

**Chinese high school to American university: The effects and outcomes of international  
college preparation programs**

by

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## DEDICATION

I would like to dedicate this study to Chinese students and their parents pursuing their dreams of achieving baccalaureate degrees in American universities.

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## ABSTRACT

This ethnographic study provides insight into the effects and outcomes of the rapidly growing international college preparation programs (CPPs) being operated in China to make students ready for a smoother transition from a Chinese high school to an American university. Specifically, this study not only examines the Chinese students' learning experiences and path to college readiness through CPPs, but also identifies the longer-term outcomes of the programs occurring after they are successfully enrolled.

This study explores Chinese students' learning experiences in specific CPPs to reveal their short-term outcomes, and investigates former CPP students' subsequent transition experiences to American universities to understand CPPs' longer-term outcomes. Aiming at analyzing the efficacies of the CPPs from the perspective of students' learning experience, this study collected qualitative data from two sides: Chinese high school students currently attending CPPs in China and Chinese undergraduate international students in American institutions. Interviews were adopted to explore students' learning experiences. Focus group semi-structured interviews of CPP students on the Chinese side were conducted in six Chinese high schools, while nine individual in-depth and open-ended interviews on the U.S. side were conducted in an American Midwestern Research University.

This study adopts two theoretical frameworks to answer the research questions: Conley's (2010) theoretical model of college readiness and Schlossberg Walters, and Goodman's (1995) Transition Theory. College readiness (Conley, 2007; 2010; Lombardi, Downs, Downs, & Conley, 2012), particularly for international students in CPPs, includes five dimensions: key cognitive strategies, key content knowledge, academic behaviors, contextual skills and awareness (Conley, 2007; 2010; Lombardi, Downs, Downs, & Conley,

2012), and international context and awareness. Additionally, with respect to students' transition experiences, four themes appear in this study: self, situation, support and strategies.

Overall speaking, this study reveals that, as a demonstration of CPPs' outcomes, Chinese undergraduate students in American universities with previous CPP experiences are capable of quickly adapting to academic practices (e.g., presentations, team work assignments and speeches) and expectations in American colleges (e.g., academic writing in English, and speaking skills in English) by being an independent, confident, and collaborative individual. Furthermore, in addition to serving as extra merits in the admission process, in terms of student success, the advanced credits help secure a smoother academic transition. However, despite the merits of CPPs in terms of English proficiency and academic preparation, culture adaptation (e.g., establishing social networks, living in an American way) may not be sufficiently prepared, which may lead to a difficult cultural transition.

Broad implications from this study directly relate to aspects of both practices and policies. With respect to practices, this study proposes implications not only for the Chinese students and their parents, but across American higher education. Various types of American higher education professionals can benefit from this study related to efficacies of CPPs in preparing Chinese students to transition from Chinese high school to American university. They include higher education recruiters, academic advisors, and student affair practitioners. Additionally, CPP program directors can better develop their programs to improve students' learning experiences in CPPs. This study also provides insights for policies, including policies related credit transfer policy, National College Entrance Exams (CEE) policy, and international student admission. Future research is recommended to focus on further

understanding the efficacies of CPPs from administrative perspectives or the programs themselves. Moreover, future researchers could follow a number of students from the point when they participate in CPPs in China to the point when they achieve a Baccalaureate degree in American universities.

## CHAPTER 1. INTRODUCTION

### Background of the Problem

The college student population worldwide has become increasingly mobile in the current era of a global knowledge economy (Mazzarol & Soutar 2002; Guruz, 2011; Mamiseishvili, 2012). Immersed in the popularity of internationalization, the United States is the largest recipient of worldwide international students (Education at a Glance 2012: OECD Indicators). International educational practitioners in the United States are proud of the increasing number of international students who have chosen American higher education institutions as their destination (Kisang, 2011). Statistics confirms an optimistic picture during the past ten years. In academic 2012/13, the number of international students in American postsecondary institutions achieved a record high of 819,644 with an increase of 7.2% compared with the previous academic year 2011/12. This represents a growth of 28.4% in comparison with the 586, 323 received in 2002/03 ([IIE], 2013; 2013). It has been widely accepted that the trend of international students coming to the U.S. will be increasingly growing in the next ten years, mostly from China, India, and South Korea. Furthermore, among the top three countries of sending students to the U.S., China, with the largest population of students studying in the U.S., is the top country of origin and of increase each year. The number of students coming from China to the United States has actually doubled in the last 10 years ([IIE], 2012; 2013). According to a report by Open Doors ([IIE], 2013), Chinese students in American postsecondary institutions accounted for 28.7% of all the international students in the U.S. in the academic year 2012/13, with a total number of 235,597 and an increase of 21.4% compared with the previous academic year 2011/12 ([IIE], 2012; 2013). According to the *2012 College Enrollment Investigation Report*

released recently by China Education Online, in recent years the number of high school students in China who choose to study abroad continues to grow rapidly, and the trend is of younger students as compared to the groups in the past. The report indicates that since 2008, the number of students in China who study abroad has sustained a growth rate of over 20% in the following four consecutive years. Furthermore, the report predicts that in the near future, the number of students studying abroad will also maintain a similar growth trend. In terms of national college enrollment in China, according to data from the Ministry of Education, this year's (2012) national colleges have a total enrollment of 9.15 million students directly from high school, 1.4 million less than the previous year. This is the fourth consecutive year of a downward trend. The growth trend of high school students choosing to study abroad for college and the downward trend of taking national college entrance exam starting in 2009 indicate the attraction of studying abroad. The U.S. is considered as the top destination of studying abroad among Chinese students and their parents (Open Doors, [IIE], 2013).

There is an abundance of research on topics about international students' experiences in American universities, some highlighting their adjustment and adaptation (e.g., Lee & Rice, 2007; Wan, 2001; Zhang, 2011), while others focusing on their challenges in both academic and social life (Ward & Kennedy, 2001; Wan, 2001; Arthur, 2003; Zhang, 2011). Much of the academic research illustrates scholars' great interest and recognition of the issues related to international students. Nevertheless, it has been frequently reported that international students who graduate in good standing from high schools in their home countries find themselves in remedial classes when they enter American colleges (Harris, 2012). Like their American counterparts, many international students lack sufficient readiness to successfully complete American collegiate-level work and to compete in lower-

division undergraduate work (Adelman, 1998, 1999; Stampen & Fenske, 1988; Hossler, Schmit, & Vesper, 1999; Cabrera & La Nasa, 2000; Perna & Tinus, 2005; Strayhorn, 2011; Sablan, 2014). Additionally, the lack of college readiness may lead to a negative effect on transition and educational adjustment (Conley, 2007; 2010). Many international high school students are uninformed about the future significance of collegial academic learning while in high school or the influences their decisions have on opportunities in the future (Bailey & Karp, 2003). Achieving the goal of academic success in college is a challenge for international students, particularly in the perspectives of many factors (e.g. English proficiencies and academic capabilities) that have joint impacts on a student's potential to succeed.

#### Statement of the Problem

The increase in international students from China may be traced to China's deep historical and cultural emphasis on education, and it has been spurred by the country's "One Child Policy" coupled with an increasing pool of middle class families. These factors have produced a generation of parents with not only the highest expectations for their sole offspring but also the resources to invest in what they believe can assist their child to stand ahead of others. It is important to understand that many Chinese parents firmly believe that admission to a top/elite university and receiving a "western" education will guarantee a bright future (Hu & Hagedorn, 2014). An overseas degree is highly recognized in the Chinese job market and the U.S. is the most favored destination (*Inside Higher Ed*, 2014). As stated in *Inside Higher Ed* (Jaschik, 2006), rising numbers of Chinese students have resulted in complaints that campuses may become "too Asian." Another aspect to the resentment stems from the assumptions of some Americans that many Chinese cheat when it

comes to admission tests and application work (Winn, 2012). With the limitation of enrollment of Asian students as well as the resentment due to American assumptions, the admission of Asian students, especially Chinese, is becoming more difficult than ever before (Winn, 2012; Ghosh, 2014), which leads to more intense competition among Chinese applicants. Additionally, as indicated by Wu (2012), setting a higher admissions bar for Asians is a form of discrimination rooted in the "model minority" stereotype, which assumes that all Asians are hard-working and financially well-off high-achievers. This results in stricter admission criteria among Chinese applicants (Wu, 2012). These issues of both intense competition and stricter admission criteria require Chinese high school students with American dreams to look for ways to positively “stand out” among their peers. With the increasing number of international students coming to America carrying the high expectation of their parents, the concept of pre-collegial preparation programs in China gradually thrived (Study Abroad Report, 2013; *China Education Daily*, 2012). Such programs provide Chinese international students with the opportunity to start American postsecondary education early with a preparation for their college-level readiness in terms of both the academic knowledge and college-level academic capabilities (i.e. English capability). These pre-collegial preparation programs are believed by both Chinese high school students and their parents to be an advantage and instant avenue in the admission process to American colleges.

Therefore, there is a great need for the development of programs that focus on collegial readiness and preparation for Chinese high school students. In order to admit students with potential abilities to achieve academic success in their collegial study, international students’ pre-collegial preparations including academic, psychological and



adjustment aspects are essential criteria in American institutions' college enrollment.

Numerous factors have significant impact on college enrollment and academic success, such as learning capability, pre-collegial preparation, accessibility of financial aid, and assistance from teachers, counselors, family members, and counterparts (Perna, 2002; Swail & Perna, 2002; Kwon, 2009). There is research on the relationship of international student admission requirements and policies on subsequent student enrollment and success, (i.e., TOFEL scores, ACT scores) (Olivas & Lee, 2006), which indicate that higher admission test scores represent higher--level academic capabilities and greater academic success in following study.

However, admission test scores represent part of students' capabilities, and college readiness is essential for college success. Despite an exhaustive search, no scholarly paper or research that examines the effects and analyzes the efficacy of college preparation programs designed for international students to enhance their college readiness and preparation for American post-secondary education could be found.

Additionally, facing the huge, prosperous but disordered market (*China Education Daily*, 2012) of college preparation programs to study abroad, Chinese high school students planning to study abroad and their parents are confused and struggling when making decisions (Study Abroad Report, *China Education Online*, 2013). In response to the disordered market, this study is deemed to provide potential Chinese high school students and their parents with comprehensive and systematic knowledge of college preparation programs, with which they make a wise choice as to which to participate.

#### Purpose Statement

The purpose of this dissertation is to describe, analyze, and assess the effects and outcomes of the rapidly growing international college preparation programs being operated

in China from Chinese high school to American university from the perspective of students' experience. Specifically, this study aims at examining the Chinese high school students' learning experiences and types of college readiness while in CPPs before studying abroad; additionally, this study is to analyze the outcomes of the CPPs on Chinese international students' transition to American college life after they are successfully enrolled.

International college preparation programs provide extra-curricular course-work to international students in their home country prior to high school graduation with the expectation that preparation/readiness will be applied when the students study in a college or university in the host country. I focus on China, the largest exporter of international students and the largest market for college preparation programs, because China sends the most international students to the U.S. On the sending side, I provide research results for Chinese high school students' learning experience and the college readiness they are made for their college life in the U.S. through learning in the CPPs. In the receiving destination, I develop an explanation on how and in what aspects college preparation programs impact international students' transition both academically and socially to colleges in this top receiving country--the U.S.--after they are successfully enrolled. In other words, I analyze the aftermath achievements in both academic and social aspects of those students who ultimately enroll in an American college with prior college preparation experiences. On both sides, the qualitative research methodology, specifically grounded theory, is adopted.

College preparation programs are relatively new to Chinese high school students and few advisors in American institutions are familiar with the programs or have had any training on how to best advise Chinese students with college preparation experiences. There is little guidance available on how to advise these students who, upon arriving in a foreign country,

may have little cultural knowledge of their new home, must survive in an environment where the spoken language is not their native tongue, AND will enroll with the experiences of participating in college preparation programs in their home country-China.

### Research Questions

This study intends to analyze the effects and outcomes of the rapidly growing international college preparation programs (CPPs) being operated in China to make students ready for a smoother transition from a Chinese high school to an American university. This study aims to explore Chinese students' learning experiences in specific CPPs to reveal their short-term outcomes, and investigate former CPP students' subsequent transition experiences to American universities to understand CPPs' long-term outcomes. Aiming at analyzing the effects and outcomes of the CPPs from the perspective of students' learning experiences, I developed three research questions. Among them, specifically, the first two research questions were conducted to investigate the CPP students' learning experiences, while the last one were developed to identify former CPP students' transition experience to American colleges. The following specific research questions were addressed in this study.

RQ1: What types of learning experiences are presented to CPP students?

RQ2: How are CPP students made college ready for American institutions?

RQ3: How do Chinese international students who take CPPs during high school perform in their transition to postsecondary education in the U.S.?

### Assumptions/Hypothesis

1. Chinese perspective international students start their transition to American college life during high school through participation in special college preparation programs.
2. International college preparation programs are beneficial for Chinese students' transition

from Chinese high schools to American universities in academic, social and cultural aspects.

3. Advanced transfer credits are an attraction to Chinese students. Furthermore, Chinese students enrolled by American universities with participation in college preparation programs have transferred advanced credits to American universities and then may graduate in less than 4 years.

### Methodology

To understand college preparation programs on the sending side in China, based on the conceptual framework below, I will adopt such qualitative research methods as open-ended interviews with students of each selected college preparation program. These methods were employed in the authentic environment (China) and all interviews were conducted in Chinese (I am a native speaker of the language). The special college preparation programs included are GAC (Global Assessment Certificate) Program, Advanced Placement (AP) Programs, and International Bachelorette (IB) Programs, the top three programs offered in Chinese high schools with an aim to enable students to study in American universities.

On the receiving side, i.e. undergraduate students in the American colleges, I employed qualitative research methods based on Grounded Theory to develop individual in-depth interviews with Chinese international students enrolled in an American Midwestern Research University with previous enrollment in any of the three college preparation programs. Additionally, the aftermath study of Chinese international students successfully enrolled in American institutions was utilized to test the effects and outcomes of the specific college preparation programs. For each program, three students were invited to the individual in-depth interview.

### Conceptual Framework

College preparation programs are constantly growing in the U.S. as a strategic approach to prepare American high school students for their college. The effect of participation in college preparation programs for college readiness has been verified by Strayhorn (2011) in four domains: college-level academic skills, college-level social skills, the academic self-efficacy as well as the sense of belonging to campus. In response to the increasing trend of studying abroad in recent years, college preparation programs designed especially for international students from China to the U.S. for the baccalaureate degree have been growing dramatically. On these grounds, the conceptual framework adopted in this study is an examination of the efficacies of college preparation programs as a bridge for students in China wishing to study in the U.S. (See Figure 1). All the three research questions are raised based on this figure and thus constitute a cohesive research area. Research question one and two were conducted to better understand the CPP students' goals, learning experiences and college readiness on the "sending side"—China; the last research question (number three) was to examine Chinese international students' transition in universities "receiving side"—the U.S..

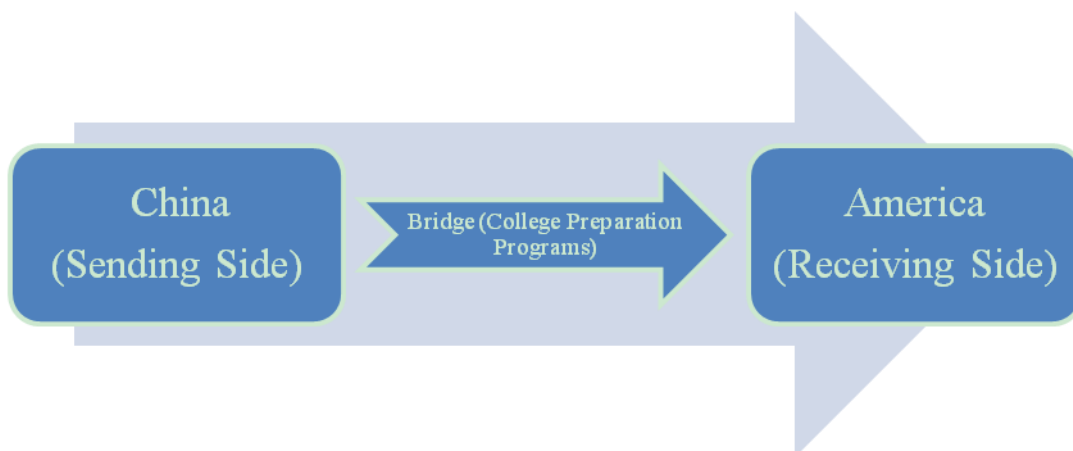


Figure 1. Sending Side and Receiving Side Connected with Bridge

### Theoretical Frameworks

To seek the answer to the first and the second research questions about students' goals, learning experiences and college readiness made in CPPs, the theory utilized is the college readiness model advocated by Conley (2010) with four dimensions: key cognitive strategies, key content knowledge, academic behaviors and contextual skills and awareness. Successful academic preparation for college is grounded in these four companion dimensions.

Another theory is adopted in this study to answer research question three, which concerns the aftermath of college preparation programs for those students who successfully enroll in the US. It is Schlossberg, Walters, and Goodman's Transition Theory (1995) with 4 "S" in the transition process: Schlossberg et al. (1995) advocated the process of transition composed of a series of three phases including "moving in," "moving through," and "moving out" (Ukomadu, 2011; Kisang, 2011). In addition, for the transition process, Schlossberg et al. (1995) identified four major aspects that have effect on a person's capability to transit to a new environment: Situation, Self, Support, and Strategies (Ukomadu, 2011; Kisang, 2011). Additionally, Schlossberg, Walters, and Goodman (1995) advocated that the transition contains three aspects: the type, the context, and the impact (Ukomadu, 2011; Kisang, 2011). In terms of type, there are three types of transitions: anticipated, unanticipated, and nonevents.

Generally, two theoretical frameworks utilized to answer three research questions are illustrated in Table 1.

Table 1. Theoretical Frameworks Utilized to Answer Research Questions

<b>Research Question</b>	<b>Theoretical Framework</b>
<b>RQ 1&amp; RQ 2</b>	College Readiness Model (Conley, 2012)
<b>RQ3</b>	Transition Theory (Schlossberg, Walters, and Goodman, 1995)

### Significance of the Study

The goal of this work is to better understand the current situation, development, practices and efficacy of international college preparation programs as well as to prepare American colleges and universities for further growth of college preparation programs. The results of this study can be used to help international students, especially those from China, adapt to the educational and academic environment in the U.S. and enhance the assistance, support and programs American universities provide to international students from overseas. What is more, this study will be of interest to international higher education professionals as it will provide a window to view college preparation program curricula as well as to inform the understanding of the academic pressures, cultural adjustments and expectations which international students participating in these programs bring to their American institutions.

This 21st century approach, developing international college preparation programs to enhance the education of international students, has been left unstudied and hence unchallenged. Since it is almost certain that these endeavors will continue to grow, it is crucial for us to have a basic understanding. Moreover, finding the “weak points” and areas needing additional emphases may be helpful to those who create and develop college preparation programs. Both the practitioners in the area of student affairs and academic advising will benefit from this study.

In terms of student affairs, the data I gather will be beneficial for student affairs practitioners to understand the implications and limitations of college preparation programs to international students. Student adjustment and academic outcomes are important for student affairs practices. It is crucial to understand that the international students who enter foreign colleges and universities with college credits from college preparation programs are

entering existing foreign classrooms and are expected to interact with local students and international students from other nations. If a student experiences adjustment issues or challenges that result in failure of full participation, it is not only the challenged student who is affected; all students in the classroom are affected. The consequences may include a hampered curriculum and/or a frustrated faculty. College preparation programs have been growing despite the lack of proper theoretical instruction or academic scrutiny. Nevertheless, it is the duty of conscientious researchers like us to fully understand the growing trend of college preparation programs and to ensure the appropriate aftermath for the success of ALL students.

With respect to academic advisors, the data I gather and the subsequent analyses will be beneficial for their academic guidance to international students. International college preparation programs are relatively new and few advisors are familiar with the programs or have had any training on how to best advise international students who enrolled with pre-collegial experiences. Better knowledge of these programs will allow these academic advising practitioners to better serve and advise international students entering foreign universities with advanced college academic readiness earned from college preparation programs in their home country prior to high school graduation. Implications for orientation, placement, and continued advisement are likely to be produced. For instance, pre-college academic readiness urges academic advisors to facilitate appropriate placement tests consistent with their academic level after their enrollment.



### Definition of Key Term

#### **Special International College Preparation Programs**

International College preparation programs are relatively long-term (generally 2- or 3- year) programs that are conducted in Chinese high schools to provide students planning to study abroad in English-speaking countries with English proficiency courses, college academic preparation courses, college study skills, as well as application services. These programs also result in advanced transferrable college credits. These programs are generally high-cost and high-stakes. The purpose of international college preparation program is to develop the skills and abilities necessary to be ready for college-level academic and social life when the Chinese high school student enrolls in postsecondary institutions in the U.S.

### Delimitations and Limitations

#### **Delimitations**

This study will be delimited to stakeholders of college preparation programs offered in China, including program principals, teachers and students. CPPs serve as a bridge to college readiness to connect Chinese high school students on the sending side and Chinese international students on the receiving side. Nevertheless, the results and findings will be of interest to higher education practitioners in both China and the U.S., academic advisors and student affairs professionals in American universities as well as higher education policy makers in both countries.

#### **Limitations**

Limitations can promote trustworthiness and validity in the research process. One major limitation in this study is the size and scope of the data. The research sites on the sending side are all high-performance high schools in big and developed cities, with high

schools in under-developed cities excluded. In order to identify the actual development status of CPPs in China, it is necessary to involve Chinese cities of average or even smaller size.

In addition, the data on the receiving side is collected at one American Midwestern Research University outside of the Ivy League. Since Hu and Hagedorn's (2014) study indicates that CPP students and their parents have high expectation on enrolling in Ivy League institutions, it is necessary to identify students' later transition experiences who manage to enroll in those institutions.

### Outline of Dissertation

This study is conducted to analyze the effects and outcomes of CPPs in preparing potential international students in China for college life in American universities. Specifically, this study explores the effects of CPPs on students' college preparation while they are in China by identifying their learning experiences in CPPs and the categories of college readiness for which they are prepared prior to studying abroad. It then examines the outcomes of CPPs on Chinese international students' transition to American college life after they are successfully enrolled. In this way, the efficacies of CPPs are reflected and verified by Chinese international students' learning experiences in both China and the U.S.

This study includes a total of six chapters. Following this chapter, Chapter Two begins with a comprehensive review of previous literature on the status of internationalization in American higher education and reasons of the increasing number of Chinese international students for Baccalaureate degrees in American universities. It then reviews existing research on the academic and social adjustments that Chinese international students are facing in the U.S., with special highlights on studies of college

preparation/transition programs for American high school students to college. Moreover, this chapter summarizes findings of previous research on new avenues pursued by Chinese students to the U.S., which include two major approaches: education agents and college preparation programs.

A theoretical model about college readiness (Conley, 2010) is used to explain Chinese high school students' learning experiences and college readiness prepared by CPPs. Transition theory (Schlossberg and Associates, 1995) is adopted to discuss the former CPP international students' transition experiences to American universities.

Chapter Three explains the qualitative methodology adopted in this study. Specifically, this chapter describes research design on both the sending side in China and the receiving side in the U.S. Specifically, on each side, the research design includes research settings, participants, data collection and data analysis. The ethical considerations are also explained in this chapter,

Chapter Four presents in detail the findings extracted from data collected from participants in China—the sending side. It provides the four a-priori themes based on college readiness theoretical model (Conley, 2010): (1) key cognitive strategies, (2) key content knowledge, (3) academic behaviors, and (4) contextual skills and awareness. In addition, a new theme is emerging from the data: international context and awareness. Accordingly, subthemes for each of these five major themes are identified and discussed one by one.

Chapter Five presents themes extracted from individual interviews with participants currently studying in American universities on their experiences coping with transition to college life in the U.S. In accordance with transition theory (Schlossberg & Associates, 1995),

four themes, i.e., situation, self, support and strategies, are identified. Subthemes under each theme are illustrated in detail.

Chapter Six discusses and summarizes the findings, and raises implications for both practices and policies. Implications for practices are beneficial for various groups of people: American higher education practitioners (e.g., higher education recruiters, academic advisors, and student affair professionals), Chinese students and their parents, and program directors. Policy implications include credit transfer policy, policies related to National College Entrance Exams (Gaokao), and “Affirmative Action” for International Students. In the end, the recommendations are made for future research.

## CHAPTER 2. REVIEW OF LITERATURE

### Introduction

This chapter contains four sections. The first one is status of internationalization in American higher education and Chinese international students in American postsecondary institutions, which includes statistics of Chinese international students in American universities; reasons of the increase of international students pursuing the baccalaureate in American universities; and academic and social adjustment challenges facing Chinese international students while they study in American universities. The second section is college preparation/transition programs for American high school students. The third section is new avenues pursued by Chinese high school students to the U.S., which includes using education agents, and taking part in international college preparation programs in China. The last part is the theoretical frameworks.

### Status of Internationalization in American Higher Education and Chinese International students in the U.S.

More than ever before, college campuses reflect the diversity of the society in which we live (Guruz, 2011). A significant and increasing number of international students are seeking admission into the United States for postsecondary education (See Figure 2). The Open Doors report (Institute of International Education [IIE], 2011; 2012; 2013) indicated that during the academic year 2012/13 the number of international students at American postsecondary institutions increased by 7% compared to the previous academic year. Based on Open Doors statistics, the academic year 2012/13 is the seventh consecutive year with expansion in the total number of international students in U.S. higher education. Compared with previous academic year 2011/12, 55,000 more newly-recruited international students are

enrolled in American higher education during the academic year 2012/13. The latest total number of international students until academic year 2013 is a significantly high record of 819,644 ([IIE], 2013).

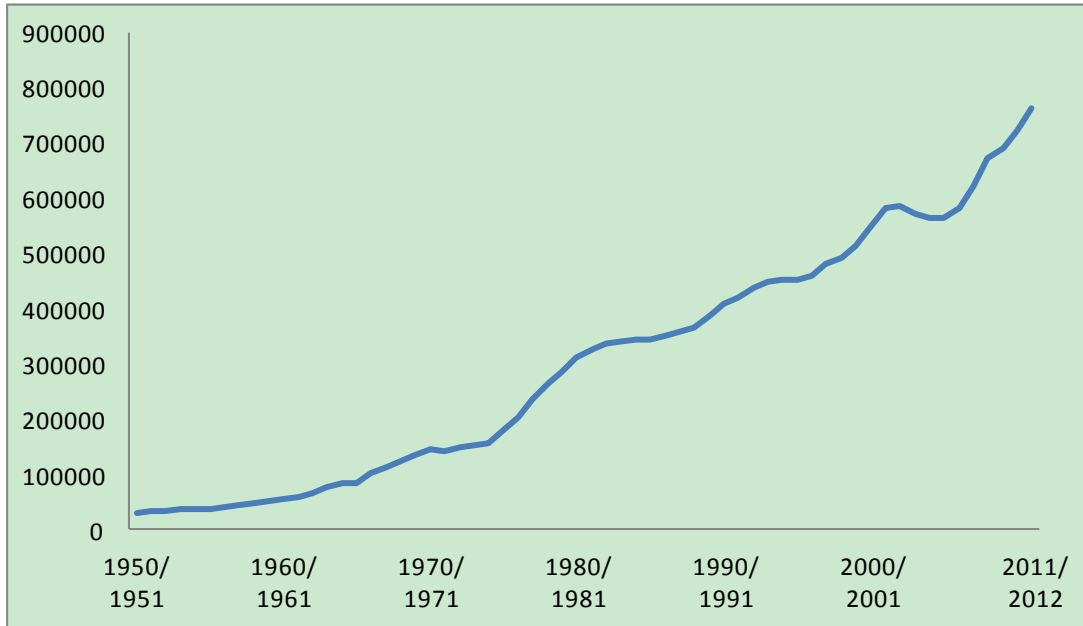


Figure 2. The Trend of International Students Coming into U.S.

It has been widely accepted that the trend of international students swarming to the U.S. will be increasingly growing up in the coming ten years. Furthermore, China is the top country of origin and of increase each year. According to the statistics from Open Doors, the proportion of Chinese international students in American postsecondary institutions accounted for 28.7% of all the international student body in the U.S. in the academic year 2012/13, with a total number of 235,597, marking an increase of 21.4% compared to the previous academic year 2011/12 ([IIE], 2012; 2013). China remains the leading place of origin for students coming to the United States.

Historically speaking, the trend of Chinese international students to the U.S., as shown in Figure 3, has been increasing over the past decade (2002-2012).

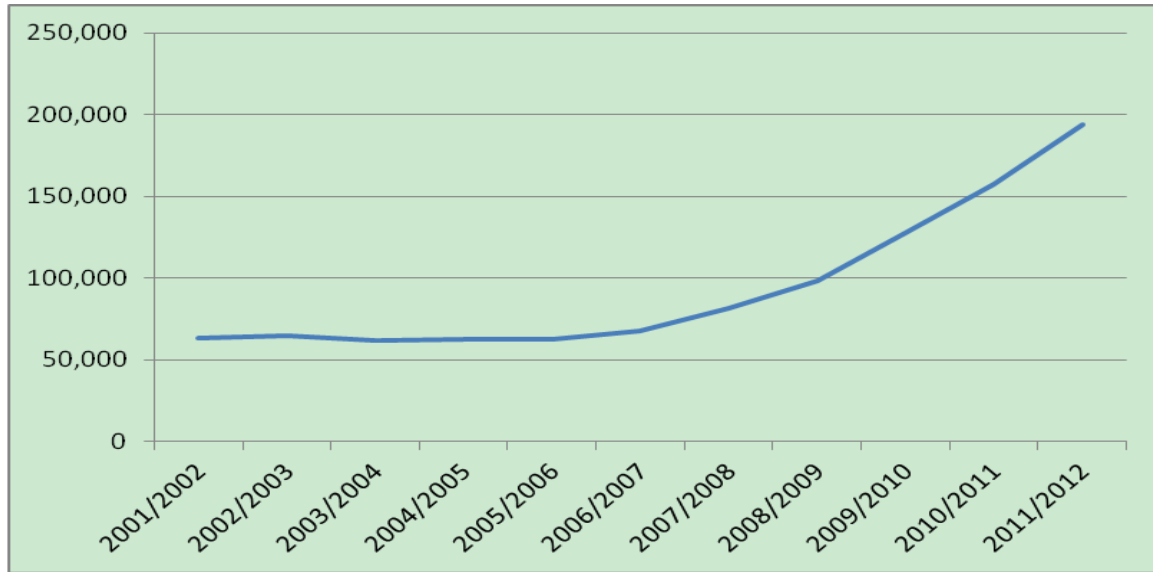


Figure 3. The Trend of Chinese International Students to US in the Past Decade

As for the composition of academic levels of Chinese students enrolled in American postsecondary institutions, while most Chinese students study in the U.S. on the graduate level ([IIE], 2012; 2013), the U.S. continues to face a sharp increase in the number of undergraduate international students originally from China (See Figure4).

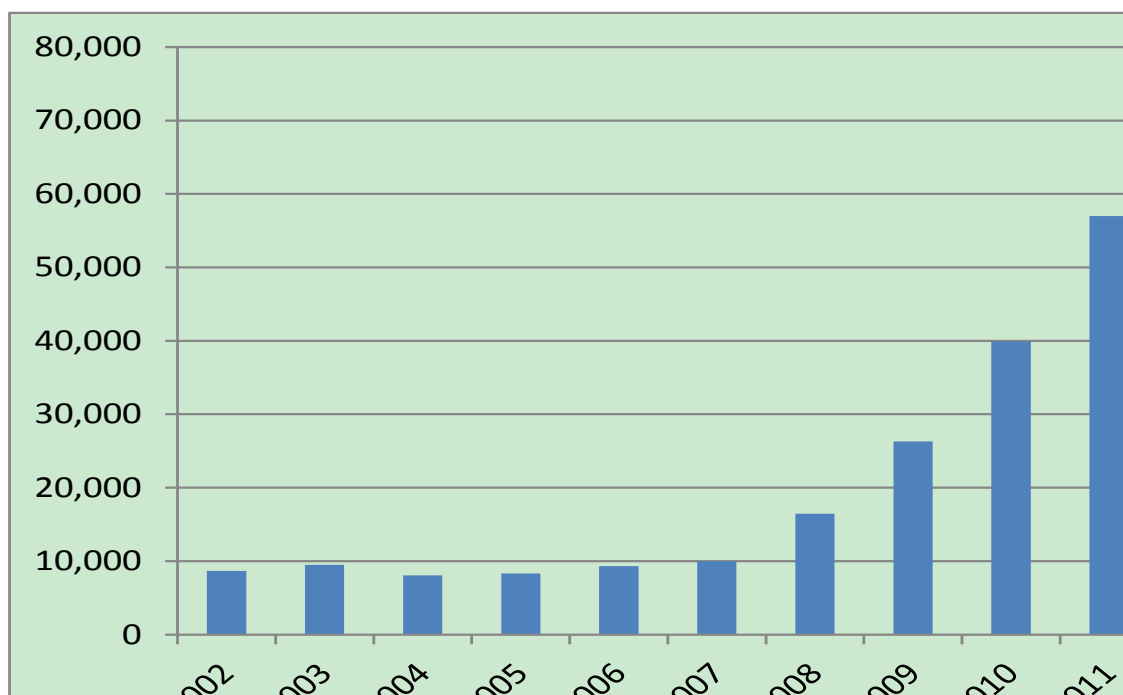


Figure 4. The Trend of Recruitment of Chinese Undergraduate International Students (IIE, 2002-2012)

### **Reasons of increasing number of Chinese international students for Baccalaureate in the US**

#### The Push-Pull Theory in Overseas Decision Making

Many academic studies (Mazzarol & Soutar 2002; King & Ruiz-Gelices 2003; Maringe & Carter 2007) have adapted the push–pull framework (See Figure 4) proposed by Altbach (1998) to explain why students decide to study overseas. Push factors are considered to be the economic or political factors that push students away from their home country to study overseas. Pull factors are considered those that attract the student to a specific foreign country or university such as institutional reputation, international recognition of a program teaching quality, the accessibility of financial support, educational quality, experiment facilities, political environment, etc. (Guruz, 2011, p. 241). By the



analysis of Hu and Hagedorn (2014), the push factors for Chinese high school students to study in the US include (1) negative aspects of National College Entrance Exam in China; (2) complaints about disadvantages of Chinese Higher Education; (3) Residence Registration System; while the pull factors include (1) improvement of career prospects in their home country due to the international recognition of a U.S. degree; (2) an excellent teaching and learning environment that fostered cooperation, creativity and critical thinking capability; (3) highly-valued western society and its freedom and justice, as well as (4) English speaking environment (See Figure 5). By comparing the Push-Pull Theory in studying overseas with the conceptual framework “Sending Side and Receiving Side Connected with Bridge” mentioned earlier in this study, push factors are concentrated in sending side—China while pull factors are positive attractions in receiving side—U.S.

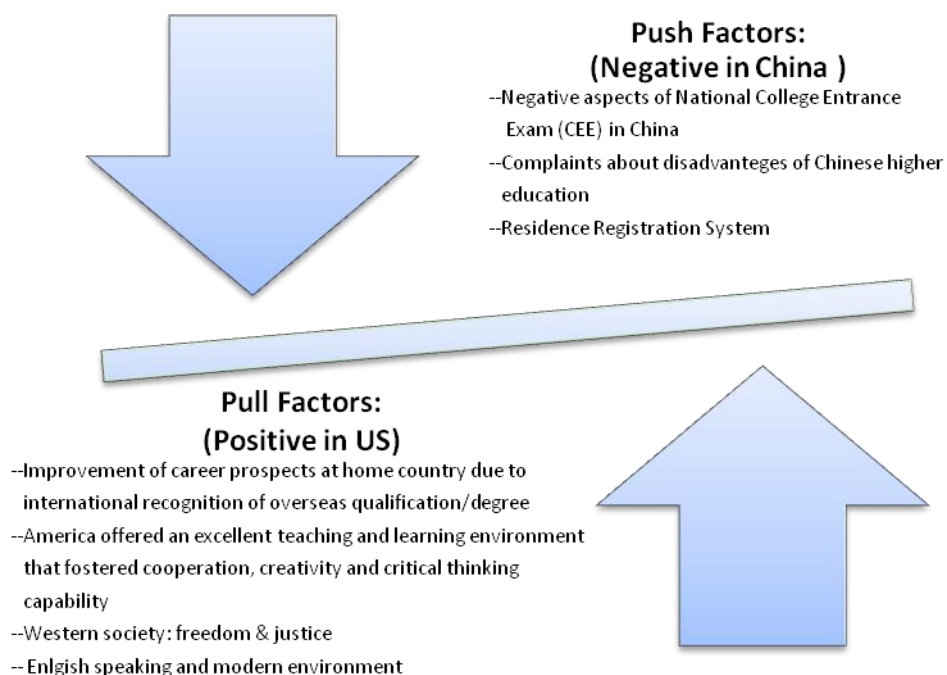


Figure 5. The Pull-Push Theory Applied in Eastern Dreamers' Decision Making (Hu & Hagedorn, 2014)

### The Influence of China's "One-Child" Policy and High Expectations of Overseas Degrees

Historically, "One Child Policy" in China and the cultural emphasis on education have produced a generation of parents with extremely high expectations for their only child (Stevenson & Lee 1990; Stevenson, 1992; Qian, 2009) (See Figure 6). Other contributing factors are cultural traditions which emphasize on education for self-improvement, future success, and family honor (Schneider & Lee, 1990; Grolnick, Benjet, Kurowski & Apostoleris, 1997). Culturally, most students feel compelled to meet their parents' demands and academic expectations (Chang, 1973; Levine & Cureton, 1998; Stevenson & Lee, 1990; Qian, 2009; Eccles & Harold, 1996). In addition, obeying authorities and keeping parents' sacrifices in mind have long been considered proper behaviors among Chinese students (Chang, 1973; Therese, Li & Zhu, 2005). It is commonly believed in Chinese culture that admission to a top university and receiving a "western" education will guarantee a bright future (Levin, 2010). Among all countries around the world, the U.S. is the most favored destination ([IIE], 2012; 2013). Recent annual report (2013) published by China Education online showed that 85% of wealthy Chinese parents intended to support their child to study overseas as an educational investment (Study Abroad Report, 2013).

Therefore, studying abroad, especially in the U.S. is highly encouraged by Chinese parents. Aiming at standing out among an enlarging group of Chinese applicants for American universities, Chinese high school students and their parents are pursuing ways to create an advantage facing the intense competition, such as getting early college credits and hiring agents to assist in the college application process.



Figure 6. Social Context of Chinese Students Pursuing the Baccalaureate in the U.S.

Therefore, the increase is likely to be traced to China's deep historical and cultural emphasis on education, and it has been spurred by the country's "One Child Policy" coupled with an increasing pool of middle class families. These factors have produced a generation of parents with not only the highest expectations for their sole offspring but also the resources to invest in what they believe can assist their child to stand ahead of others. It is important to understand that many Chinese parents firmly believe that admission to a top/elite university and receiving a "western" education will guarantee a bright future. An overseas degree is highly recognized in the Chinese job market and the U.S. is the most favored destination (*Inside Higher Ed*, 2014). With these consensuses, application process is full of intense competition for Chinese international students to realize their eastern dreams (See Figure 7). As stated by Ruse (2010) in the *Chronicle of Higher Education*, the rising number of Chinese students has resulted in complaints that campuses have become "too Asian." Another aspect of concern is the cheating in college admission tests and plagiarism in academic work would lead to be incapable for American college-level academic work (Winn, 2012). With these issues in mind, admission of Asian students, especially Chinese, has become increasingly controversial (Ruse, 2010). This leads to even more intense competition for Chinese students in their application processes. As a result, Chinese high

school students with “dreams” must be even more competitive and strive to “stand out”.

Figure 7 provides a framework for understanding the nature and the conflicts between Eastern dreams to “stand out” and the perceptions of Asian students in western universities.

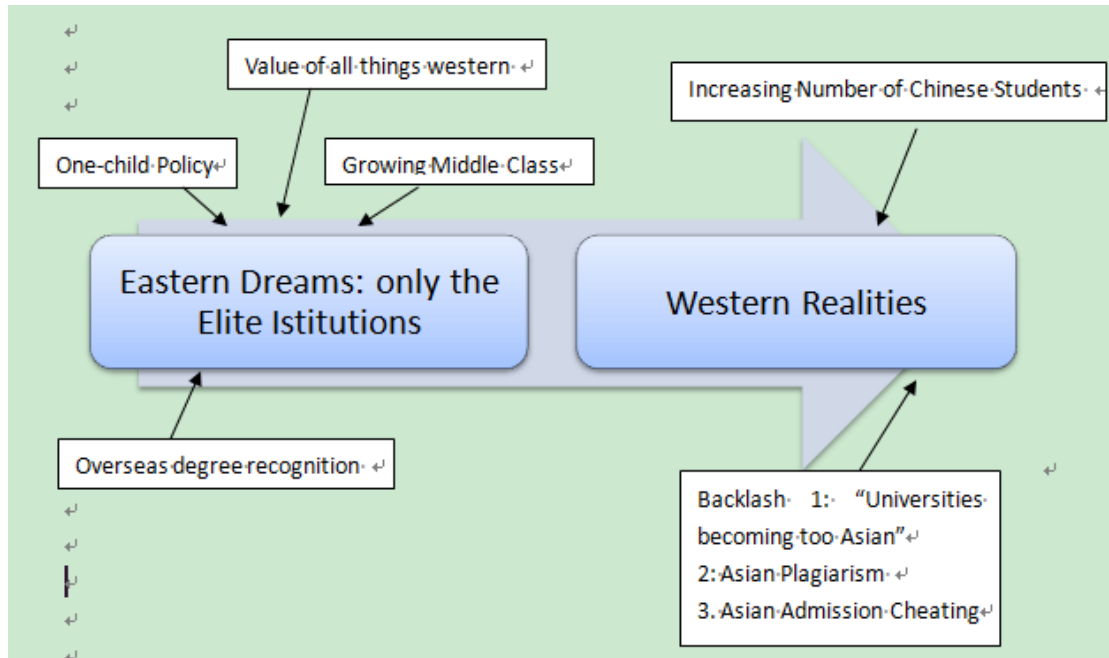


Figure 7. The factors effecting “Eastern Dream” and “Western Reality” (Hagedorn & Hu, 2013)

### Academic and Social Adjustments of Chinese International Students in the U.S.

Although the internationalization trends are beneficial for American higher education in various ways, due to their diversities in geographical and cultural backgrounds, it is likely for international students to encounter serious adjustment issues in foreign countries, such as the U.S., which is distinctive and totally new to them, for instance cultural shock, academic barriers, and social networking problems (Olivas & Lee, 2006; Ward, Bochner, & Furnham, 2008; Al-Sharideh, & Goe, 1998). Moreover, the adjustment and acculturation issues make the study abroad experience more challenging. It has been pointed out that international students face higher levels of social anxiety with lower social adjustment to U.S. life

(Khawaja & Dempsey, 2007). For instance, it is common and reasonable for them to suffer from loneliness and homesickness with fewer social ties in a foreign society. It is difficult for international students to effectively build social networks with both American professors and peers because they are unfamiliar with American cultures, norms and social values.

With the increasing number of international students enrolled in American postsecondary institutions, great attention has been paid to providing sufficient assistance to facilitate international students' adjustment to the foreign countries and overcome various adjustment issues (Chirkov, Vansteenkiste, Tao & Lynch, 2007). International students are found to have strong academic skills in their learning performances in terms of high scores and achievements; however, due to the high pressure of living in a foreign culture, international students are still facing many challenges and barriers in their adjustment experience higher education in the U.S. (Chirkov, et al, 2007). In order to analyze specific content of adjustment issues, it is necessary to clarify the definition of "adjustment" of international students.

#### Definition of Adjustment for International Students

Compared with local American students, international students tend to overcome more challenges and difficulties due to the impact of cultural differences (Kaczmarek, Matlock, Merta, Ames & Rose, 1994). Analysis of previous academic study and scholarly research related to the topics of international students in higher education shows that there is little consensus among those who research on the concept of adjustment or adaptation. Stafford, Marion and Salter (1980) claimed that adjustment refers to whether international students experience specific problems in the college environment. They provided a few examples, including the academic incapability, the inabilities to communicate or adapt to the foreign

foods, financial problems and the problems in building social networks. However, Hurtado and Spuler (1996) proposed “adjustment” as a process in which international students avoid and overcome psychological stress/pressure. According to Jung and Wadsworth (2007), “adjustment” is defined as a process of both cultural and psychological change and it occurs when people face the contradictions of two or more culture (p. 618).

All the definitions mentioned above include aspects of overcoming problems and solving distress during international students’ transition process to foreign colleges. As a result, adjustment can be identified as a process to adapt to a new academic, cultural and social context. One task of this study is to analyze the main adjustment challenges facing international students after their enrollment in American postsecondary institutions..

Previous research has categorized the general adjustment issues of international students into six types: English language proficiency, learning strategies and academic advice, cultural adaptation, prejudices, social networks with local students, as well as homesickness (Al-Sharideh, & Goe, 1998; Lee & Rice, 2007). I mark these types further into three stressors, namely, language barriers, academic stressors, and social network/relation stressors.

### Language Barriers

Language is the most essential tool for international students to communicate with locals. They would face a significant and major barrier if they are not capable of communicating in the local language. It has been found that English language proficiency is an essential aspect of cultural adaptation and social integration for Chinese international students in American universities (Yeh & Inose, 2003). At the same time, Chen (1999) indicated that capabilities of mastering English both conversationally and academically

significantly affected the international student's level of adjustment in socio-cultural and academic domains.

On the academic aspects, international students would face serious problems when giving presentations, writing papers, and understanding lectures if they are affected by language barriers (Chen, 1999; Mori, 2000). Succinctly, English capabilities are found to have a close relationship with academic performance and engagement in international students (Zhang & Brunton, 2007).

On the social aspects, language is a significant barrier for international students to establish and develop their social relationships and networks (Chen, 1999; Mori, 2000). High English proficiency is beneficial for international students to increase self-esteem during their interpersonal association with American professors and peers (Zhang & Brunton, 2007)

Therefore, all of the research referenced demonstrates that language is an essential and important component in facilitating adjustment of international students (Duru & Poyrazli, 2007). Higher language proficiency results in a lower level of stressors during their adjustment process (Dao, Lee, & Chang, 2007; Al-Sharideh, & Goe, 1998).

### Academic Stressors

International students are likely to encounter a number of academic stressors/problems when studying in a new academic environment. Although academic stress is prevalently experienced by all university students on campus international students tend to be subject to more intense academic stress due to a lower level of second language proficiency. It has been widely pointed out that during the process of adjusting to a new educational environment, international students recruited by American postsecondary

institutions had stronger reactions to other types of stressors they met when encountering barriers or stressors in academic perspectives (Misra, Crist & Burant, 2003) .

A contributing factor to academic stress for international students is that their original academic expectations to American higher education are different from the real academic life in American institutions. Chen (1999) and Mori (2000) argued that international students are expecting to perform better, at least the same, in academic areas than in their home countries. However, international students are likely to feel disappointed about their actual academic performance because of their adaptation to a new educational environment. Therefore, as Chen (1999) indicated, these disappointments they experience lead to a negative decrease of their confidence in adaptation and adjustment to a new academic environment. Moreover, facing the high pressure from international students' parents, family and even their peers, international students are subject to intensified academic stress for obtaining academic achievements (Chen, 1999; Mori, 2000).

Another factor which aggravates the academic stress for international students is the difficult adaptation to the teaching style offered differently in America. For instance, as Mori (2000) pointed out, Asian students may encounter an extremely difficult adjustment process to Western universities who place importance on critical thinking. Liberman (1994) interviewed 682 international students in the U.S. who are originally from Asian countries, and analyzed their academic study experiences abroad. He concluded that it is beneficial for them to participate and be involved in class, interact with teachers and peers, and also think critically and independently. However, this is a difficult process for them to adapt to since they are taught of passive acceptance of knowledge back in their home countries. In addition



to passive learning styles, critical comments or inquiries to teachers in class are considered as disrespectful in some other countries, especially in Asian countries.

Different learning styles are also an academic stressor for international students. Kashima & Loh (2006) claimed that since Asian international students are taught to learn individually in home countries, they are used to studying by themselves without collaboration with peers. As a result, they face difficulties in learning collaboratively through group assignments, which is promoted in America. In this sense, teamwork can be another academic stressor for international students.

In order to manage these academic and learning stressors facing the international students, some research provided effective strategies to help them realize successful adjustment.

#### Social Network Stressors

In a totally new living and studying environment, it is essential for international students to build a new social network. Previous research advocated that adjustment issues facing international students were connected with their establishment of social networks and relationships (Al-Sharideh, & Goe, 1998). Past research has also suggested that personalities tend to have an influence on international students' capability to establish their friend circles and other social networks. Therefore, whether international students can effectively build up their social network or not has a direct impact on their social-cultural adaptation (Brisset, Safdar, Lewis, & Sabatier, 2010). At the same time, according to Andrade and Evans (2008), international students' capabilities to establish social networks are highly affected by language barriers, different cultural backgrounds and difficulties in communication with others. These add to their feelings of homesickness and lack of sense of belonging. Moreover,

55% of Chinese international students in their research sample expressed having encountered difficulties and unhappiness when trying to make friends with local students (Zhang & Brunton, 2007). International students tend to have lower-level social support than their local counterparts, resulting in greater loneliness and homesickness and less sense of belonging (Zhang & Brunton, 2007).

Compared with European international students, Asian students encounter more significant difficulties when making friends with local American students. Since collectivism, commonly referred to as acting in groups, is highly valued in Asian culture (Yeh & Inose, 2003), it is challenging for Asian students to make friends with peers with a western cultural background that emphasizes individualism (Mori, 2000). The *Chronicle of Higher Education* (2010) reported that almost 40% of international students said they have no close American friends. Due to the lack of connection with the American society and with a looser social network, international students suffer from a lower sense of belonging and a heavier feeling of loneliness.

#### College Preparation/Transition Programs for American High School Students to College

Entrance into college is an important landmark for a person's success in the U.S. and is considered as an essential transition to be an adult (Arnett 2000; Mattanah, Hancock & Brand, 2004). This transition is considered as an essential stage with increased stress (Arnett, 2000; Mattanah, Hancock & Brand, 2004). Research studies of American college students have constantly indicated that academic preparation is not only a critical factor for transition, but also an important predictor of enrollment retention and success in college life (Stampen & Fenske, 1988; Adelman, 1998, 1999; Hossler, Schmit, & Vesper, 1999; Cabrera & La Nasa, 2000; Strayhorn, 2011; Perna & Titus, 2005). Regardless considerable consensus

among researchers about the significance of academic preparation for college, current studies (Adelman, 1999; Cabrera & La Nasa, 2000; Karp & Hughes, 2008; Strayhorn, 2011) also indicate that a large proportion of students graduating from high school lack fundamental learning capabilities required for academic success in college. The lack of college preparedness may lead to a negative effect on transition and educational adjustment (Arnett, 2000; Mattanah, Hancock & Brand, 2004). According to national statistics and report, roughly one third of all perspective students entering postsecondary institutions require remedial work (Strayhorn, 2011). Academic preparation is the strongest of all momentum factors in pre-collegiate experiences. Therefore, college preparation programs are established as a means to prepare high school students for college readiness.

### **Program Goals and Missions**

As stated by Perna (2002), the most common goal of early intervention programs is to increase college enrollment rates. The other two of the top three goals of intervention programs are to promote college awareness and to promote college exposure.

More recent research advocated that interventions intend to verify that transition programs from high school to college positively affect specific pre-college academic skills (e.g. taking notes in class, delivering presentations) and academic self-efficacy for high school students. Specifically, participation in transition programs enhances international students' preparation for American colleges in four aspects: (1) academic self-efficacy; (2) engagement in campus /sense of belonging; (3) academic capabilities/learning strategies; (4) social interaction skills (Strayhorn, 2010). Similarly, Hagedorn and Fogel (2002) indicated that school-to-college preparation programs are beneficial for high school students in self-efficacy, goal orientation and achievement behavior (P172-173). Wilber & LaFray (1978)

pointed out that college preparation programs are supposed to have the following effects: (a) to remediate students academically with college-level course such as Mathematics and English, (b) to provide students with a real feeling and expectation of academic life in college, (c) to ensure a smooth academic transition by developing consistent curricula between high schools and colleges, and (d) to supply students with high performance the opportunity to earn college credits in advance. Later, four principles of intervention of college preparation programs for high school students are concluded as: (1) to prepare and to inform high school students of the academic requirement of college; (2) to provide more practical and useful information to students about the capabilities that they will need to achieve success in collegial work; (3) to increase academic self-efficacy for students in college; (4) to establish and improve institutional relationships among high schools and colleges (Orr, 1999; Orr, 2002; Bailey & Karp, 2003; Robertson, Chapman, & Gaskin, 2001).

### **Brief Overview of College Preparation Programs**

An overview of college transition programs for American students to postsecondary institutions reveals two main sets of strategies to increase college readiness and preparedness.

#### Pipeline Programs

Generally speaking, pipeline programs, considered as one of the most traditional strategies, are utilized to enhance the enrollment, retention rate and ultimate graduation rate in postsecondary education (Tierney & Hagedorn, 2002; Strayhorn, 2011). Summer Bridge Programs (SBP) is one most typical category of pipeline intervention among all types of the pipeline programs (Gándara, 2002; Strayhorn, 2011). By infusing the adjustment in the curriculum (Villalpando & Solórzano, 2005), such pipeline programs as SBP have played an

essential and critical role in helping students “get ready” for and “get into” college by involving parent efforts (Gándara, 2002; Swail & Perna, 2002; Kwon, 2009).

Credit-Based Transition Program (e.g. Dual Enrollment)

Although many programs and intervention are conducted to smoothen students’ transition from high school to college life, one strategy that allows and encourages American high school students to take college-level courses and thus earn college credits in advance has grown dramatically over the last decade (Bailey & Karp, 2003; Wilson, 2009; Caradona, 2013). These programs, collectively known as Credit-Based Transition Programs (CBTP) (Bailey & Karp, 2003; Karp & Hughes, 2008), allow high school students to take college courses and earn college credits (Kleiner & Lewis, 2005; Waits, Setzer & Lewis, 2005; Lerner & Brand, 2006). Credit-based transition programs have been adopted primarily to prepare students for college life in the aspects of college-level work and comprehension of collegial knowledge. The strategic element in CBTPs is that high school students are privileged with the opportunity to earn college credit by completing collegial coursework while in still high school (Bailey & Karp, 2003), and the most typical example is Dual Enrollment/Dual Credits.

Dual Enrollment/Dual Credits, the most popular form of CBTP designed for American students attending American universities and an alternative use of school time (Adelman, 2002), is conducted based on the agreements signed between high schools and colleges. Students are allowed to take college courses while still in high school (Bailey & Karp, 2003) and as such the credits they earn in high school can be recognized as college credits (Orr, 2002). The strategy of taking college courses in advance and thus earning college credits in high school has grown dramatically over the last decade (Kleiner & Lewis,

2005; Waits, Setzer & Lewis, 2005; Learner & Brand, 2006; Karp & Hughes, 2008; Wilson, 2009; Caradona, 2013). According to a report from a major research university's Early Credit Task Force (December 2011), in Fall 2010, 62% of entering first-year students had earned some college credits while in high school, compared to 34% in Fall 2000 (Early Credit Task Force, Final Report, December, 2011). Dual Enrollment, i.e. taking college courses in high school, is highly recommended as a Strategy for College Readiness by paving path out of college (Adams, 2012).

### **Benefits of School-to-College Preparation Programs**

Due to the popularity of college preparation programs, it is essential and necessary to study the benefits of them, which are the attractive factors for both students and parents. School-to-College programs positively prepare students for college readiness and facilitate students' integration into college academically, socially and psychologically (Nora & Cabrera, 1996; Nora, 2002). Boswell (2001) stated that key benefits of college preparation programs are to promote students to prepare for postsecondary education especially academically.

### **College Enrollment and Persistence**

College admission and subsequent retention are highly related to academic achievements (Hagedorn & Fogel, 2002; Swail & Perna, 2002). The college preparation is beneficial for increasing college attendance by preparing high school students for college-level academic work. The bridge programs from school to college were designed to enhance high school students' college readiness while they are still in high school, as well as to encourage more high school students to enter higher education. A number of studies evaluate the impact of college preparation programs on undergraduate student enrollment,

retention rate and academic success in college life (Garcia, 1991; Felder, Felder, & Associates, 1995; Fletcher, Newell, Newton, & Anderson-Rowland, 2001; Strayhorn, 2011). For example, an evaluation developed by Garcia (1991) across 19 California State University campuses indicated that participation in summer bridge programs was beneficial for the first and even the second years retention rates in college. Likewise, Felder and colleagues (1995) proved that, compared with their counterparts without the program participation, college students with summer bridge program experience had higher retention rates, approximately 70–80%, in first year college. The La-Guardia Middle College High School Program in New York, a credit-based transition program, reports that 95% of their students complete high school and 90% continue to study in college (Kleiman, 2001). Furthermore, additional studies indicated increased college attendance for high school students due to their participation in credit-based transition programs. Peterson, Anjewierden, and Corser (2001) pointed out that 45% of credit-based transition students planned to attend college, and 56% of the students claimed that credit-based transition classes affected their decision to attend college. Stewart (2002) stated 85% of high school seniors participating in the credit-based transition programs planned to continue their study after high school graduation. According to a national report titled *Early College, Early Success: Early College High School Initiative Impact Study* published by American Institute for Research (AIR), Early College students who were provided with college-level courses and credits were significantly more likely to enroll in colleges than comparison students. Early College students were also more likely to enroll in both two-year and in four-year colleges or universities. During the study period (2005-2011), 80 percent of Early College students enrolled compared with 71 percent for comparison students. In addition, researchers stated that high school students experienced a

meaningful college life by participating in credit-based transition programs (Bailey & Karp, 2003; Lords, 2000). Prior to their arrival in college campus, they are well prepared with the knowledge about how to achieve success in college by taking part in credit-based transition programs.

College preparation programs not only increase college enrollment, but also promote college persistence. Educational retention refers to students' retention until successful completion. It is described by Burr, Burr, and Novak (1999) that high retention rate in college is needed to be ensured with efforts and strategies prior to college enrollment, especially academic preparedness and readiness. Persistence models have shown that the pre-college academic ability has a direct influence on college academic achievement and, therefore, on persistence decisions (Cabrera, Nora, Castaneda, & Hengstler, 1992; Nora & Cabrera, 1996; Pascarella & Terenzini, 1991; 2005). Tinto's (1975, 1987, 1993) *Student Integration Model* also identified the close relation between academic achievements and college persistence. Indicated by American Institute for Research (AIR) study report (2005-2011) titled: "*Early College, Early Success: Early College High School Initiative Impact Study*", early College students were significantly more likely to earn a college degree than comparison students. Because they start earning college credits in high school, Early College students should complete college degrees earlier than comparison students.

### Psychological Preparation

With respect to a psychological perspective, to achieve a smooth and successful transition from high school to college, it is essential yet demanding for young people to make efforts in developing an independent identity.



It is especially required and necessary to do psychological preparation since Larose, Bernier and Tarabulsky (2005) pointed out that young people are unable to transit to college environment in psychological sense if they are not prepared themselves to new context such as academic expectations and social environment. However, college preparation programs developed during the high school time is a benefit for student psychological preparation for college. Participation in school to college programs may benefit high school students by increasing their self-efficacy and goal orientation (Hagedorn & Fogel, 2002). Studies have shown an increase in social and emotional adjustment during the transition from high school to college by those students who have attended a college preparation program (Larose et al., 2005). Academic studies (McDonough, 2004; Larose et al. 2005) have also indentified that college students who receive beneficial support and preparation from pre-collegial preparation programs realize smooth and successful transition to campus life.

#### New Avenues Pursued by Chinese Students to the U.S.

With the limitation of enrollment to Asian students as well as the resentment due to American assumptions, the admission to Asian students, especially Chinese, is becoming tougher than ever before (Jiang, 2011; Jaschik, 2006; Ruse, 2010), which leads to more intense competition to Chinese students. Therefore, these issues require Chinese high school students with American dreams to look for alternative ways to positively “stand out” among the many Chinese applicants.

#### **Using Education Agents for Application**

Aiming at standing out among an enlarging group of Chinese applicants for American universities, Chinese high school students and their parents are pursuing alternatives in the serious competition—hiring agents to help with their application. However, many of these

Chinese high school students would perhaps never achieve their goals to study in the U.S. without a friendly but expensive “helper” to facilitate their application. Indicated by China Education Online, *Study Abroad Report* (2013) reported that the ratio of Chinese high school students using agent to apply for American universities was 8 out of 10. The main reason why Chinese students chose to use an agent in college application process was that they had limited knowledge about application for American college or the U.S. Visa application (Zhang, 2011). However, with intense competition among agents, cheating is rampant. It was estimated that 90% of recommendation letters from Chinese students were faked; 70% of all college application essays were not written by the students, and half of all high school transcripts had been falsified (Pratt, 2014). The academic outcome of those Chinese international students who employed agents who cheated may not be positive.

### **International College Preparation Programs in China**

A number of the existing academic studies about the issues of international students in American institutions have emphasized the difficulties and challenges students encounter during their adaptation and transition to foreign universities and cultures (Poyrazli & Grahame, 2007; Misra, Crist, & Burant, 2003; Poyrazli & Kavanaugh, 2006; Trice 2004; Ketevan, 2012) and the strategies they adopt to overcome those barriers (Mallinckrodt & Leong 1992; Kaczmarek et al. 1994; Ying & Liese, 1990; Stoyhoff, 1997; Lee, 1986; Ketevan, 2012; Poyrazli & Lopez, 2007; Poyrazli, Kavanaugh, Baker & Al-Timini, 2004). Much research has also analyzed international students’ transition to American campuses in the aspects of academic success, social interactions, and engagement (e.g., Lee, 1984; Kagan & Cohen, 1990; Mallinckrodt & Leong 1992; Lee & Rice, 2007; Barratt & Huba 1994; Ying, 2003; Trice 2004; Ketevan, 2012). A large body of research revealed a positive relationship

between successful transitions to college and students' meaningful involvement, even greater connection to, with their college community (Pascarella & Terenzini, 2005; Tinto, 1993).

The pathway to college is marked by vast disparities in college preparation, college knowledge, and college culture within schools (McDonough, 2004). Therefore, enhancing college readiness is an effective approach for educational practitioners to adopt to ease the transition to college institutions. However, despite this growing body of knowledge about international students' college experiences in the U.S. including adjustments and challenges (Ketevan, 2012), research on their college readiness and preparedness prior their college enrollment in American institutions has been limited but highly required in the future. Intense competition among Chinese applicants to American universities aligned with potential barriers and adjustments pose warning and anxiety to potential Chinese parents who are planning to send their children abroad for university. Education agents hired in the application process for a success admission can hardly guarantee students to achieve sufficient college readiness, especially academic readiness, prior to their study abroad (Tremblay, 2013). Potential adjustments and transition issues make the pre-collegial preparation experiences essential and critical for potential Chinese international students and their parents.

### Rationale

First of all, the contradiction between rising numbers of Chinese international students on American university campus (IIE, 2012) and the complaint that campuses may become “too Asian” resulting from the increasing number stated in the *Chronicle of Higher Education* brings about limitation of enrollment to Asian students (Jiang, 2011). Apart from the limitation in the number of Chinese, Americans' resentment due to the reported facts that

the Chinese cheat in their application materials and test scores by hiring education agents (*Forbes*, 2012; *The Diplomat*, 2012; Pratt, 2014) has made the admission to Asian students, especially Chinese, tougher than ever before (Jiang, 2011; Ruse, 2010), which leads to a more intense competition to Chinese students.

Moreover, a considerable amount of evidence indicates that is first-year students would become involved in one or another aspect of their new college communities, significantly increase the likelihood of persistence if the transition from high school to college can be negotiated successfully (Pascarella & Terenzini, 1991). The international college preparation programs aim at exploring the link of smoothing the transition from high school to college and the subsequent integration and adjustment in college by developing pre-collegial preparation experiences during high school period. Pre-college preparation experiences have a direct influence on college academic achievement and an indirect influence on degree attainment with persistence for American students (Cabrera, Nora, Castaneda, & Hengstler, 1992; Nora & Cabrera, 1996; Pascarella & Terenzini, 1991; 2005). Similarly, international college preparation programs operating in China have been developed and implemented for Chinese high school students to prepare them for successful collegiate-level work and college-life in the U.S.. The goal of college preparation programs is to enable high school students to take college courses, earn college credits, and attend seminars while still in high school, thereby facilitating the transition from Chinese high school to American postsecondary institutions with various strategies such as academic curricula, counseling service, and college application assistance (Boswell, 2011a).

#### Current Situation of International College Preparation Programs in China

The market of International College Preparation Programs in China has been growing rapidly and vigorously. Shanghai (China) Education Statistics 2010 data indicate that 51 exemplary high schools established 24 international college preparation classes. In 2003, there were only two high schools operating international college preparation class in Zhengzhou, Henan Province; in comparison, by the end of 2010, nine high schools in this province had 16 international college preparation classes in total and in the following year of 2011, 13 high schools launched 24 international college preparation classes. Across China, students who participate in international college preparation classes has accounted for more than 10% of the whole student population (*China Education Daily*, 2012).

#### Brief Categories of International College Preparation Programs

International college preparation programs can mainly be divided into three major types: singleton programs, comprehensive programs and enhanced comprehensive programs. The literature divides credit-based transition programs into three broad types: (a) singleton programs which mainly focus on offering college-level introductory courses; (b) comprehensive programs that include most academic experiences and capabilities required by college learning; (c) enhanced comprehensive programs that not only provide college courses to prepare students for colleges academically but also provide mentoring service to ensure success in college education, such as orientations (Wilbur & Lambert, 1995; Bailey & Karp, 2003).

***Singleton Program.*** Singleton programs offer college-level work to high school students as electives. The primary goal of such programs is to enrich high school curriculum as well as to provide students with the opportunity to earn college credits. In this way, high school students could begin their college learning with a jump start to earn their

baccalaureate degrees (Bailey & Karp, 2003). Among several categories of singleton programs, Advanced Placement (AP) course is the most common and typical one (College Board, 2005 a), and many dual-credit programs also follow the AP model (Bailey & Karp, 2003; Galloway, 1994).

*Advanced Placement (AP).* Administered by the College Board, Advanced Placement (AP) courses were first developed in 1955. Students' proficiencies are tested and determined by standardized tests. The specific principles are as follows: usually students scoring a 4 or 5 out of a possible 5 on the AP exam earn credits for introductory college courses; a score of 3 is considered a passing score by some postsecondary institutions, where college credit is offered in specific subjects. AP courses were the first type of credit-based transition programs organized by the U.S. to aid students in transiting from high school to college (Alliance for Excellent Education, 2008; College Board, 2005a).

During the academic year 2007-2008, about 25% or more than 2.8 million students took at least one AP exam. As a result, about 15 percent received a score of 3 or higher on AP exams (College Board, 2008). As the College Board claimed, recently, schools enrolling diverse students are more likely to implement the AP courses. For example, in 2004, the number of AP Exam grades of 3 or higher, especially among traditionally underrepresented students has increased by 22 percent compared with a decade ago (College Board, 2008).

Due to the popularity of AP in the U.S. and aligned with the significantly increasing trend of Chinese applicants, the College Board in the U.S. collaborates with the Ministry of Education of the People's Republic of China in 2010 and after that, AP courses were first officially introduced into Chinese high schools (China Education Yearbook, 2010). Until 2011, almost 180 Chinese high schools have registered for AP courses and 13 thousand AP

exams have been taken by Chinese students (Educational Statistics Report, 2011). Currently, the main AP courses and exams are offered in Calculus, Statistics, Physics, Macroeconomics and Microeconomics.

***Comprehensive programs.*** Comprehensive programs are college preparation programs that are not only about the courses but also related to academic skills and capabilities' training. They require that "students take many, if not all, of their courses, usually during the last year or two of high school, under its auspices, either as an articulated series of courses spanning many semesters or as their entire curriculum" (Bailey & Karp, 2003, p. 15).

*International Baccalaureate Diploma Program (IB).* A typical comprehensive program is International Baccalaureate Diploma Program (IB). It offers college-level courses to a large number of international students around the world. Established in 1968, IB program has continued to offer a more comprehensive curriculum than the AP program. It integrates the concept of internationalization and globalization, and aims at motivating teachers and students to participate in international cooperative projects, ultimately assessing themselves in the international competition (Peterson, 2003).

IB provides an academically-challenging curriculum to high school students with high motivation and achievement who take exams in specific subject areas and earn credits so as to realize a smooth and successful transition from high school to college (International Baccalaureate Organization [IBO], 2004). The IB comprehensive transition program offers another type of academic challenge to high school students to develop their academic potential before entering college.

According to the official website of IBO, the core curriculum of IB program includes:

*The Extended Essay* that requires students to conduct independent research under the advice of instructors and do an in-depth learning of a particular question related to any of the Diploma Program subjects taught in class. The course is designed to enhance students' critical thinking ability.

*Theory of knowledge (TOK)* develops students' learning and understanding of the academic disciplines. Students are required to inquire deep into the structure of knowledge, so as to build their own map of knowledge as an internalized construct.

*Creativity, action, service (CAS)* involves students in an array of activities parallel to their academic studies throughout the Diploma Programme. Creativity pushes students to engage in the arts and creative thinking. Action seeks to help students form a healthy lifestyle through physical activities. Service with the community serves as a vehicle for a new way of learning with academic values. These three branches of CAS promote development of students' personal and interpersonal skills through experiential learning and thus enable a journey of self-discovery.

Assessment in IB is criterion-related. In other words, every student's performance is measured against a set of pre-defined assessment criteria formulated in accordance with the aims and objectives of each subject curriculum, instead of the performance of his/her peers taking the same subject curriculum.

According to the introduction on the official website, the International Baccalaureate Foundation coordinates with 2,384 schools in 129 countries to offer three IB programs to approximately 646,000 students (International Baccalaureate, 2008). The IB Program was first offered in China in 2010 (Ministry of Education).



***Enhanced comprehensive programs.*** Another type of international college preparation program aims at preparing Chinese students for their postsecondary education readiness through academically-supportive programs on college campuses. The enhanced comprehensive programs provide various kinds of services such as orientation, application orientation, application assistance, and academic mentoring.

*Global Assessment Certificate (GAC) Program.* An example of the enhanced comprehensive program in China is *Global Assessment Certificate (GAC) Program*. It is an internationally-recognized university preparation program for students whose native tongue is not English. It is a product of ACT Education Solutions, Limited (a wholly-owned subsidiary of ACT Inc). According to GAC Overview materials, the GAC is a university preparation program that provides students with the academic knowledge, independent learning skills, English language skills and confidence to enter and successfully complete a bachelor's degree at university. The GAC program offers a series of courses held out of regular schooldays with the result of providing international college credits that can be applied after the high school students graduate from their home countries and commence study at a foreign university. International students who complete the GAC certificate can bring 31 credits to American colleges or universities when they enroll. The GAC program started operation in Chinese high school (Beijing Foreign Language School) in 2009.

With the exception of several reports in educational newspapers, international college preparation programs in China have remained unstudied. There is virtually NO academic research or scholarly papers available on the GAC program or its aftermath.

### Challenges of International College Preparation Programs

Like the two sides of a coin, on the one side, international college preparation programs have recently become greatly popular (China Education Annual Statistics); on the other side, challenges facing international college preparation programs are growing more and more obvious and even serious.

Participating in an international college preparation program and then applying to study abroad is considered as an investment in education. Theoretically, the value of education can be measured by either the input method or the output method. The input method assesses the resources committed to education by families, students, and the state, and it looks at the value of education from an accounting point of view. In contrast, the output method assesses what is produced by education. Therefore, expenditures on education (the input side) are treated as investment in human capital (Psacharopoulos & Patrinos, 2004). Practically, the major challenge for parents is that they have doubts on values of the expensive investment including tuition and expenses of participation in such programs. The investment value is mainly measured by student outcomes. With strong complaints, parents are unlikely to acknowledge the standardized and reasonable expense for participation in international college preparation programs. According to a survey conducted by Shanghai Education Department in 2012, the average of a student's annual expense in college preparation program in China is nearly 90,000 RMB (equal to \$14,516).

As for the students, once they make the decision to study abroad, they must exclude themselves from the annual uniform Chinese College Entrance Exam due to the large amount of time and energy required to prepare for studying abroad. However, they still must pass the course completion tests of several main subjects such as Chinese and then obtain high school

graduation certificate (Ministry of Education of People's Republic of China, China Education Yearbook). Therefore, the balance of attendance of regular Chinese high school curriculum and international courses becomes a great burden for students. With respect to preparation for application for American institutions, they have to achieve high scores in standardized admission tests such as the ACT and TOEFL. Without question, the preparation for college readiness includes various capabilities; however, facing the intense competitions among numerous applicants, students have to focus on developing the ability to deal with western university admission tests. Such test-oriented preparation is unlikely to be believed as meaningful and significant collegial-preparedness experiences to students' future transition to American collegial life as complained by most parents (*China Education Daily*, 2012; Study Abroad Report, 2013, *China Education Online*)

At the moment, the international college preparation programs in China lack a systematic structure and mature approach to integrate into Chinese high schools (*China Education Daily*, 2012). Moreover, the characteristics of each type of college preparation programs are not clear to Chinese parents. Facing the huge, prosperous but disordered market of college preparation programs to study abroad, Chinese high school students planning to study abroad and their parents are confused when making decisions (Study Abroad Report, *China Education Online*, 2013).

### Theoretical Frameworks

Two theoretical frameworks are adopted in this study to answer three research questions consequently, namely, college readiness model (Conley, 2010) as well as Schlossberg, Walters, and Goodman's (1995) transition model.

### Conley's College Readiness Model

In order to respond to the first two research questions about CPP students' learning experience and their college preparations, Conley's (2007, 2010) the college readiness model is adopted.

Conley (2007, 2010) argued that a college readiness model stresses the significance of students' cognitive capabilities and behavioral attributes, so as to lay down the contextual nature of college success. In addition to the content knowledge in core academic subjects, Conley held that students must be well adept at critical thinking and problem solving, and must also command the methods to explore unknown land in collegial-level study. As Conley (2010) proposed, successful academic preparation for college is grounded in four companion and interactional dimensions in total: (1) key cognitive strategies, (2) key content knowledge, (3) academic behaviors and (4) contextual skills and awareness (See Figure 8). By combining these four dimensions together, a college readiness model is created and then utilized to assess programs in terms of preparing students' for their college.

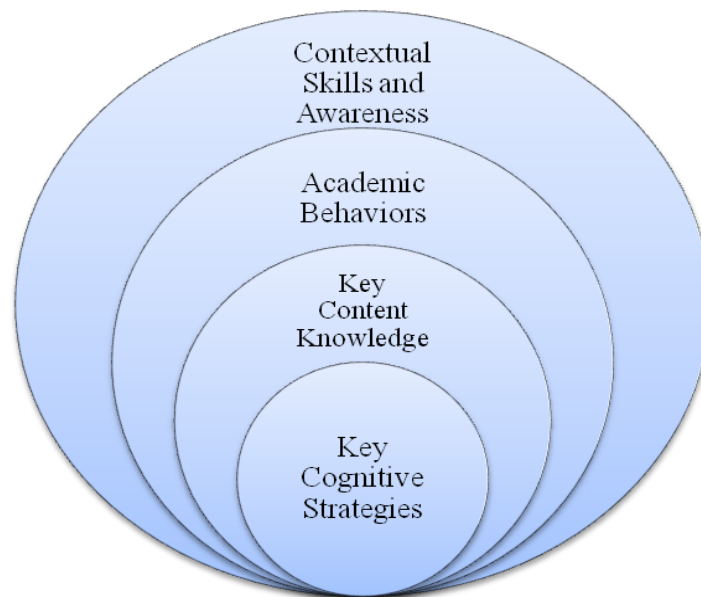


Figure 8. Four Dimensions in College Readiness Model (Conley, 2010)

Key cognitive strategies are “habits of mind” or intentional behaviors that students should be capable of over time and in various circumstances, so that they “learn when and where to employ them” (Conley, 2010). Key cognitive strategies, those that encourage students to learn, apprehend and use knowledge from a various disciplines, are the prerequisite of the success of a collegially-well-prepared student. There are five key dimensions in key cognitive strategies, i.e. reasoning, argumentation, and proof; interpretation; precision and accuracy; problem solving; and research (Conley, McGaughy, O’Shaughnessy, & Rivinus, 2007). Understanding and mastering key content knowledge is another essential factor in college readiness, which is achieved knowledge by means of the key cognitive strategies. The core academic subjects essential for college readiness include English, Math, Science, Social Science, World Language, and the Arts. Another dimension of college readiness is academic behaviors (also called self-management), which encompasses a range of behaviors that reflects a series of qualities necessary for academic readiness, including self-monitoring, self-awareness, and self-control. Specifically, the elements of self-management include time management, study skills such as techniques for preparing for tests, goal setting, persistence with difficult tasks, and self-awareness of academic strengths and weakness. The fourth dimension of college readiness is contextual skills and awareness, i.e. college knowledge. Contextual factors enable students to better understand how college operates as a system and their identity in the college system. In addition, it is necessary for students to be familiar with both the formal and informal college culture prior to successful admission into college. For instance, the knowledge of a college’s operation, including college admissions exams, financial aid services and college application

processes, facilitates the students' choice and successful enrollment in that college (Conley, 2010).

### **Schlossberg, Walters, and Goodman's Transition Theory**

Tinto (1975, 1987, 1993) hypothesized that students must make a transition from a previous environment to a new one. As a result, students have to separate themselves from former groups (high school environments) and go through a transition and interaction to their new college communities by incorporating new behaviors and values through academic and social integration (Tinto, 1975; Bean, 1980; 1985; Kuh, Kinizie, Buckley, Bridges, & Hayek, 2006; Pascarella & Terenzini, 2005; Schaps, 2005). According to Bridges (1980; 1991), transition is a process composed of three phases where people gradually accept the details of the new situation and the changes that come with it. Bridges (1980; 1991) developed a model that explains the transition process, featuring the three phases, i.e. "Ending" "Neutral Zone" and "New beginning". This three-phase model elaborates on the adjustment that people make when undergoing a transition. As Bridges (1991) stated, "transition starts with an ending and ends with a beginning". In this study, Chinese international students with CPP experience start their transition to American college life from the point of participation in a CPP.

In order to answer research question three, "How do Chinese international students benefit from these CPPs after they have enrolled in an American college or university", I use the Schlossberg, Walters, and Goodman's Transition Theory. According to Schlossberg's (1984) research, the term "transition" is defined as "any event or non-event that results in a change in relationships, routines, assumptions or roles and /or economics" (p. 43), which would facilitate the understanding of the transition process. Sargent and Schlossberg (1988)

stated that the psychological changes experienced by individuals are a critical part of their adaptation efforts to major changes encountered in daily life.

Additionally, Schlossberg, Walters, and Goodman (1995) investigated transition at a particular time in terms of the type, context, and impact (Ukomadu, 2010). They suggested that there are three types of transitions: anticipated, unanticipated and nonevents. (1) Anticipated transitions are the major events that are expected, such as language barriers, and westerns foods for Chinese international students to the U.S.. Since these events are normative, international students can anticipate and plan for the event; (2) Unanticipated transitions are life events that are not predictable, and disrupt the normal routine, typically leading to a crisis. An example is a student not teaching and learning in completely different modes; (3) The third type is nonevent transitions, which are the expected transitions that actually do not occur. Context is defined as the circumstances where transition evolves and how one perceives and relates himself to the transition. The strength of the impact is proportionate to the extent to which a transition changes or influencees an individual's original pattern of life (Ukomadu, 2010).

Schlossberg et al. (1995) advocated that the process of transition composed of three phases, i.e. "moving in," "moving through," and "moving out.", and proposed four categories of factors that have effects on a person's capability to transit to a new environment, namely Situation, Self, Support, and Strategies, known as the "4 S's".

The first "S", Situation, refers to the type of transition useful in assessment and includes the context in which the events occur and the impact of the transition on the individual's life. Specifically, situation includes role changing in new situation, concurrent stress in new situation, as well as precious experiences with a similar transition. The second

“S”, “Self”, refers to “personal and demographic characteristics” and “psychological resources”. The former one is described as affecting how an individual views life, while the second one includes ego development, outlook, commitment and values. The third “S” is Support, which really refers to social support such as “intimate relationships, family units, networks of friends, and institutions and communities”. The fourth “S” is Strategies. Schlossberg et al. (1995) argues that there are three types of responses to deal with transition: those that change a situation, that “control the meaning of the problem,” and that manage stress “in the aftermath” (Evans, Forney, Guido, Patton & Renn, 2010, P216-217). The “4 S’s” constitute the list of all variables taken into discussion in the Transition Theory (See Figure 9).

The first three factors: situation, self and support, are used to assess an individual in a transition situation, while the last factor, strategies, defines the measures one may actually take when transiting to a new environment (Ukomadu, 2010). In a word, the “4S’s” provide a framework for the analysis of one’s transition process. Therefore, people who have more beneficial resources or assets in these four aspects would realize a smooth transition (Evans, Forney, & Guido-DiBrito, 1998; Ukomadu, 2010). Goodman, et al (2006) argued that how an individual responds to a transition even depends on the interaction and balance of “4S’s” factors.



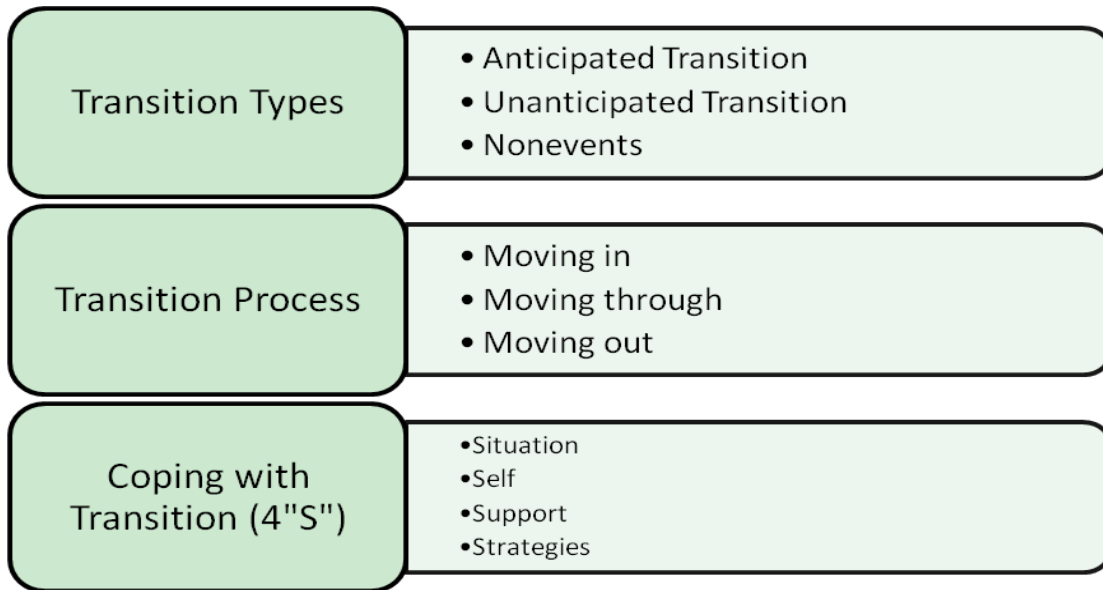


Figure 9. Schlossberg, Walters, and Goodman's Transition Theory (1995)

### Summary

The chapter reviews four major parts of the literature. The first part is about the status of internationalization in American higher education and Chinese international students in the U.S. In this section, I reviewed the literature about the reasons of the increasing number of international students for Baccalaureates in US, and focused on the increasing trend of Chinese perspective international students. I also reviewed in this part the academic and social adjustments of Chinese international students who are successfully enrolled in the US. In the second part of the literature review I discussed college preparation programs for American students. In the third part, I turned to international students and reviewed new avenues for them to apply for Baccalaureate programs in the U.S., which includes using an agent and participation in special college preparation programs. The last part I reviewed is relevant theoretical frameworks, including Logic Model of Program Action, Conley's

College Preparation and Readiness Dimensions Theory and Schlossberg, Walters, and Goodman's Transition Model.

After reviewing the literature, I am able to develop my study based on existing academic studies and scholarly research.

### CHAPTER 3. RESEARCH METHODOLOGY

Chapter Three elaborates on the research methodology adopted in this dissertation. It presents the epistemology and theoretical perspective that guide this study, along with the rationale of the selected methodology and methods, including interviews as a method, the research site and participant recruitment as well as the data collection and data analysis process.

#### Qualitative Approach

The approach of qualitative research originates from academic practices of sociology, anthropology, and clinical psychology. The philosophy behind it is that meaning is socially constructed by a person's interaction with his surroundings (Merriam & Associate, 2002). It focuses on the process that is occurring as well as the product or outcome. Researchers are particularly interested in understanding how things occur. As stated in Creswell (2009), qualitative research is "a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (p. 4). In this study, I examined various ways adopted by special college preparation programs (CPPs) and analyzed their outcomes in preparing Chinese international students' college readiness and helping smooth their transitions to college life in the U.S.

From a qualitative research point of view, this chapter specifically includes four parts—epistemology, theoretical perspective, methodology and methods—which are considered the foundations of social research (Crotty, 1998). These four parts constitute the research design in a whole study. Epistemology is "the theory of knowledge embedded in the theoretical perspective" (p. 3). It is also considered as a way of understanding and explaining how we know what we know. The theoretical perspective, in turn, informs the

methodology, and “the methodology governs our choice and use of methods” (Crotty, 1998, p. 2).

### **Epistemology: Constructionism**

Qualitative research tries to understand and analyze the social constructions and interpretations at a certain time point in a particular context. In this sense, the epistemological scope for this study is social constructionism. The emphasis of social constructivism is the process of constructing meanings rather than discovering meanings by uncovering the ways in which individuals and groups participate in the creation of their perceived social phenomenon (Crotty, 1998). In this study, the outcomes and efficacies of CPPs for Chinese international student college readiness were constructed by uncovering potential international students’ learning experiences in CPPs and the aftermath in American universities. Although all the students share the similar experiences of participating in CPPs, their perspectives, goals, learning experiences and aftermath transition experiences in American universities could be illustrated and explained in different ways.

### **Theoretical Perspective: Interpretivism**

Crotty (1998) pointed out that the interpretive approach “looks for culturally derived and historically situated interpretations of the social-life world” (p. 67) (Creswell, 2003). Furthermore, Merriam and Associates (2002) indicated that a key character of the interpretivism perspective is that “researchers strive to understand the meaning people have constructed about their world and their experiences; that is, how do people make sense of their experiences?” (p.5). As it focuses on understanding and explaining human experiences and social reality, the interpretive theoretical perspective well fits this study. In order to explain the participants’ experiences in CPPs, it is necessary to identify Chinese high school

students' learning experiences in CPP programs and Chinese international students' aftermath transition experiences in American universities. In this way, the real college readiness preparation experiences in CPPs can be constructed and explained.

### **Methodology: Grounded theory**

Based on the social constructionism epistemology and the interpretive theoretical perspective (Faugier & Sargeant, 1997; Creswell, 2003; 2009; Punch, 2005), this study adopts the grounded theory as its methodology. Creswell (2009) advocates that a research adopting the grounded theory should explain how an education process of events, activities, actions, and interactions that evolve over time. Researchers need to collect data, identify categories/themes out of data, and connect them so as to form a theory that explains the whole process. Grounded theory is used when researchers need a broad theory or explanation of a process (Faugier & Sargeant, 1997; Hughes, 1997; Punch, 2005; Creswell, 2009). Since the goal of this study is to examine the outcomes of special CPPs in preparing Chinese international students' college readiness in American universities, Grounded Theory methodology appropriately fits this study. Thus this study analyzes Chinese high school students' expectations and learning experiences in CPPs before they study abroad and Chinese international students' transition experiences in American universities after they are successfully enrolled as a continuous process, so as to reveal the outcomes and efficacies of CPPs.

### **Method**

This study examines CPPs from two perspectives. The first is the high school students enrolled in the programs in China and preparing to go to the U.S. for postsecondary study (China sending side). The second is the former CPP students from China who are

currently studying in U.S. colleges (American receiving side). Accordingly, in this part, the methods adopted on the China sending side and those on the American receiving side are introduced separately. On each side, I present the following elements in research methods: (1) research sites; (2) participants; (3) data collection; and (4) data analysis. This section also includes (5) trustworthiness and validity, and (6) summary.

## **Sending Side in China**

### Research Sites

This study examines a total of three programs in China that were specifically described in Chapter 2: (1) Global Assessment Certificate (GAC) Program, (2) Advanced Placement (AP) Program; and (3) International Baccalaureate (IB) Program. All three of these programs provide advanced transferable American college credits upon the completion of the program. High performance high schools in three major cities; Beijing, Nanjing and Shanghai were selected as research sites.

Initial contacts were made via telephone calls to the high school principals of the following six high schools: (1) the Second High School Attached to Beijing Normal University (SHS), (2) Beijing Foreign Language School (BFLS), (3) Experimental High School attached to Beijing Normal University (EHS), (4) Nanjing Foreign Language School (NFLS), (5) The High School attached to Nanjing Normal University (HSNN), and (6) Shanghai Datong High School (SD). Table 2 shows the programs examined at each of the high schools included in this study. I examined the GAC program on three research sites and the AP and IB programs on two sites respectively.

Table 2. List of Research Sites in China

	<b>GAC</b>	<b>IB</b>	<b>AP</b>
The Second High School Attached to Beijing Normal University (SHS)	YES		YES
Beijing Foreign Language School (BFLS)	YES		
Experimental High School attached to Beijing Normal University (EHS)			YES
Nanjing Foreign Language School (NFLS)		YES	
The High School attached to Nanjing Normal University (HSNN)		YES	
Shanghai Datong High School (SD)	YES		

### Participants

The selection of participants was based on “purposeful sampling” (Patton, 1990) rather than random sampling. I aimed at providing thick description (Geertz, 1973) of students’ learning experiences in CPPs and the types of college readiness for which students were prepared.

Telephone is the best way to reach principals as it is a more culturally acceptable for this type of initial contact. As a Chinese native speaker, I made the phone call and had a discussion in the Chinese language.

On the phone I introduced my study plan, presented my schedule and asked the principals if I could visit the schools and meet with students. Consistent with the culture in Chinese high schools, the principal relayed the information about the visit to the teachers in charge. With the principals’ approval, I collected contact information of the teachers in charge, and either emailed or called them directly to discuss the study plans. I asked the teachers to introduce and explain my study to the students in class. In cases where the

principals preferred for me to explain the procedures and the study directly to the students, I did so using contact information (e.g. email addresses) provided by the principals.

Table 3 shows the CPP student participants in detail on the sending side (China). For the GAC program, I interviewed two focus groups in SHS (Group 1 and Group 2), with five students in G1 and six in G2. G1 students were in the first year of GAC program and G2 students were in the second year. Similarly, three focus groups were interviewed at BFLS (G3, 4 and 5) in accordance with the interview sequence. G3 and G4 had five students respectively, and G5 had six students. Students in both G3 and G4 were in the first year of GAC and those in Group 5 were in the second year. The focus groups interviewed at SD in Shanghai are labeled G6, G7 and G8, with four, seven and seven interviewees respectively. Students in G6 were studying in GAC program for the second year, while those in both G7 and G8 were in their third year in the program. A total of forty-five students were interviewed in GAC program in eight focus groups.

Similarly, for the AP program, five focus group interviews were conducted, with two at SHS and three at EHS. I have interviewed thirty-three AP students in total, including eight students in G1, six in G2, five in G3, seven in G4 and seven in G5. Each interviewee is marked the same way as for those in GAC program.

Along the same line, I interviewed thirty-seven IB students in six focus groups. G1, G2 and G3 were interviewed at NFLS, with five students in G1, six in G2 and six in G3. The other three focus groups (G4, G5 and G6) were interviewed at HSNN. Both G4 and G5 had seven students, and six students were in G6. Each interviewee is marked in the same way described above.



In sum, I interviewed one hundred and fifteen CPP students on the sending side (China) from three programs, i.e. GAC, AP and IB. All the participants were marked by the order of speaking in their own focus groups. For example, Jack was the third one to speak in G6 for GAC program, so he was marked as GAC student No. 3 in G6.

Table 3. List of Number of CPP Student Participants on the Sending Side

	<b>SHS</b>	<b>BFLS</b>	<b>EHS</b>	<b>NFLS</b>	<b>HSNN</b>	<b>SD</b>
<b>GAC</b>	G 1– 5	G 3 –5				G6 –4
(Total-45)	G 2 – 6	G 4 – 5				G7–7
		G5 – 6				G8–7
<b>AP</b>	G1 – 8		G3–5			
(Total-33)	G2 –6		G4–7			
			G5–7			
<b>IB</b>				G 1– 5	G 3 –7	
(Total 37)				G 2 –6	G 4 – 7	
				G3 – 6	G5 – 6	

Note: In “G X–Y” format, “X” represents group number, and “Y” represents the number of people in this group.

### Data Collection

Qualitative researchers usually adopt multiple ways to collect their data, such as observations, interviews, and other types of audio and visual materials (Hughes, 1997; Creswell, 2003; Punch, 2005). Even though all these approaches can gather data, interview is usually the primary data collection method when one attempts to uncover the meaning of the experience and explain the entire process (Merriam & Associates, 2002). Therefore, data

collected in this study mainly came from documents and interviews, with interviews playing the most important and essential role.

Documents are literal material data about CPPs in the Chinese market, including government reports, publication data and program introduction documents. The first category of documents includes the annual reports of the Chinese Ministry of Education, local annual education status reports, and educational newspapers. CPP program introduction documents include websites of high schools offering CPPs and CPP advertisement brochures.

Interview has been found to be an ideal method to uncover how actors make meaning of processes and structures (Kuh & Whitt, 1988; Schein, 1985; Yin, 1994; Seidman, 1985, 1991). Creswell (2009) lists four categories of interviews: (1) face-to-face, one-to-one and in-person interview; (2) telephone interviews with participants; (3) e-mail internet interviews; and (4) focus interviews with six to eight interviewees in each group.

Since my intention was to explore and uncover views and experiences from the participants, I adopted focus group interview to collect data on the sending side in China in 2013 summer, which involved semi-structured interview with open-ended questions that was guided by interview protocol and informed by the first two research questions and theoretical framework, namely college readiness model (Blee & Taylor, 2002; Creswell, 2009). The questions in a semi-structured interview, relevant to the research questions, are the same and preformulated, but the responses are expected to vary and be open-ended (Schensul & LeCompte, 2013, P171). Open-ended questions allow participants to “best voice their experiences unconstrained by any perspectives of the researcher or past research findings” (Creswell, 2009, p. 225). It is possible for interviewees to create responses to interview

questions “without being forced into response possibilities” (Creswell, 2009, p. 226). In a word, semi-structured interviews are guided with a scheduled interview question list based on the previous knowledge and understanding of this topic, and are useful in collecting extensively exploratory data. In this study, by conducting the pilot study in summer 2012, I have had basic knowledge and understanding of CPP students’ learning experience; therefore, it is appropriate to conduct semi-structured interviews.

***Focus group interviews.*** In focus groups or group interviews, interviewees are brought together and encouraged to talk about the subject of interest (Morgan, 1997). Moreover, focus group interviews can generate a considerable quantity of data in a relatively short period of time from a large number of people, providing researchers with the access to a rich source of data on a particular social issue (Schensul & LeCompte, 2013, P195). With seven to ten people in one group, interviewees are either stimulated to talk from different perspectives or are encouraged to stimulate more thoughtful ideas than individual interviews (Bogdan & Biklen, 2006). In this study, the focus group method (Morgan, 1997; Wilkinson, 1998) is the primary means to analyze students’ learning experiences in CPPs. The interviews, lasting for thirty five minutes to fifty minutes were digitally recorded and later transcribed by me. This study collected 835 minutes of interview recordings and hence produced the raw data of 67 pages of single-spaced transcription in Chinese. All the transcriptions were then translated into English for further analysis.

***Interview Protocol.*** The semi-structured interview protocol for CPP students (See Appendix A) on the sending side is informed by Conley’s four dimensions of college readiness introduced in Chapter Two (See Figure 8). As advocated by Conley (2010), successful academic preparation for college is grounded in four companion dimensions: (1)

key cognitive strategies, (2) key content knowledge, (3) academic behaviors and (4) contextual skills and awareness. The interview protocol to Chinese students studying at CPPs was designed accordingly and the interview questions for CPP students are marked with “S” in Table 4.

Table 4. The Relationship between Theoretical Framework and Interview Protocol

<b>Theoretical Framework</b>	<b>Interview Protocol</b>
<i>College Readiness Dimensions</i>	
Key cognitive strategies	S3, S5,S6, S9
Key content knowledge	S3, S5, S6
Academic behaviors	S4, S5, S6, S9
Contextual skills and awareness	S1, S5,S6, S8

### Data Analysis

After data collection, it is important to develop strategies for analyzing the data and uncovering their significance. The first step, transcription of recordings, began immediately after the interviews so as to ensure accuracy. Following the transcription, a set of rigorous coding procedures (Strauss & Corbin, 1990; 1997) guides the analysis to develop theoretically informed interpretations of the data. Data coding, as the second step in data analysis, progresses through the three major stages: open, axial and selective coding. Open coding identifies and develops concepts in terms of raw data properties and dimensions. Axial coding puts the data together in new ways by making connections between a category and its subcategories. Finally, the selective coding process integrates relevant categories to form a substantive theme (Strauss & Corbin, 1997; Creswell, 2009) (See Figure 10 below).

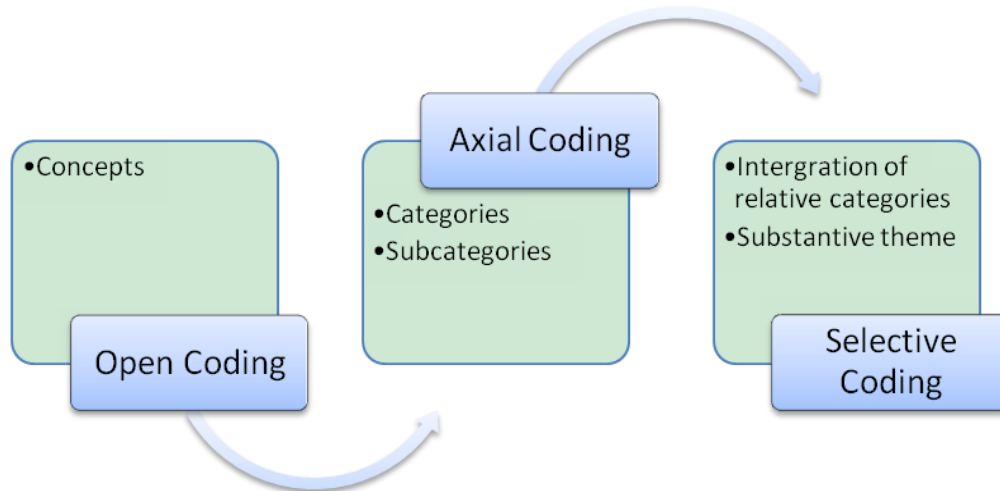


Figure 10. The Three Steps of the Coding Process (Strauss & Corbin, 1990; 1997)

Codes, assigned with meaning, are used to retrieve and organize the data. When codes are organized into coherent categories that summarize the data, they collapse into themes. Therefore, the last and most important step in data analysis is theme finding.

Themes come from both the existing theoretical knowledge and understanding of the subject of study (an *a priori*, or deductive approach) and the data (an inductive approach) (Ryan & Bernard, 2003). “*A priori* themes” come from features of the subject being studied (Ryan, 2003) as well as the widely-accepted professional definitions established in literature, local and commonsense constructs, researchers’ values, theoretical orientations, and personal experiences (Bulmer 1979; Maxwell 2005; Strauss & Corbin, 1990; Strauss 1987; Ryan, 2003). In this study, based on the theoretical framework of Conley’s (2010) College Readiness Dimension Theory, *a priori* themes include four college readiness dimensions: key cognitive strategies, key content knowledge, academic behaviors and contextual skills and awareness.

At the same time, another different kind of themes, known as emerging themes, are induced from data. As (Dey, 1993) pointed out, it is not possible to anticipate all the themes

that may come up before all the texts are actually analyzed. Different from the pre-set ones, these “emergent themes” refer to the ideas, concepts, actions, relationships, meanings, etc. that come up in the data.

Finding emergent themes is both iterative and generative (Lawrence-Lightfoot & Davis, 1997; Maxwell, 2005). Merriam (1988) claimed that a cross-case analysis should be conducted to discover and identify emergent themes. Therefore, I coded the data not only within each of the focus group interview transcriptions but also across all of the 19 groups. In this way, unanticipated themes emerged from the information the participants shared. These emergent themes were adopted to develop the college readiness dimension theory for international students.

### **Receiving Side in the U.S.**

#### Research sites

This study chooses a Midwestern American Research and Land Grant University (MRU) as the research site. It is an appropriate site to develop this study for a couple of reasons. First of all, like many institutions, this MRU is recruiting an increasing number of international students. Data on Fact Book on the MRU website shows the increasing trend of international undergraduate students recruited from 2007 to 2011. Indicated by Fast Book of MRU, over the past five years, the total number of international graduate students at MRU has continuously increased, and the year-on-year growth rate has increased from 3.6% to 7.8%, indicating that MRU will likely continue to recruit more international students. The data collected at MRU are typical and indicative of the internalization trend in American higher education. Second, MRU is one of the American universities that accepts the credits transferred from all the three CPPs (GAC, IB, and AP) attended by international students.

Therefore, data collected from MRU may be indicative of other American institutions who also accept transferred credits from CPPs.

Although most CPPs aim at securing their students' enrollments in Ivy League institutions, the truth is that most Chinese international students in the U.S. will end up in colleges and universities not in that selective category. MRU represents a respected research institution that, though not in the Ivy League, enrolls a large number of international students from China.

Chinese international students with previous CPP experiences who have successfully enrolled at MRU were invited to participate in this study. From a methodology perspective, since qualitative research is not usually concerned with producing generalizable results (Creswell, 2009), data collected at one particular institution will be of high value to that specific university.

### Participants

One of the several strategies for purposeful sampling of information-rich cases is snowball sampling. Snowball sampling is the most common sampling method used in qualitative studies (Hardon, Hodgkin, & Fresle, 2004).

Goodman (1961) defined snowball sampling as a technique of using existing study subjects to recruit future ones from among their acquaintances. According to Hughes (1997), the initial subject identified should be one who is likely and able, and hence expected to provide more other subjects, expanding the network of contact and inquiry. This sampling method was at first employed to solve the problems related to sampling concealed populations such as the deviant and the socially isolated (Creswell, 2003; 2009). Nevertheless, it can also be used as part of a wider set of methods that may benefit from the

social networks of identified respondents, so as to generate more potential contacts (Hughes, 1997).

In this study, since I am an international doctoral student from China enrolled in the study site institution, I am well-placed to encourage other international students to participate in my study. Consequently, I started to recruit participants with the assistance from my Chinese friend circle (Creswell, 2003). There is a Chinese Student Association in the research site institution and I met with the students in the association once a week for ten weeks. During my conversation with them, I identified several who participated in CPPs before studying abroad, so I introduced my study purpose to them directly and invited them for the individual interviews. As international students from the same country, they were very supportive of my research. So I collected their contact information such as email addresses and cell phone numbers. Later on I emailed electronic invitation letters to them. The students who received the invitation letter and agreed to participate in the interview contacted me directly with my contact information included in the invitation letter. For the students having more questions, I provided further explanations regarding the nature of the study. In the end, five students from my Chinese friend circle agreed to participate in the individual interviews. Using the approach of snow ball sampling, I asked these five participants to introduce to me more Chinese international students with CPP experiences among their friend circles. In the end, I managed to invite in nine interviewees. The students agreeing to be interviewed were required to sign informed consent letters (See Appendix F) prior to the interview. I also informed of them that I would use pseudonyms in place of their real names in order to ensure confidentiality. After participants were recruited, I scheduled interviews at each participant's timeline and convenience. Eventually, I collected data from



three students from each of three programs, altogether nine participants. These participants were all purposefully invited to participate in the research due to their successful enrollment at the research site on the receiving side in this study and their previous CPP experiences.

### Data Collection

On the receiving side in the U.S., in order to identify former CPP students' transition experiences to American colleges, I conducted in-depth, open-ended individual interviews to collect data. All the interviews were digitally recorded. In addition, I also took handwritten notes during interviews so as to capture points of interest and importance.

***Individual interview.*** The individual interview is a qualitative data collection method which proceeds as a confidential and secure conversation between an interviewer and a respondent. In-depth, open-ended interviews enable researchers to learn more about the issues studied by asking interpretive questions, since there is no standard answer to in-depth questions. Such interviews are exploratory, hence beneficial for analyzing the issues little known (Schensul & LeCompte, 2013). The exiting understanding of CPP alumni's transition experiences to American universities is limited, and could be expanded through in-depth, open-ended interviews.

On the receiving side, since the Chinese international students have already successfully enrolled in American universities as college students, I assumed that they were willing to share their CPP experiences in high school. I used the individual in-depth interviews to see if their previous CPP experiences were beneficial for their college readiness and a smooth transition to American college life. Each participant was individually interviewed in a face-to-face format. Interviews lasted 30 to 45 minutes. Later, I transcribed the interview recordings in Chinese and then translated all the transcription into English.

***Interview Protocol.*** Individual interviews followed an in-depth, open-ended exploratory interview protocol (Blee & Taylor, 2002) informed by the third research question and Schlossberg and Associates' Transition theory (1995). In reference to Schlossberg and Associates' Transition Theory (1995), the interview questions for the receiving side, Chinese international students studying in the U.S. with previous CPP experiences, were generated based on their aftermath academic and social transition experiences in American universities (See Appendix B). There are two major groups of interview questions: general perception and satisfaction with CPPs, and CPP students' aftermath transition experiences (both academically and socially).

### Data Analysis

In order to analyze the data collected on the receiving side in the U.S., I read through all the nine transcripts, which are thoroughly independent of one another. The total length of nine interviews was 308 minutes, with 29 pages of single-spaced transcription for all the interview recordings. I took notes about the information that stands out from data as open codes. The coding procedure is similar to the one I adopted when analyzing data on the sending side through three major steps: open coding, axial coding, and selective coding. When codes are organized into coherent categories that summarize the data, they collapse into themes. Similarly to the case on the sending side, both "*a priori*" themes and emergent themes emerge from the codes. Specifically, the initial themes, a "start list" of pre-set themes (often referred to as "*a priori* themes"), were derived based on Schlossberg et al. (1995) transition theory. In the meantime, another set of themes emerged from the raw data. Finally, the spontaneously emerging themes were adopted to develop the transition theory for the particular group of international students.

### Trustworthiness and Validity

Inquiries in qualitative studies usually generate and present findings as a bunch of preliminary description and interpretation that needs to be analytically sorted out (Merriam & Associates, 2002). In order to “enhance the researcher’s ability to assess the accuracy of findings as well as convince readers of that accuracy” (Creswell, 2009, p. 191), Creswell proposed eight primary strategies to ensure trustworthiness: triangulation, member checking, rich description, clarification of researcher positionality, presentation of negative findings, prolong time in the field, peer debriefing, and use of an external auditor (Creswell, 2009, pp. 191-192).

#### **Triangulation**

In qualitative research, triangulation is designed to increase credibility, dependability and confirmability of the data as well as their collecting process (Creswell, 2009; Hughes, 1997). If the coding themes are built by various participant perspectives or data resources, they increase the validity of the study (Creswell, 2009). In this study, the major source of data was interview transcripts. The analysis of the documents, such as course syllabi, textbooks, program brochures, online news reports, and government statistics results, added to the triangulation.

#### **Member Checking**

Member checking refers to the process where research subjects are required to help check and confirm that data have not been mistakenly analyzed or interpreted (Merriam & Associates, 2002). In this study, participants received a draft of the findings and themes for comments after transcription of interview recordings were completed.

### **Presentation of negative findings**

Adding contradictory information or findings will increase the credibility of the study (Creswell, 2009). In this new era of CPPs in China, it is likely to identify negative themes in my study. I also stated in the informed consent forms “please be assured that anything shared in the interview will not be shared with your supervisors and no reprisals will result from your participating in the interview.” I explain in my findings the negative opinions and responses, without providing any identification cues.

### **Peer Debriefing**

A peer debriefer is “a person who reviews and asks questions about the qualitative study as that the account will resonate with people other than the researcher” (Creswell, 2009, p. 192). This peer reviewer will explore other aspects of the study that I might otherwise neglect (Lincoln & Guba, 1985). This strategy is suggested by Merriam and Associates (2002) to enhance the dependability of the study. Three other researchers in my program served as peer reviewers for my study. When they reviewed my study for the first time, they felt confused about the quotes I adopted to illustrate the focus group data since it was hard to introduce all the participants’ names and write down their opinions in the transcription process.

### **Researcher Positionality**

When I came to the U.S. as an international student for the first time in 2009 for my study in a Master’s degree program, I experienced a difficult transition to American college life. Cultural shock, categorized as unexpected changes in both academic and social life, made me feel that I was not ready to study in an American institution. My own experience indicated to me that it may be highly beneficial for potential Chinese international students to

prepare and become college ready for a foreign country during their time in high school. The preparation may smooth their later transition to life in American campuses.

### **Ethical Considerations**

This study was conducted under the approval of the Office of Institutional Review Board at MRU. There are two packages of the Institutional Review Board approval materials, one for study on the Chinese side (see Appendix C) and the other for study on the U.S. side (see Appendix D). Before deciding whether to participate in the research project, participants on both China and the U.S. sides were given consent letters informing interview purpose, confidentiality, contact information and time commitment. All the participants were required to sign the consent forms prior to the interview.

### **Summary**

Chapter Three explains in detail the research methodology of this study. Specifically, it introduces the epistemology (social constructionism), theoretical perspective (interpretivism), methodology (grounded theory) and methods (documents and interviews). This chapter also presents specific methods facilitated to choose research sites, recruit participants, collect and analyze data on two sides: China and the U.S. Accordingly, Chapter Four will illustrate the findings on the sending side—China, while Chapter Five will present the results from the U.S. side.

## CHAPTER 4. FINDINGS & ANALYTICAL DISCUSSION—CHINA

The purpose of this chapter is to share findings of the study and to provide an analytical discussion of each of the developed themes in order to answer the first two research questions:

RQ1: What types of learning experiences are presented to CPP students?

RQ2: How are CPP students made ready for American institutions?

In order to answer the first two research questions, I collected qualitative data through focus group interviews. All the data were analyzed by both “a priori codes” and emergent codes. I interviewed the Chinese CPP students in their native language—Chinese and all the quotes I used in this part are translated from the original Chinese.

### Learning Experience and College Preparation in CPPs

According to *Early College High School Initiative (ECHSI)* (2007; 2008), academic preparation for college, only when students are adequately prepared can they develop full potential by taking advantage of all of the college resources. Due to the importance of college preparation for student success in college life, the overall purpose of this research on the sending side (China) is to understand various types of college readiness for which Chinese high school students prepare in CPPs for their future study in the U.S.

Academic preparation for college presents a comprehensive description of the knowledge and skills needed by all college entrants (The College Board, 1983). Based on the college readiness dimension theory (Conley, 2010) and the data collected from focus group interviews with Chinese high school students currently studying in CPPs, findings of this study suggest that college readiness for CPP student include five themes: (1) key cognitive strategies; (2) key content knowledge; (3) academic behaviors; (4) contextual skills

and awareness; and (5) international content and awareness (See Figure 11& 12). The last dimension/theme has been developed specially to address the college readiness of international students.

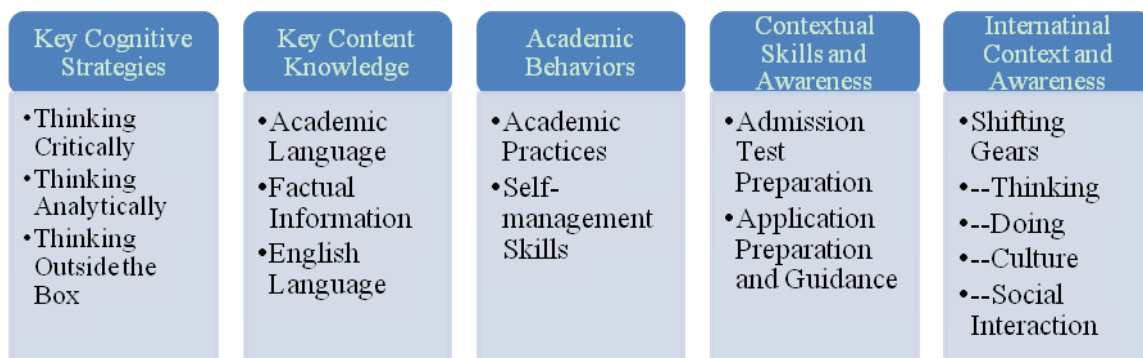


Figure 11. The Content of College Readiness Theory Applied to International Students

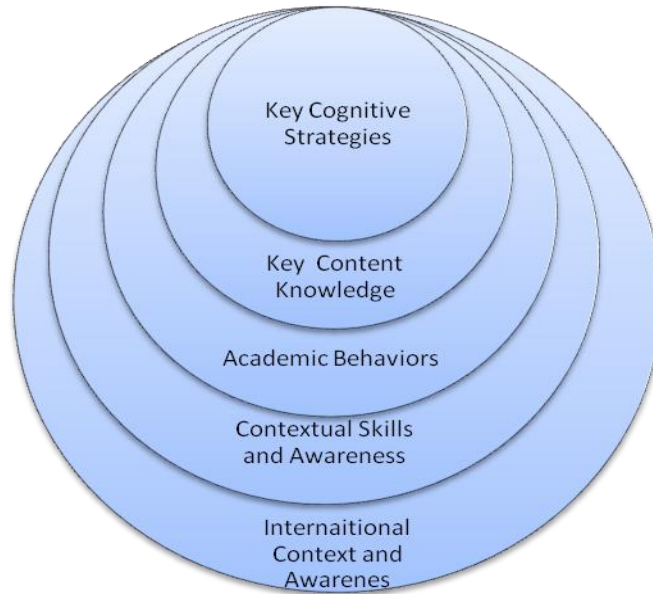


Figure12. Five Dimensions in College Readiness Theory for International Students

As shown in Figures 11 and 12 above, I will present findings by applying Conley's College Readiness Dimension Theory to the specific context of international students.

### **Key Cognitive Strategies (Theme 1)**

According to Conley (2007; 2010), the key cognitive strategies are the most important factor in the process of thinking, while thinking is necessary to construct and retain new knowledge. The thinking ability/skill, as a typical representation of key cognitive strategies, is also considered as a disposition, not an attribute. More specifically, students struggle with new knowledge that requires them to think independently rather than being told directly by the instructor. In the process of learning new knowledge, cognitive strategies, especially thinking skills, are necessary and important. Therefore, since students need to



learn new knowledge in college, the training of key cognitive strategies is necessary in the preparation for college readiness. Interviews with Chinese high school students in the CPPs show that the key cognitive strategies for CPP students are closely related to thinking skills, which include: (1) thinking critically, (2) thinking analytically, and (3) thinking outside the box.

When the participants were asked about their learning experiences in CPPs, many talked about the ways teachers in CPPs make them determine what the knowledge is, think why the knowledge is developed in its way, and explore how knowledge is developed and applied. In other words, the key cognitive strategies are trained in three aspects: what the knowledge is, why it is, and how it is. The “what” needs students to think about the foundation of the theory and knowledge critically; “why” requires them to think about the reasons behind the problem analytically; and “how” demands students to think “outside the box” and to inquire and explore beyond the knowledge itself. While these skills are not sufficiently trained in traditional Chinese class, they are essential in American colleges.

### Thinking Critically

The ability to think critically, according to Glaser (1941), includes three elements: ( 1 ) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experiences, (2) knowledge of the methods of logical inquiry and reasoning, and (3) some skills in applying those methods. Most importantly, as stated by Scriven and Paul (1987) at the 8<sup>th</sup> Annual International Conference on Critical Thinking and Education Reform (1987), critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends. Critical thinking is about evaluating information and

determining how to interpret it, what to believe and whether something appears to be right or wrong. Almost all the participants noted that they were asked to explore the evidence behind theories and to subsequently try to interpret the knowledge in CPP class. On the contrary, in traditional Chinese classes, teachers usually deliver the standard answers to the questions directly and students are simply required to memorize the answers. In this way, students have no idea why the answers are developed in those ways nor how to explain the answers to the questions. Therefore, the different way of making students interpret and evaluate what they have learned in CPP class, which is far beyond memorizing the knowledge itself, is helpful in developing students' critical thinking skills.

To practice skills of thinking critically, mainly in the tests, AP student No. 3 in Group 2 stated that:

AP tests are about the knowledge itself; however, unlike the Chinese learning approaches, we do not need to reach standard answers for test questions... The AP teachers ask us to find the answers by ourselves, and then justify our own ideas....

As mentioned by most AP students in the focus group discussion, the answers to AP test questions are usually “various without a standard answer”. Students need to understand what the questions are asking and then write down their own answers supported by reasonable justification. AP student No.4 in Group 3 said, “the questions make us think and then write down the way we think. No fixed answer....”.

Apart from in CPP tests, more importantly, critical thinking skills are mostly developed in CPP class in the form of a seminar and discussion. Most GAC students noted that, in seminar and discussion classes, they were allowed to ask relevant questions they have

based on the learning in the lecture class, and they were grouped to discuss these questions so as to figure out the “correct” answers. GAC student No.1 in Group 5 stated:

The good thing is there is no right or wrong, just say what you think. But you need to justify why you think in that way....

As an important thinking skill in the learning process, critical thinking is also beneficial for students to concentrate on learning knowledge itself rather than only concern about tests scores. IB student No. 3 in Group 2 shared his own experience about critical thinking:

The subject of Chinese Language and Literature in IB program is so open that it allows every student to express their own views. [When] we did literature appreciation, we were requested to express our own views about the articles and any opinion would not be criticized. We just needed to explain and justify our ideas. In this way, we would focus more on the analysis of literature itself rather than being limited by the “standardized” answers. Also [in this way], we focused on training and strengthening our thinking abilities rather than merely dealing with the tests.

In addition to learning the knowledge in the textbooks, almost all IB students in focus groups mentioned that they developed critical thinking skills by free discussion and sharing their own views on the latest social issues. IB student No 4. in group 4 said:

Global warming issue [is discussed] in our weekly discussion class, we were assigned to talk about our own opinions on the causes of global warming and the approaches to tackle it.....this makes me care about all relevant environmental issues....

In conclusion, support of the development of critical thinking is a new learning method in CPPs since the traditional way of learning in Chinese classes is to be told the “right” and standard answer to questions. In tests, the answers to the questions are unique and fixed.

Due to the authority of teachers in class, few students would challenge the “right” answer given by teachers; as time passes, it is unlikely for students to think critically in traditional Chinese classes since they rarely have opportunities to challenge the justification of the “authentic” answers given by teachers. However, in the domain of college readiness, critical thinking skills are important and critical in constructing a systematized knowledge system. With the purpose of preparing students for their college life in the US, CPPs are beneficial for students’ college readiness in the aspect of critical thinking.

### Think Analytically

Analytical thinking emphasizes the process of justification and explanation of why a “challengeable” answer is true. It describes a thinking style that enables a person to break down complex information or a series of comprehensive data. It uses a step-by-step method to analyze a problem and come to an answer or solution. In essence, analytical thinking represents a cause and effect style of looking at a problem, and is sometimes referred to as perceiving something through multiple lenses. Specifically, analytical thinking is defined as the ability: (1) to evaluate the evidence for the belief or knowledge, and to ask if the evidence supports the claim; (2) to view the topic or issue from a variety of angles and perspectives; (3) to continue analyzing an issue or topic until having a good understanding of the details (Russell, 2014). In other words, analytical thinking involves the process of gathering relevant information and identifying key issues related to the information. This type of thinking also requires comparison of sets of data from different sources; identifying possible cause and effect patterns, and drawing appropriate conclusions from data in order to arrive at appropriate solutions.

During focus group interviews, most CPP students indicated that they were taught the ways to explore and interpret the knowledge by themselves using analytical thinking skills, including both the step-by-step way to figure out the answers to the questions and the breaking down of problems into pieces to solve problems.

First of all, the class climate, designed to be both engaging and interactive, is helpful in facilitating analytical thinking. A lot of IB students stated that they were encouraged to ask questions whenever they have in class, even while sitting in the seat without hands up. IB student No.1 in Group 4 said:

This [Asking questions without standing up] is encouraged rather than being considered as disrespectful to teachers. Nearly all the questions are accepted and answered. However, this is not always allowed in Chinese traditional class.....”

Secondly, due to the gradual process of learning knowledge, the function of foreign teachers in the teaching of analytical thinking skills is to guide the students step by step to think and to explore the answers to questions. IB student No.2 in Group 1 said:

... The teachers encourage us to ask more questions based on the ones we [have] already asked, and then guide us to figure out the answers by ourselves....In this process, we have opportunities to talk about our own ideas and then find out our own solutions....

Additionally, GAC student No.1 in Group 6 provided a good example of the training of analytical thinking skills:

The Chinese teacher will tell us the answers directly, such as one plus one equals two, but GAC teachers deliver the knowledge by explaining the exploration processes of the knowledge, such as referring to books and internet, etc., and they [GAC teachers]

give us a chance to explore our own views on issues and find out why the theory is in its way..... In the exploration process, I would think and then find my own interest in learning.

Thirdly, CPP teachers serve as guides for students to explore new knowledge. They break down the questions into small pieces and point out the correct direction for students. It is the students themselves who figure out the answers or solutions. As GAC student No. 3 in Group 1 stated:

[We are] taught to find the answers by ourselves rather than told by teachers.

Knowledge is only a small part in our GAC class learning. Most of the time is spent on thinking. Sometimes the questions are very broad and the teacher teaches us where to start and what is the next [step]...As our Math teacher, he always directs us to solve complicated math problems step by step... . We are taught how to think procedurally and then explore our own answers to the questions....it is fun to only focus on the knowledge itself and .....I do enjoy this way of learning...

Given to the lack of training in critical and analytical thinking in traditional Chinese classes and their necessity in American classes, CPPs tend to bridge this gap for Chinese high school students. In order to prepare students for learning in the U.S, CPPs hold that the thinking abilities are much more important than commanding the knowledge itself. What is more, in the whole process of thinking, students can not only learn the knowledge itself, but also gain a sense of accomplishment.

### Thinking Outside the Box

Thinking outside the box (also called thinking beyond the box) is a metaphor that refers to thinking differently, unconventionally, or from a new perspective. This phrase often

equals to novel or creative thinking (Pappano, 2014). CPP students are asked to think beyond teachers' lectures and knowledge in textbooks. Based on the basic knowledge taught by teachers in class or written in textbooks, students are encouraged to explore and inquire by themselves. Indicated by AP student No. 3 in Group 1:

We are encouraged [by AP teachers] to learn about the universal and fundamental knowledge; learn things we never think about before, new things...

Take an AP Chemistry teacher as an example, based on the statement of AP student No. 2 in Group 2:

AP [Chemistry] teacher is different [from other teachers]. She tells us what the originality [of the theory] is, makes us think what the development process is, and then helps us figure out how people get their results...

In this way, by learning in CPPs, students know where the theory comes from, what the knowledge itself is, how people draw a conclusion of this theory and then how to apply it into practice. Therefore, the students have a whole picture and a comprehensive understanding of the theory. Their understanding is beyond the "box" taught in lecture, which is beneficial to students' application of what they have learned.

According to most IB students' reflection in focus group interviews, IB students are taught to develop their awareness and spirit of exploration in extended essay course. They discuss topics with teachers in advance, such as a geographic field trip, and then study on their own to explore, to conduct the questionnaire, to organize the whole survey process, which require them to consider the whole study process thoroughly. Throughout the whole process, they gain a lot beyond the knowledge they learn in class. An IB student No.3 in Group 1 stated:

I think more actively and more comprehensively after participating in [IB] program.

For instance, the lab course provides me with the opportunity to explore the “real” results by experiments instead of memorizing the results in textbooks.

Essay writing is another effective way to train students’ skills of thinking beyond the box.

Said IB student No. 3 in Group 4:

In our extended essay class, a foreign teacher asked us to find a specific topic as well as an idea about this topic, and then to do research to find out supportive resources to justify the idea.... However, I had never done that before in traditional Chinese class and I was even scared to have my own idea, so I kept asking the foreign teacher whether my idea was correct. Now after practices, I am used to independent thinking, [which] is a great improvement for me.....

In addition to essay writing, independent study is another channel to help students learn beyond the courses content by themselves. For example, GAC teachers advocate independent study and encourage students to apply the knowledge they have learned in class.

Below is an example offered by GAC student No.4 in Group 1:

There is a scenario in our textbook. Teachers will encourage us [students] to explore our personal experiences in similar scenarios as well as our thoughts and feelings about them, and then teachers will ask us to discuss the feelings, such as “in that case, if you were there, what would you do?”

Most CPP students mentioned in their interviews that, in the foreign teacher’s class, they are allowed to discuss their own ideas with teachers as long as they can justify their own ideas, even if the ideas are contradicted to what they have learned in class. What is important is not the correctness of the final answer, but the thinking process.



Therefore, to sum up, thinking skills, including skills of thinking critically, thinking analytically and thinking outside the box, are proved to be key cognitive strategies in Chinese high school student preparation for American college study by participating in CPPs. First of all, thinking by students themselves will encourage them to learn and explore by themselves. Secondly, the thinking process is a prerequisite for applying what have been learned. The exploration and inquiry of knowledge is helpful for students to find the connection within knowledge and students are thus enabled to find solutions when they are facing different but similar situations. What is more, the thinking abilities are an essential part of the learning strategy, especially for college learning. Specifically, learning in American class emphasizes the thinking process and fresh ideas, which are part of the training for CPP students.

### **Key Content Knowledge (Theme 2)**

Generally speaking, the key content knowledge includes reading and writing skills, and core academic subject-area knowledge and skills, such as English/language arts, mathematics, science, social sciences, world languages, and the arts. It is critical to the understanding of the academic disciplines relevant to students' college academic learning since students need to invest efforts to master and apply subject-specific content knowledge. In CPPs, the key content knowledge includes key foundational content and "big ideas" from core subjects. There are three elements: (1) Academic language--key terms and terminology; (2) Factual information; (3) English Language.

#### Academic Language

Academic language is essential for students to understand the language of the academia in American colleges. Moreover, the comprehension of the academic language, especially academic terms, is necessary for Chinese high school students to communicate

with their foreign teachers and peers regarding academic work. In this case, the academic language specifically refers to key terms and terminology used in college curricula in the U.S., which are fundamental for students' learning of college-level academic subjects. As most AP students stated in focus group interviews, being familiar with key terms is essential for them to take the AP tests since all the AP textbooks and tests are in English. Without knowing the key terms, it is impossible for them to learn college-level knowledge and take the tests. As AP student No. 4 in Group 1 indicated:

AP courses are about college-level academic work. At the beginning of the AP courses, I did not understand the knowledge taught in class, so I asked the academic advisor to explain the content in Chinese. Learning the terminology and content in English was beneficial for me to get used to listening to foreign institutors in class....

Stated by IB student No. 5 in Group 3:

After learning the key terminology in English, I do not have to "translate" the English terms into Chinese in my learning process. In future learning and exams, the English terms will have a direct reflection [in my mind] while I am thinking....

Indicated by GAC student No. 2 in Group 5:

The advantage [of GAC program] is the combination of the Chinese curriculum and the American one. We first learn the knowledge in Chinese and it will be translated into English in classes taught by foreign teachers. We in this way get familiar with the way of "learning" the knowledge in English...

Comprehending the academic terms in English is an essential preparation for Chinese international students' learning life in American colleges. Therefore, academic terms in

English are a part of the key content knowledge that CPPs prepare for Chinese high school students with their life in American colleges.

### Factual Information

Factual information is the college-level academic knowledge itself. The comprehension of college-level knowledge is an essential component in college readiness. CPPs mainly offer introductory courses in American colleges, which would get students prepared for their future college courses. As verified by GAC student No. 1 in Group 2, “the learning of college-level courses [in GAC program] is supposed to offer me the necessary transition to and preparation for college academic life in the U.S....”

First of all, specifically, as noted by most CPP students in interviews, learning the introductory college courses are useful for them to expand their scope of knowledge. Different from the test-based learning in traditional high school classes, almost all the introductory courses are knowledge-based. They provide extensive college-level knowledge and enrich students’ knowledge reservoir. This also offers a prepared start for college learning. Stated by AP student No. 3 in Group 4:

The AP courses are college-level courses, such as Calculus, Chemistry and Physics, and they are compulsory courses in college....The width of AP courses, similar to that in American general education, provides us with extensive college-level knowledge. It is a good start for my future study in the American university.... Furthermore, the comprehension of college introductory courses in various subjects is beneficial for students to be a well-rounded person for their future life. As noted by most CPP students in focus groups, taking college-level introductory courses in general gives them opportunities to get a whole picture of the general education in college, so they are capable of

exploring their true interest before applying for a college program. Take the IB program as an example. This program is designed to train students to develop in an all-round way.

According to IB student No.1 in Group 6:

Compared with in traditional Chinese high schools, we do not have to pick to learn in either liberal arts or sciences direction here... I found out my interest by learning IB program. For example, thanks to the introductory course of Chemistry, I found out that I was very interested in Chemistry. So I am planning to apply for programs related to Chemistry. IB gave me a good opportunity to find my true interest.

However, Some the CPP students also pointed out that the knowledge taught in CPP courses has a wide range but may not be very deep.

### English Language

English language proficiency has become an important issue in American higher education due in part to a raised awareness of the role of English language ability in college learning. There is also increased recognition within American universities of the fundamental nature of language in learning and academic achievement for international students. Given the current prerequisite of English in admission requirements for international students by American institutions nationally (e.g. TOEFL), English language capability is considered as the core; hence the most important part of preparation for students to study in the U.S whose first language is not English. In addition to English Language Proficiency Test needs, English language proficiency is also called on to read a variety of materials; to write essays, reports and papers; to express oneself in class; and to listen and learn from discussions and lectures in American college class. Due to the necessity of

English in U.S. college study, CPPs have focused a lot of effort to improve students' English capabilities, including speaking & listening, writing and reading.

***Speaking & Listening.*** All the CPPs students interviewed mentioned improvement in their English language proficiency by participating in CPPs. Courses taught by foreign teachers provides a great chance to communicate with English native speakers. IB student No. 2 in Group 5 said:

All the courses are taught in English by foreign teachers using English-written textbooks....It [IB] provides an English environment. The communication with foreign teachers is in English.... At the beginning, I was very shy and was hesitated to talk with them [in English], and they [foreign teachers] asked me to talk to them and ask them questions. They treated me very nicely and patiently while listening to my poor English, and I really appreciate their help and encouragement... A few months later, I felt relaxed and was capable of communicating with foreign teachers in English fluently..."

According to most GAC students, foreign teachers have office hours to answer students' questions individually outside of class. Mentioned by GAC student No. 2 in Group 7:

It [office hour] is very helpful for us to communicate with them after school and it gives us more opportunities to practice English with native speakers...as time passes, I am not afraid to speak in public any more....

However, it takes long-term efforts to enhance English speaking and listening skills.

Continually, GAC student No. 2 in Group 7 also indicated:

At the beginning, I was not sure how to express myself clearly in English. After one semester's learning, I know better how to ask questions and express [my ideas] in

English in class. Since the foreign teachers are native speakers, we can learn the native way to express ourselves.

However, with respect of consecutive hiring of foreign teachers in CPPs, the CPP students also complained about the frequent replacement of foreign teachers as well as the accents of the foreign teachers. According to GAC students:

We change the foreign instructors very frequently, on average, one foreign teacher only teaches us for only one semester. The longest one was in our program for one year. The high frequency of changing instructors makes it hard for us to get used to since we usually have fixed instructors in our Chinese class. We always need time to get used to understanding different teachers [in GAC program]....it is a problem for us....

Similarly, as mentioned by most IB students, the instructors in their programs are from different parts of the world, such as the U.S., England, Singapore, Africa, and Australia. Their accents are quite different so students need to adjust to accents and idioms.

**Writing.** Both the IB and GAC programs have specific English writing courses which aim at improving students' English writing skills. In addition, most of the CPP students interviewed said that their academic English writing capabilities were improved by academic reports, papers and essay writing. Taking the IB program as an example; in the extended essay course, students are given a template for academic essays, while the topic is decided by the teacher in class. While the writing template sets a frame for the students, they have to investigate the specific content in the essay by themselves and there is no fixed way. Explained by IB student No. 3 in Group 6:

For each paragraph, the first sentence is a statement, and the rest [in this paragraph] are materials that support the statement...this way of writing is different from the what we are taught in the Chinese writing class....Also the logic relations between sentences are very important....

Most of the GAC students stated that they considered the writing template very helpful, for it made it easier to learn how to write English papers.

Additionally, since it requires constant practice to improve writing, professional feedback and guidance are very useful. As indicated by many of the GAC students, most GAC course assignments are papers and each requires many words, which forces students to write. GAC student No.3 in Group 8 pointed out:

Usually, we are asked to write a draft first and then teachers will review it and give it back to us with comments and suggestions, and we have to revise the paper accordingly....We are also asked to do peer review in class....It is a challenge but I have learned and practiced a lot through it.

In contrast, the writing training in the AP program was not commented as positively as IB and GAC courses. AP courses focus on teaching knowledge itself, and emphasize less on systematic training of English academic writing skills. AP student No.2 in Group 5 said:

I have to figure out how to write correctly and express myself clearly by myself since it is not taught formally in class... I hope we have writing courses and teachers to teach us systematically and professionally...

**Reading.** English Reading capabilities are emphasized in CPP class since it is essential for self-learning in U.S. college life. Instructors in CPPs adopt the pedagogy similar to that in American college classes; however, it takes time for Chinese high school

students to get used to it since reading and self-learning are usually not emphasized in Chinese high schools. Interviews with most CPP students showed that the pedagogy of CPPs is different from that in Chinese high schools. The foreign teachers assign students advanced reading materials and then the lecture is based on the reading materials. CPP students also claimed that it would be hard to understand the points mentioned in class if they did not prepare themselves very well by reading and understanding the materials in advance. As noted by IB student No. 5 in Group 4:

During the lecture, the teachers put all the reading materials together, and they do not follow the order of chapters in the materials...I have to read before I attend the class....

### **Academic Behaviors (Theme 3)**

The factors that are important for college success go beyond cognitive abilities and content knowledge. Since academic behaviors are critical for college students' persistence and success (ACT, 2007, 2008; Allen, Robbins, & Sawyer, 2010), they are also important for college success. As a result, CPPs include academic behaviors as an essential part in college readiness and emphasize the training of them. In CPPs, academic behaviors include two parts: academic practices and self-management skills.

#### Academic Practices

Academic practices in CPPs include the activities organized by CPPs such as (1) delivering presentation and doing speeches, (2) developing projects and writing reports, and (3) conducting researches and writing academic paper. These activities are usually not organized in traditional Chinese high school class.



*Delivering presentation and doing speeches.* There is hardly any presentation in Chinese classes, since the main form of class is instructor-delivered lecture; therefore, it students in CPPs needed time to adjust and to acquire the skills to do presentations. According to most IB students interviewed, eye contact, a typical way to show confidence in public speaking, is the essential factor in doing a presentation. Specifically, as IB student No. 4 in Group 2 said:

During my first presentation, I was afraid of looking at the classmates and the instructor sitting in front of me. I even shivered due to nervousness. I was very shy and felt awkward talking in front of the class....I buried my head and looked straight to the ground. There was no eye contact with the class....But after a semester of practices, I got much better at doing presentations in front of the whole class and I also have learned that eye contact is the key in my presentation....

Additionally, the process of organizing slides in PowerPoint in presentation is important since PowerPoint should only serve as guidance and it is not proper to put all words on slides. It is not recommendable to read the content on slides word by word. Based on the response from GAC student No. 2 in Group 8:

At the beginning, I put all the texts on the slides, and almost read word by word when presenting; however, the instructor advised me to talk to the audience rather than reading the slides. Through practices, I am much better now than before...I was told by foreign teachers that presentation is common in American class and I think the practice in CPPs is beneficial to my future study....

As for speeches, since Chinese classes are often organized in the form of lecture, students are rarely given any opportunity to speak in front of the whole class. In contrast, in the speech

class in CPPs, students are encouraged to deliver speeches to the whole class. Doing speeches is beneficial to students' logical thinking and analytical thinking skills. It is also a useful way to improve students' English capabilities. Mostly importantly, doing speeches are beneficial for enhancing students' confidence in expression. As IB student No. 6 in Group 5 pointed out:

I was so nervous when I was asked to do speech the first time. It was so hard for me to open my mouth and talk in front of others. Then I kept pushing myself to talk and then after a period of time, I was not that afraid of talking...

Furthermore, preparing a speech outline in advance is a helpful way to build confidence and it makes the speech more organized. GAC student No. 4 in Group 7 noted:

I tried to do speeches in accordance with the outline I wrote in advance. It is a good way to help me express myself clearly. After several times, I am confident enough to talk to the whole class. Also I am learning how to express my opinions clearly...

***Developing projects and writing reports.*** Projects are considered as a practical way for students to apply knowledge into practice and an essential way to learn to systematically organize that knowledge. It is necessary to acquire skills to develop projects and write reports, which are a part of college readiness in the U.S.; therefore, CPPs use projects and report writing as assignments for students. Specifically, the projects include academic projects and social practical projects based on different types of topics. According to CPP students, most of the time the projects raise open questions without fixed answers. In this process, CPP students have to explore the answers and solve practical problems. After completing the projects, students need to write a formal report to describe the whole project,

including the purpose, questions, results and the implications to the practice. According to IB student No. 4 in Group 6:

Usually the course assignments are [academic] projects. We are broken into small groups to complete a project on a specific topic. We have to try to figure out the way to solve the problem [in the project] and then draw the conclusion in the end....After that, we are asked to write an academic report.

Furthermore, in terms of report writing, IB student No. 1 in Group 3 noted:

This was very hard for me at the beginning and the professors gave us a template about how to write a report. It was very helpful. Based on the template, I learned how to start to write a report.....

GAC students reported a similar way to do projects and write reports. They were assigned a topic of the project and then discussed it in class. The purpose of the whole project is to solve the problem and then draw the conclusion. Upon completing the project, they were told to demonstrate their results. Each member in the team had to undertake his/her obligations and collaborate to work on the report.

With respect to improve students' academic capabilities in doing projects, CPPs also provide students with opportunities to work with professors in college so as to finish academic projects. The specific approach is that several students are mentored by one college professor to work on an assigned project. The involvement of CPP students in college-level academic projects in advance prepares their academic capabilities.

In addition, CPP students are also told to do social practical projects, which is significant to broaden their views and expand their knowledge. According to GAC student No.4 in Group 1:

During some weekends, the school organizes us to teach in the special school for the blind as volunteers.... We were deeply impressed that the blind students were working so hard to learn knowledge. Facing lots of difficulties in their life, they were still brave and optimistic....I should learn from them and there is no excuse for me to complain about the difficulties in my life.... It is a good experience for me and I did learn a lot. After I came back home, I wrote a report to document my meaningful experience...

Similarly, IB student No. 1 in Group 5 said:

Last semester, we were organized to plant trees and the purpose of this project is to improve our awareness of environment protection. Everybody on the earth should have this awareness and protect the environment....

***Conducting research and writing academic papers.*** According to O'Donnell, O'Brien, and Junor's (2010) claim, American colleges and universities are responsible for teaching students how to properly embark on research projects, especially as more jobs call upon students to use research skills in the workplace. However, according to an American local report, released by Project Information Literacy (Head, 2012), most college students do not know how to perform research correctly. This study, which surveyed 8,353 students from 25 colleges, reported that 84 percent of respondents found "getting started" the hardest part in research projects. Additional problem areas include defining a topic, narrowing it, and sorting through results -- 66 percent, 62 percent and 61 percent of students respectively. found these steps the most difficult To prevent such cases, CPPs help Chinese high school students prepare their college readiness through conducting research and writing academic papers. As GAC student No. 3 in Group 6 stated:

...For the course of Science taught by foreign teachers, we were guided by teachers in computer labs. Each of us was assigned a specific but different task---a research question, and then teachers gave us time to do online research. Each of us had to solve the problem independently. We could go to the internet to find the answers as well as the supportive materials to explain our answers....I am getting used to the way of conducting research...

After conducting research, students usually present research results in the form of an academic paper. Without any doubt, academic paper writing should be taught in CPPs so as to prepare students for college readiness in terms of academic practices. Interviews with CPP students indicated that foreign teachers in CPPs taught students the structure of an academic paper, including introduction, methodology, results and recommendations. They taught students how to write each part separately, and they also introduce to students the Americans writing habits, which is definitely important for college learning in the US.

According to most CPP students, the most important skill they learned about English academic writing is using references. They NEVER knew that they have to refer to the original article when they quote. But in order to avoid plagiarism in the U.S., they had to incorporate the skills of using references. Besides, CPPs also teach effective ways to find relevant academic research done by other scholars. As IB student No. 4 in Group 1 pointed out:

I was taught to use Google Scholar to do searching. Additionally, if I want to use other scholars' ideas or statements, I should cite their work and then add their names and their works' titles in the reference part. It is not allowed to use others' work directly; however, I often did that in the past and now I know that it is not allowed...

Generally speaking, foreign teachers in CPPs ask students to do academic practices similar to those in American classes. It is considered as an approach to “warm up” before students begin their college learning in American universities.

### Self-management skills

Self-management skills, which is defined as the personal application of behavior change tactics that produces a desired change in behavior (Lorig & Holman, 2003), include time-management skills, self-learning skills, self-awareness skills and test-taking skills for Chinese students at CPPs.

***Time-management skills.*** Time management is important for student’s college academic success. It is beneficial for students to manage time effectively and make the most of it. CPPs train students to manage their time by setting deadlines for assignments at the beginning of the semester. Usually students have adequate time to work on projects, and they have to keep in mind the deadlines. In contrast, in traditional Chinese high schools, the Chinese teachers usually leave only one or two days for students to finish the assignments. Students do not have to make a timeline since the time to finish the assignments is short. What they need to do is to invest in a lot of time within just a few days to finish the assignments and turn them in. The deadline is somewhat flexible, as GAC student No. 4 in Group 6 indicated, “If we miss the deadline [of the assignment], we are allowed to extend a couple of days to work on that. Not a problem....”

However, according to most GAC students, usually, they are assigned a project or an assignment at the beginning of the semester, while the deadline is the end of the semester. Students have a whole semester to finish the assignment. In this situation, Students must

learn how to manage time. CPP teachers ask students to schedule their own timeline at the beginning of the semester. As noted by GAC No.1 in Group 4:

It is important to remember the due day because after that day, teachers will not accept any assignments...

Similarly, a "to-do" list is helpful for students who learn to manage time. GAC student No. 5 in Group 7 said:

When I was beginning to take GAC courses, I had a difficult time managing my after-school time since there were assignments from both Chinese and American curricula. I learned how to manage my time.... Now I have a notebook with deadlines as well as a to-do list for all the things I have to do every day. I can manage my time very well now....

Generally speaking, completing assignment and homework in time is an effective way to learn how to manage time, for students can work at their own pace in accordance with their schedule.

***Self-learning skills.*** Self-learning skills can be a big challenge for Chinese high school students since they are used to the traditional teaching mode of lecture adopted by Chinese teachers. However, CPPs train students to learn by themselves since self-learning skills are necessary for American college study. Most AP students commented that AP teachers usually only explain the key points in textbooks, and they need to master the details by themselves. As noted by AP student No. 5 in Group 1:

I have to read the textbook first and then try to complete the exercises. If I meet any difficulties or problems, I could either ask teachers after class or go online to Google

the answers. The self-learning process enables me to think and search for new knowledge by myself...

Similarly, the IB program improves students' self-learning skills in two ways, i.e. extracurricular activities and extended essay courses. According to IB student No. 4 in Group 5:

In the activities, we are required to learn by ourselves and explore new ideas... For example, we learned in business class to work on a marketing plan for a cell phone brand, and it is very interesting.... It is a good way to learn business knowledge....

In extended essay courses, IB students are also encouraged to learn and do research by themselves about a topic and share their own ideas.

***Self-awareness skills.*** Self-awareness in this case specifically refers to student self-recognition of academic and disciplinary interest, which is very important for students to find their interest and strength prior to college application. CPPs give students valuable opportunities to explore their own academic interest and strength, which will guide students to a wise decision on a college major. Participation in CPPs is beneficial for students to have an objective and comprehensive awareness of their own disciplinary interest. Although the college-level course is much harder than high-school-level courses, students are still willing to overcome difficulties when they are taking courses out of strong interest. According to AP student No. 4 in Group 5:

I have taken three AP courses: Biology, Chemistry and Physics. Those are all my interests before I took AP courses. However, after I finished all the courses, I found that I was doing much better in Biology than in the other two. Therefore, I have decided to apply for programs related to Biology for my college study...



Similarly, AP student No.2 in Group 3 noted:

The reason that I decided to take AP courses is my interest. I have strong interest in Math and Chemistry. I also decide to choose one of the two [majors] as my college major....

In the IB program, students also have opportunities to explore their self-interest since the courses in this program are very comprehensive. Both social sciences and hard sciences are taught in the IB program allowing students to learn knowledge in various disciplines. IB student No. 1 in Group 2 commented:

It is good for me to know “everything” before I apply for college. I found that I have strong interest in history, so I decided to take it as my college major.

***Test-taking skills.*** There are two main elements in test-taking strategies. One is to know the knowledge to be tested and the other is to know how to take the test. Both elements should be based on the understanding of the knowledge learned in class. CPP teachers repeatedly encourage students to think about why the knowledge is true. However, in traditional Chinese high school class, students are taught to believe in all the words written in textbooks without any doubt. Being forced to think independently encourages students to learn the knowledge without memorizing. To explore the justification of the knowledge is an important process that helps students understand the knowledge and enable them to use the knowledge to deal with the test. Usually the test questions in CPP courses are open without standardized answers. Some of the test questions are practical which require students to answer based on their own understanding and analytical thinking. Learned from IB student No. 1 in Group 4:

Most of the courses require us to write short essays in the test. In these essay writing tests, I have to propose our own idea based on my own thinking. The new ideas should be based on the knowledge learned in class.

Similarly, AP student No. 6 in Group 1 identified the strategies to take AP tests:

When taking AP test, it is important to truly understand knowledge itself. Take Chemistry as an example. A better way to understand it is to do experiments and observe what will happen and think about the reason rather than memorizing what should happen in experiments. In AP tests, the questions are open ones that ask about the application of the knowledge.

Overall, two elements, academic practices and self-management skills, are included in the college readiness dimension of academic behaviors. CPPs prepare students for learning in American colleges within the aspect of academic behaviors.

#### **Contextual Skills and Awareness (Theme 4)**

According to Conley (2007, 2010) contextual skills and awareness include college admission requirements, college types and missions, affording college, college culture, and relations with professors. For potential international students, contextual skills and awareness include three aspects: admission test preparation, application preparation and guidance, and social interactions.

##### Admission Test Preparation

For international students, high scores in admission tests are the key to enter high-ranking American universities. Most of the CPP advertisements and procedures promise they are able to send students to Harvard or Yale University. Therefore, Chinese students and their parents assume that CPPs are helpful for standardized test preparation and will

secure successful admission into elite American universities. However, most CPP students are not very clear about the admission criteria of U.S. universities, although they were told by most CPP teachers that high scores in admission tests such as SAT and TOEFL would be helpful.

While students have high expectation for CPPs when preparing for standardized admission tests in, in reality, CPPs may not be highly effective. As AP student No. 5 in group 2 indicated:

[AP courses] Help me learn college-level courses in advance; [AP program] also helps us with AP tests, SAT and TOEFL tests. But the time to prepare for admission tests is very limited.

Along the same line, GAC student No. 4 in Group 5 pointed out:

TOEFL teachers have no experience in teaching test preparation courses. I know some other language training courses and they provide much better training.

Compared with those specialized language training courses, GAC programs are not professional in TOEFL training....For instance, our TOEFL writing teacher, she gave us a template to recite and as a result, most of us write the essay in the same way.

This is not allowed in TEEFL test.... So we have to participate in other TOEFL training programs or prepare the tests by ourselves.

#### Application Preparation and Guidance

In addition to standardized admission test preparation, CPPs also provide help and advice in the student application process such as personal statement writing. CPP foreign teachers can write recommendation letters for students and admission consolors can provide application guidance.

***Transfer credits.*** The concept of “transfer credits” is rarely heard in the Chinese education system due to the lack of this term in its dictionary. However, students in CPPs learn this term as well as the benefits of “transferred credits”. Generally speaking, the scores and credits earned from CPPs are regarded as a “favorable ticket” in students’ application for American universities since the scores for advanced courses and the associated credits represent students’ advanced preparedness for American college study. In other words, to most CPP students, benefits of college-level advanced and transferred credits are not only convincing proof of their capabilities for college study but also provide advantages for them to stand out among a large number of applicants. CPP students believe that it would be much easier to be admitted in American universities with AP credits on their transcripts.

According to AP student No. 2 in Group 1:

Earning college credits in advance is good for my college admission. The credits earned by taking AP courses can be transferred and substituted as the required introductory courses in college study.... [However], after I am enrolled in an American college, I would like to retake those required introductory course in the American class although I could transfer the credits earned from the AP courses.

Similarly, with high international recognition, the IB credits are assumed by CPP students as helpful in applications for US institutions. “High [IB] scores and credits are required if I want to apply for top [American] institutions...in terms of [IB] scores, the higher, the better...” from IB student No. 5 in Group 1.

What is more, some CPP students value advanced college credits from the angle of saving college tuition and college time. AP student No. 1 in Group 4 said:

I heard that in American universities, some [international] students could not finish all the required courses or earn enough credits in four years and it is hard to graduate in four years.... If I can earn college credits in advance by taking AP courses, I will have less academic pressure and I would be more relaxed in college....I can also save some money by shortening college time....

However, some CPP students pointed out that they do not care about the transferrable credits since only a limited number of American institutions accept the CPP credits and they may not be the highest ranking of institutions. Transferable credits were not a big attraction for their participation in CPPs.

In sum, most CPP students think that having transferable credits on their transcript will give them extra points compared with other competitors. These credits will raise their chance of being admitted since they are evidence of their capabilities to take college-level courses.

***Overseas experience/ campus visiting.*** College culture is learned through campus visits prior to college application. The overseas experience such as campus visits provide students with a clear direction in their application process.

Most CPP students were organized to visit the U.S. by their high school during their vacation. When they were in the U.S., they spent most of the time visiting university campuses. AP student No. 3 in Group 5 said: “Personally, I like Princeton and MIT for their architecture. I am planning to apply for those two universities for my undergraduate program....”

According to the interview with GAC students, they were organized to visit the U.S. twice. They visited several universities and also they met with the admission officers in a couple of institutions.

### **International Context & Awareness (Theme 5)**

Facing the future challenges in American universities, Chinese high school students are “shifting” from the eastern to the western context with the help of CPPs. The best ways to decrease the conflict between the American and the Chinese culture is to learn to “shift gears”.

#### **Shifting Gears**

An essential objective of CPPs is to prepare students for shifting from the Chinese to the American culture. It is important for potential international students to adapt to college academic life and social life in the U.S., including the “American way” of thinking, doing, culture and social interaction.

***Thinking.*** American education emphasizes that knowledge should be used to solve problems rather than to deal with tests. The American way of thinking encourages CPP students to increase their awareness of the problem about themselves in daily life. The practical meaning of knowledge is emphasized. According to IB student No. 4 in Group 1:

After two-year study here [IB program], I have formed the habit to think when I saw news around me. For example, I read an article several days ago about a new model of selling business. I tried to explain it with the knowledge from my business class and also I decided to analyze this model in my final project.

***Doing.*** In order to shift to the American culture, learning American’s behavior and their ways of doing things are important to improve international students’ awareness of

international context. CPPs try to create an American context for students to learn about American's behavior. For example, Holidays present a good way to learn about a country and its culture. Stated by GAC student No. 2 in Group 3:

We celebrated Christmas last year with foreign teachers. We decorated the Christmas trees and held a party. All the foreign teachers got together to celebrate, dancing and singing....

In addition, students learn the American way of getting along with others in CPPs. Most IB students claimed that in the American class, they have learned how to appreciate others' hard work. They learned to say "you did a good job" to partners. IB student No. 2 in Group 2 said:

Also I tried to say "thank you" to my mom after she made a delicious dinner for me....this habit makes me feel much happier than before....

**Culture.** Acknowledgement of American culture both in and out of class in advance is beneficial to CPP students' future college life in the U.S. Most CPP foreign teachers introduce to students the American culture relevant to the class content. As noted by GAC student No. 5 in Group 6:

For example, in one speech class, we learned about American food.... So the teachers told us how to give tips in American restaurants since we do not have to tip in Chinese restaurants.

In terms of the introduction of daily life habits for the Americans, GAC student No. 1 in Group 4 said:

Foreign teachers told us that [in the U.S] cold water from water tap in kitchen is drinkable. But the hot water is not....usually, Americans have coffer for breakfast and

the categories of coffee include: light, dark and decaf.... People could add [to coffee] cream or sugar to their preferences...

In addition to the acknowledgement of the American culture in general, the awareness of differences between Chinese and American class climates, one of the advantages of CPPs, is also important for students to prepare themselves for American college life. As CPP students indicated, in most traditional Chinese high schools, students are asked to memorize the lecture content and are told to keep classroom discipline by avoiding asking questions at any time. In CPP classes, teachers value students' ideas and opinions and they encourage students to think aloud and share their thoughts....Indicated by IB student No. 3 in Group 4:

The class taught by foreign teachers is very open and relaxing. Students can ask questions without standing up..... I remembered in one class, a student gave a very excellent speech, so the foreign teacher applauded for him. It is hard to see such a scene in Chinese class.....

When students have questions, CPP teachers usually give them suggestions for further research so students can explore the answers by themselves. Interviews with most of the GAC students showed that the process of learning the knowledge is challenging but interesting to them. GAC student No. 6 in Group 7 stated:

I raise questions I wanted to ask and then figured out the answers under the help from foreign teacher. I had a huge sense of accomplishment, which increased my interest in learning.

***Social interaction.*** The social interaction includes interactions with both foreign teachers and peers. It is an effective approach for building both academic and social networks.



*With foreign teachers.* The social interactions with foreign teachers include both in-class and after-class interactions. The in-class interactions are mostly determined by the class climate. An open and interactive class climate promotes the interaction with foreign teachers in class. After class, attending office hours is a useful way to realize social interaction with foreign teachers. Generally speaking, CPP students are encouraged to communicate with foreign teachers. As noted by AP student No. 3 in Group 1:

In our [AP] class, I am highly involved in the interactions with teachers. We are encouraged to ask questions we have. The class climate is very active, relaxing and interactive. I do enjoy this kind of class...

Additionally, most IB students stated that foreign teachers in IB programs are from different countries and areas all over the world. Many of them can be very humorous and create a relaxing class. The class content is very interesting and they often tell IB students about the culture and funny stories in their countries.

After class, foreign teachers have office hours to help students solve problems they meet in both study and life. As IB student No. 7 in group 4 indicated:

I often visit my foreign teachers during office hours. They are really helpful. I remember one time I did not know how to search for academic articles and papers on my project topic, so I went to the writing teacher during his office hour. He was very nice and introduced to me a lot of practical ways to do searching, like Google scholar and library resources.

In addition to course work, CPP teachers also gave students guidance for their application materials during office hours. Most GAC students mentioned in their interviews that foreign

teachers even help them with personal statement during office hours. GAC student No. 6 in Group 5 said:

I wrote a personal statement draft and asked him for suggestions. After he read it, he gave me very helpful revision suggestions....He told me to write about my personal experience and good qualities in detail rather than in general. Only the details are persuasive.

*With students/peers.* The social interaction with peers is beneficial for improving students' teamwork and leadership skills. Cooperation with others is important not only in college but also in society. In traditional Chinese high schools, students are unlikely to be taught to work together since almost all of the assignments are required to be finished independently. However, since teamwork assignment is common in American class, CPPs need to prepare students with teamwork skills so as to prepare their college readiness. As noted by IB student No. 6 in Group 4:

In terms of social activities, we are usually assigned to work in small groups and we'd divide the whole assignment into small pieces. Each of us is in charge of one part. At the beginning, we do not know how to work together, but after discussion and practice, we found that teamwork is an efficient way to finish assignments....

Additionally, teamwork is a good way for students to know how to work with others and discover others' advantages. Therefore, students have opportunities to know other peers better. One IB student stated that every person has his/her own advantages and he has learned to explore others' advantages in group work. IB student No. 2 in Group 6 said:

Xue Yang was my classmate and I did not know her very well at first. Then we were assigned to the same group to do group work. During our group discussion last week,

I was absent since I was sick. She called me after the discussion and checked if I was Okay..... I found out that she was very nice and we became good friends now.

Furthermore, team work is helpful for students to learn to respect others' ideas as well as to share opinions with others. As most GAC students claimed, through teamwork, they have learned to respect others' opinions because nobody can always be correct. Listening to others and respecting their opinions are very important. Sharing opinions are essential to learn more and improve efficiency.

Last but not least, the skill of being a professional leader is practiced in CPPs too. In IB program for example, every student has the opportunity to be a leader in social activities. The leader is required to organize the activity. According to the experiences of IB student No. 1 in Group 3, a good leader needs to know the strength of each group member, and should know how to take advantage of all these merits. IB student No. 1 in Group 3 also stated: "It is important to integrate the effective recourses...."

In a word, dealing with an international context requires students to shift from their native context to a foreign one, which is practiced in CPPs. Shifting the mode of thinking is the key to shift to western culture, while doing is a reflection of behaviors in western culture. Social interaction is required to live in an international context. Additionally, western culture is the context and CPPs help students to aware it in three ways: thinking, doing and social interaction. Therefore, it is proved that students, while learning in CPPs, are made ready for American institutions by shifting from eastern culture to western one.

### Summary

This chapter presents the results of the study and answers the first two research questions. Data show that there are five major themes or college readiness dimensions in

CPP students' learning experiences: key cognitive strategies, key content knowledge, academic behaviors, contextual skills and awareness, as well as international context and awareness. The themes reflect an understanding of the learning experiences of Chinese students in CPPs and reveal the ways CPPs adopt to make students ready for American institutions.

The whole dissertation analyzes the effects of CPPs in two perspectives. Chapter Four already completed the study of one perspective: high school students enrolled in the programs in China and preparing to come to the US for postsecondary study. Furthermore, Chapter Five provides the findings regarding former CPP students from China who have come to the US for college. The effects of CPP on Chinese international students' transition to American universities are identified.

## CHAPTER 5. FINDINGS & ANALYTICAL DISCUSSION—U.S.

This chapter presents the findings pertaining to the third research question: how and how well do Chinese international students who take college preparation programs during high school transit to postsecondary education in the US?

The findings are based on qualitative data collected through individual interviews with the Chinese CPP students conducted in their native language—Chinese. All the quotes used in this chapter are translated from the original Chinese.

### Participants Profile

All the data were collected at an American Midwestern Land Grant Public University (MRU), a major research university in the Midwest. A total of 9 students were interviewed. Their specific information, including pseudonyms, gender, major, school year and the CPP attended, is displayed as follows (see Table 5):

Table 5. The Demographic Information of Sample on U.S. Side

<b>Pseudonym</b>	<b>Gender</b>	<b>Major at MRU</b>	<b>Year</b>	<b>CPP</b>
<b>Mary</b>	Female	Marketing	Senior	AP
<b>Tim</b>	Male	Statistics	Graduate	AP
<b>Ann</b>	Female	Apparel, Merchandising, and Design	Graduate	AP
<b>Henry</b>	Male	Industrial Engineering	Graduate	IB
<b>Jack</b>	Male	Computer Science	Graduate	IB
<b>Mike</b>	Male	Chemistry Engineering	Senior	IB
<b>David</b>	Male	Mechanical Engineering	Senior	GAC
<b>John</b>	Male	Computer Sciences	Sophomore	GAC
<b>Eric</b>	Male	Electronic Engineering	Sophomore	GAC

**Mary**

Mary is a senior student majoring in marketing. She took two AP courses in her 12<sup>th</sup> grade: biology and chemistry. She took the AP courses in a top international high school in Beijing. She successfully transferred 5 credits to MRU.

**Tim**

Tim graduated from ISU with a major in statistics. He took two AP courses, Calculus and Economics, during his 12<sup>th</sup> grade in his hometown in Jiangsu Province. He attended the international division of a public high school. Unfortunately, he was not able to transfer any credits to MRU.

**Ann**

Ann is originally from Shanghai and she took 3 AP courses, Biology, Economics and Computer Sciences, in her 12<sup>th</sup> grade. She graduated from MRU in the major of Apparel, Merchandising, and Design. She did not transfer any credit to her undergraduate study.

**Henry**

Henry graduated from ISU with Baccalaureate degree in Industrial Engineering last year. He is now a first-year graduate student in the program of Engineering at MRU. He took the IB program in an international high school in Beijing for three years, from the 10<sup>th</sup> to the 12<sup>th</sup> grade. He did not take part in the Gaokao. There were two parts in the IB program: required courses and selective courses. Henry finished the program successfully by taking all the required courses, i.e. Economics, Mathematics, Chinese and English, as well as selective courses including Physics and History. Finally, he transferred 16 credits to MRU and finished his undergraduate study in three and a half years.

**Jack**

Jack attended the same IB program as Henry in Beijing. He graduated from MRU with Baccalaureate degree in Computer Sciences last year. Now he is a first-year graduate student in the program of Computer Sciences at the University of Illinois at Urbana-Champaign. Like Henry, Jack did not take the Gaokao. The IB courses Jack took included the required courses in Economics, Mathematics, Chinese and English, and two selective courses: Chemistry and Philosophy. He finished the whole IB program by passing all the tests. Finally, he transferred 15 credits to MRU and got his Baccalaureate Degree in three and a half years.

**Mike**

Mike is a senior student at ISU majoring in Chemistry Engineering. He finished his IB program in an international high school in Shanghai. In addition to the required courses of Economics, Mathematics, Chinese and English, he took another two selective courses, Statistics and Biology. Finally he transferred 16 credits to MRU and is planning to acquire his Baccalaureate degree in three and a half years.

**David**

David is a senior student majoring in Mechanical Engineering at MRU. He studied in the GAC program in Wuhan, Hubei Province. He took several GAC courses, such as Economics, English, Computer Sciences, Sciences, Speeches, Social Sciences, Calculus, and business. After completing the GAC program, he transferred 24 advanced college credits to ISU as selective courses credits required by his program. As a result, it is possible for him to earn the Baccalaureate in three and a half years. He is now classified as a senior by his program based on his grade points; however, it is only his third year studying at MRU.

### **John**

John is classified as a sophomore student in his program of Computer Sciences, but actually this is his first year at MRU. He finished his GAC program in the international division of a public high school in Suzhou, Jiangsu Province. Over the three years in the GAC program, he took a number of college preparation courses such as Computer Sciences, Economics, Mathematic and English. After completing the GAC program, he transferred 33 credits to MRU after enrollment.

### **Eric**

Eric attended the same GAC program as John in Suzhou. Now he is classified as a sophomore student in the program of Electronic Engineering at MRU although this is his third year studying in the U.S. for his Baccalaureate. He completed the whole GAC program by taking a series of courses and he managed to transfer 31 credits to MRU. Now he has almost completed all the courses work in undergraduate program in Chemistry and will be graduating this year.

### **Four Themes in Transition Process**

Schlossberg, Walters, and Goodman's Transition Model (1995) was adopted in order to answer the research question about the aftermath performance of Chinese international students in their postsecondary education in the U.S. who take CPPs during high school.

Students' purpose to participate in CPPs is to ensure a successful transition process to the American life with an early start, for the CPPs provide them with a classroom environment similar to what will be experienced in the U.S. All the interviewees believed that learning in the CPPs was a sufficient preparation for them not only in English proficiency but also in western learning habits.



The data analysis on the American side was based on Schlossberg's Transition Theory. Schlossberg et al. (1995) identified four major sets of factors that influence a person's ability to cope with a transition: Situation, Self, Support, and Strategies.

Accordingly, themes extracted from the data are categorized as follows (see Figure 13):

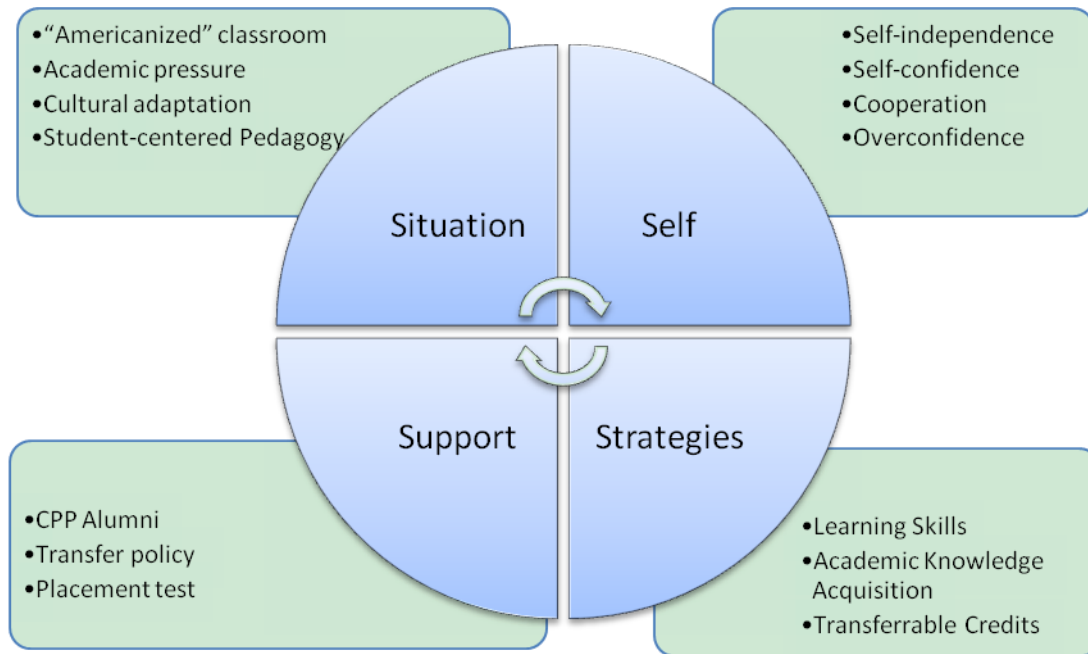


Figure 13. 4 S's in Transition Theory for Chinese International Students with Previous CPP Experiences

As illustrated in Figure 13, being consistent with the 4 S's in Schlossberg's et al (1995) Transition theory, four *a-priori* themes for Chinese international students with previous CPP experiences include: situation, self, support and strategies. Under Theme 1 ("Situation"), there are three subthemes, i.e. "Americanized" classroom, academic pressure, cultural adaptation and student-centered pedagogy; Theme 2 ("Self") includes three subthemes: self-independence, self-motivation, self-confidence, and overconfidence; along the same line, Theme 3 ("Support") contains CPP alumni, credit-transfer policy, and

placement test; and Theme 4 (“Strategies”) specifically has four subthemes: learning skills, academic knowledge acquisition, and transferrable credits.

### **Situation (Theme 1)**

There are three important factors in “situation” in the transition process. The first is the “previous experience with a similar transition”, which refers to how effectively one coped with previous transitions, and what the implications are for the current transition. The second is “concurrent stress”, which is explained as the multiple sources of stress present in the new environment. The third is “role change” that is involved in the process of transition (as described by Chickering & Schlossberg, 1995, p. 51; Sargent & Schlossberg, 1988, p. 60; Schlossberg, 1990, p. 5; Schlossberg et al., 1989, p. 17).

“Situation” in Schlossberg’s transition theory is an appropriate theme in the analyses of the transition experiences of Chinese international students with previous CPP participation. First of all, CPPs create a learning environment similar to the American class so as to enable students in CPPs to experience a similar yet “early-start” transition, which is beneficial for their later real transition in American colleges. This is illustrated by the first subtheme—“Americanized” classroom. Secondly, though with the benefits of previous simulated transition experiences in CPPs, Chinese international students still have to face other kinds of stresses in American colleges, which is identified by the second subtheme—academic pressure and the third subtheme—cultural adaptation. Lastly, CPP students begin to change their self-defined roles while they are studying in CPPs so as to prepare for life in American colleges. It starts far before they go abroad. This is described by the last subtheme—student-centered pedagogy. Therefore, the simulated transition experiences in CPPs can provide effective implications to the real transition to American college life. In a

word, the “situation” theme, in this study, includes four subthemes: “Americanized” classroom, academic pressure and cultural adaptation and student-centered pedagogy.

### “Americanized” Classroom

CPPs put Chinese high school students in a transitional environment, especially in academic aspects, by creating “Americanized” classrooms. First of all, almost all of the CPP courses are taught by foreign teachers and the textbooks are all written in English. At the same time, all assignments, including reports, oral presentations and group work, must be completed in English. Students in CPPs are immersed in an English teaching and learning environment. Most importantly, foreign teachers in CPPs are from various English-speaking countries, and their accents are beneficial for making students get used to variety of teachers in American universities. Secondly, the class climate in CPPs is relaxing, interactive and communicative just as that in American classes. In addition, the format of CPP courses the same as the course form in the U.S. Thirdly, students’ course scores in CPPs are determined by multiple assessments, such as project reports, quizzes, research papers, and presentations. None of the CPP courses evaluates students’ performance based solely on mid-term and/or final exams. However, despite the CPPs’ effort to create an “Americanized” classroom so as to smooth students’ transition in the U.S., students still need to get accustomed to the American way of thinking and the class size in American universities on their own. As a whole, this “Americanized” classroom situation in CPPs benefits an early transition to American college life. In terms of the English-taught environment, John explained:

GAC program is almost the same as an American class. ALL the courses are taught in English. Foreign teachers emphasize teamwork and communication with peers.

Interaction is highly recommended in class. The way foreign teachers teach in GAC

program is similar to that in American class. It took me some time to get used to such a class style.

In CPPs, foreign teachers from various English speaking countries, such as Australia and England, are employed and each has a unique local accent. All these are similar to the class environment in American class. In this way, CPPs provide students with early opportunities to get used to teachers with various accents, which is beneficial for their transition to academic learning in the U.S. Some participants on the Chinese side complained about the variety of nationalities and accents of foreign teachers in CPPs; however, after they arrived in the U.S, they found out the familiarity of various accents had great benefits for their adaptation to the American class. David said:

I remembered we had teachers speak English but from different countries, such as Singapore, India and Australia. Their ways of speaking English are quite different and I could not catch up as the first year of studying in GAC....After I come to the US, I found out that the teachers here [in American universities] are from various places and speak different kinds of English....I am getting used to the diversity of teachers better than other Chinese students.

In addition, as Jack pointed out:

In [IB] program, the foreign teachers changed very frequently. Even for the same subject, we have different teachers...for example, teacher teaching for Math 150 is different from the one for Math 250...this is not usual in Chinese high school...But I found out that in America, teachers do in the same as that in IB program....I am already used to that before I came to US in IB program....

Furthermore, similar to that in American colleges, the CPP curriculum is also composed of both required and selective courses. As Jack explained:

For required courses, all the students are demanded to attend them; however for selective courses, we need to find our own classroom... [This is] similar to learning in American universities.

To work on an individual course plan, students need to be independent and responsible for their own schedules. Similar comments made by Mary:

For selective courses, I need to go to the assigned classroom for my particular course. This is different from the traditional Chinese high school class: students are all taking the same courses in the same classroom.

In addition to the American-style teaching environment, CPP teachers also give students class assignments in an American way—formative assessment rather than Chinese traditional summative assessment. In the U.S., college teachers usually adopt a formative assessment, which means the final score for one courses is based on performance of multiple assessments in student learning process. The goal is to monitor student learning and to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning (Crooks, 2001). The formative assessments in CPPs prepare students for the assessment processes practiced in American courses. As noted by David:

...the assessment way in [American university] is similar to that in GAC program...[foreign] teachers usually give us four or five [assessments]...for instance, the Chemistry course [at] last term, the first assignment is a group project; the second one is a quiz; the third [one] is a presentation; and the last one is final exam...Even I

got a low score for the group project, I can still get an “A” [score] for this course, because I have three other opportunities [to catch up]....

Nevertheless, although the CPPs create an “Americanized” classroom situation, the environment may not totally reflect the “western” style of thinking. Especially regarding teamwork, some participants found that working with Chinese peers in CPPs is quite different from teamwork with American peers in a real American class. As David indicated:

“American students prefer to divide the whole piece of assignment into segments, and then each one will take care of one of them. The group members works separately and meets at the very end to get parts of work together .....However, in CPPs when working with Chinese peers, we prefer to working together all the time, thinking about and discussing every detail together....”

Another non-positive aspect of the experiences in CPPs is the teacher-student ratio, which does not help in students’ transition to the American class. There are about 15 to 20 students in one CPP class with one foreign teacher. Such a ratio makes it convenient for students to interact with teachers. As Mike pointed out, “the ratio between students and teachers in IB program is only 10:1, which creates great opportunities for us to interact with teachers.” Since CPP classes are small, students tend to assume that the situation is the same in American classes. However, after arriving in a real American class, they begin to realize that most of undergraduate courses, especially the introductory-level courses, may be taught in large-size classrooms. As indicated by Ann:

In our AP class, we only have 20 students. We have very small class size and we interact with teachers very well. In my mind [before I study in the U.S.], the American classes would be very small too.....but after I came to real [American] classes, I was

shocked. Almost 100 students are sitting in a huge classroom. It is unlikely to have one-on-one interaction with teachers in class.....the real [American] class is quite different from the one in my mind.....

To sum up, to Chinese international students, due to the “Americanized classroom” created in CPPs, the “previous experiences of a similar transition” is helpful to their later transition to real learning in American colleges. Of course, there is also a negative side in the “Americanized classroom”, such as the failing of this form of classroom in reflecting the American way of thinking and the false impression to students concerning the class size in American colleges.

#### Academic Pressure

Compared with the traditional Chinese high school classes that aim at training students for Chinese College Entrance Examination, there is less homework in CPPs and students studying in these programs are more relaxed. As most participants indicated, they had a low homework load when taking the CPP courses and the class climate was relaxing and free. They were encouraged to communicate with teachers and discuss with other classmates. As a result, they took it for granted that the American class would be taught in a similar way. They assumed that real American classes are relaxing as well with only a few homework assignments. However, the reality is totally different. Ann shared her experiences:

...When I came to the U.S. [for the] first time, I began to realize that students in American classes have a much heavier homework burden. A lot of homework assignments and a large number of tests and quizzes gave me very heavy academic pressure.

Instead of spending a whole day studying in CPPs, students in American universities usually attend only one or two hours of lectures each day, but they are required to take three to four hours or even longer time to finish assignments outside the class. Sharing a similar experience, John said:

I face heavy pressure in study, [which is] not anticipated...I always have to go to bed in midnight for I need to finish all the assignments first.... Learning in GAC in China was very relaxing with very few time spent on homework and I did not have this kind of pressure [after school]...

Academic pressure is the new “concurrent pressure” that Chinese international students need to deal with in their transition to a new environment—American colleges. They did not experience this kind of transition in CPPs.

### Cultural Adaptation

Except for academic pressure, cultural adaptation is another concurrent stress faced by Chinese international students with former CPP experience in their later transition to American culture. CPP teachers often introduce the U.S. culture to Chinese students before they study in American colleges by introducing American holidays such as Christmas and Thanksgiving. However, their knowledge about the American culture was still very limited, and it was unlikely for them to experience genuine American culture in person before they actually studied abroad. In other words, CPP students were told the basics of western culture but were not immersed in it in a meaningful way. They do not have the opportunities to understand and experience America in person until they actually arrive in the U.S. As Jack indicated, “I learned about the party culture of American college students in the U.S., which was never told in [IB] class....” Similarly, while major aspects of American holidays are



taught in CPPs, minor yet important ones may be overlooked in CPP class. Tim pointed out, “I never knew that I have to tip after having dinner in the restaurant until I came to the U.S..... I was never taught [about this] in CPPs... and the expressions in public areas out of campus are quite different from academic ones adopted by professors [in class], such as ‘room for cream’ when I order a coffee or ‘here or to go in a restaurant.” The contradictions between the American culture and the Chinese one still make them feel shocked. Likely, as noted by Henry:

I heard from my IB teachers that most Americans like cheese in their meals. But I am not very well prepared that almost every kind of American food has cheese in it, such as sandwich and pizza. After I came here [to the U.S.], at the very beginning, the smell of cheese seemed very weird to me. I tried very hard to get used to it. Now I feel much better and kind of accustomed to it....

Overall speaking, the concurrent stress in new situation during students’ transition to their American college life includes academic pressure and culture adaptation. Although they learned some in these two aspects in CPPs, what they learned is not enough for them to transit to real American life smoothly.

### Student-centered Pedagogy

Unlike the Chinese traditional teacher-entered pedagogical method, both engagement and interaction in class are highly encouraged in American colleges; therefore, CPPs adopt student-centered pedagogy in the “Americanized” classroom situation they create. The role of students is changed to be active compared with the passive role in traditional Chinese classes. In this way, Chinese students, when in CPP classes, can benefit from the student-

centered pedagogy and achieve a smoother transition to American classes. During the interview, Mary said:

In my college life in the U.S., I am used to asking questions without any fears for teachers. I am not frightened to discuss with my classmates in group work either. Those [communication] skills are learned in AP classes...where I began to realize that I am core in my learning and I should learn the knowledge by motivated thinking rather than passive memorizing....

A similar response came from Ann:

I can ask professors questions in a proper and clear way in American class, which is learned in AP class. Expressing myself was very hard for me at the very beginning but foreign teachers in CPP encouraged me to do that....after practices, I can do that very well...

Teachers in American class try to make students think and ask questions rather than only lecturing to them. This is also the way adopted by foreign teachers in CPP class. Jack indicated his experience in the IB program:

I really enjoy learning in IB class.... For example, in Chemistry class, American teachers ask us to do experiments first and to draw conclusions based on the results, which is so similar to the way adopted by teachers in IB program....The Chemistry teacher in American class reminds me of the one in my IB Chemistry class. On the contrary, my Chinese friends [without IB experience] would always ask teachers for correct answers directly.

In other words, the student-centered pedagogy pushes students to change their role from being passive as in traditional Chinese class to being active as in American class while they

were studying in CPPs. The kind of “role change” benefits their transition to American colleges.

Overall, under the theme of “situation”, three subthemes are identified from the nine interviews. The “Americanized” classroom in CPPs, the first subtheme, provides students with opportunities to gain an advance experience similar to the real transition before they study abroad. Subtheme two, concurrent stress, which refers to the academic pressure and culture adaption former CPP students have in American colleges remains a challenge for Chinese international students studying in the U.S. The third subtheme, student-centered pedagogy, enables students to smoothly transit to in the American class with early role change in CPPs.

### **Self (Theme 2)**

According to Schlossberg’s transition theory, elements considered important in relation to the theme of “self” fall into two categories: personal and demographic characteristics, and psychological resources. The latter includes “ego development; outlook, in particular optimism and self-efficacy; commitment and values; and spirituality and resiliency” (Evans, Forney, Renn & Patton, 2009, P217). In this study, the theme of “Self” in transition refers to how people change their perception of themselves. The ways Chinese international students with CPP experiences view themselves and their performance in the U.S. highlight such words as independence, self-confidence, self-motivation and collaboration. Therefore, this study proposes that the second theme of “Self” contains five subthemes, i.e. independence, self-motivation, self-confidence, collaboration and overconfidence.

## Independence

College life in the U.S. emphasizes “independence”. CPPs teach students how to study independently and to take responsibilities as an adult before Chinese international students go to the US. In Chinese culture, students are taught to study and take various courses uniformly in one fixed classroom and almost all the students have the same timeline and schedule. In contrast, it is important for students to learn how to study and complete assignments individually in an American college. Therefore, with specific training in this aspect, former CPP students are more independent when they arrive in the U.S., especially in the following ways: making schedules, independent study, independent thinking, and handling emergencies in daily life. As mentioned by Tim:

....in traditional Chinese high school class, all the whole class follow exactly the same schedule; however, for AP courses, class schedule for every one is different since some courses are selective rather than required.....I need to keep in mind the location and time for every course , and it is similar to the study in American class....

What is more, to truly be independent, students need to manage their time according to their own workload situations, and to make suitable schedules to handle several subjects concurrently. All the three participants with previous IB learning experience stated that they have greatly improved independent study skills by participating in IB program and these skills are beneficial for their study in the U.S.. Specifically mentioned by Mike:

I learned how to arrange my time to study different subjects, which is very very important for my college study since every student has to take four or five courses per semester. I have to explore how to manage time so as to handle all those courses and

how to study those courses effectively and earn high scores in tests all by myself. All these require independent skills, and I have greatly improved my skills in IB program. Additionally, CPPs make students understand that study is their own business so they should be responsible for their course learning by effectively arranging their time. This is beneficial for students' later transition to the culture of independent study in American class.

According to Jack:

I can clearly remember that the Chemistry teacher answered our questions during office hours.... That was the first time I realized that I should study independently and the role of teachers is only to help me with my study.... That is very important in my academic life later in the U.S. Teachers should not be accounted for my study; they are just helpers.

Furthermore, independence is reflected in the thinking process, which is also emphasized in the American class. Students are required to think on their own based on the relevant resources they have. CPP students know the effective way of doing independent thinking due to the advance practices in CPPs. Based on Mary's responses:

Independent thinking is very important in American class....It is also taught in AP class.... For instance, my Biology teacher, she tried to make us do the thinking on our own rather than telling us the correct answers directly.... This is also emphasized in my college courses. For instance, ... Chemistry course....

In addition to independence in academic life, CPPs also train students to be independent in their daily life by having them live in dormitories. It is a good preparation for their future life in the U.S. when they will live on their own and away from their parents. As Henry pointed out:

Since the IB program campus is far away from my home, I have to live in a dormitory on campus so order to save time to study. I decided to share a dorm with several other students. The new environment forced me to live independently....After I arrived in the U.S., the capabilities of living independently are so important, since the whole country [U.S.] was new to me and I had no friend at all in the beginning.....

Interviews with international students, especially those from China to the U.S., indicate that being independent in both study and daily life in CPPs approves to be helpful preparation for Chinese international students to transit to their college life in the U.S.

### Self-motivation

Self-motivation is defined as the initiative to undertake or continue a task or activity without another's prodding or supervision. As noted by most participants, learning experiences in CPPs enhanced their self-motivation through both academic assignments and extra-curricular projects. In light of academic assignments, American teachers usually give students reading assignments before class and base the lecture content on and even beyond those materials. CPP students are hence motivated to complete reading these materials since they learned from their practice in CPPs that preparation before attending class was helpful to their understanding in class. As noted by Henry:

American teachers usually delivered lectures by combining all the relevant materials together rather than following the sequence of chapters in the textbook. This required us to do preparation according to the [course] syllabus....My other Chinese friends, however, were reluctant to complete the reading materials before attending the class. But I knew I had to preview those materials since the reading in advance would facilitate my learning process...

Both short-term and long-term goal-setting are effective methods for enhancement of self-motivation, since goals can stimulate students to get more self-motivated. Most participants pointed out that it is important to set their own goals while learning in the U.S., since it is easy to get lost without clear direction. They learned to set goals when learning in CPPs and this approach has proved beneficial for their later study in the U.S. As Jack indicated, “my long-term goal aims at the next 10 years, while the short-term one is about this semester.... I found achieving goals make my life highly motivated....”

In addition, students with previous CPP experiences are usually more active in extra-curricular activities on American campuses. In CPPs, students have opportunities to participate in projects and hence accumulate experiences. Participation in those projects shows enthusiastic involvement and high self-motivation in college life. As David pointed out:

I actively take part in activities organized by our [Engineering] Program, such as the Student Leadership Competition, to raise money for charity.... I signed up for this activity and I participated in this competition...I organized a group of students to prepare for this competition....although it was not related to my school work, I was still interested in this....

### Self-confidence

Self-confidence is an attitude which allows individuals to have positive yet realistic views of themselves and their situations. Self-confident people trust their own abilities, have a general sense of control in their lives, and believe that, within reason, they will be able to do what they wish, plan, and expect. According to Franklin University’s report *How to Build the Self-Confidence Needed to Earn Your Degree* (2012), self-confidence usually helps people rebound from disappointment and overcoming obstacles. Furthermore, self-

confidence is a necessary prerequisite of academic success. Especially for international students, self-confidence is necessary for their success in both academic and social life. Students with CPP experiences build their self-confidence in CPPs prior to starting college life in the U.S., so they usually view themselves very positively after arriving in the U.S. According to Henry:

In my college life in the U.S., my advantage is that I have confidence to fit in American culture and life.....One big fun part of IB program is to celebrate American festivals with foreign teachers. At the beginning, I was very shy to participate in those kinds of parties. But our foreign teachers were very nice and they tried to encourage us to involve.... After three years in IB program, I have great confidence to engage in different cultures.... For example, In Halloween, I know I should dress myself with custom before I go to party....this is the tradition and culture on Halloween....

Early introduction to western culture is beneficial for building confidence. Take Eric as an example. Although it is his first time going to the U.S., he is confident enough to accept and appreciate western culture. As indicated by Eric:

I think the reason is that I was told about western culture in [GAC] class and I am not surprised about how in many ways American people behave differently from us [Asian people]....

Besides social life, self-confidence is also essential in international students' academic life in the U.S. Almost all participants noted that they have great confidence in study during the first year in college since they have taken most of the introductory courses and are familiar



with most of the academic terms in CPPs. As Jack explained: “I know where to start for my college study....” Additionally, Ann shared her thinking:

In [American] class, I am confident enough to express my own ideas, communicate with instructors and also discuss with peers.... Most of my confidence comes from my AP program experiences.

English language proficiency is essential in building confidence in communication. It is obvious to note the necessity of English proficiency for learning in American colleges. As the transition that all non-English-speaking international students have to go through in their college life in the U.S. both academically and socially, its importance is stressed in all CPPs. All the participants pointed out that all the CPP materials are written in English, including textbooks, test papers, and other materials. The improvement of English proficiency is an important factor in building their self-confidence. Tim said:

It is important for me to learn and the practice the knowledge of other subjects in English... After I am enrolled [in the U.S.], I am able to read English textbooks faster and understand the quiz better than other international students [without AP experiences]....I felt very confident compared with other Chinese students in [my] class...

Similarly, as Eric stated, speaking skills are also emphasized in the IB program. His speaking skills were greatly improved by doing speeches in class and they proved very important to his later study in the American class. Doing speeches in front of the whole class, on the one hand, requires self-confidence and on the other hand, increases students' self-confidence. John also noted that:

Thanks to my experience in the GAC program..... In the American class, most of our assignments are reported in class in the form of speech. Compared with the other Chinese international students without CPP experiences, my speech skills are much better....I like doing speeches in front of the whole class.... It makes me feel so good....

### Collaboration

Collaboration refers to one's working with other members as a team so as to achieve a common goal. In the American class, collaborating is highly valued since students are often grouped to achieve a particular goal through teamwork. Students have to learn from each other, communicate with each other and learn to respect others in this process. In order to prepare Chinese international students for transition to American colleges, CPPs provide opportunities for them to practice collaboration and teamwork in class. Students learn the way to organize a team, to communicate with other members, to resolve disputes, to manage time, as well as to value opinions of others. After learning in CPPs, Chinese international students view themselves as more collaborative in the U.S. According to Henry:

Compared with other Chinese international students [in American class], I know better how to work with other classmates for class projects. I have learned that at IB program. We had a lot of opportunities to work together with others such as in projects in business class, so I learned how to respect others' ideas and hard work.

Most participants indicated that time management is essential in collaboration, which involves making a schedule by breaking down the ultimate goal into a list of tasks and then tracking the progress toward the ultimate goal. As noted by David:

I am more capable of collaborating with others, and I have the awareness of teamwork, which is highly valued in college study in the U.S..... When I was studying at GAC program, we were always assigned to work together in both academic and extracurricular projects.... For example, I was the leader in the project of planting trees. I learned how to manage time to complete the project on time...In order to achieve our goal, I broke the task into small pieces with their deadlines, and the whole group was required to make progress at each time point...

Furthermore, when completing an assignment, collaboration is an important way to improve group efficiency by making full use of every member's advantages to achieve goals. As Tim recalled:

Similar to the teamwork in American class, when I was taking AP courses, we were often asked to complete one project by working in groups. For instance, we were assigned to do a research on the issue of global warming. We had five people in our group and each of us took care of different parts of this project....I was good at [academic writing], so my responsibility was to write the "findings and results" part of our report. At the same time, Xiaoyu, she was good at information searching, and she was in charge of searching for relevant information online....

### Overconfidence

With the previous experiences in CPPs, students tend to get overconfident and mistakenly overrate their capabilities in their college learning. Since they have taken college-level introductory courses in CPPs prior to entry into colleges, most CPP students have a good start in college learning by placing high in the placement tests and getting good grades

in the first one or two semesters. This is likely to lead students to have a misperception of the academic pressure they may face in American colleges. As Mike said:

After I came to the U.S., I found out that I had already learned most of the courses and I thought it [learning] was very easy.... So I spent a lot of time playing computer games. But in the third semester in college, I found it hard to follow the class.... I had to catch up by learning harder than others....

In conclusion, CPPs help improve students' abilities in terms of independence, self-confidence, self-motivation and collaboration, which are required in the transition to American colleges. However, some students have misperceptions of themselves in their college learning and overconfidence.

### **Support (Theme 3)**

Support in Schlossberg's et al (1995) transition theory is identified as what help/resources people are able to get to smooth their transition to a new situation/environment. Goodman et al. (2006) suggested that social support can be measured by identifying individual's stable supports. CPP students are supposed to get sufficient support from their programs to assist them to transit to American life smoothly. Under the theme of "support", three subthemes are identified in open coding: CPP alumni, credit-transfer policy, and placement test.

#### **CPP Alumni**

Alumni are important social connections in the college environment. From the psychological perspective, international students studying and living in foreign countries feel more comfortable to ask people from their home country and who speak the same language for help. Chinese international students with CPP experiences, have the advantage of owning

a social network with other CPP alumni who graduated earlier (referred as upper classmates) and are now studying in the U.S.. The earlier graduates usually are more experienced and can be helpful. Therefore, the CPP alumni are an important resource to provide assistance.

According to Mike:

My friend, Jason, graduated one year [from IB program] before me, and now he is studying in New York for his Baccalaureate. Due to his one year earlier [studying in the U.S.], I often ask him questions about life in the U.S. For example, what are necessary to pack for my first time trip to the U.S.? How much US dollar should I bring with me just in case? How could I rent a house? ... Jason is very helpful and supportive....

CPP alumni can also share experiences and providing advice on approaches to transfer credits to American universities. As Jack shared in his interview:

I learned the approach to transfer my [IB] credits from a friend who graduated one year earlier than me from the same program....I had no idea about the transfer procedure and he gave me specific instructions. I really can not imagine how I could manage to transfer IB credits to MRU without him. ...

Furthermore, CPP alumni can also provide assistance in class registration. As John said:

In my first semester [in the U.S.], I had no idea what courses I should register. I consulted a friend who was in the same [GAC] program with me and graduated a year before me. He was very helpful and gave me advice in Chinese since my English was poor when I first came here.....he also gave me suggestions about how to get high scores in tests, such as effective ways of taking notes and communication skills.

Participation in CPPs is an effective channel to build social networks with CPP alumni. With similar experiences of studying in CPPs and the same goal of achieving baccalaureate degrees in American universities, the connection between these alumni and sharing experiences among them are essential for their study and life in the U.S., especially when they meet difficulties. As Mike claimed, he highly valued the community built while learning in IB program and the alumni are useful recourses for his future development in the society.

### Credit-Transfer Policy

Neither CPPs nor American universities provide sufficient information about credit-transfer policy to CPP students. “Transfer” is a term seldom heard in Chinese education and almost all Chinese students and their parents are unfamiliar with it. Most CPP students earn advanced college credits that are transferable to American institutions; however, some of them have never successfully transferred the advanced college credits due to the lack of information on the transfer policy and procedures. It is necessary to disseminate among CPP students the policies related to credit transfer. However, according to the participants, there is nowhere for them to get this kind of support, and the only way to do so is to figure out the transfer policy and procedures by themselves. As Tim noted:

I learned that [AP] credits can be transferred to college; however, when I first came to the U.S., I had no idea about the procedure and I did not know what I should do. I spent some time to figure this out, but then I was told by the Registrar’s Office that I had already missed the deadline for transferring credits....

According to most participants with IB experiences, their teachers informed them that if their scores of IB courses are high enough to meet American institution's requirements, the credits can be transferred after they have been enrolled. As Jack said:

When I submitted my application files, the admission consular [in IB program] gave me some suggestions. She told me to put my IB transcript in the application files and to describe the courses I had taken. I think those suggestions were very helpful for me to successfully transfer credits.

The transfer policies are different among various programs and institutions. Stated by Henry:

I turned to the academic advisor in our program [in the American university] when I wanted to transfer IB credit after I landed in the U.S..... The numbers of transferrable credits vary in different American institutions and different programs. Although my friends and I studied in the same IB program, the number of credits I transferred to Industrial Engineering was different from that of my friend who was enrolled in the program of Statistics in another institution.

In American universities, academic advisors are responsible for providing advice and guidance to students transferring their advanced credits. As indicated by David:

In terms of the transfer credits, I had no idea what courses could be transferred. So I gave my academic advisor [of Mechanical Engineering program] a transcript with all college courses I have taken and all advanced credits I have earned in GAC.... Then she [academic advisor] helped me transfer 24 credits to my current program.

Apart from the academic advisors in programs, students can also receive guidance and instructions in transferring credits with online information. As John confirmed:

I learned that there was a list online of all the transferrable courses in my program on MRU website. I got that information before I came to the U.S.... I learned that I had to submit an extra transcript with only GAC courses and [GAC] credits I had earned to Registrar's Office at MRU after I got the official admission. If my scores of the transferrable courses meet the requirements set by MRU, the credits can be transferred.... Finally, I transferred 33 credits to my program....

In response to the circumstance where students lack the knowledge about credit transfer policy, both CPPs and American universities should take responsibilities in the different phases of students' transition. On the one hand, CPPs should be responsible for providing students with information and guidance in transferring credits during their application process; on the other hand, American universities should assume the role of advising international students on the issue of credit transfer. Both the Registrar's Office on the university level and the academic advisors on the program level should work together to provide guidance and advise to international students.

### Placement Test

Placement tests are instruments to determine a student's level of ability in one or more subjects in order to place the student with others of the same approximate ability. For Chinese international students, passing the placement test and starting from a higher level of courses requires their prior preparation and practices. To achieve this goal, CPPs take the responsibilities of providing support and training to help students score as high as possible.

As noted by Tim:

The content of placement test for Math in the U.S colleges is similar to that for AP Math. I passed the placement test since I had learned that before...And I was placed



in a higher level of Math... It [AP Math] was very helpful.... I heard that some of my Chinese friends did not pass the tests since they were not very familiar with the English terms in Math.... I think the AP course was very beneficial to the introductory courses in the U.S.

Not only are CPPs beneficial for the Math placement test, it is also helpful in improving students' English proficiency so as to score high on the English placement tests. As stated by John:

When I saw the questions in English placement test, I felt so confident. The questions were almost the same with the ones in [GAC] tests.... Especially English writing and reading tests, I had done a lot of practices in GAC English courses. I passed all the English placement tests: reading, listening and writing. So I could start from English 201 rather than 101....It has saved my time and energy...

Mike shared a similar experience:

The Math and English courses I took in GAC program were beneficial for my placement tests [in American university]. The contents in the tests were very similar to those I had learned in GAC program.... Thank goodness! I passed both Math and English placement tests.

In conclusion, in terms of “support”, CPP alumni are definitely beneficial to students in sharing their experiences and for providing a mentor of sorts who can provide assistance. This may be especially important because the credit-transfer policy is typically not sufficiently explained by either the CPP or the American university.

### **Strategies (Theme 4)**

Strategy in Schlossberg's (1995) et al transition theory is defined to include three major categories of coping responses: "those that modify the situation, those that control the meaning of the problem, and those that aid in managing the stress in the aftermath" (Evans, Forney, Renn & Patton, 2009, P 217). In this study, the strategies for CPP students to transit to American universities, extracted from the data as Theme 4, include three subthemes: learning skills, academic knowledge acquisition and transferrable credits.

#### Learning Skills

Learning skills are not only crucial in facilitating students' learning process but also vital to their success both on and out of campus. In this study, two learning skills are beneficial for former CPP students' transition to American universities, i.e. critical thinking skill and communicating skill.

***Critical Thinking.*** Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action (Glaser, 1941). To be specific, there are three subcategories of skills under critical thinking: (1) analyzing and classifying; (2) arguing and explaining; (3) problem solving and tracking cause & effect.

First of all, skills to analyze and to classify are a core part of critical thinking skills. To analyze a problem means breaking information down into smaller parts, examining each part, and learning how the parts integrate together; classifying means identifying the categories or groups of information and identifying how each type or group is distinct from the others. In interviews, all nine participants noted that analyzing and classifying skills are

necessary for the course work in American colleges. Professors usually ask students to capture the important information they have learned while reading by drawing a concept map in class to represent their understanding of a topic. Some teachers even require students to conclude the gist of a lecture in one or two sentences. To complete these tasks, students need the leaning skill of analyzing and classifying. They need to break the reading or lecture contents down into parts and regroup the parts into major categories by investigating the connections among them. American college learning requires students to find connections among all key and relevant concepts and integrate them in the leaning process, for it is a necessary step to build up the knowledge system. Interviews with former CPP students revealed that skills of analyzing and classifying are trained in CPPs, hence providing them with a sufficient preparation to study in American colleges. As noted by Tim:

AP teachers usually asked us to write down the key words or main ideas when reading, and then find the connections among these ideas.... I did not understand why [AP] wanted us to do this in class.... After coming to the U.S., I realized that those practices were helpful for me to learn college courses.... My understanding of the course contents is always deeper and more comprehensive than other classmates in Class...

Similarly, CPP students were taught to adopt the concept maps as a useful way of integrating knowledge, Ann said:

I remember that in my AP Biology class, the teacher assigned us to write down the key concepts we learned in that lecture, and then draw a concept map to illustrate the results.... It was the first time for me to draw such a map, but now looking back, it was very helpful for my later learning in college.

Secondly, skills to argue and to explain are an essential part in critical thinking. These skills are important strategies to achieve critical thinking in learning. Arguing is to use a series of statements logically connected and evidence backed, to reach a conclusion. Explaining is to tell what something is or how it works so that others can understand it. Encouraging students to express their own opinions on controversial issues is a common way adopted in American class to improve critical thinking skills. According to the former CPP students, this way is similar to the pedagogy used by CPP teachers. Most participants noted that in CPP speech classes, foreign teachers usually assigned them a controversial social topic and they were encouraged to express and justify their own opinions. They were required to base their arguments on either scholars' research works or their personal experiences. In this way, CPP students learned the skills of arguing and explaining and were thus used to this teaching approach prior to learning in the U.S.. According to Mike:

In our speeches class in CPP, foreign teachers often assigned us controversial topics without no specific answers.... For example, the gay issue, we were asked whether we are supportive or opposed. We had to share our own opinions with supportive justifications.

Most participants noted that foreign teachers in CPPs promoted critical thinking by allowing them to express their own opinions on social issues that required justifications. In this sense, the skills of arguing and explaining are prepared for CPP students in advance.

Thirdly, skills to solve problems and to track cause & effect are also important factors in critical thinking. Problem solving skills are also required in college learning since most of the assessments are about applying knowledge learned in class to solve practical questions. Problem solving involves analyzing the causes and effects of a problem and finding a way to

stop the causes or effects. Similarly, tracking cause and effect is to determine why something is happening and what results. As John pointed out:

I remember that in my Chemistry course [in GAC program], the test questions were about using the theory we learned in class to explain a common phenomenon in daily life....so interesting and I liked it....I could get a high score if I know how to apply the knowledge.... They are almost the same as the tests in American universities....

In order to solve practical problems, the skill of tracking cause and effect is widely adopted in Physics learning. Mike said:

The whole universe is inter-related and every phenomenon has the cause.... Learning the cause and the effect is helpful to fully understand it [Physics] ....

Similar responses from Jack were that most of the exams in Economics in his college require application of the knowledge to analyze cases. Jack is very good at this since the Economics subject in IB program was tested in the same way.

***Communicating.*** Communicating is the process of transferring a thought from one mind to others and, in return, receiving thoughts back. Communicating allows minds to think together.

Effective reading aims at understanding what authors are trying to communicate in their writings. Usually, in American universities, students are assigned a heavy load of reading. In this situation, effective reading along with note-taking, mentioned by most former CPP students, is important in capturing the main ideas. With similar trainings in CPPs, most students are capable of reading effectively in their college study. As Mary mentioned:

When I was just starting to study in AP, I had to read a lot of huge books. I did not know how to finish all of them on time.... After spending some time exploring the

approaches, I knew how to read fast and also understand it.... When I started my college, I was already used to having a lot of reading assignments.... The practice in AP program was helpful...

In addition to reading, doing presentations and speeches are also important ways of communication in academic course tasks. The skills of giving presentations and speeches are practiced in CPPs and all of the CPP students I interviewed commented that eye contact and effective PowerPoint slides are important. In American colleges, almost all the courses require students to do presentations, reports, or speeches. As Mike shared:

I had a Chinese friend in my class in the U.S. He was so frightened to have eye contact with others when doing presentations in class...he stared at the monitor and read his PowerPoint word by word.... It made me think of my learning experiences in IB program where I learned how to do presentations.... Now I am so good at it in college....

Academic writing skill is also a component of communication skills. Basic research training in CPPs is necessary and helpful to students after they enroll in American institutions. According to interviews, students are taught to select a doable research topic, and to find research resources and relevant materials online, and then to write up the paper with references. Writing in academic English, finding research resources (e.g. academic journals), and the proper use of citations are all essential for Chinese high school students to prepare for their academic life in U.S. colleges. As David said:

[GAC] class taught me the format of English academic papers, which is useful for me to complete writing assignments in American class.... Learning it [writing] [in GAC class] was a good start and a good preparation for me....”

In the perspective of academic writing, John also indicated:

It was my first time to learn how to use citation properly when writing an academic paper. Doing citation correctly is very important in American colleges; however, it is not taught in traditional Chinese class.... I learned to search on Google Scholar so as to find academic journals and published books.... I need to cite names of the publications and authors in my paper.... I can't use original sentences of other authors without quotes....”

In addition to language proficiency, the way of thinking is also the key to smooth communication. Although CPP students have opportunities to communicate with their foreign teachers and classmates in English in and out of CPP class, to achieve efficient communication with native speakers in an American class is still a big challenge for Chinese international students. Rather than the English language itself, the American way of thinking is a challenge in international students' communication with both American teachers and their peers in the American class. As a result, although students did have their communication skills improved by participating in CPPs, they still meet problems when communicating with native speakers in an American class. As David said:

I felt very confident when entering into a real American class because I practiced my English a lot in IB [for] three years.... However, [in the U.S.,] it is still hard for me to totally understand their spoken English and engage in their conversation. I feel very shy and embarrassed to get involved in their conversation.

Despite a long practices time using English in CPPs in China, it is still a challenge for Chinese international students to fully understanding Americans' conversation and follow up

their way of thinking, specifically with American college students in group work. Mike shared his experience of communicating with native Americans:

After three years' training in [IB] program, I have gained great confidence in my English skills, especially the spoken English. I have improved a lot in communication with foreign teachers compared with my first year in IB program.... However, I can still remember how embarrassed I was in my first class in the U.S. I could only understand 60 percent of what teachers said and maybe only 40 percent from my [American] peers in the discussion part in class. I felt very very frustrated.... [In IB program], we were assigned to work with other students in class for group projects, and we communicated with each other very well in Chinese because the whole class was [composed of] Chinese students in China. [But] the group work in the American class is another story... Sometimes, I could not follow them [American classmates]... Language is only one part; and the other bigger part is the way of thinking.

#### Academic Knowledge Acquisition

Two factors are included in the subtheme of knowledge acquisition: basic academic vocabulary and course content. Most academic disciplines and subjects have a set of terminology of their own. Knowing the meaning of course-specific words helps students fully comprehend the learning materials. In addition, the advance learning of academic terms in college subjects helps students understand the questions in the tests. After enrolling in American universities, students began to understand that acquisition of the basic academic vocabulary in CPPs is a preparation for transiting to American academic life. Compared with other students without CPP experiences, the participants are more prepared to start college learning without wasting time on memorizing academic terms. Henry said:



I learned the basic academic terms in Chemistry and Mathematics in English in [IB] program, so I did not have to start from scratch in college, I could understand the professor's lecture very well with a quick comprehension of the terms.... Also I am good at asking professors questions with correct [academic] terms....

In terms of the advantages of knowing basic academic vocabulary in exams, David pointed out:

I always had outstanding performances Physics exams in the first semester [in college] because I was very familiar with the terms used in Physics.... I felt so good at that time.... Other Chinese students had to spend time to memorize those terms after they began to learn in American class, but I did not have to.... I learned [almost] all of these terms in GAC program....

Apart from the basic academic vocabulary, course content learning in CPPs is also considered as a preparation strategy for students' learning in American colleges. Since the Chinese high school students in CPPs plan to study in American universities for their baccalaureate degrees, academic adjustment to college introductory course content is an anticipated transition. The college introductory courses in CPPs enable students to capture the important information of those subjects in advance for later college study. All the interviews with former CPP students revealed that learning in CPPs gave participants an opportunity to gain comprehensive knowledge so as to adapt to introductory courses in college. According to Tim:

The knowledge I have learned in the AP courses of Calculus and Economics is very similar to that I learned in the first year in college [in the U.S.]. Those courses are never taught in traditional Chinese high schools, but the basic knowledge about

Calculus and Economics are required in American colleges. For my Chinese peers who have never taken [AP] courses, it is hard to catch up in the American class.

Fortunately, AP courses are helpful for my first year study in the U.S....

Similar comments by Jack:

...I learned a lot of basic knowledge in the subject of Math, so I was able to start my college learning very well. When the professor mentioned some terms and knowledge, I was already familiar with them.....

Academic knowledge acquisition, including academic vocabulary and introductory course content, is an effective strategy for students' preparation for learning in American colleges. Key terms and the introductory course content taught in CPPs facilitate a smooth transition to the academic life in American colleges.

### Transferable Credits

Students consider transferable credits earned from CPPs as a strategy to save study expenses and to save time so as to secure early graduation, and to expand personal interest. However, at the same time, students complain about the limited number of American institutions who accept advanced CPP credits.

First of all, transferring advanced college credits earned in CPPs can help students graduate sooner. In some colleges who accept CPP credits, CPP students are eligible to graduate in less than four years due to the advanced college credits earned in CPPs. For example, thanks to the IB program, both Henry and Jack graduated from their undergraduate programs in three year and a half by transferring 16 and 15 credits respectively to MRU. In a similar way, although it is his third year at MRU, David is classified as a senior student 24 advanced college credits earned from GAC transferred to MRU. According to the interview

with him, he should be able to graduate and earn a baccalaureate in another half year.

Similarly, John brought in 33 GAC credits earned in high school when he enrolled in MRU and he is now classified as a sophomore student although this is his first year in college.

Secondly, students who bring in transferrable college credits earned from CPPs save their expenses on college education. Undergraduate students pay for their college based on the number of credits taken. Advanced transferable credits can help save some college tuition. As Henry and Jack indicated, they both saved about \$10,000 of tuition due to IB advanced college credits transferred to MRU.

Thirdly, by bringing in advanced college credits earned in CPPs, students can spend more time on developing their personal interests rather than on courses. As David noted, compared with his friends also from China, because of the advanced 24 college credits earned from GAC, he has more time to enjoy his social life and to develop personal interests such as hiking and fishing, which make his college life more colorful.

However, interviews with Chinese international students with advanced college credits from CPPs show that students have complaints about the limited recognition of transferrable credits by American institutions and their academic programs. For instance, GAC credits are highly recognized in the business and engineering programs at MRU. But they are not recognized in other programs such as Design. The number of American universities who accept IB credits is limited as well. In addition, the interview participants stated that they wanted to be informed of information concerning credit transfer policies and procedures during college application.

### Summary

This chapter provides an in-depth and detailed description of how Chinese international students who take CPPs during high school perform in their transition to postsecondary education in the U.S. Based on Schlossberg's (1995) et al transition theory, four themes are indentified in this study: (1) Situation; (2) Self; (3) Support; and (4) Strategies. Collectively, these themes provide a deeper understanding of the concurrent stress and role change in a new situation; how former CPP students view themselves in transition to American colleges; what support former CPP students gain during their transition in the U.S.; and what strategies learned from previous CPP experiences former CPP students adopt in transitions. In a word, the themes present a thorough and comprehensive understanding of the effects of CPP experiences in Chinese international students' transition to American college life, in other words, the long-term outcomes of CPPs.

## CHAPTER 6. SUMMARY, DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

This chapter discusses findings and implications of the study on both the Chinese side and the American side. It starts with a summary and a review of the study and includes six parts in all. The discussions part combines Chinese high school students' learning experiences in CPPs before they study abroad and Chinese international students' transition experiences in American universities after they are successfully enrolled as a continuous process, so as to reveal the outcomes and efficacies of CPPs. The following conclusions part summarizes the findings of the study. The implications part provides implications for policies in both China and the U.S., and for practices of five groups of people: (1) Chinese students for potential overseas study and their parents, (2) academic advisors, (3) student affair practitioners, (4) new student recruiters in U.S. universities, and (5) CPP program directors. In the end, the last section provides the recommendations for future research.

### Summary of the Study

The purpose of this study is to better understand the role and effects of CPPs in Chinese students' learning experiences from Chinese high school to American university from two perspectives: the sending side in China and the receiving side in the U.S. On the one hand, China, as the largest exporter of international students and the largest market for CPPs that sends the most international students to American universities, is selected as the research site to identify CPP students' learning experiences and the categories of college readiness they are made for American universities. On the other hand, on the receiving side, the U.S., this study develops an explanation on how and in what aspects college preparation

programs impact international students' transition both academically and socially to colleges in this top receiving country (the U.S.) after they are successfully enrolled.

Three questions that guide this study are:

RQ1: What types of learning experiences are presented to CPP students?

RQ2: How are CPP students made college ready for American institutions?

RQ3: How do Chinese international students who take CPPs during high school perform in their transition to postsecondary education in the US?

Although college preparation has been a widely-researched topic (Alexander, Riordan, Fennessey & Pallas, 1982; Hosseler, Braxton, & Coopersmith, 1989; Manski & Wise, 1983; Perna, 2002), few if any studies have analyzed the effects and impacts of special international college preparation programs for international students' learning experiences, especially the transition experiences. All the three research questions this study raises are answered from the lens of students' learning experiences. The first two questions are about students' learning experiences in CPPs on the sending side in China, while the last one is related to international students' later transition experiences after they are enrolled successfully in American universities on the receiving side in the US. Since the impacts of CPPs on students' learning experience are continuous, analysis of international CPP students' transition experiences in the U.S. can be used to reveal the efficacies of CPPs.

As more CPPs are arising in the Chinese market, the potential impacts of these programs on international students' transition to American universities should be explored by the academia. Findings from this study will inform higher education practitioners and policy makers who are responsible for dealing with issues related to the internationalization in higher education.

### Review of the study

Chapter One identified the purpose and the problem that drives this research and raises the research questions. It pointed out that in practice CPPs play an essential role in Chinese students' transition experiences from Chinese high schools to American universities. It also stated the importance and significance of analyzing the effects and outcomes of CPPs by the lens of students' learning experiences. This chapter ended with a preview of the methodology, the frameworks utilized in this study, delimitations and limitations as well as the outline of this study.

Chapter Two reviewed previous academic research and scholarly study regarding status of internationalization in American higher education and the Chinese international students in American post-secondary institutions, including reasons of the growing trend of Chinese students studying for Baccalaureate in American universities, as well as their academic and social adjustments. This chapter further provided an overview of college preparation/transition programs for American high school students to college with a brief description of the program goals and missions, target students, and benefits of school-to-college preparation programs. Additionally, this chapter reviewed the new avenues pursued by Chinese Students to study in American universities, especially using education agents for application and attending international college preparation programs in China. This chapter ended with the theoretical framework of this study, i.e. the college readiness dimension theory (Conley, 2010) and transition theory (Schlossberg & Associates, 1995).

Chapter Three illustrated the research methodology, particularly the specific methods, that are facilitated in completing this study. More specifically, based on the social constructionist epistemology and the interpretive theoretical perspective, this study adopted

the grounded theory as its methodology. Research methods on both the sending side in China and the receiving side in the US were introduced respectively. Each part described elements of method including the research settings, participants, data collections and data analysis. The last part in this chapter is trustworthiness and validity, which contains triangulation, member checking, presentation of negative findings, peer debriefing, researcher positionality and ethical considerations.

Chapter Four provided a comprehensive qualitative analysis of the data collected from Chinese high school students in CPPs about their CPP experiences and college readiness they are made there for American colleges prior to studying abroad. This chapter reported students' experiences by themes and supporting quotations, and describes findings of focus group interviews.

Chapter Five offered an in-depth qualitative analysis of the data collected from Chinese international students with previous CPP experiences about their transition experiences to American colleges. These students with previous CPP experience have been successfully enrolled in American colleges and hence are eligible and able to evaluate their previous college preparation in the CPPs based on their own transition experiences. Based on the analysis, this chapter provided recommendations for potential Chinese international students.

Chapter Six drew a conclusion and provided a comprehensive discussion of the study. Furthermore, implications for policy and practices, and recommendations for future research are also offered in this chapter.



## Discussions

This study reveals CPPs' full impacts by testing the efficacy of college preparation CPPs offer to potential Chinese international students back in China on their future transition experiences to American college life. Chapter Four identifies the types of college readiness Chinese high school students are prepared by CPPs and thus illustrates the short-term effects of CPPs. Meanwhile, Chapter Five illustrates former CPP students' subsequent transition experiences to American universities as CPPs' long-term outcomes. Put together, these two chapters offered answers to all the three research questions and offer a comprehensive illustration of the full impacts of CPPs.

Generally speaking, the CPPs provide students with useful skills, especially academic skills, needed in college with an early start. However, even so, students still face transition challenges after they land in the U.S., proving that the transition experiences is a continuum, with CPPs capable of being partially helpful but yet not able to get students fully prepared before going abroad. Major findings of the study fall in from four aspects: English proficiency, academic preparation, cultural adaptation and transferrable credits. The first three aspects are consistent with the barriers listed in the literature review section in Chapter Two, i.e. language barriers, academic stressors and social network stressors, while the last aspect is a new finding never made before this study.

### **English Proficiency**

Language barriers are placed as number one among all issues concerning international students' adjustment to overseas institutions. Findings of this study are consistent with those in previous research, that is, improvement of English proficiency is the prime goal for Chinese students to achieve prior to studying abroad.

Participants reported that communication with foreign teachers in CPPs is a critical practice for college preparation. They acknowledged that smooth communication practiced in CPPs could enhance their confidence. However, even so, it is still difficult for Chinese international students to engage in the communication with peers in real American class due to their being unfamiliar with the American way of thinking.

This study recognizes that professional academic writing trained in CPP is beneficial for international students to conduct research in college life. The teaching of academic writing in CPPs, such as the structure of academic papers and necessity of references, guides students to the right direction in the future.

Presentations and speeches, adopted as practices of English speaking in public, were proved as a useful way in increasing students' confidence. CPPs teach the appropriate approaches of presenting and speaking, and so enable potential international students to do the same in real American class.

### **Academic Preparation**

This study proves that CPPs are beneficial for international students' academic preparation in terms of offering college-level knowledge in advance, creating an "Americanized" classroom, adopting student-centered pedagogy in class, and training necessary thinking skills rarely mentioned in traditional Chinese high schools. All these preparation make international students feel confident. Like two sides of a coin, academic preparation, however at the same time, may also lead to such negative effects on international students as overconfidence, making them less devoted in their college learning.

Findings of this study reinforces the point illustrated in the literature review in Chapter Two that academic preparation is essential for international students to overcome

academic stress, which according to existing studies is a major stressor in their process of adjusting to a new educational environment (Misra, Crist, & Burant, 2003). In particular, this study notes that a major benefit of CPPs is to prepare potential Chinese international students academically before they study abroad so the academic stress they encounter later may be lessened.

One important part of the academic preparation in CPPs is the early acquisition of college-level academic knowledge, including the learning of college introductory courses and the academic terms in English. Interviews with Chinese international students with former CPP experiences indicate that college-level knowledge learned in college introductory courses in CPPs has proved as a “warm up” for their continuing learning in American colleges, while the familiarity of key academic terms, considered as “tools”, are beneficial for them to be familiar with academic language. The advance learning of college-level course serves as a helping start for future college study. Being familiar with and understanding the college-level courses, potential international students may apply for college majors based on their own interest.

The “Americanized” class in CPPs is designed to be relaxing, engaging and interactive. Especially, teachers in CPPs adopt student-centered pedagogies that are similar to those in American college classes, making students highly involved in class. Nevertheless, academic pressure in real American class still shocks Chinese international students with CPP experiences, for it is much higher than expected and that experienced in CPPs.

In addition to the acquisition of college-level knowledge, the benefits of CPPs for international students’ transition to American university life include the training of thinking critically, thinking analytically and thinking outside the box. Different from the focus of

traditional Chinese class on learning facts, CPPs encourage students to identify the cause and effect, think of the relationships between different fields of knowledge, apply the knowledge to practice, and come up with their own conclusions based on independent research. All these practices above in CPP class prepare students very well for learning in American class, which does require students to think critically, analytically as well as outside the box.

Last but not least, academic preparation in CPP promotes a more likely pass in placement tests since what is tested is similar to what is already learned in CPPs.

### **Cultural Adaptation**

Cultural adaption is highly necessary for establishing social networks in the U.S., but it is not sufficiently emphasized in CPPs. According to existing research (Al-Sharideh, & Goe, 1998, 2009), international students' adjustment issues are associated with their establishment of social networks and relationships. Building social networks, as an essential part in international students' transition, cannot be successful without communication. While language, as the tool of communication, is intensively trained in CPPs, promotion of cultural adaptation is not a major effort in CPPs.

Cultural adaptation plays a critical role in the in-class communication in American universities. In CPPs, the students' English capabilities are rapidly strengthened and their college-level academic knowledge is well prepared. However, student still meet problems when trying to engage in American class. Some participants mentioned that they even had no idea what to laugh about while other classmates did so when it seemed that the professor shared a joke in class, which made them feel awkward and uncomfortable. As Swail and Perna (2002) claimed, most college preparation programs for American students include a strong emphasis on building academic preparation, but very little or no emphasis on

integrating students' cultural identifications, cultural needs, or cultural assets into the program, although many scholars in this area have issued class for the inclusion of culture and cultural components in preschool programs (Tierney & Hagedorn, 2002). CPPs face a similar situation in that the cultural preparation is insufficiently developed in CPP classes. As proved in this study, although students are taught by foreign teachers in CPPs, Chinese international students sometimes still face difficulties in cultural adaption, making them stay away from American peers and remain silent in conversation or group discussion.

What is more, cultural adaptation is crucial in communication out of class as well, which is an essential channel for Chinese international students to be involved in American life, establish social networks or relationships, and overcome social network stressors in transition experiences. Culture is so comprehensive that it is reflected in various aspects in daily life, such as chatting about topics, engagement in teamwork with other Americans, and using humor in conversations. In this sense, it is far from enough to only celebrate several American festivals in CPP class such as Christmas and Thanksgiving.

A key problem in learning about American culture in CPPs that it is entirely different from living in that culture. Students did truly become familiar with the western culture when attending CPPs, however mainly and merely in class. Obviously, class leaning is only a very small part of college life in the U.S... In this sense, CPPs should create more and diverse environments for students and expose them to American culture.

### **Transferable Credits**

While students usually only consider transferable credits earned in CPP as a “favorable ticket” or a competitive “plus” to their successful admission to American universities, most of them do benefit from those transferable credits after successfully getting

enrolled in American universities in shortening the length of the baccalaureate program, saving tuition and spending more college time in developing their own interests. From this perspective, CPPs, by providing college credits in advance, have a positive impact on international students' college readiness.

Specifically, interviews with CPP students in China show that almost all of them see college course credits on the transcript as a competitive tool to make them stand out in the application process, and they see it as the only function of these credits. Overlooking future benefits of these credits, they usually fail to pay attention to specific policies on transferring these credits to their American institutions.

### Conclusions

The purpose of this study is to analyze and assess, so as to better understand the outcomes and efficacies of the rapidly growing phenomenon of international CPPs being operated in China from Chinese high schools to American universities. It explores Chinese students' experience of learning in specific CPPs to reveal their short-term outcomes, and investigates former CPP students' subsequent transition experiences to American universities to understand their long-term outcomes. Since the impacts of CPPs on Chinese students' learning and transition experiences are a continuous process, the former CPP students' transition experiences in the U.S., while truly reflecting the effects of previous college preparation prior to studying abroad, serve as a convincing manifestation of the outcomes and impacts of CPPs.

Overall speaking, as a demonstration of CPPs' outcomes, Chinese international students studying in American universities with previous CPP experiences are capable of quickly adapting to academic practices (e.g. presentations, team work assignments and

speeches) and expectations in American colleges (e.g. academic writing in English, and speaking skills in English) by being an independent, confident, and collaborative individual. Furthermore, in addition to serving as extra merits in the admission process, in terms of student success, the advanced credits help secure a smoother academic transition, which is outstanding benefit of CPPs. However, despite the merits of CPPs in terms of English proficiency and academic preparation, culture adaptation (e.g. establishing social networks, living in an American way) is not sufficiently prepared in CPPs, which may lead to a hard transition culturally.

### Implications

This study contributes to the existing theories on American students' college readiness and extends the application range of the theories to that of international students. Generally speaking, it is necessary and essential for policy makers and higher education practitioners to serve the international students enrolled with advanced college credits with appropriate policies and regulations. With respect to practice, the results in this study provide essential implications to various groups of people, including American higher education practitioners such as higher education recruiters, academic advisors, as well student affair professionals, Chinese potential international students and their parents and program directors. Implications for policies are also presented below, including credit transfer policies, policies for the National College Entrance Exam in China and the "affirmative action" for international students.

## **Implications for Practices**

### American Higher Education Practitioners

*Higher Education Recruiters.* This study can enable new student recruiters in American institutions to better understand the practice and efficacy of CPPs, and informs them that CPP enrollment and credits can be used as a tool to differentiate applicants. First of all, the standardized tests provided by CPPs, such as IB tests and AP tests, enable admission officers to compare students from various countries on an equal basis. One of the reasons why CPPs are popular internationally is that “[The AP and IB tests] tell us not only about how that student performed in the [college-level] course in high school time but on a national or international scale,” says a representative from Rice University (National Association for College Admission Counseling, 2014).

Secondly, this study shows that the transferred credits of the CPPs have a significantly positive impact on international students’ academic transition to the American campus life. As a result, recruiters should be more confident that transferred credits earned in advance should be taken into consideration in the admission process for international students.

Additionally, with the increasing number of Chinese high school applicants pursuing baccalaureate degrees in American universities, U.S. institutions must be aware of the problem of diversity of student body on campus. The enrollment of all international students who meet the requirements on SAT/ACT and TOEFL scores may not be feasible and practical in the future for some public institutions. The “unlimited” enrollment may lead to an unexpected enlargement of campus size (e.g. the faculty, dormitory and dining halls). In this case, it is necessary for recruiters to rank the applicants by other factors. However,



admission officers may have doubts about Chinese applications, fearing that their application materials and recommendation letters may have been ghostwritten by education agents (Winn, 2012; Pratt, 2014). In this situation, the CPP experiences and advanced college credits on the transcript serve as positive and favorable “tickets” in the admission process in making international applicants stand out.

***Academic Advisors.*** This study recommends that academic advisors should not serve all international students with standard academic readiness orientations and presentations, but realize that those entering with advanced college credits also bring special advantages that could place them at a higher level of academic orientations due to the benefits of advanced credits. Better knowledge of the efficacies of the CPPs also allows advisors to serve and advise international students who bring in transfer credits with different and higher-level criteria than other international students without transfer credits. Due to students’ advanced academic preparation in CPPs, the academic advisors and others should design appropriate academic orientation programs to mentor them, perform more successful course placement and perhaps even create college success seminars that help them bridge their previous CPP experiences with the reality.

However, one concern about CPPs is the quality of advanced college-level courses. CPPs are criticized as more “test-prep” for standardized tests than “college-prep” functions. For instance, many academic programs have boosted their requirement to higher AP exam scores in awarding credits, while colleges and universities are increasingly reluctant about awarding credits to the AP coursework of incoming students (Jenkins, 2012). In the meantime, the American universities that accept transfer credits earned from CPPs, especially elite institutions, have become increasingly skeptical about AP exams and

International Baccalaureate tests, which reflects a broader shift among colleges that are seeking to retool general-education curricula to make them emphasize intellectual skills (Jenkins, 2013).

The second concern is the integration of advanced transfer credits and college credits. At the academic level, due to the complexity and variety of transfer credits, academic advisors should pay attention to how the transferred credits interact with undergraduate curricula. The whole curricula in all four years of college, from the introductory level to capstone courses, should be systematic and integrative. The way of thinking and the connections among subjects should be emphasized as undergraduate education goals. Some introductory courses are required and necessary for students who take higher-level courses; however, if the CPP courses such as AP and IB fail to prepare students well enough, it is hard for them to achieve academic success in advanced college-level courses, even though they have acquired the credits for those courses. As a result, American universities now have concerns that CPP transfer credits, such as credits earned in AP or IB, are not designed to achieve learning goals in undergraduate programs.

The third concern is that the issues of course-equivalency and articulation of credits remain unclear or even unknown to students with transfer credits. It becomes the duty of academic advisors to provide academic plans that fit those international students enrolled with advanced transfer credits.

***Student Affairs Professionals.*** With CPP's increasing popularity in China as tickets to American higher education, this study is also of interest to student affairs professionals as it provides informative and interesting findings of the CPPs' impacts on international students' transition to American campus life. In practice, with the acceptance of transfer

credits in American colleges, Chinese international students with CPP credits are enrolled as “senior” students from an academic perspective. Take the GAC program as an example; a typical student with completion of this program is awarded 31 college credits. With this number of credits, which equals to the total number of credits during the first academic year in an American university, students are likely to be academically enrolled as a “sophomore” student.

However, although the student may seem fully academically prepared, he/she still should be considered by the university as a “freshman” in terms of his/her cultural transition and social experiences. In other words, in addition to academic benefits of CPPs, the findings in this study require student affairs practitioners not to overlook the limitations of the CPPs to international students in the perspective of cultural and social transition. Consequently, consistent cultural orientation and social network seminars/workshops are necessary for international students even with advanced transfer credits. Although international CPP students appear to be academically prepared, institutions should not take for granted that international students planning to study abroad have the same acculturation and acclimation as their American counterparts. Student adjustment and academic outcomes are important for student affairs practices. It is crucial to understand that the international students entering American colleges and universities with college credits from CPPs are expected to interact with local students and international students from other nations. If a student experiences adjustment issues or challenges that result in failure of interaction and engagement, all students in the classroom may be affected. The consequences may include a hampered curriculum and/or frustrated faculty. Therefore, appropriate cultural orientation is necessary for all international students even with advanced college credits.

### Chinese Potential International Students and Their Parents

Since the purpose of this study is to identify the categories of college readiness students are prepared in CPPs and also the actual long-term outcomes of CPPs in assisting students' transition to life in the U.S., the results of this study are beneficial to Chinese students and their parents who seek the real connection between costly college preparation programs and actual outcomes so as to make wise decisions.

First of all, Chinese students and their parents should not consider the major objective of CPPs as to direct students' application process and to assist standard tests to enter American universities (such as TOEFL/IELTS and SAT/ACT). Neither should they consider the main function of CPPs to improve English proficiency, nor only as application guidance or language training. The main purpose of attending CPPs should be to prepare students for college such as improving English capabilities, taking college introductory courses, earning college credits, preparing for application, and getting adapted to the American-style teaching pedagogy while still in high school.

In addition, Chinese students and their parents should also be aware of the benefits of transfer credits to students' future college life in the U.S., such as saving college time and tuition. More practically, Chinese students and their parents should pay more attention to credit transfer procedures and policies in American universities.

Generally speaking, the impacts of CPPs on Chinese students' college preparation to American universities are positive. Therefore, this study recommends prospective international students to participate in CPPs prior to studying abroad to secure a smoother transition to American colleges.

### Program Directors

This study recommends to program directors that the culture preparation should take a larger proportion in program design so as to secure smoother culture adaptation of students to the life in U.S. This study clearly indicates that CPPs are beneficial for international students' academic transition to American colleges; however CPPs' overlook in cultural preparation for students results in their hard social transition to American life. It is better if program directors can introduce more culturally-sensitive courses in CPPs' curricula. In addition, program directors should make short-term study-abroad plans as part of the CPP for students, as a direct way to experience foreign culture, before they actually study abroad.

Secondly, there is a current void but a need regarding the dissemination of credit transfer policies and procedures to CPP students and their parents.

Thirdly, since the college preparation is a continuous process that starts from attending CPPs and extends to months after enrolled in American universities, the service of CPPs to international students' college preparation should extend accordingly rather than stopping right after they get admissions.

### **Implications for Policies**

This study raises several important and thought-provoking policy implications on the current state of CPPs, including the credit transfer policy, policies related to National College Entrance Exams (Gaokao) and "Affirmative Action" for International Students.

### Credit Transfer Policy

The Chinese international students enrolled with advanced college credits raise important policy questions for the postsecondary education institutions in the U.S.. First and foremost, questions regarding course equivalency, especially for international students, seem

urgent. Transfer of credits earned internationally requires policies and agreements on course equivalency. As CPPs exist today, important questions about their coherence with college curricula go largely unasked and questioned. Transfer policies need re-examination and regulations, especially with respect to international students earning American transfer credits in their home countries. Transfer policies are designed to assist students to be successful by providing flexibilities. But if there is scarce overlap between transfer credits and required courses in university programs, the transfer credits are not that meaningful, and transfer credits earned in advance may not be contributing to students' college success and future development.

Additionally, pedagogical questions regarding the efficiency and quality of instruction of CPPs for international students remain unanswered. There is a current policy void regarding international students enrolled with advanced credits in this aspect. It appears that policies related to the quality of CPPs' instructions may need re-examination and therefore transfer policies should be designed to truly assist students to succeed in college.

#### National College Entrance Exams (Gaokao) Policy

Policymakers in China understand that one of the biggest reasons some Chinese high school students decide to study abroad is to escape the fierce competition of the National College Entrance Exam (Gaokao) as well as to explore more educational opportunities in the western education system. According to Zhang and Hagedorn (2011), as a typical example of selective exams, students who participate in the exam have to deal with fierce competitions and extremely high stakes. Gaokao produces a solitary standardized score that determines not only what university a student is eligible to enter, but also whether or not he/she can enter any Chinese university. In contrast, Chinese parents believe that the

American higher education system emphasizes students' practical capabilities such as problem-solving capability, rather than concentrating only on memorizing specific knowledge facts. Consequently, policies should change to eliminate three major disadvantages of Gaokao, i.e. sole assessment standard, sole selection method and sole entrance channel. Especially, College admission in China should move towards a more flexible direction so as to give students more opportunities to enter Chinese universities. For instance, the college admission standard should be modified to not only base on the exam score, but also include students' academic performance and performances in social activities during high school.

#### “Affirmative Action” for International Students

American universities should be aware of the growing number of Chinese applicants, especially with the help of CPPs, which are specifically designed to assist them in achieving this goal. Despite years of attacks on affirmative action, the U.S. Supreme Court preserves an important mechanism for bringing “minority” students to campus, but has shifted the argument from affirmative action as restorative justice to diversity as a legitimate societal need (Ruffins, 2014). American colleges and universities do value students who bring diversity to campus. However, with the dramatic increase of Chinese applicants, it is necessary to address this issue from a policy perspective, especially when there is currently a void of corresponding policies that may respond to this phenomenon. This study suggests that American universities improve admission policies to balance the diversity on campus. As a possible result, it is likely that the number of Chinese applicants enrolled would be controlled (Unz, 2012; Bell, 2012).

In sum, this study proposes three implications from the policy perspective. First, policies should be made to regulate the equivalencies and efficacies of advanced college credits; second, policies related to the Gaokao should be modified to convince Chinese students to study for their Baccalaureate in China; third, “affirmative action” for international students is necessary for maintaining the diversity on American campus.

#### Recommendations for Future Research

Analyzing the outcomes of CPPs in terms of Chinese international students’ transition experiences from Chinese high schools to American colleges is beneficial for a better understanding of the effects of CPPs in preparing students for college before they study abroad, hence assisting potential Chinese international students and their parents, international student recruiters in American institutions, higher education policy makers, and educational administrators to make better evaluation and decisions. This study addresses the impacts and outcomes of CPPs from students’ learning experiences. It is likely for future researchers to conduct a study on the government’s (e.g., Chinese Ministry of Education) policies towards CPPs from an administrative perspective. Future studies can also focus on CPPs themselves by analyzing elements of the operation process, such as program design, objectives, curricula and evaluation approaches. Findings regarding CPP directors and teachers’ interactions with students and even their parents will benefit potential students and their parents in better understanding the role that CPPs play in their transition from Chinese high schools to American universities.

With respect to the participants, this study does not explore the transition experiences of Chinese international students with previous CPP experiences in other American universities than MRU or identify the impact of CPPs on Chinese international students’



transition to other English-speaking countries, such as British or Australia. Future researchers may expand a similar study to a larger number of international students. With a larger and more diverse population, different impacts and effects of CPPs on students' college preparation and subsequent transition to overseas institutions can be identified.

In the respect of research methods, this is not a longitudinal study, and different participants were interviewed on the Chinese and the American sides. Due the time limits in working on this study, the current CPP students interviewed in China and the former CPP students studying in the U.S. were two different groups of people. In order to ensure the consistency of participants on both sides, adopting a qualitative approach, future researchers could follow a number of students from the point when they participate in CPPs in China to the point when they achieve a Baccalaureate degree in American universities. In that way, the study will cover the whole process of learning experiences in CPPs as well as the entire transition experiences in college. The whole tracking process would probably take 7 to 8 years. Specifically, in-depth interviews and case studies, in this case, can be conducted by researchers to identify the outcomes and impacts that CPPs have on students' success.

Additionally, future research can conduct quantitative research to analyze international CPP students' college preparation by comparing their academic success (e.g. academic grades, retention rate, etc.) and achievements with those of non-CPP international students or even native American students.

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## APPENDIX A. INTERVIEW PROTOCOL TO CURRENT CPP STUDENTS

**Interviewing topic:** Your enrollment & learning experience in CPPs (including GAC, AP, and IB program)

**Interviewees:** Current students in CPPs

**Interview format:** Focus group interview in Chinese

**Interview length:** 35-50 minutes

**Interview questions:**

1. Why did you decide to go abroad? Where are you hoping to study? How did you decide on a location? Have you had a specific expected university or major in your mind yet?
2. Why do you choose to attend the <program name>? Have you heard of others programs except for <program name>? If yes, why do you decide to participate <program name> finally?
3. What courses have you taken in PGA so far? How do these courses differ from those taught in your regular high school? Please describe specifically.
4. How do the teaching methods in the PGA differ from those in your regular high school? Please describe specifically.
5. What preparations do you think are necessary for you to make before you study abroad?
6. Do you feel you are learning valuable information in the PGA program that you would not gain in your high school? What specifically?
7. What is the BEST thing in the PGA Program? What would you like to change to make the program better?
8. Do you feel “ready” to go to the US? Is there anything about studying abroad that concerns you?

9. How do the PGA teachers compare to other teachers you have had?
10. Is there anything else you would like to tell me about your enrollment in the PGA program?



## APPENDIX B. INTERVIEW PROTOCOL TO CPP ALUMNI

**Interviewing topic:** Your satisfaction and perceptions of CPPs (including GAC, AP, and IB program) and transition experience to American universities

**Interviewees:** Chinese international undergraduate students with previous CPP experience

**Interview format:** in-depth, open-ended interview

**Interview length:** 30-45 minutes

**Interview questions:**

1. In which college preparation program did you participate while in China? What is your major in college?
2. Tell me the major aspects/perceptions of your CPPs.
3. Are you satisfied with your CPP? Why or why not? If you had to do over, would you enroll in the CPP to prepare for your college?
4. Which aspects did this program affect your academic college life at ISU?
5. In which aspects does this program affect your social transition at ISU?
6. What else do you want to tell me about the CPP you attended?

## APPENDIX C. INSTITUTIONAL REVIEW BOARD APPROVAL—CHINA SIDE

**IOWA STATE UNIVERSITY**  
 OF SCIENCE AND TECHNOLOGY

 Institutional Review Board  
 Office for Responsible Research  
 Vice President for Research  
 1138 Pearson Hall  
 Ames, Iowa 50011-2207  
 515 294-4566  
 FAX 515 294-4267
**Date:** 9/17/2013**To:** Dr. Linda Serra Hagedorn  
N012 Lagomarcino Hall**CC:** Jlayi Hu  
N244 Lagomarcino Hall**From:** Office for Responsible Research**Title:** Journeys from China to the Ivy Leagues: Growing Dependence on College Preparation Programs**IRB ID:** 13-331**Approval Date:** 9/3/2013**Date for Continuing Review:** 9/2/2015**Submission Type:** New**Review Type:** Full Committee

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use only the approved study materials** in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- **Retain signed informed consent documents for 3 years after the close of the study**, when documented consent is required.
- **Obtain IRB approval prior to implementing any changes** to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- **Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems involving risks** to subjects or others.
- **Stop all research activity if IRB approval lapses**, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

## APPENDIX D. INSTITUTIONAL REVIEW BOARD APPROVAL—U.S. SIDE

IOWA STATE UNIVERSITY  
OF SCIENCE AND TECHNOLOGY

Institutional Review Board  
Office for Responsible Research  
Vice President for Research  
1138 Pearson Hall  
Ames, Iowa 50011-2207  
515 294-4566  
FAX 515 294-4267

**Date:** 11/27/2013

**To:** Dr. Linda Serra Hagedorn  
E262 Lagomarcino Hall

**CC:** Jiayi Hu  
N244 Lagomarcino Hall

**From:** Office for Responsible Research

**Title:** Chinese High School to American University: The Role of Special International College Preparation Programs

**IRB ID:** 13-499

**Approval Date:** 11/25/2013

**Date for Continuing Review:** 11/17/2015

**Submission Type:** New

**Review Type:** Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.
- Obtain IRB approval prior to implementing any changes to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.
- Stop all research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- Complete a new continuing review form at least three to four weeks prior to the date for continuing review as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 1138 Pearson Hall, to officially close the project.