Skills Taught in China vs. Skills Used in the USA

Listening to participants identify skills they perceived they learned in China, and which skills they used in school in America, the researcher noticed a general trend. The researcher-created question protocol asked Huang, Yang, Wu, and Zhou to review a list of 11 skills and discuss whether or not they felt prepared in these skills in their education in China, and then whether or not they had used these skills in their education in America. These skills are listed below with a simple definition:

1. **Technology**: browse the web for homework, solve simple computer errors, use word processing software, and create, or modify websites.
2. **English**: read a newspaper in English, read and respond to an email in English, carry on a conversation in English, watch a movie in English without Chinese subtitles, and write a short essay in English.
3. **Math/financing**: create a simple budget, track expenses and income, and balance month-end finances.
4. **History**: understand major Chinese history happenings and how those have shaped China today, explain major events in Western history and how those have shaped the Western countries.

5. **Relational**: building relationships with co-workers, solving relational problems, helping co-workers' careers grow, and contributing to your team.
6. **Presentation/public speaking**: write a speech, use slideshow tools to create a presentation, clearly present to a group of people, and observe a speech and identify strengths and weaknesses.
7. **Written communication**: draft an effective email that is clear and polite, reply to emails in a clear and effective manner, and write a formal proposal.
8. **Problem-solving**: identify issues and roadblocks in a process, present issues to a team and invite input, draft at least one potential solution to identified issues, and track the progress of solutions to see if they were effective.
9. **Career growth**: being on time to work each and every day, communicate your career goals to your management, and communicate about deadlines and outcomes.
10. **Team leadership**: communicate a vision and plan to a team, assign tasks in a team, follow up with team members' progress, and create buy-in so team believes in you.
11. **Time management/organization**: create and use a calendar, manage a daily list of responsibilities, create and use a to-do list, and plan out your day to complete all needed tasks on-time.

Table 6 *Skill taught/not taught in China vs. skills used/not used in USA*

Theme	Code	Frequency				Total
		Huang	Yang	Wu	Zhou	
Not Taught in China	Technology	1	1	1	1	4
	English			1	1	2
	Math/Financing	1	1	1	1	4
	History		1	1	1	3
	Relational	1	1	1		3
	Public speaking	1	1	1	1	4
	Written communication	1	1	1	1	4
	Problem solving	1	1	1	1	4
	Career growth	1	1	1	1	4
	Team leadership	1	1	1	1	4
	Time management	1	1		1	3
Taught in China	English	1	1			2
	History	1				1
	Relational				1	1
	Time management			1		1
Not used in USA	Math/Financing	1	1			2
	History		1			1
	Relational	1	1			2
	Public speaking	1	1			2
	Career growth	1				1
	Team leadership	1				1
Used in USA	Technology	1	1	1	1	4
	English	1	1	1	1	4
	Math/Financing			1	1	2
	History	1		1	1	3
	Relational			1	1	2
	Public speaking			1	1	2
	Written communication	1	1	1	1	4
	Problem solving	1	1	1	1	4
	Career growth		1	1	1	3
	Team leadership		1	1	1	3
	Time management	1	1	1	1	4

Only four skills in this list: English, history, relational, and time management skills, were identified by any of the participants as having been taught in college in China. For English, both Huang and Yang mentioned they had been taught English in college. Huang studied English as her

major, and Yang had the opportunity to test into higher level English classes. Neither Wu nor Zhou perceived they had been taught the English skills the researcher was asking about. Huang felt she was taught history in college in China, whereas Yang, Wu, and Zhou all agreed they were not taught this skill. Zhou perceived he was taught relational skills during his time in military college, while Huang, Yang, and Wu felt they had not been taught this skill. Wu felt she was taught time management skills through the strictly structured schedule she had in college, but Huang, Yang, and Zhou did not share this experience. The other seven skills were perceived by the participants as not taught.

Figure 8 *Skills participants perceived were taught in China*

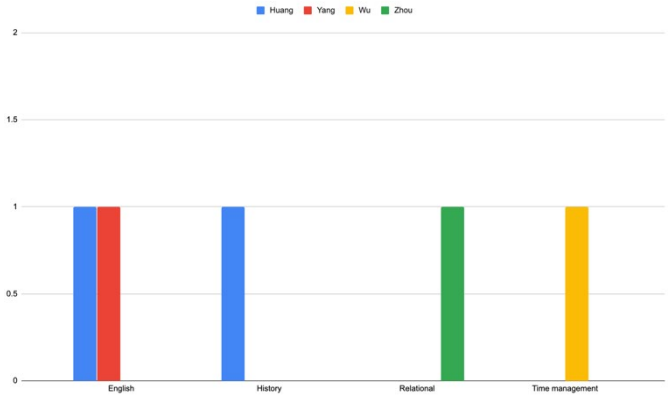
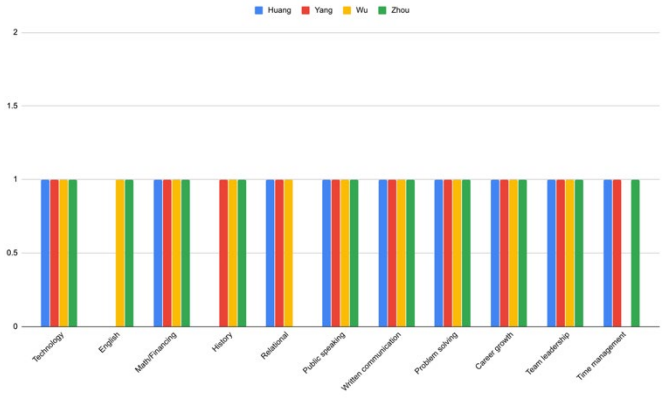


Figure 9 *Skills participants perceived were not taught in China*



When the participants talked about skills used in America, at least two of the four agreed they had used these skills in America. Six of the skills had one or two participants state they had not used these skills. These skills were: financing, which Huang and Yang had not used; history, which Yang had not used; relational and public speaking skills, which both Huang and Yang had not used; and career and team leadership skills, which Huang had not used. For all other skills, all four participants agreed they had used these skills in their time in America.

Figure 10 *Skills participants perceived they did not use in school in America*

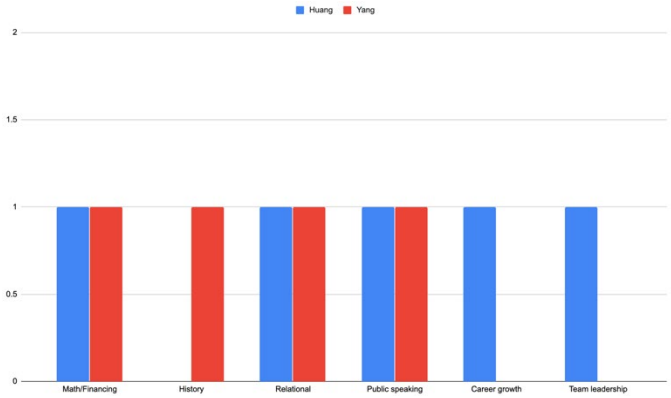
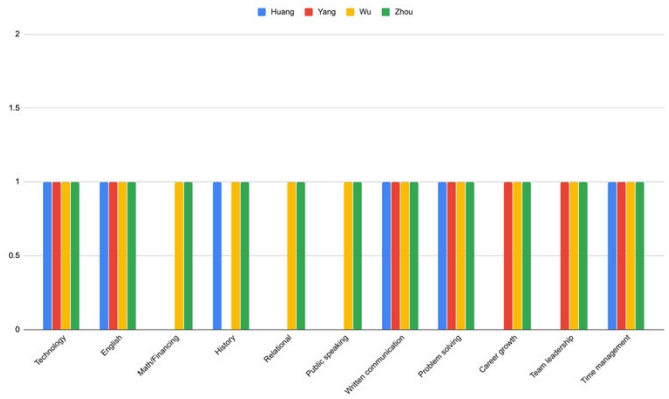


Figure 11 *Skills participants perceived they used in school in America*



This is interesting to note because all 11 skills discussed in the interviews were found to be used in America by at least two of the four participants. Yet, at least two of the four participants agreed that all 11 skills were not taught in their colleges in China. During the research process, the

researcher did not uncover any authoritative skill list already created so this American Graduate Skill List was compiled by looking at resources listing what skills are generally listed by universities and research groups as needed in graduate education in America (Association of College & Research Libraries, 2011; Beaumont, 2012; Concordia University Portland, 2018; IUPUI, n.d.; Ondrusek, 2012; University of Illinois, 2010). Because this list came from universities in America, the trend that at least two of the four participants did not feel these skills were taught in college in China is concerning. If graduate students coming to America are not prepared in these skills in some way, the transition to US standards for students to succeed in their education experiences in America will be difficult (Ondrusek, 2012).

With this difference in skills learned and skills needed, the transition for the interviewed participants was not always easy. Most of them shared struggles they experienced when they first began their studies in America as there were skills these participants either had no experience in or were weaker at, such as understanding spoken English, working in a team, or giving a presentation. This struggle was made more challenging for some of them by the fact their universities in America often expected them to have these skills, and so did not take time to teach these skills to the new students. These findings agree with the literature that found that students who lack needed graduate skills struggle to be able to complete their degrees (O'Clair, 2013). Despite this, many graduate department leaders assume students have the skills they need to succeed, which is often not true (O'Clair, 2013).

Learned Skills Outside of School

Instead of having learned these skills in college in China, all of the participants shared they had learned various skills either at home, on their own, through work experiences, or even after they arrived in America. In a few instances, the skills being discussed had been learned in high

school, but not college. One participant, Huang, had 25 years of work experience in China and, for many of the skills discussed, had learned them through her work.

Figure 12 *Skills learned in middle/high school*

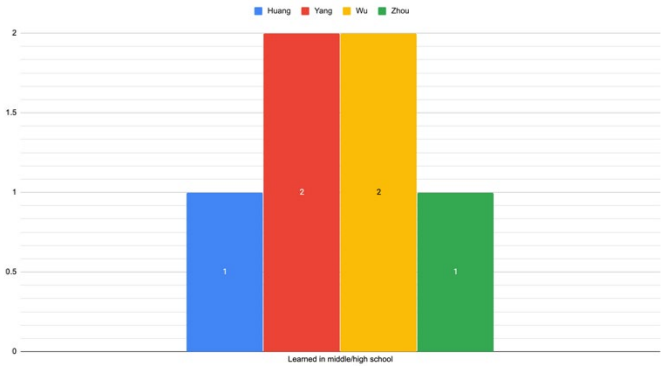


Figure 13 *Skills learned through work or on own*

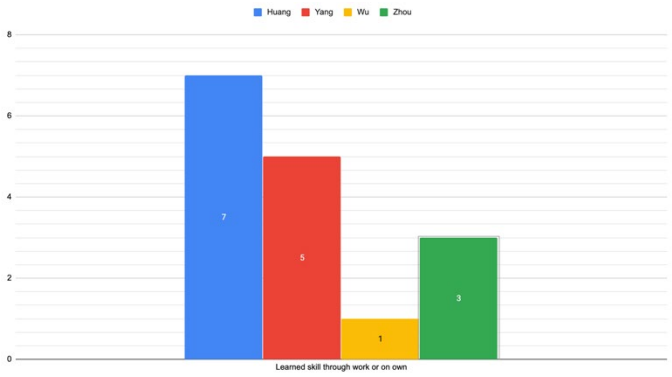
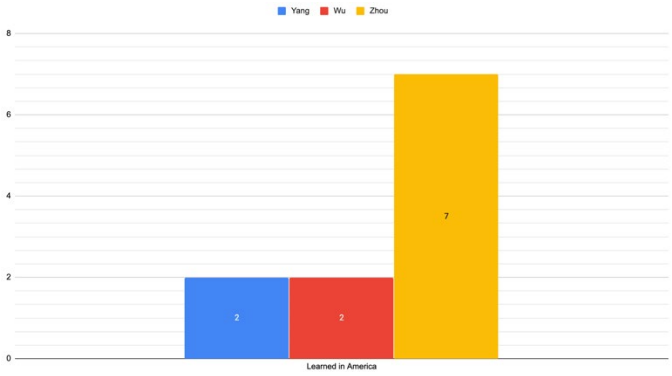


Figure 14 *Skills learned in America*



Between the four interview participants, they mentioned learning skills either through work or on their own at least 16 times. For example, when talking about finances, Huang stated, “I

learned them in my, through my own life experience." Skills were stated as having been learned in middle or high school six times. Yang shared this experience a lot. For instance, when talking about public speaking, she shared, "My high school gave me a lot of opportunity to do, do presentation on teaching and yeah stuff like these are listed, but not in my college." Participants mentioned that they did not learn a certain skill until in America 11 times. One such instance was when Zhou talked about writing emails, "So, how to write a formal email and make it clear and polite is definitely something we have to learn after we came to US".

This trend led to a lack of consistency in what skills participants had learned. Some knew some skills, and other participants knew other skills. Having not had a consistent college experience in which to learn skills, participants had to rely on their environments where they potentially might learn skills.

Chinese Education Teaches to Test

Two major observations were made that connect with the theme of teaching to the test. One observation was that education in China is about teaching to the test (应试教育 *yingshi jiaoyu*), and this observation was made by Yang, Wu, and Zhou. The connected observation was that all four participants shared that nothing was taught to them in college that was not related to their major. Zhou helped put this into words when he reflected, "Everything we learned…is for those exams…when I was in the college, I cannot get the degree if I don't pass those tests." Because the tests were most important, nothing not on the test was taught, which meant that anything not required for the tests for the major was not taught.

Figure 15 *Participant perception of being taught to a test*

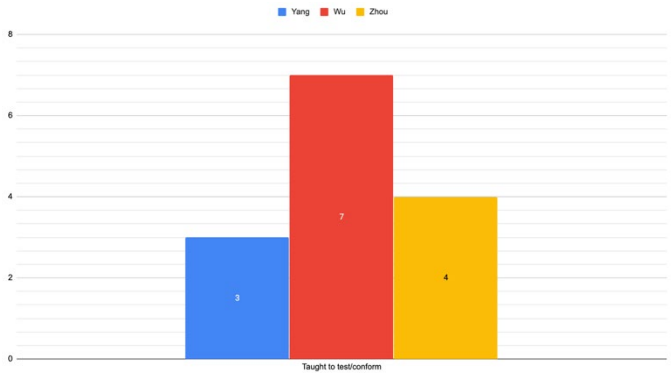
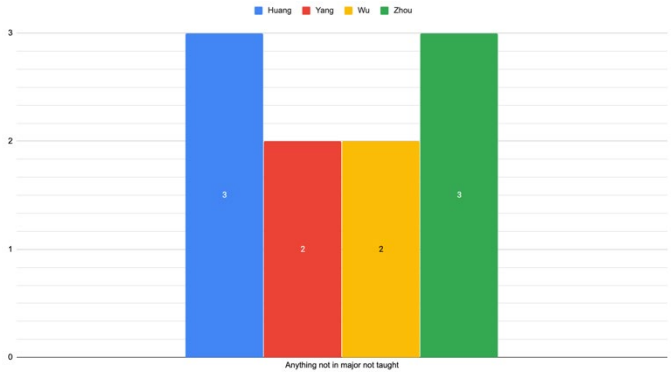


Figure 16 *Participant perception of any topic not in major not being taught*



Three of the participants mentioned being taught to a test a total of 14 times throughout the interviews. Several of them mentioned this was why they did not feel like they had learned practical skills, because the education system in China had focused on preparing them for a test, not for practical use of knowledge. Zhou explained it clearly, “It’s very…test oriented not for real life practicing purposes.” Wu also commented, “What we learn gonna be exactly, what’s gonna be in the test.”

Connected to this theme, all four participants mentioned not learning anything that was not included in their major a total of 10 times throughout the interviews. If a topic was not going to appear in any tests for the major, it was seen as not worth teaching. Only information related to the major was required to pass the test. The participants in this study shared their perception that

since many of the skills discussed were not needed to complete their major and pass their tests, the skills were not taught. Zhou specifically brought this up multiple times. For example, when talking about history, he said, “No history at all. That’s not, that is not part a part in my curriculum.”

Another issue brought up five times by Yang and Wu, which ties into teaching to the test, was the fact that these two participants did not feel they were encouraged to work in teams in China. Wu shared how she perceived this, “We actually don’t encourage teamwork…in school we don’t have the study group. Professors, they don’t like it.” Instead, students were encouraged to study independently and to compete with each other. With the final goal of the test, this emphasis would fit the teaching method. Since the test was the final goal, students would want to do best on the test, and teachers would want to see students perform independently, as the tests are taken separately. Teamwork was limited since teamwork would not help meet the end goal of passing the test and hopefully being the best.

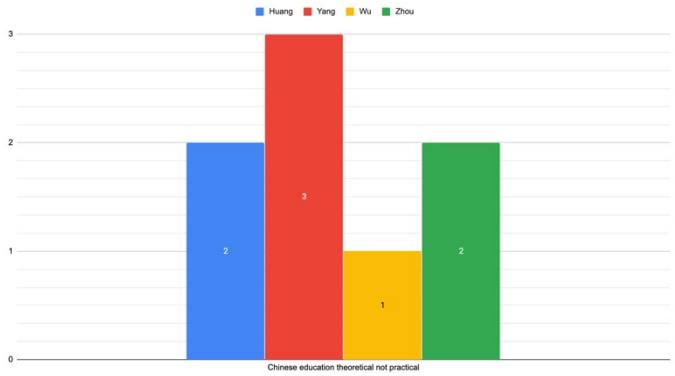
Multiple pieces of literature either examine or at least reference, this characteristic of Chinese education to teach to the test (Lucas, 2019; Jiang & Guo, 2017; Rosecky et al., 2004; Tang et al., 2017; Yuchtman, 2017; Zhang, 2014). However, some of the literature voices concern about whether or not tests are the best evaluation tools education in China can use to measure the effectiveness of its education (Dongmei & Jiangbo, 2009; Yuchtman, 2017; Zhang & Sheese, 2017). It is interesting to realize that while Chinese education today emphasizes testing, Mao did not believe in emphasizing testing, and called for reforms that would ensure the students learned and were not burdened through their education (Qingjun, 1994).

Chinese Education Theoretical

All the participants in this study agreed that at least part of why they perceived they were not prepared in various skills, had to do with Chinese education being theoretical. Yang was a

mathematics major, yet when talking about financial skills, she reflected, “We as mathematics major, we were taught very theoretically, but none of them are about financial things and help you to manage your life.”

Figure 17 *Participant perception of Chinese education theoretical not practical*



This concept was mentioned at least eight times over the four interviews. Multiple times, throughout the interviews, the participants shared how they never received a practical education in China. Instead, they were taught theoretical knowledge without any connection to their lives at that time, or how they might use the knowledge in the future. Huang stated this well, “my generally understanding of the Chinese education is like it’s pretty more about the theory or academic…so that’s why all these skills that you mention, they don’t teach them in our class…so a lot of students, they are not ready.” Several of the participants shared how they had found their lack of practical preparation to make their transition to American harder as they needed these skills in the USA. Zhou reflected on his initial struggles with team leadership, “Yeah, it was hard…we didn’t use this kind of concept in China.”

These experiences seem to agree with a general trend in Chinese education where students do not learn how to connect the knowledge they learn with practical life (Fan et al., 2017). The researcher found no examples in the literature relating to disciplines similar to the participants. However, one study did find that much of the pedagogical training teachers received was

theoretical in nature as these students did not receive practical courses, such as teaching methods, and did not have opportunities to practice, instead, they were trained in the subject matter (Shibao, 2005).

However, while education in China is generally theoretical, Chinese companies want to hire workers with practical skills such as initiative motivation, leadership, knowledge of the company, and loyalty in those they interview and value the personality the person they are looking to hire brings to the team (Peppas & Yu, 2005). Employers in China also look for cognitive, non-cognitive, and people skills for a successful workplace (Hora & Blackburn Cohen, 2018). Thus, not only is it graduate schools in America that want students to have practical skills, but Chinese companies. Because of this, without these skills, all Chinese students will struggle, whether those going abroad or those entering the workforce in China.

Since this study grounds itself in Dewey's theory of education, it is interesting to note that Dewey believed education that ignored practical instruction as dangerous because it would cause the learner to see study as a hardship and not to learn what is needed. In his lectures in China Dewey stated:

> When pupils lack interest in learning they naturally come to regard study as hardship. Many people, including not a few educators, ignorant of the facts of the case, hold to the opinion that lack of interest in studies is inherent in human nature. But, since living in the modern world requires that we study, these people would force or entice pupils to study—and they show considerable ingenuity in the range of tricks and procedures which they devise to this end. But these methods don't work, because the pupils do not understand what they are supposed to be learning; and the fact that they don't understand stems from the circumstance that the material to which they are required to apply

themselves has so little to do with their actual living (Dewey, 1973, p. 194).

Mao also taught that education should be related to every day, practical life, so that the masses would benefit and be best able to benefit society (Mao, 1964; Price, 1970; Qingjun, 1994). In a conversation with the Nepalese delegates of Education, Mao declared:

> Our education is fraught with problems, the most prominent of which is dogmatism. We are in the process of reforming our educational system. The school years are too long, courses too many, and various methods of teaching unsatisfactory. The children learn textbooks and concepts which remain [merely] textbooks and concepts; they know nothing else. [They] do not use their four limbs; nor do [they] recognize the five kinds of grain (Mao, 1964).

Language Barriers

Yang, Wu, and Zhou all agreed that language had been significant barriers for them when they initially arrived in America. One way this manifested was in the struggles they experienced in spoken English. This theme was mentioned eight times throughout the three interviews. Wu shared her difficult experience, “The first month in America was disaster…they [friends] cannot believe I can survive my spoken English is so bad.” Yang still tended to shy away from speaking up in class due to this, “If I in the Chinese context, okay, I will feel more…confidence. But if …I’m the only international or I will ten to just wait.”

Another area of struggle in language was an understanding of how to communicate politely in writing as Americans tend to be less formal. The three participants mentioned this idea six times in their interviews. Yang shared what this looked like in communication with her professor.

Figure 18 *Participant perception of spoken English being hard*

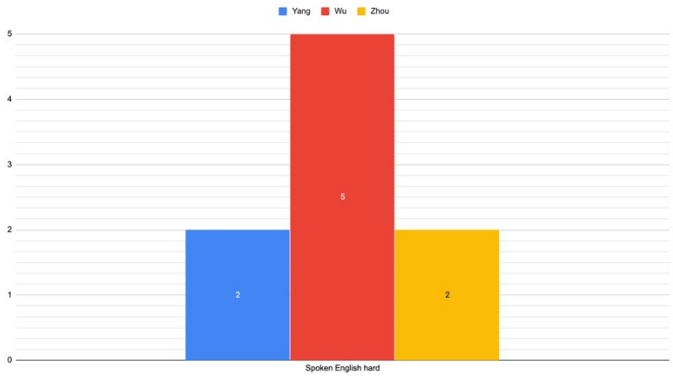
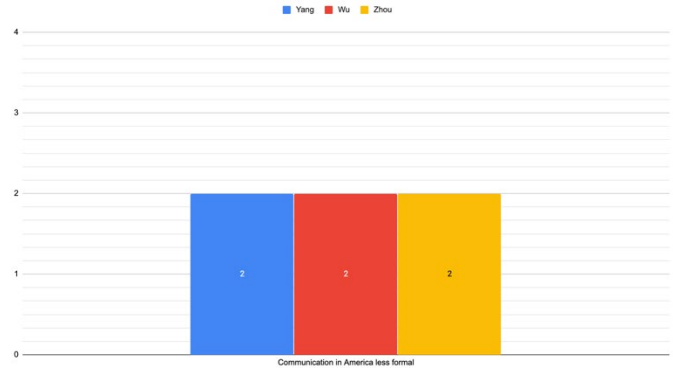


Figure 19 *Participant perception of written communication in America less formal*



Multiple studies have looked at the language barriers international students face (Cheng & Erben, 2019; Huntley, 1993; Li et al., 2016; Nguyen, 2013; Tang et al., 2017; Xie, 2016). Similar to what Yang shared about speaking up, Cheng and Erben (2019) found that language anxiety affects the language ability of international students. Because of this, it can be especially hard for adult students who can communicate very well in their native language but struggle to communicate effectively in the language they are studying in (Cheng & Erben, 2019; Huntley, 1993).

Personal Journey

This study began in January 2018 with the intention of conducting a mixed methods study looking at students in private universities in China who were in their internship in their final year.

Almost all Chinese university students enter into a six to twelve month internship at the end of their program. The researcher envisioned using a similar skills list as in this study, to determine whether or not students felt they had learned the skills they needed to function in the job world they experienced in their internships. With this intent, the researcher obtained IRB approval and began reaching out to contacts in China to connect with private universities and obtain permission to first survey and then interview students. Foreign involvement in education in China is a sensitive subject, and this led the contacts to be nervous about engaging with the researcher in research in private universities in China. The researcher sought to clarify that no questions relating to politics or religion would be asked as this study was looking at skills and avoiding sensitive topics. However, it soon became clear it would not be possible to obtain participants in a reasonable timeframe due to the concern of the contacts.

With the potential difficulties of pursuing research in China in mind, the researcher turned to look at removing the survey component and interview Chinese students in America who had completed their undergraduate degrees in Chinese private universities. A similar skills list was to be used, but it was ensured that the skills reflected the skills graduate schools in America would be looking for in their students. The researcher resubmitted her IRB application and received approval for this change. The researcher then began to reach out to friends and the international departments of universities all over the Mideast area of the United States. Due to time constraints and the fact that private Chinese university graduates are rare in America, the researcher was still unable to find participants for the study.

This led to the final change for the researcher. This change was minor, with the focus moving from Chinese students from private universities in China to Chinese students from public universities in China. The researcher would still be looking at the same skills needed for success

in graduate school in America. IRB approval was obtained for the change. The researcher used snowballing to find the necessary participants. With the number of public Chinese university students in America, it took little time to find the needed participants and interview them.

Throughout the changes in this study, the researcher learned about the challenges of research. Having experienced the difficulties and changes needed in this study, the researcher will approach future research with a realization and expectation that it will likely change. Having grown up in China, the researcher was aware before this study of the sensitivity of Western involvement in education in China. However, the process of this study revealed how deep the concerns run among educators in China. The researcher still hopes to conduct research with students in China but will likely need more time to build relationships needed to obtain permissions.

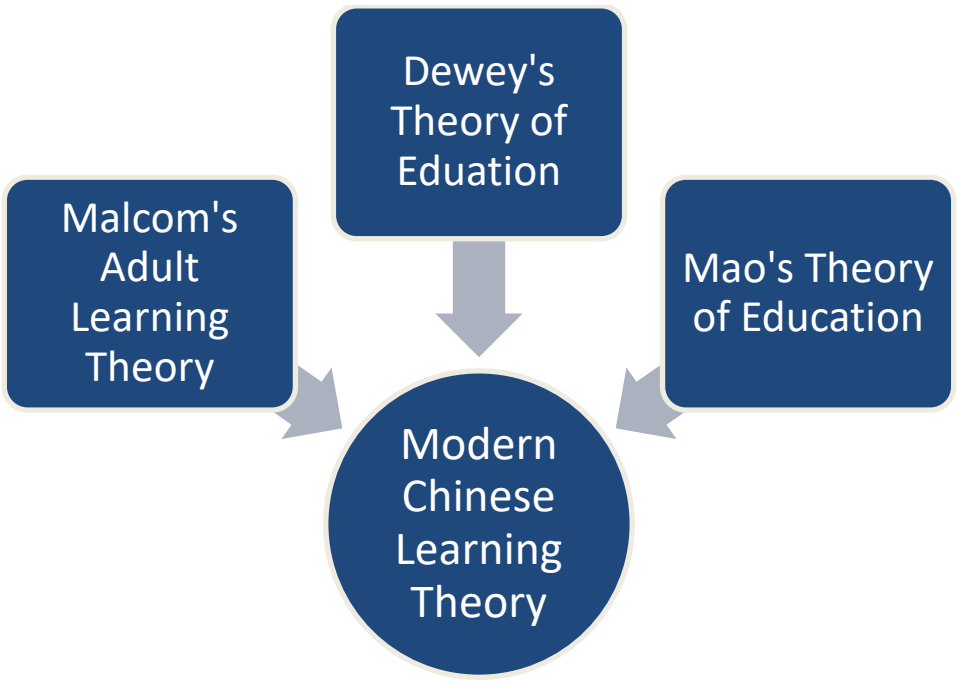
Western researchers looking to do research with university students in China should be prepared for complications to arise. It would be wise for researchers looking to do this research to ensure they have connections with Chinese people in education. Even then, they should be prepared for the process to be long and difficult, or possibly not to succeed. It would likely be helpful if future researchers had a connection with a government official or fostered a connection, as this would allow them to have the approval of a government official, which would likely lead to universities being more comfortable with allowing Western research.

Implications Relating to the Theoretical framework

The three learning theories examined in the literature review form a triangle of thought upon which this study is founded. The theories of Malcom, Dewey, and Mao converge to create a modern Chinese learning theory. This theory is founded on the shoulders of education giants and looks ahead to what Chinese graduate students need for the future. Based on the research in this study, the researcher would argue this is the ideal to work towards but is the not current theory

guiding higher education in China.

Figure 20 *Suggested theory for modern Chinese education*



Malcom's Adult Learning theory sees adult learners as individuals who are able to take responsibility in their education experience and collaborate with their teachers (Merriam, 2001; Pratt, 1988). However, as noted above, the participants shared how they were taught to the test, asked to memorize information, and as Zhou used the illustration of "stuffing the duck method education," where students were force-fed information. These participants did not express feelings of engagement and responsibility in their undergraduate education, but a sense of forced learning of information others had predetermined to be important.

Dewey's theory of education saw education as shaping society, which means it is a necessity. To keep education connected to society, Dewey called for it to related to practical accepts of the students' lives (Dewey, 1973). While these four participants did not specifically mention it, education in China is valued, with elementary education being mandatory to ensure that all can attend school. However, the differences between Chinese education and Dewey's

thoughts appear in relation to having education related to practical aspects of students' lives. As detailed above, all four of the participants shared that their experience of education in China had been theoretical. They did not feel they had learned practical life skills, even in their major content areas.

Mao's theory of education focused on a system that taught practice and not theory (Qingjun, 1994; Mao, 1964). Mao believed in learning by doing and ensuring that subjects were applied to life (Price, 1970; Mao, 1964). As seen in the interactions with the four participants in this study, none of them experienced practical education during their undergraduate education in China. Instead, they mentioned multiple times the emphasis on testing and teaching theories they found during their educational experience. Their stories were not like the education experience Mao had envisioned for the young of China.

A modern Chinese learning theory would call for a shift in universities in China today back to the practical teaching style Mao called for. This theory would acknowledge the place of the university students as adult learners who understand the world they live in and can collaborate with their teachers in their learning experience. This experience would be focused on practical skills as Dewey and Mao envisioned, ensuring that students graduate not only with knowledge in their minds but with the ability to apply that knowledge in the world they live in.

Recommendations for Further Research

This research adds to the limited body of literature regarding Chinese students studying abroad in America. Due to how young modern Chinese education is today, only having been formed in the 1970s, there is much research still to be done to understand it well (Berger et al., 2013; Chen, 2013; Fan et al., 2017; Hu & Seifman, 1997; Siming, 2003). Hopefully, this study, along with other studies in the last few years, will serve as a foundation for additional research.

Since this study was limited to four participants, multiple studies would add to the findings in this study, such as the following:

A quantitative study using the researcher's American Graduate Skill List, to get a broader idea of student perceptions. Such a study could use online survey tools to collect data from hundreds of participants on their perceptions of skills taught in China and skills used in school in America. Data of this scope would help fill out some of the conclusions reached in this study to see if these conclusions seem to be trends with which students from all over China agree.

Several qualitative studies conducted in different populations would be helpful to expand the participant pool and determine if the conclusions in this study are limited to these four participants or truly reflect the whole population of Chinese graduate students in America especially if these studies were conducted similarly and looking at the same skills with the only main difference being populations.

One potential population grouping would be comparing students from first tier universities (一本大学 *yiben Daxue*) such as 北京大学 *Beijing Daxue* (Peking University), second tier universities (二本大学 *erben daxue*) such as 河南大学 *Henan Daxue* (Henan University), and third tier universities (三本大学 *sanben daxuesuch*) as 吉林大学珠海学院 *Jílín Daxue Zhuhai Xueyuan* (Zhuhai College of Jilin University). All Chinese universities are categorized by these tiers with first tier universities being the best in the nation, second tier being acceptable, and third tier often being private, or independent, universities that were formed out of a public university. Such a study would allow researchers to determine if student perceptions differ based on the tier of college attended in China. Another grouping could survey students from various provinces in China looking for variations between student perceptions between provinces. These types of studies would give researchers a better understanding of whether conclusions can be drawn

generally about all Chinese students or differ significantly between the type of school or province the student was in.

Another potential qualitative study could be a comparison of international Chinese students who are at either public or private universities in America. This type of study would examine what skills Chinese graduate students find themselves using in America. Such data would allow researchers to better understand if all skills are equally needed in education in America no matter what type of school, or if the skills needed depended on whether the university is public or private.

Implications for Professional Practice

Recommendations for Chinese Education Leaders

Over 300,000 Chinese students have already chosen America as their destination for higher education (Institute of International Education, 2019). As China grows to become a first world country, more students will come to the USA for education. Much of Chinese education is rooted in tradition, or political thought, that has served its students so far. Yet, as the world becomes more global, Chinese education will need to as well (Onsman, 2012). Many scholars in China who have been abroad are already beginning to think globally about how education in China should look in the upcoming years (Liu & Yumei, 2015; Xian, 2015).

The Chinese government acknowledges the need for continued growth and improvement as well with its "China's education modernization 2035" plan. This plan clarified some of the key principles for encouraging modern education in China. These included: "adhere to the leadership of the party, adhere to Chinese characteristics, adhere to priority development, adhere to serving the people, adhere to reform and innovation, and adhere to governing education according to law" (The state council, the People's Republic of China, 2019).

The results of this study could be beneficial to education leaders in China as they seek to prepare their students better to study abroad and live and work in a connected world. This study suggested that it may be helpful for Chinese higher education to prepare students in areas beyond what is tested. For students going to America for higher education, they would benefit from understanding other study methods and styles, as well as knowing skills such as teamwork. These skills are used in education in America, and it would be beneficial for Chinese students to at least have a basic knowledge of these skills.

Chinese students are consistently high performing test-takers since so much of their success depends on test scores (Jiang & Guo, 2017). However, in light of this research, it appears that some introduction of skills not covered in tests would benefit students. Chinese educators may consider adding skills to the curriculum that are not necessarily reflected on tests. Such action would prepare students more broadly so that they are better equipped for opportunities such as studying in America.

This study also suggests that Chinese educators look at determining a unifying theory of education, such as the modern Chinese learning theory proposed in this study, for ensuring they meet the goals laid out in the "China's education modernization 2035" plan. The 2035 plan encourages many ideals such as international exchanges between schools, building a learning system that serves all and is life long, and ensuring schools can modernize to meet the needs of their students. The ideas of adult learning theory, Dewey's theory of education, and Mao's theory of education combined in a modern Chinese learning theory would equip Chinese education learning with some practical ways to build a higher education system that meets the goals and needs of the nation.

Recommendations for American Education Leaders

With over one million international students currently in the USA, it can be challenging for leaders in higher education in America to be able to meet international student needs (Institute of International Education, 2019). Most leaders in American education who are involved in international student departments know the common struggles of international students and the difficulties these students have in connecting to a new culture (Park, 2016; Yang et al., 2016; Zhou et al., 2011). They know of the language struggles students experience that may make them hesitant to speak up or communicate (Cheng & Erben, 2019; Huntley, 1993). Research has also pointed to specific struggles in skills such as critical thinking, which has led to more awareness of these struggles (Lucas, 2019; Zhang 2017).

As America becomes a destination for an increasing number of students from China, leaders in higher education in America would benefit from reading research similar to this study and creating tools to assist Chinese students in the transition better. One idea would be for leaders to create an orientation specific to Chinese, or more broadly Asian, students. This orientation could go beyond a simple introduction to the school and life, such as how to bank, phone sim cards, and other such details. Instead, such an orientation would walk students through information on what to expect in their classes, how to obtain help, methods teachers may use in class, and how students are expected to interact and engage in American education.

Another potential idea would be for education leaders to create resources for professors, and school administrators, that introduce these members to basic differences between American and Chinese education systems. Thus, for example, when a student struggles in teamwork, the professor does not assume the student is stupid or incompetent. Instead, the professor would understand that this student may have never participated in a group homework project before and then provide support to the student through explanation to guide the student to success.

Recommendations for American Professors

With diverse classrooms full of students of different ages as well as students from around the globe, university professors have a difficult job trying to meet the needs of their students (Nguyen, 2013; Yang et al., 2016; Zhou et al., 2011). However, these differences are exactly what makes it vital that professors ensure that all their students are learning the materials they need so that all their students can succeed (Huang, 2012). Professors are limited in time to learn everything about their international students. Yet, with Chinese students making up about 33% of the international student population in America, it would benefit professors to have at least a basic level of knowledge of Chinese student-specific struggles (Institute of International Education, 2019).

One way this research suggests professors can assist their international Chinese students is by simply listening. The participants interviewed showed thought and were able to articulate their experiences and perceptions of education in America. Professors would benefit from intentionally seeking to interact and connect with Chinese students in their classes. These professors should not assume that the Chinese students are comfortable with the teaching methods used or homework assigned and should support their students by looking to listen and understand these Chinese student experiences and needs.

Conclusion

By listening to student perceptions and experiences, this study used individual voices to give insight into how prepared Chinese students are for graduate study in the USA. While the participant pool was limited, this research found that participants generally did not perceive they were successfully prepared in all the skills discussed in the interviews.

Of the eleven skills examined in the interviews, all four participants agreed they were not taught seven of the skills. For the remaining four skills, two or more of the participants did not feel they were taught the skills. The experience of the participants in China is contrasted with all four participants being in agreement that five of the skills were used in education in America, and two more agreed they had used the other six skills. This contrast paints a picture of a perception of a lack of preparation by the students. When so many skills are needed to succeed in graduate school in America, yet these skills are rarely, if ever taught, then the students suffer. Throughout the interviews, the participants spoke of their struggles and difficulties due to this misalignment between the perception of skills taught and skills needed.

In addition to this tension, three themes surfaced again and again in the interviews. First, the participants agreed that education in China focused almost solely on tests. While this gave them a clear goal to work towards, it also meant the participants perceived their education to be limited. They did not get to learn information unrelated to their majors. For them this meant that they did not really learn how to learn, just how to do well on tests, something which did not serve them well when they moved to a new environment and had to learn in entirely new ways.

Second, the participants perceived their education in China was purely theoretical. Such education goes against the very vision Mao had for successful education in China (Mao, 1964; Price, 1970). Students may know a lot of information, but are not able to apply it, which makes their knowledge useless in daily life.

Third, the participants encountered language and cultural difficulties that hindered their studies. While this cannot wholly be avoided with participants coming from another culture and speaking another language, this fact makes their educational experience more difficult. Whether homework takes more time, or participants are fearful to engage in class, this struggle means

students may miss out on information or need more time to complete assignments.

Student perception is a vital measure of success. Test scores and graduation rates give researchers an idea of how well students are performing. However, it is through hearing the students themselves that researchers learn what the students feel. While higher education in China is growing, and education methods are modernizing, students who study abroad still feel a gap. These students perceive they are not well prepared for graduate studies in America. While these results are discouraging, they will hopefully prompt more profound thought from educators in both China and America on how to bridge this gap. Such thought may create an opportunity to work together to ensure that the next generation of Chinese studying in America feels well prepared for this experience.

References

Association of College & Research Libraries. (2011, December 6). Ideal graduate characteristics. Retrieved from http://www.ala.org/acrl/issues/infolit/standards/using/idealgradcharacteristics

Aubrey, K., & Riley, A. (2016). *Understanding & using educational theories*. SAGE.

Barratt-Pugh, L., Zhao, F., Zhang, Z., & Wang, S. (2018). Exploring current Chinese higher education pedagogic tensions through an activity theory lens. *Higher Education*. https://doi.org/10.1007/s10734-018-0304-8

Beaumont, S. (2012). How to be a successful graduate student. Retrieved from https://www.unbc.ca/sites/default/files/assets/graduateprograms/current/how_to_be_a_good_graduate_student_beaumont_2012.pdf

Berger, J. B., Hudson, K. E., & Ramírez, G. B. (2013). How universities work: Understanding higher education organization in northwest China. *Education Policy Analysis Archives, 21(64)*, 1–21. Retrieved from http://epaa.asu.edu/ojs/article/view/1350

Brayda, W. C., & Boyce, T. D. (2014). So you really want to interview me? Navigating "sensitive" qualitative research interviewing. *International Journal of Qualitative Methods*, *13*(1), 318–334. Retrieved from http://search.ebscohost.com

Cai, Y., Bo, A., & Hsiao, S. C. (2018). Emerging social work field education trends in China. *Journal of Social Work Education*, *54*(2), 324–336. https://doi.org/10.1080/10437797.2017.1350233

Cain, L. K., MacDonald, A. L., Coker, J. M., Velasco, J. C., & West, G. D. (2019). Ethics and Reflexivity in Mixed Methods Research: An Examination of Current Practices and a Call

for Further Discussion. International Journal of Multiple Research Approaches, 11(2), 144–155. https://doi.org/10.29034/ijmra.v11n2a2

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The Use of Triangulation in Qualitative Research. *Oncology Nursing Forum*, *41*(5), 545–547. https://doi.org/10.1188/14.ONF.545-547

Chen, K. (2014). What American educators can learn from Chinese secondary education. *American Secondary Education*, *42*(2), 69–79. Retrieved from: http://search.ebscohost.com

Chen, L. (2013). The changing nature of China's higher education. *Journal of Education and Learning*, *2*(2), 190-200. https://doi.org/10.5539/jel.v2n2p190

Chen, S.-Y., & Hu, L.-F. (2012). Higher education research as a field in China: Its formation and current landscape. *Higher Education Research and Development*, *31*(5), 655–666. https://doi.org/10.1080/07294360.2012.692116

Chen, Q., & Fortune, A. (2017). Student perceptions of the learning process during undergraduate field practicum: A qualitative study. *Social Work Education*, *36*(5), 467–480. https://doi.org/10.1080/02615479.2016.1224830

Cheng, R., & Erben, A. (2012). Language anxiety: Experiences of Chinese graduate students at U.S. higher institutions. *Journal of Studies in International Education*, *16*(5), 477–497. https://doi.org/10.1177/1028315311421841

Ching-Sze Wang, J. (2005). John Dewey as a learner in China. *Education & Culture*, *21*(1), 59–73. Retrieved from https://search.ebscohost.com

Claxton, G., & Lucas, B. (2016). Open dialogue: The hole in the heart of education (and the role of psychology in addressing it). *Psychology of Education Review*, *40*(1), 4–12. Retrieved from http://search.ebscohost.com

Concordia University Portland. (2018, August 22). Top 10 characteristics of high-performing graduate school students. Retrieved from https://education.cu-portland.edu/blog/admissions-tips/top-10-characteristics-of-high-performing-graduate-school-students/

Daguang, W. (2009). Basic characteristics and particularities of nongovernment education in China. *Chinese Education and Society*, *42*(6-), 61–73. https://doi.org/10.2753/CED1061-1932420604

Darawsheh, W. (2014). Reflexivity in research: Promoting rigour, reliability and validity in qualitative research. International Journal of Therapy & Rehabilitation, 21(12), 560–568. Retrieved from http://search.ebscohost.com

Daykin, J. B. (2014). The glocalization of John Dewey's educational philosophy in republican-era China. *American Journal of Chinese Studies*, *21*(1). Retrieved from https://search.ebscohost.com

Deng, M., & Zhao, Z. (2014). The education system in Shanghai: Negotiating the nature of education. *The Asia-Pacific Education Researcher*, *23*(4), 805–812. https://doi.org/10.1007/s40299-014-0188-z

Department of Homeland Security. (2019). "2018 All Countries of Citizenship by Total Number of Active SEVIS Records." *Student and Exchange Visitor Program.* Retrieved from https://www.ice.gov/doclib/sevis/pdf/data-CitizenshipActiveStudents_2018.pdf

Dewey, J. (1973). *Lectures in China, 1919-1920*. Honolulu, HI: University of Hawaii Pr.

Dongmei, Z., & Jiangbo, C. (2009). Undergraduate teaching and learning evaluation. *Chinese Education & Society*, *42*(1), 33–41. https://doi.org/10.2753/CED1061-1932420103

Drew N. (2004). Creating a synthesis of intentionality: the role of the bracketing facilitator. *Advances in Nursing Science*, *27*(3), 215–223. Retrieved from http://search.ebscohost.com

Every trade has a master. (2019, May 30). *Beijing Review,* Retrieved from https://search-proquest-com

Fan, M., Wen, H., Yang, L., & He, J. (2017). Exploring a new kind of higher education with Chinese characteristics. *American Journal of Economics & Sociology*, *76*(3), 731–790. https://doi.org/10.1111/ajes.12192

Fengqiao, Y. (2009). Policies on private education. *Chinese Education & Society*, *42*(6), 30–39. https://doi.org/10.2753/CED1061-1932420602

Fischer, C. (2009). Bracketing in qualitative research: Conceptual and practical matters. Psychotherapy Research, 19(4/5), 583–590. https://doi.org/10.1080/10503300902798375

Frambach, J. M., Driessen, E. W., Chan, L.-C., & van der Vleuten, C. P. M. (2012). Rethinking the globalisation of problem-based learning: How culture challenges self-directed learning. *Medical Education*, *46*(8), 738–747. https://doi.org/10.1111/j.1365-2923.2012.04290.x

Fusch, P., Fusch, G. E., & Ness, L. R. (2018). Denzin's Paradigm Shift: Revisiting Triangulation in Qualitative Research. *Journal of Social Change*, *10*(1), 19–32. https://doi.org/10.5590/JOSC.2018.10.1.02

Gregoratto, F. (2017). Agonist recognition, intersections, and the ambivalence of family bonds: John Dewey's critical theory manifesto in China. *Transactions of the Charles S. Peirce*

Society: A Quarterly Journal in American Philosophy, *53*(1), 127–145. https://doi.org/10.2979/trancharpeirsoc.53.1.08

Hampshire, K., Iqbal, N., Blell, M., & Simpson, B. (2014). The interview as narrative ethnography: Seeking and shaping connections in qualitative research. *International Journal of Social Research Methodology*, *17*(3), 215–231. https://doi.org/10.1080/13645579.2012.729405

Hoiman, C. (1992). Modernity and revolution in Chinese education: Towards an analytical agenda of the Great Leap Forward and the Cultural Revolution. In R. Hayhoe (Eds.), *Education and Modernization: the Chinese Experience* (pp. 73-99). Tarytown, New York: Pergamon Press.

Hora, M. T., & Blackburn Cohen, C. A. (2018). Cultural capital at work: How cognitive and noncognitive skills are taught, trained, and rewarded in a Chinese technical college. *Community College Review*, *46*(4), 388–416. https://doi.org/10.1177/0091552118784352

Hu, S. M., & Seifman, E. (1997). *Education and socialist modernization: A documentary history of education in the Peoples Republic of China, 1977-1986*. New York: AMS Press.

Hua, W. (2009). Prospects of private education in China. *Chinese Education and Society*, *42*(6-), 40–60. https://doi.org/10.2753/CED1061-1932420603

Huang, X.-H., Adamson, B., & Lee, J. C.-K. (2014). The move to quality assurance in Chinese higher education: Tensions between policy and practices. *London Review of Education*, *12*(3), 286–299. Retrieved from http://search.ebscohost.com

Huang, Y. (2012). Transitioning challenges faced by Chinese graduate students. *Adult Learning*, *23*(3), 138. Retrieved from https://search.ebscohost.com

Huixin, Y., & Haibing, W. (2016). Returns to education in China: 1989-2011. *China Economist*, *11*(3), 39–53. Retrieved from https://search-proquest-com

Huntley, H. S. (1993). *Adult International Students: Problems of Adjustment*.

Institute of International Education. (2019) "International student totals by place of origin, 2018/2019." *Open Doors Report on International Educational Exchange*. Retrieved from https://www.iie.org/opendoors

Institute of International Education. (2019) "International students by academic level and place of origin, 2018/2019." *Open Doors Report on International Educational Exchange*. Retrieved from https://www.iie.org/opendoors

IUPUI. (n.d.). Characteristic of graduate students. Retrieved from https://psych.iupui.edu/Users/dappleby/Undergrad/character.htm

Jian, H., Marion, R., & Wang, W. (2019). Academic integrity from China to the United States: The acculturation process for Chinese graduate students in the United States. *Ethics & Behavior*, *29*(1), 51–70. https://doi.org/10.1080/10508422.2018.1468760

Jiang, Y. G., & Guo, H. (2017). Transcending the nature of refinement: The policy development on liberal arts education in China. *Chinese Education & Society*, *50*(3), 268–283. https://doi.org/10.1080/10611932.2017.1331009

Kai, Y., & Ertl, H. (2010). Equity in access to higher education in China. *Chinese Education & Society*, *43*(6), 36-58. https://doi.org/10.2753/CED1061-1932430602

Kang, C., Wang, G., Shi, M., & Sun, F. (2014). Research trend on higher education in China for the past ten years. *International Journal of Educational Management*, *28*(3), 319–339. https://doi.org/10.1108/IJEM-04-2013-0059

Lei, J. (2012). Striving for survival and success: Chinese private higher education in the twenty-first century. *On the Horizon, 20*(4), 274-283. https://doi.org/10.1108/10748121211272416

Li, D., Granizo, M. G., & Gardó, T. F. (2016). The value trade-off in higher education service: A qualitative intercultural approach to students' perceptions. *Intangible Capital*, *12*(4), 855–880. http://dx.doi.org/10.3926/ic.706

Li, J. (2012). World-class higher education and the emerging Chinese model of the university. Prospects, *42*(3), 319–339. https://doi.org/10.1007/s11125-012-9241-y

Li, M., & Stodolska, M. (2006). Transnationalism, leisure, and Chinese graduate students in the United States. *Leisure Sciences*, *28*(1), 39–55. https://doi.org/10.1080/01490400500332686.

Li, X. (2012). Turning around low-performing private universities in China: A perspective of organisational ecology. *International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft*, *58*(6), 735-758. https://doi.org/10.1007/s11159-012-9325-1

Li, Y., & Wang, C. (2014). Analysis on the current situation of higher education resource allocation in China. *Management & Engineering*, (15), 54–58. https://doi.org/10.5503/J.ME.2014.15.012

Lin, J. (2015). China: Private trends. *International Higher Education*, *36,* 17-18. https://doi.org/10.6017/ihe.2004.36.7430

Lu, S. (1997). Culture and compliance gaining in the classroom: A preliminary investigation of Chinese college teachers' use of behavior alteration techniques. *Communication Education*, *46*(1), 10–28. https://doi.org/10.1080/03634529709379070

Lucas, K. J. (2019). Chinese graduate student understandings and struggles with critical thinking: A narrative-case study. *International Journal for the Scholarship of Teaching and Learning*, *13*(1). Retrieved from https://search.ebscohost.com

Ma, X. & Malcom, A. (2016). Growth and conflict: The views of Chinese private higher education managers. *Journal of International Education in Business*; Acton, 9(1), 17–31. https://doi.org/10.1108/JIEB-04-2016-0003

Madsen, S. R. (2010). Chinese women administrators in higher education: Developing leadership throughout life. *Academic Leadership* (15337812), *8*(2), 1–8. Retrieved from: http://search.ebscohost.com

Mao, T. (1917). *Selected Works of Mao Tse-tong* (Vol. 6). Kranti Publications. Retrieved from https://www.marxists.org/reference/archive/mao/selected-works/volume-6/mswv6_01.htm

Mao, T. (1937). *Selected Works of Mao Tse-tong* (Vol. 6). Kranti Publications. Retrieved from https://www.marxists.org/reference/archive/mao/selected-works/volume-6/mswv6_25.htm

Mao, T. (1939). *Selected Works of Mao Tse-tong* (Vol. 2). Foreign Languages Press. Retrieved from https://www.marxists.org/reference/archive/mao/selected-works/volume-2/mswv2_22.htm

Mao, T. (1964). *Selected Works of Mao Tse-tong* (Vol. 9). Kranti Publications. Retrieved from https://www.marxists.org/reference/archive/mao/selected-works/volume-9/mswv9_36.htm

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: SAGE Publications.

Meng, L., Muñoz, M., King Hess, K., & Liu, S. (2017). Effective teaching factors and student reading strategies as predictors of student achievement in PISA 2009: the case of China and the United States. *Educational Review*, *69*(1), 68–84. https://doi.org/10.1080/00131911.2016.1155537

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult & Continuing Education*, *2001*(89), 3. Retrieved from https://search.ebscohost.com

Milena, Z. R., Dainora, G., & Alin, S. (2008). Qualitative research methods: A comparison between focus-group and in-depth interview. *Annals of the University of Oradea, Economic Science Series*, *17*(4), 1279–1283. Retrieved from http://search.ebscohost.com

Ministry of Education of the People's Republic of China. (2002). *Law on the Promotion of Non-public Schools of the People's Republic of China*. Retrieved from http://en.moe.gov.cn/Resources/Laws_and_Policies/201506/t20150626_191387.html

Naderifar, M., Goli, H., & Ghaljaei, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, *In Press*. https://doi.org/10.5812/sdme.67670

Naidu, T., & Prose, N. (2018). Re-Envisioning Member Checking and Communicating Results as Accountability Practice in Qualitative Research: A South African Community-Based Organization Example. Forum: Qualitative Social Research, 19(3), 783–797. https://doi.org/10.17169/fqs-19.3.3153

Nelson, C. V., Jacquelyn S, N., & Bobby G, M. (2004). Predicting success of international graduate students in an American university. *College and University*, *80*(1), 19–27. Retrieved from https://search-proquest-com.nnu.idm.oclc.org

Nguyen, H. M. (2013). Faculty advisors' experiences with international graduate students. *Journal of International Students*, *3*(2), 102–116. Retrieved from https://search.ebscohost.com

Niu, X. (1995). Mao Zedong and John Dewey: A comparison of educational thought. *The Journal of Educational Thought (JET) / Revue de La Pensée Éducative*, *29*(2), 129–147. Retrieved from http://www.jstor.org/stable/23767673

O'Clair, K. (2013). Preparing graduate students for graduate-level study and research. *Reference Services Review*, *41*(2), 336–350. https://doi.org/10.1108/00907321311326255

Ondrusek, A. L. (2012). What the research reveals about graduate students' writing skills: A literature review. *Journal of Education for Library & Information Science*, *53*(3), 176–188. Retrieved from https://search.ebscohost.com

Onsman, A. (2012). Recognising the ordinances of Heaven: the role of Confucianism in higher education management in the People's Republic of China. *Journal of Higher Education Policy & Management*, *34*(2), 169–184. https://doi.org/10.1080/1360080X.2012.662741

Onsman, A., & Cameron, J. (2014). Democracy and international higher education in China. *Australian Universities' Review*, *56*(2), 4–13. Retrieved from http://search.ebscohost.com

Pan, S.-Y., & Law, W.-W. (2006). Legalizing education: The role of law in the regulation and deregulation of China's private education. *Education & the Law*, *18*(4), 267–282. https://doi.org/10.1080/09539960601036060

Park, E. (2016). Issues of international students' academic adaptation in the ESL writing class: A mixed-methods study. *Journal of International Students*, *6*(4), 887–904. Retrieved from https://search.ebscohost.com

Peppas, S. C., & Yu, T. (2005). Job candidate attributes: A comparison of Chinese and US employer evaluations and the perceptions of Chinese students. *Business And Economics--Management*, *12*(4), 78–92. Retrieved from https://search-proquest-com

Pratt, D. D. (1988). Andragogy as a relational construct. *Adult Education Quarterly*, *38*(3), 160–172. https://doi.org/10.1177/0001848188038003004

Price, R. F. (1970). *Education in Communist China*. Washington, NY: Praeger.

Qingjun, Z. (1994). Mao Zedong (1893-1976). *The Quarterly Review of Comparative Education*, *24*(1/2), 93-106. Retrieved from http://www.ibe.unesco.org/sites/default/files/maoe.pdf

Qizong, H., & Yizhong, Z. (1997). Some thoughts about current private education in China. *Chinese Education & Society*, *30*(1), 38. Retrieved from http://search.ebscohost.com

Ravitch, S. M., & Riggan, M. (2017). *Reason & rigor: How conceptual frameworks guide research*. Los Angeles: SAGE.

Rhoads, R., & Gu, D. (2012). A gendered point of view on the challenges of women academics in The People's Republic of China. *Higher Education (00181560)*, *63*(6), 733–750. https://doi.org/10.1007/s10734-011-9474-3

Rolls, L., & Relf, M. (2006). Bracketing interviews: addressing methodological challenges in qualitative interviewing in bereavement and palliative care. Mortality, 11(3), 286–305. https://doi.org/10.1080/13576270600774893

Rosecky, R. B., Smith, L. W., & Li, Y. (2004). Non-public collegiate education in modern People's Republic of China. *International Education Journal*, *5*(2), 221–230. Retrieved from http://search.ebscohost.com

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Los Angeles: SAGE.

Scalapino, R. A. (1982). The evolution of a young revolutionary Mao Zedong in 1919-1921. *The Journal of Asian Studies (Pre-1986)*, *42*(1), 29–62. Retrieved from https://search-proquest-com

Shao, K., & Tamashiro, R. (2013). Comparing teacher dispositions in China and the USA. *Research in Higher Education Journal*, *21*. Retrieved from: http://search.ebscohost.com

Sheng, X. (2017). Cultural capital, family background and education: Choosing university subjects in China. *British Journal of Sociology of Education*, *38*(5), 721–737. https://doi.org/10.1080/01425692.2016.1158638

Shibao, G. (2005). Exploring current issues in teacher education in China. *Alberta Journal of Educational Research*, *51*(1), 69–84. Retrieved from: https://search-proquest-com

Siming, L. (2003). Degree system in mainland China: Development and implications. *Higher Education Management & Policy*, *15*(3), 169–180. Retrieved from http://search.ebscohost.com

Stroud, S. R. (2013). Selling democracy and the rhetorical habits of synthetic conflict: John Dewey as pragmatic rhetor in China. *Rhetoric & Public Affairs*, *16*(1), 97–132. Retrieved from https://search.ebscohost.com

Snowball sampling. (n.d.). Retrieved from https://research-methodology.net/sampling-in-primary-data-collection/snowball-sampling/

Snowball sampling. (2017). Retrieved from https://research.oregonstate.edu/irb/policies-and-guidance-investigators/guidance/snowball-sampling

Snowball sampling: Definition, advantages and disadvantages. (2017). Retrieved from https://www.statisticshowto.datasciencecentral.com/snowball-sampling/

Sun, M. (2014). 30 years of Chinese educational management: Achievements, characteristics and problems. *International Journal of Educational Management*, *28*(3), 340–348. https://doi.org/10.1108/IJEM-04-2013-0058

Sun, Q. (2011). Embedding employability in the curriculum: A comparative study of employer engagement models adopted by design programmes in China and the UK. *Journal of Chinese Entrepreneurship*, *3*(1), 36–48. https://doi.org/10.1108/17561391111106016

Tang, X., Collier, D. A., & Witt, A. (2017). Qualitative study on Chinese students' perception of U.S. university life. *Journal of International Students*, *8*(1). https://doi.org/10.5281/zenodo.1134279

The state council, the People's Republic of China. (2019, February 23). 中共中央、国务院印发《中国教育现代化 2035》[The Central Committee of the Communist Party of China and the State Council issued "China Education Modernization 2035"] Retrieved from http://www.gov.cn/zhengce/2019-02/23/content_5367987.htm

Thomas, D. R. (2017). Feedback from research participants: are member checks useful in qualitative research? Qualitative Research in Psychology, 14(1), 23–41. https://doi.org/10.1080/14780887.2016.1219435

Tian, L., & Liu, N. C. (2018). Rethinking higher education in China as a common good. *Higher Education*. https://doi.org/10.1007/s10734-018-0295-5

Tsang, E. Y. (2013). The quest for higher education by the Chinese middle class: Retrenching social mobility? *Higher Education*, *66*(6), 653–668. https://doi.org/10.1007/s10734-013-9627-7

University of Illinois. (2010, September). An incomplete list of graduate student skills. Retrieved from https://grad.illinois.edu/sites/default/files/pdfs/gradstudentskills.pdf

U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2001, 2011, and 2018, Fall Enrollment component. See *Digest of Education Statistics 2018,* table 306.10.

Vaughan, K. (2018). Progressive education and racial justice: Examining the work of John Dewey. *Education & Culture*, *34*(2), 39–68. Retrieved from https://search-ebscohost-com

Wang, L. (2017). Negotiating the intersection of the urban-rural divide and gender in contemporary China: Rural female university students. *Modern China*, *43*(6), 646–677. https://doi.org/10.1177/0097700417697395

Wang, Q. (2007). *Higher education reform in post-Mao China: Market forces vs. political control* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Accession Order No. 3285630).

Wang, W. (2004). *The reviving academic profession in China: The case of Zhejiang Shu Ren University*. (Doctoral dissertation). Retrieved from https://search-proquest-com

Wang, X., & Liu, J. (2011). China's higher education expansion and the task of economic revitalization. *Higher Education*, *62*(2), 213–229. https://doi.org/10.1007/s10734-010-9383-x

Wang, Y. & Falconer, R. (2005). Experiences of Asian-Chinese students in the United States: A case study. *Research in the Schools*, *12*(1), 20–31. Retrieved from https://search.ebscohost.com

Wang, Y., & Secombe, M. (2004). A study of people-run tertiary education in South and West China. *International Education Journal*, *4*(4), 21–29. Retrieved from http://search.ebscohost.com

Weizheng, Z. (1992). Confucius and traditional Chinese education: an assessment. In R. Hayhoe (Eds.), *Education and Modernization: the Chinese Experience* (pp. 3-22). Tarrytown, New York: Pergamon Press.

Xie, Q. (2016). Business communication needs of English major undergraduates and curriculum development in a Chinese university. *Asia-Pacific Education Researcher (Springer Science & Business Media B.V.)*, *25*(4), 667–676. https://doi.org/10.1007/s40299-016-0296-z

Xiong, Q., & Niu, X. (2018). Liberal arts core curriculum quality assurance based on teaching evaluation by students: A case study of Fudan University. *Chinese Education & Society*, *51*(4), 260–271. https://doi.org/10.1080/10611932.2018.1481647

Xian, W. (2015). A quantitative study of the internationalization of the academics and research productivity: Case study of China. *Chinese Education & Society*, *48*(4), 265–279. https://doi.org/10.1080/10611932.2015.1119539

Xuehong, L. (2012). *Excellence through general education: The status of general education reform in Chinese universities*. ProQuest Dissertations & Theses Global. Retrieved from https://search-proquest-com

Yakaboski, T. (2013). The rest of the story: A qualitative study of Chinese and Indian women's graduate education migration. *NASPA Journal About Women in Higher Education*, *6*(2). https://doi.org/10.1515/njawhe-2013-0012

Yalun, A., & Du, C. (2019). The Development of Educational Administration System in China. *International Education Studies*, *12*(2), 25. https://doi.org/10.5539/ies.v12n2p25

Yang, J. Z., & Frick, W. C. (2009). Will the leadership of Chinese education follow the footsteps of American education? A Brief Historical and Socio-Political Analysis. *Journal of Thought*, *44*(2), 23–48. Retrieved from https://search-proquest-com

Yang, R. (2013). Indigenizing the Western concept of university: The Chinese experience. *Asia Pacific Education Review*, *14*(1), 85–92. https://doi.org/10.1007/s12564-013-9254-0

Yang, R. (2015). Reassessing China's higher education development: A focus on academic culture. *Asia Pacific Education Review*, *16*(4), 527–535. https://doi.org/10.1007/s12564-015-9397-2

Yang, Q., Dunleavy, V. O., & Phillips, J. R. (2016). Are you satisfied? Exploring the mediating effects of mentoring communication strategies in predicting Chinese international graduate students' program satisfaction. *Communication Education*, *65*(2), 182–203. https://doi.org/10.1080/03634523.2015.1090005

Yao, C. W., & Vital, L. M. (2018). Reflexivity in International Contexts: Implications for U.S. Doctoral Students International Research Preparation. *International Journal of Doctoral Studies*, 13, 193–210. https://doi.org/10.28945/4005

Youzhong, S. (1999). John Dewey in China: Yesterday and Today. *Transactions of the Charles S. Peirce Society: A Quarterly Journal in American Philosophy*, *35*(1), 69–88. Retrieved from https://search.ebscohost.com

Yubu, J. (1970). *Education in the Republic of China.* China: Ministry of Education.

Yuchtman, N. (2017). Teaching to the tests: An economic analysis of traditional and modern education in late imperial and republican China. *Explorations in Economic History*, *63*, 70–90. https://doi.org/10.1016/j.eeh.2016.11.003

Zhang, D. (2012). “Tongshi” education reform in a Chinese university: Knowledge, values, and organizational changes. *Comparative Education Review*, *56*(3), 394–420. Retrieved from http://search.ebscohost.com

Zhang, H. (2014). Teachers’ leadership styles in China’s higher vocational colleges. *International Forum of Teaching & Studies*, *10*(2), 21–31. Retrieved from: http://search.ebscohost.com

Zhang, T. (2017). Why do Chinese postgraduates struggle with critical thinking? Some clues from the higher education curriculum in China. *Journal of Further & Higher Education*, *41*(6), 857–871. https://doi.org/10.1080/0309877X.2016.1206857

Zhang, G. X., & Sheese, R. (2017). 100 years of John Dewey and education in China. *The Journal of the Gilded Age and Progressive Era*, *16*(04), 400–408. https://doi.org/10.1017/S1537781417000299

Zhao, J., & Jones, K. (2017). Women and leadership in higher education in China: Discourse and the discursive construction of identity. *Administrative Sciences (2076-3387)*, *7*(3), 1–17. https://doi.org/10.3390/admsci7030021

Zhong, N. (1997). *University autonomy in china* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Accession Order No. NQ27760).

Zhou, R., & Xie, B. (2010). The educational technology centre: A window to view the progress of Chinese ICT-based higher education. *British Journal of Educational Technology*, *41*(4), 642–659. https://doi.org/10.1111/j.1467-8535.2010.01095.x

Zhou, Y., Frey, C., & Bang, H. (2011). Understanding of international graduate students’ academic adaptation to a U.S. graduate school. *International Education*, *41*(1), 76-94,99-100. Retrieved from https://search-proquest-com

Zhu, Y. (2019). New National Initiatives of Modernizing Education in China. *ECNU Review of Education*, *2*(3), 353–362. https://doi.org/10.1177/2096531119868069

Appendix A

Initial Email/Social Media post

Hi, my name is Ruth and I am a doctoral student at Northwest Nazarene University in Idaho in the USA. I grew up in China and love the culture, the history, and most importantly the food! I am so excited to continue my journey with Chinese culture and education as I pursue my PhD studies.

For my study I am looking at skills you all have been taught in college in China and how you are finding those skills translating over into your graduate studies in the USA. For my research I am looking for 2-3 Chinese students from your university to participate in an interview with me. I am looking for students who attended a *Gongli Daxue* in China.

I believe skills are important for success in one's life and studies. Mao Zedong called for education that helped everyone learn the skills needed to be successful workers to contribute to society. Especially as our world become more international, we must arise to the challenge of ensuring skills taught around the globe will enable students to be international world citizens. I am hoping that my research will be able to help educators continue to improve education to meet the changing needs of society. Through your participation you all will help with this goal.

If you are willing to participate in this survey, please click the link below to be taken to a Qualtrics survey where I will ask for your contact information, as well as a few general demographic questions. Thank you all!

Appendix B

Qualtrics Survey Questions

Please provide the following information so that I can get in contact with you about possibly participating in my research.

Please provide the following information so that I can get in contact with you about possibly participating in my research.

1. Name (required)
2. Email (required)
3. Cell (not required)
4. Age (required)
5. Gender (required)
6. Current university you are attending (required)
7. Degree working towards (required)
8. Current GPA (not required)
9. The University you attended in China was:
    a. Public (公立大学)
    b. Private (民办大学)
10. Name of university attended in China (required)
11. Degree completed in college (required)
12. College GPA (not required)
13. Preferred method of contact:
    a. Call
    b. Email
    c. Text
14. Would you be free to either meet in person or participate in a video conference call?
    a. Meet in person
    b. Conference call
    c. Neither

Appendix C

Informed Consent Form

A. PURPOSE AND BACKGROUND

Ruth Gao, a doctoral student in the Department of Graduate Education at Northwest Nazarene University is conducting a research study related to students from public higher education universities in China who are currently studying in graduate programs in the USA. She is seeking to better understand how students from these institutions perceive their level of preparation for study at the graduate level in the USA. We appreciate your involvement in helping us investigate how to better serve and meet the needs of Northwest Nazarene University students.

You are being asked to participate in this study because you are a healthy volunteer, over the age of 18.

B. PROCEDURES

If you agree to be in the study, the following will occur:

1. You will be asked to sign this Informed Consent Form, volunteering to participate in the study.

2. You will participate in an interview in English. You will answer a set of interview questions to learn about your studies in China in your *Gongli Daxue*, as well as your time in your graduate program in the USA. This discussion will be recorded on the computer and is expected to last 90-120 minutes.

3. You will be asked to read a debriefing statement at the conclusion of the interview.

These procedures will be competed at a location mutually decided upon by the participant and principal investigator. This may include meeting in person, or an online video conference call. The total time for the interview will be approximately 90-120 minutes.

C. RISKS/DISCOMFORTS

1. Some of the discussion questions may make you uncomfortable or upset, but you are free to decline to answer any questions you do not wish to answer or to stop participation at any time.

2. For this research project, the researchers are requesting demographic information. Due to the make-up of your city and university population, the combined answers to these questions may make an individual person identifiable. The researchers will make every effort to protect your confidentiality. However, if you are uncomfortable answering any of these questions, you may leave them blank.

3. Confidentiality: Participation in research may involve a loss of privacy; however, your records will be handled as confidentially as possible. No individual identities will be used in any reports or publications that may result from this study. All data from notes, audio

tapes, and disks will be kept in a locked file cabinet in the Department and the key to the cabinet will be kept in a separate location. In compliance with the Federal wide Assurance Code, data from this study will be kept for three years, after which all data from the study will be destroyed (45 CFR 46.117).

4. Only the primary researcher and the research supervisor will be privy to data from this study. As researchers, both parties are bound to keep data as secure and confidential as possible.

D. BENEFITS
There will be no direct benefit to you from participating in this study. However, the information you provide may help educators learn to improve education in public HEIs in China so as to better prepare students for the workforce.

E. PAYMENTS
There are no payments for participating in this study.

F. QUESTIONS
If you have questions or concerns about participation in this study, you should first talk with the investigator. Ruth Gao can be contacted via email at rGao@nnu.edu, via telephone at 502-999-6395 (C) or by writing: 2607 Stony Brook Dr. Louisville, KY 40220.

Should you feel distressed due to participation in this, you should contact your own health care provider.

G. CONSENT
You will be given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point. Your decision as to whether or not to participate in this study will have no influence on your present or future status as a student at Northwest Nazarene University.

I give my consent to participate in this study:

_____ _____
Signature of Study Participant **Date**

I give my consent for the interview and discussion to be audio taped in this study:

_____ _____
Signature of Study Participant **Date**

I give my consent for direct quotes to be used in this study:

Signature of Study Participant	**Date**
Signature of Person Obtaining Consent	**Date**

THE NORTHWEST NAZARENE UNIVERSITY INSTITUTIONAL REVIEW BOARD HAS REVIEWED THIS PROJECT FOR THE PROTECTION OF HUMAN PARTICIPANTS IN RESEARCH.

Appendix D

Confidentiality Agreement Transcriptionist – English

Confidentiality Agreement Transcriptionist

I, Mengen Gao transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentations received from (Ruth A. Gao) related to her research study on the researcher study titled **": A Mixed Methods Study of Public Higher Education in China: How Do Students View the Success of Public Higher Education Institutions in Preparing Students for Success Upon Graduation"**.

Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents.
2. To not make copies of any audiotapes or computerized titles of the transcribed interviews texts, unless specifically requested to do so by the researcher, (Ruth A. Gao).
3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession.
4. To return all audiotapes and study-related materials to (Ruth A. Gao) in a complete and timely manner.
5. To delete all electronic files containing study-related documents from my computer hard drive and any back-up devices.
6. I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber's name (printed) Mengen Gao

Transcriber's signature Mengen Gao

Date 01/12/2020

Appendix E

American Graduate Skill List

Here is a sheet of skills we will be talking through in today's interview. Each skill category is listed followed by potential detailed skills you may have been taught in your undergraduate degree. Please reference this list as we conduct out interview.

Knowledge Skills

1. Potential **technology** skills:
    - Ability to browse the web to gain information needed for homework
    - Ability to solve simple computer errors
    - Ability to install needed software and updates on the computer
    - Ability to use word processing software
    - Ability to create, or modify, websites
2. Potential **English** skills:
    - Ability to read a newspaper in English
    - Ability to read and respond to an email in English
    - Ability to carry on a conversation in English
    - Ability to watch a movie in English and understand the story without Chinese subtitles
    - Ability to write a short essay in English
3. Potential **math/financing** skills:
    - Ability to create a simple budget
    - Ability to track expenses and income
    - Ability to balance month end finances
    - Ability to create financial spreadsheets
4. Potential **history** skills:
    - Ability to recount major Chinese history happenings and how those have shaped China today
    - Ability to explain major events in Western history and how those have shaped the Western countries

Career Skills

5. Potential **relational** skills:
    - Importance of building relationships with co-workers
    - Importance of solving relational problems instead of being passive
    - Importance of helping co-workers' careers grow
    - Importance of contributing to your team
6. Potential **presentation/public speaking** skills:
    - Ability to write a speech
    - Ability to use slideshow tools to create a presentation
    - Ability to present to a group of people clearly
    - Ability to observe a speech and identify strengths and weaknesses

7. Potential **written communication** skills:
    - Ability to draft an effective email that is clear and polite
    - Ability to reply to emails in a clear and effective manner
    - Ability to write a marketing social media post
    - Ability to write a formal proposal
8. Potential **problem-solving** skills:
    - Ability to identify issues and roadblocks in a process
    - Ability to present issue to a team and invite input
    - Ability to draft at least one potential solution to identified issues
    - Ability to track progress of solutions to see if they were effective
9. Potential **career growth** skills:
    - Being on time to work each and every day
    - Communicating when you will be late or something unusual happens
    - How to communicate your career goals to your management
    - How to communicate when about the ability to reach a required deadline
10. Potential **team leadership** skills:
    - Ability to communicate a vision and plan to a team
    - Ability to assign tasks in a team
    - Ability to follow up with team members progress
    - Ability to create buy-in so team believes in you
11. Potential **time management/organization** skills:
    - Ability to create a calendar
    - Ability to manage a daily list of responsibilities
    - Ability to create and use a to-do list
    - Ability to plan out your day to complete all needed tasks on-time

Appendix F

Interview Questions

1. Let's take a look at the skills sheet you have. We'll first look at each skill and talk about your college education in China. (go over each skill one at a time with the with following questions).
    a. Do you perceive you were well prepared in this skill?
    b. If not, why?
    c. If yes, how and why?
    d. Please describe to me specifics from your classes that helped prepare you in this area.
    e. Please describe any teaching methods you believe helped you learn this skill. (List options if student does not know how to respond).
    f. Please describe any type of homework you completed that you believe helped you learn this skill. (List options if student does not know how to respond).
2. Let's take a look at the skills sheet you have. Let's now talk about these skills in light of your graduate education here in the USA. (go over each skill one at a time with the with following questions).
    a. Have you used this skill in your studies in the USA?
    b. If so how?
    c. Do you perceive that you were prepared in this skill at an international level? (meaning you were able to comfortably pick up using this skill in the USA?)
    d. Please describe any areas of these skills you struggled with upon beginning your studies in the USA.
    e. Please describe any skills you found yourself better prepared in than your US classmates.
    f. Please describe any skills you found yourself less prepared in than your US classmates.
3. Is there anything else you would like to tell me about your education experience in China?
4. Is there anything else you would like to tell me about your education experience in the USA?

Appendix G

Participation Debrief Email

Thank you for your participation in this study.

After I have an opportunity to analyze the data, I will e-mail you the results and ask for feedback. Mainly I want to ensure that I captured the essence of our discussion, accurately portraying our discussion and your thoughts. This study will conclude March 1, 2020.

In the meantime, if you have any questions or concerns, Ruth Gao can be contacted via email at rcompere@nnu.edu or via telephone at 502-999-6395. You may also contact Dr. Russell Joki, Dissertation Chair at 208-866-2111 or by writing: rjoki@nnu.edu.

Thank you for your participation.

Ruth Gao
Doctoral Student
Northwest Nazarene University
IRB Application#

Appendix H

NIH Certificate

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Ruth Compere** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 01/15/2018.

Certification Number: 2596821.