# Mitigating Transitional Challenges of Chinese Students in U.S. Higher Education

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## **Abstract**

The number of Chinese international students enrolled in U.S. higher education has significantly grown over the past two decades. In 2015, Chinese international students accounted for the largest group of international students from any one single country. Previous research acknowledges Chinese students encountering significant difficulties in U.S. education institutions. However, research specifically targeting the Chinese demographic within U.S. higher education institutions has not been extensively explored toward mitigation. This study tracks Chinese international students' transition to the United States, while primarily focusing on student-perspective of their preparation in China, acclimation experience in the U.S., and response to environmental change.

**Keywords:** U.S. higher education, Chinese international students, Chinese international preparation programs, language proficiency, education leadership, transition mitigation

## 1. Introduction

Seven years after President Nixon visited China and three decades after the founding of the People's Republic, the United States and the People's Republic of China announced diplomatic relations, on January 1, 1979 (Chu, 2004). Fifty Chinese students arrived in United States to further their studies five days before the diplomatic establishment, and by 2003, there were more than 580,000 Chinese students studying abroad, primarily in the United States (Chu, 2004).

International students contribute approximately \$21.8 billion in tuition and \$12.8 billion in additional economic impact—representing a major service export—to their host cities' economies (Ruiz, 2014). The Asian international student population accounts for 64.1% of all international students in America. Furthermore, Chinese students contribute 25.4% of the total international population (Ruiz, 2014). Nelson (2013) reported that during the 2012-2013 academic year, the Chinese international population had grown beyond 200,000 in the United Statesand numbers have continuously increased.

Large bodies of evidence suggest Chinese students are facing a variety of difficulties in the United States (FlorCruz, 2013; Liu, Brancato, & Da, 2014; Luo, 2013). Even students with outstanding academic achievements in high school are struggling in U.S. colleges. Liu, Brancato and Da (2014) found that Chinese students' high school GPA and standardized test scores are not consistent with their university performance, as Chinese international students lack systematic preparation for academic transition in U.S. higher education. Additionally, Luo (2013) revealed there was a surprisingly high dropout rate for Chinese international students studying in Ivy League universities, which only admit exceptionally high-achieving students. Luo (2013) alleged that differences in language and the education system between societies were the cause of Chinese students' poor academic performance, despite their previous high achieving records.

In addition, many Chinese students have quit school due to academic misconduct in U.S. colleges and universities (FlorCruz, 2013; Liu, 2013). Liu (2013) also states there is an unfortunate increase in Chinese students being expelled for cheating in the United States. Evidence suggests there is opportunity for mitigating Chinese international student success somewhere between early preparation to degree completion in the U.S.

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## 2. Relevant Literature

China's growth in U.S. educational demandshave grown exponentially over the past five to seven years (Abelmann & Kang, 2014; Bartlett & Fischer, 2011; Steinberg, 2011). Growth in demand is visible all across the nation. For instance, the University of Delaware has experienced increases in Chinese enrollment from eight people to 517 between 2007 and 2011 (Abelmann & Kang, 2014); Grinnell College, in rural Iowa, had 10% of the 2011 incoming class consist of Chinese international students (Steinberg, 2011); and Mount Holyoke College had enough Chinese applicants to fill its entire incoming freshman class (Bartlett & Fischer, 2011).

### 2.1 Current Preparation for Chinese International Students

A major focus for Chinese student preparation is English language. Literature repeatedly stressed English language proficiency is vital to the success of international students in U.S. higher education because both academic and social adjustments require English language skills (Andrade, 2006; Yeh & Inose, 2003; Sawir, 2005).

English has gained huge popularity in China, and has become a key indicator for school performance (Jie & Xiaoqing, 2006). This trend has increased the popularity of English language schools in China and the development of countless internet resources (Kettle, Yuan, Luke, Ewing, & Shen, 2012). Additionally, it is very common to see high school student organizations hosting English corners to help practice English language skills (Gao, 2012).

Many Chinese cities even have international schools and programs to prepare students to attend U.S. universities (Robinson & Guan, 2012). Beyond specializing English language training, these schools also use U.S. curriculum and educators to assist students' adaptability to the U.S. education environment (Robinson & Guan, 2012). In addition, Advanced Placement (AP) classes, which prepare high school students for the rigors of college-level work (Pope & Donald, 2013) have been taught in some Chinese international high schools (Robinson & Guan, 2012).

On a personal level, Chinese students aiming to study in U.S. universities are motivated to conquer the standardized tests required for admission. The Chinese tradition of education highly prioritizes test-based achievements (Yangyang, 2012; Liu & Lu, 2011; Liu & Teddlie, 2005). Due to this, Chinese students honestly believe that good test scores area strong indicator for admission and university success (Chen, 2009).

However, in the United States, research has articulated that successful transition periods are crucial for academic success in new environments for international students. Alspaugh (1998) states that during specific transition points, students can experience achievement losses in reading, mathematics, science, and social studies. Suido, Shaunessy, Michalowski, and Shaffer (2008) and Taylor, Pogrebin, and Dodge (2002) contend that U.S. college-preparatory programs, such as the International Baccalaureate (IB) Diploma Program, involves not only academic curricula challenges, but also require large amounts of time spent after school doing homework, developing projects, engaging in research, studying for exams, and participating in extracurricular activities. This is beneficial for Chinese international students, because researchers believe that preparation programs can help students to adapt smoother (Suido et al., 2008; Taylor et al., 2002).

## 2.2 Identified Challenges Regarding Chinese International Students

Among the published literature on this topic, five reoccurring themes for challenges and stress among Chinese international students studying in the U.S. can be realized. These themes are: (1) language deficiency, (2) academic differentiation, (3) social exclusion, (4) emotional issues, and (5) financial pressures.

Language deficiency. The primary challenge to Chinese international students in U.S. higher education is language proficiency, and this challenge has been widely recognized by researchers for well over a decade (Andrade, 2006; Sawir, 2005; Yeh & Inose, 2003). Numerous research studies have identified and discussed Chinese students' difficulties with English (Wan, 2001; Yeh, 2000; Lin, 1998; Sun & Chen, 1997; Liu, 1995; Ye, 1992; Chang, 1990; Lou, 1989; Kao, 1987; Perkins, 1977). Kao (1987) stated after studying Chinese students who attended universities in Washington, D.C. that English proficiency was considered the major obstacle to Chinese students academic success. More specifically, the importance of listening deficiency is generally lacking, which has been deemed as the most frequently needed classroom skill and most critical determinant of an individual's academic success. Even more so than reading and writing skills or academic aptitude (Tweed & Lehman, 2002; Upton, 1989; Lebauer, 1984; Diamond, Sharp, & Ory, 1983; Conaway, 1982). Wang (2003) attributed Chinese students' English language difficulties to four causes: (1) the over usage of slang or "Chinglish" expressions, (2) the lack of contextual knowledge or cultural background, (3) the misplaced focus of language training toward testing, and (4) lack of opportunity to practice English (Wang, 2003).

Academic differentiation. Many Chinese students arrive in the U.S. expecting similar systems of education as delivered in China. Jinyan (2005) examined the effects of U.S. classroom instructional factors on Chinese students' comprehension. The results were congruent with past research findings on instructional factors that affect Chinese international students' classroom engagement, which include differing lecture organization, lack of textbook usage, lack of blackboard writing, lack of lecture summary, and increased amount of student participation and group work (Jinyan, 2005). These are all significant differences between Chinese education systems (Jinyan, 2005).

Additionally, Tweed and Lehman (2002) reported that U.S. classrooms are typically more Socratic-oriented, and therefore, professors value questioning, discussing, and group work involving active participation, which negatively affected Chinese students' ability to succeed (Tweed & Lehman, 2002; Holmes, 2004).

In contrast, there are also many differences between Chinese and U.S. higher education systems. In China, the central government plays a major role in directing the administration of all colleges and universities and providing uniform supervision and support of all foreign students in China (Donovan, 1981). Due to this, Chinese students often have difficulty understanding the highly decentralized and autonomous nature of U.S. education (Donovan, 1981). Moreover, schools in China provide a number of services which Chinese students automatically assume U.S. universities will also provide, such as, housing and course selections (Donovan, 1981).

Social exclusion. Bartlett and Fischer (2011) cited Jennifer Gregan-Paxton, an undergraduate advisor at the University of Delaware in saying, "Chinese students stuck together because they wouldn't necessarily get the warmest reception from their U.S. peers" (p. 5). The article introduced Chinese international students' grievances about their experiences in U.S. universities, including reports of professors ignoring Chinese students' questions and only responding to American students, Chinese students were given the cold shoulder while working on group projects, and U.S. peers pretend to welcome them, but they did not actually connect (Bartlett & Fischer, 2011; Yan & Berliner, 2009). Similarly, multiple researchers found that international students from East Asia, particularly from China, were inclined to have few friends in the U.S., or even no U.S. friends. These same east Asian students were also typically dissatisfied with the friendship quality when they did connect with U.S. peers (Fischer, 2012; Gareis, 2012).

*Emotional issues*. Many Chinese students face emotional issues, due to the extreme environmental transition, feeling of homesickness or loneliness, extreme cultural differences, and differing social networks (Ip, Chui, & Johnson, 2009; Zhao, Jindal-Snape, Topping, & Todman, 2008; Sawir, Marginson, Deumert, Nyland, & Ramiaet, 2008; McClure, 2007; Adelman, 1988). Some assertions made by Bochner, McLeod, and Lin (1977), Furnham and Alibhai (1985), and Sam (2001) indicate that international students who succeed in their new environment heavily rely on both social support and social connectedness.

Financial Pressures. Shao (2014) and Ruiz (2014) have examined the general schooling and living costs for Chinese students in the United States and identified that of the \$22 billion USD spent on tuition and living expenses in the 2011-2012 academic year, over 60 percent was financially supported solely by students' families. This was despite that fact that per capita Chinese income in 2013 was only \$6,807 USD (World Bank, 2014). The significant family contribution in the form of investment towards a student's education can often be a source of additional stress on Chinese students studying in the United States.

The five above mentioned themes of challenges affecting Chinese international students studying in U.S. higher education institutions are summarized in Table 1.

Table 1. Compiled Summary of Challenges facing Chinese International Students in USA

|   |   | Andrade, 2006; Sawir, 2005; Wang, 2004; |
|---|---|---|
|   |   | Yeh & Inose, 2003; Tweed & Lehman,      |
|   |   | 2002; Wan, 2001; Yeh, 2000; Lin, 1998;  |
| Language  | Stress resulting strictly from a lack of ability to | Sun & Chen, 1997; Liu, 1995; Ye, 1992;  |
| Deficiency  | functionally communicate.                           | Chang, 1990; Lou, 1989; Upton, 1989;    |
|   |   | Kao, 1987; Lebauer, 1984; Diamond,      |
|   |   | Sharp & Ory, 1983; Conaway, 1982;       |
|   |   | Perkins, 1977                           |
|   | Stress resulting from factor relating to extreme    | Jinyan, 2005; Holmes, 2004; Tweed &     |
| differences in academic environments (ex. curriculum, |   | Lehman, 2002; Lin, 1998; Upton, 1989;   |

| Academic & Institutional Differentiation | testing, teach and assignment design, university services and involvement, etc.)                          | Lebauer, 1984; Diamond et al., 1983;<br>Donovan, 1981   |
|--|---|---|
| Social<br>Exclusion                      | Stress resulting from negative outward intercommunication among peers, professors, and administration.    | Fischer, 2012; Gareis, 2012; Bartlett & Fischer, 2011   |
| Emotional<br>Issues                      | Stress resulting from personal factor (ex. home sickness, extreme cultural differences, loneliness, etc.) | Yan & Berliner, 2009; Ip, Chui, & Johnson, 2009; Sawir, Marginson, Deumert, Nyland, & Ramiaet, 2008; Zhao, Jindal-Snape, Topping, & Todman, 2008; McClure, 2007; Sam, 2001; Adelman, 1988; Furnham & Alibhai, 1985; Bochner, McLeod, & Lin, 1977; |
| Financial<br>Pressures                   | Stress resulting from the high cost of education in the United States.                                    | Shao, 2014; Ruiz, 2014; Anders, 2014;<br>Golden, 2014; Kuo, 2014  |

## 2.3 Limitation of Previous Research

The evaluations from past studies thoroughly and consistently provide observational summaries of challenges Chinese students face in U.S. higher education institutions, however, research finding have not holistically approached the student transition process from pre-departure preparation to U.S. graduation in order to identifying preparatory short fallings and key areas for anticipatory mitigation to lessen or completely alleviate the discussed issues. To accurately inform educational policy towards addressing this dilemma, there is a need for comprehensive transitional analysis.

What is missing from prior studies are Chinese international student testimony beyond the identification of their challenges to include reflection on the preparation and transition process in a constructively critical way. This study analyzes Chinese students' perceptions of the preparatory and transitional process of studying in U.S. higher education institutions. This study also cross-references Chinese high school principals' perceptions on the topic in China, in order to more deeply begin to understand and interpret the issue of Chinese international student success.

## 3. Methodology

The researchers conducted a phenomenological study as a qualitative method for analyzing student perceptions. In this study, experiences of phenomena referred to Chinese students' challenges in U.S. higher education institutions, which needed to be examined and investigated for the causation. To identify areas for mitigation of Chinese students' experience, the researchers conducted in-depth interviews with Chinese students currently studying in the United States (Colorado, California, and New York) then interviewed Chinese principals in order to avail a different perspective.

The research design of the study was built on four key dimensions: (1) Chinese international students who were currently enrolled in U.S. higher educations institutions; (2) Chinese international students who specifically attended Chinese international preparation programs; (3) Chinese Principals who's schooling arrangements specifically included international preparation programs; and (4) Chinese Principals whose schools have graduates attending or having attended U.S. higher education institutions.

Based on these four dimensions, this study was conducted through a two-phase research process. Phase one involved individual interviews of Chinese international students. Interviews were semi-structured and the sample only included Chinese students who were currently matriculated in U.S. universities, as the researcher didn't believe Chinese students who were only participating in a short-term study abroad had enough experience to accurately articulate the phenomenon. Phase two involved interviewing Chinese Principals. Participants were asked to answer the questions about how schools prepare students for future studies in U.S. higher education institutions and previous students' academic track records in U.S. colleges and universities.

This study was directed by students' perspective and focused on this research question: where in the preparatory and transition phase of study abroad is there potential to mitigate challenges facing Chinese international students studying in U.S. higher education? There searchers employed random sampling in the study by

approaching Chinese international students in locations with high Chinese international student populations. All the participants shared two significant dimensions: (1) they were currently enrolled in an U.S. college or university, and (2) they had experienced some degree of Chinese international preparation education in China.

Data included responses from both state universities with national rankings of 50 to 250 and more selective universities with national rankings from 1 to 50 (USNEWS, 2015). This diversity of participant population was able to represent differential schooling contexts and settings that host Chinese international populations with an array of distinctive achievement levels. One hundred and sixty-eight participants' responded and have been evaluated during this process.

With the assistance of the Chinese Ministry of Education, the researchers were able to meet 48 Chinese principals. Each principal spent roughly 30 to 60 minutes with the researcher and responded to the prepared interview questions. Collectively, the feedback from the interviews of Chinese students and principals portrayed a thicker description of this issue than prior research.

## 3.1 Coding and Theme Identification

Although the study was divided into two phases, analysis was performed across phases in order to compare emergent themes (Creswell, 1998). The phenomenological method from Colaizzi (1978) was employed while analyzing participants' transcripts. Results integrated all the themes into a very in-depth description of the phenomenon Table 2 illustrated the coding process utilized though some examples of recognized statements and phrases from student transcripts with the formulated meanings, and emerging themes from their associated meanings.

Table 2. Example of coding process

| Recognized statements and phrases from student interview transcripts:   | Formulated Meaning:  | Theme cluster:                             |
|---|--|--|
| For most of the time, I cannot fully understand the course, so I record the course works and study them after class by listening to the tape again and again. If I don't do that, I probably cannot catch the next class. | Understanding lecture contents is hard a real-time delivery speeds. Extra effort is needed to stay on track. | Language impedes the academic performance. |
| People discuss a topic and speak very fast to me, so I don't talk too much. I'm fraught that my speed of speech and my content will drag my group. I just nod along but I might not understand their points.              | Language ability led to limited understanding and limited group work contributions.                          |  |
| I sometimes write the essay in Chinese and ask my<br>friends who are from English major to translate my<br>words in English and turn it in.   | Assistance is needed to complete written assignment.   |  |
| It's so intimidating to speak in front of the class. I can do better speech if I'm alone, but when speaking in public, my voice just inflect and I start to grunt.  | Anxiety of speaking ability reduced willingness to participate.  |  |

In the second phase, the researcher analyzed Chinese principals' responses to the questions pertaining to how to support their students in preparation to receive U.S. education and previous students' performance in U.S. colleges and universities. Analysis followed the steps described in the first phase. Themes identified during phase two were then compared against the Chinese international students' reflection derived in phase one. The researcher wanted to investigate if there was any connection between Chinese students' challenges and their preparation program and transition experience.

The process of analysis involved both deductive and inductive strategies. Once preliminary descriptions and themes were constructed, the researchers re-approached selected participants to validate if the themes were their original ideas. Member checking crossed locations and campuses, and the researcher used some of the responses from higher-ranking schools to inquire if participants from a lower ranking school would be adherent to the ideas

and vice versa. The results indicate a high level of consistency in participants' perceptions from different school types. If new relevant themes occurred from the second-time visit to participants, then they were also included in the final description. In the end, from 218 verbatim transcripts, 228 significant statements and phrases were recognized and extracted, then arranged into the formulated meanings. Formulated meanings were then clustered into themes.

Using the protocols from Frankel (1999) and Meadows and Morse (2001), verification of this study was fulfilled through a review of existing relevant literature, strict adherence to the phenomenological method, bracketing of past experiences, proper documentation of observations and field notes, collection of appropriate data samples, identification of negative cases, and saturation of interview data. Validation of the study was within-project evaluation and was accomplished by multiple methods of data collection (interviews and document analysis), data analysis and coding by member checks by participants. The various phases of the study helped to create multiple viewpoints on the topic across issues relating to Chinese students' challenges in U.S. higher education institutions and potential areas for mitigation of challenges among the preparation and transition process between Chinese and U.S. educational institutions.

#### 4. Findings

A sample of 168 Chinese international students who were currently enrolled in U.S. higher education institutions participated in this phenomenological study. The average high school GPA for students attending a state college or university was 3.2 (SD=0.4), while that of participants attending higher-ranking schools was 3.7 (SD=0.2). Similarly, average TOEFL score from higher-ranking schools was 105 (SD=4.2), which was higher than that of participants from a state college or university (Average=84, SD=10.3). These phenomena are congruent with the fact that higher-ranking schools expect higher students' academic achievements in the admission processes.

The average time for participants spent in U.S. institutions has less discrepancy between the two groups of participants: 1.5 years (SD=0.5 year) for a state college or university students and 1.5 years (SD=1 year) for more selective universities. Over the time spent in U.S. higher education institutions, nearly all sampled students experienced rising GPA performance, which indicates adaptation to a new academic environment. Among the 168 participants, only one person reported a decrease in GPA. However, the researchers regarded this as an outlier, as the student experienced a terrible injury and attributed his absence from classes to this phenomenon.

The self-reported GPAs are 3.7 (SD=0.2) for students from higher-ranking universities and 3.5 (SD=0.4) for those from state colleges or universities. The different academic achievements reflect the theory that education is sequential, and current performance is largely influenced by previous capacity (Moller, Stearns, Potochnick, & Southworth, 2011). In this case, participants who went to higher-ranking schools had higher high school GPAs and TOEFL scores than their counterparts who went to regular state colleges or universities.

The data analysis of student interviews led researchers to identify common themes among all students. The themes identified were (1) mitigation potential in China, (2) mitigation potential in the United States, and (3) mitigation potential in personal preparations.

## 4.1 Student Perspective on Mitigation Potential in China

While it is clear Chinese preparation programs have come a long way and appear to have good intent. The student reflection on their experiences arose common issues of hiring to few or under qualified foreign teachers, and generally speaking, managing student learning environments in a very similar way to traditional Chinese models.

All participants reported the experience of challenges due to language barriers, classroom settings, and emotional issues caused by cultural diversity. When asked about their preparation experiences, students described their programs as test-oriented and not focused on actual performance skills needed for studying and living in the United States. 100% of students interviewed regarded a negative attitude toward their preparation experience in Chinese programs.

Many students raised concerns over the curriculum language-medium used in preparation programs. A key dilemma for Chinese international preparation program is that most have to teach Chinese mandated curriculum in order to graduate students. While it was clear the students may not have been expecting a truly authentic "American" learning environment in China, they were expecting their books and classroom dialogue to be in English, and this was not the case for most students.

Additionally, what students labelled as most damaging to their preparation in China was the test-oriented learning focus of curriculum. Most students expressed concerns over their programs specifically focusing on preparing for entrance exams (TOEFL/IELTS/ACT/SAT). Interview statements such as, "my school was only a

TOEFL training center" were very commonly observed. In addition, many participants complained that their former schools barely offered any "American" curriculum, and when they did, the content was not delivered as taught in the United States.

## 4.2 Student Perspective on Mitigation Potential in USA

Student perspective on mitigation in the USA was not quite as unanimous as the perspective on Chinese international preparation programs. Likely because of the widely varying practices for international students throughout the United States. However, student interviews revealed a number of areas for improvement among U.S. higher education institutions supporting the Chinese international students' transition process.

Regardless of the language proficiency, many among this sample of students were expecting a short-term language transition program, or class. Something to act as a bridge and jump start the transition. As one participant explained, "I think the language jump course in my school was very helpful, because all my classmates could not speak Chinese, so I was forced to use English everyday. My language skills grew dramatically in those few days."

Chinese international students also were expecting a step beyond the traditional institutional orientation which was not widely offered among this student sample. Given the widely understood knowledge of extreme social and cultural differences, many Chinese international students expressed frustrations that they were not exposed to the classroom environment prior to the first days of classes. Discussions about evaluation standards, classroom participation, developing course schedules, and working in teams were all very common themes of anxiety among students which were usually left unaddressed upon arrival.

Furthermore, students in this interview sample generally expected some degree of extended institutional outreach to assist socialization. Most institutions are already offering something, however, the result from these efforts are very mixed and the duration for which assistance programs are offered usually taper off soon after the beginning of the semester. It was very clear that most students report experiencing varying levels of emotional issues, which they associate with negatively affecting their studies, and in most cases students were expecting institutions to be offering a wider variety of social programs to help jump start the development of their friendship circles.

## 4.3 Student Perspective on Mitigation Potential in Personal Preparation

In additional to the obvious stakeholders in China and the United States, the researchers identified students themselves as being a third potential area for mitigation. This was concluded through analysis of both student and principal responses (while the first two areas of mitigation were based solely on the students' perspective).

Feedback revealed that a possible challenge for Chinese international students may be caused by their socioeconomic status. It was a very commonly reported issue in principal interviews that students encounter difficulties because they lacked the skills and motivation to process the problem. Based on the principals' comments, 100% of Chinese international students transitioning from their preparation programs came from middle, upper middle, or very wealthy families. Home lives among these classes generally are very secure in China. Students' families could easily afford to provide all the requirements for personal studies and survival throughout the formative year of life. Therefore, students were not conditioned for such independence and typically underdeveloped in the skills required for coping with adapting to new environments all on their own.

One specific exert worthy of highlighting from a Chinese Principal at an International Preparation school is listed below:

"There are many things that school cannot help the students for. One example of 'many things' I talk here refers to the fact that some of our students are pretty spoiled by their parents and lack the ability to live by themselves. My school offers a parent training course to teach them (parents) how to behave at home in order to help their children's independence, but it looks like we don't have a very positive impact on the outcomes. We get news about students being expelled by American schools for constant truancy and absence from class, and we have also seen some reports that students couldn't handle independent life in the foreign country and chose to come home."

Students responses matched the highlighted Principal comments. Especially, for Chinese international students who had low GPA or TOEFL scores. Responses implied that their motivations to resolve the difficulties were not always very strong, and many of the difficulties could have been initiated through their family life in China. Comments, such as "I got used to being taken care of all the time at home. But now, I don't know how to handle all the responsibility without support" and "I don't want to attend class if it is not midterm or a final" very clearly illustrated correlation to Principal claims. Further motivation issues were identified in statements such as,

"...they (professors) need your attention all the time. I cannot study 24 hours a day. I feel like a slave". These statements were particularly interesting, as the level of rigor in Chinese K-12 education is very often regarded as being greater than that of K-12 programs in the United States.

## 4.4 Principals' Perspectives on the Issues

A qualitative survey was administered to a sample of 48 principals in Chinese high schools. This survey was administered parallel to the Chinese international student sample and addressed similar aspects of educational preparedness for study in the United States, such as, availability of preparation programs for international study, common challenges faced among their students, and potential solutions for improving the preparations of students planning to study abroad. Furthermore, the survey administered to Chinese high school principals also request information regarding the current policy in place for tracking students who leave their respective high schools to study abroad. Interestingly enough, only some of the common themes identified among the sample of Chinese high school principals match the results derived from the survey administered to the Chinese international students currently attending colleges and universities in the United States.

Theme one: All Chinese international students are facing challenges. Among the Chinese high school principals, 100% of Chinese high school principals clearly stated their students commonly face challenges in U.S. higher education. Not one principal denied their students commonly face challenges when studying in the United States. But many principals attributed the challenges to uncontrolled external variables, such as home life, in China influencing the transition beyond the school's individual control.

Theme two: 100% of respondents stated they provide some type of preparation for U.S. education. Furthermore, about 50% of principals specifically state they utilize U.S. curriculum for preparation. However, many principals also specifically stated common challenges among students as "ways of learning" or "ways of teaching" in the United States, which resonate with students' statements feeling unprepared for new classroom settings. This data seems to be a contradiction. Otherwise, it may lead to the conclusion that simply utilizing U.S. curriculum is not an effective preparation technique. Approximately 40% of Chinese schools utilizing U.S. curriculum also mention a common theme of their students' challenges being related to the American style of teaching and learning.

Theme three: Language and culture training is what students need to be prepared for U.S. higher education institutions. Approximately 80% of principals responded that English language and culture preparation would help improve preparation for U.S. higher education. This seems obvious, but it is clearly supported by the data provided by both Chinese students and principals. Similar to the students' demand for additional classroom preparation, many of the Chinese principals also suggested that intensive English programs or short-term summer exchange programs are key elements that may better prepare students for attending colleges and universities in the United States. Principals believe that language and culture are keys to success, because language barriers and cultural difficulties can cause tremendous emotional stress on students and in turn impair students' school performance.

## 5. Discussions

Chinese students were highly unsatisfied with the common phenomena that preparation programs (1) utilized Chinese textbooks instead of American English, (2) employed Chinese staff to teach most of the courses, and (3) lacked U.S. standards of evaluation. While, Principals primarily point to language, culture, and family life as the basis for addressing student challenges.

It is clear that both school preparation programs and students' individual initiatives have the power and responsibility to increase personal preparedness for education in the United States. While Chinese classes are striving to more closely emulate the style and experience of the U.S. classroom, students also must be seeking out additional language and culture training. Whether it is via short-term exchanges or participation in additional intensive English programs. Chinese students' mastery of the English language is the number one recommendation for increasing success in the United States by Chinese high school principals and experienced international Chinese students studying abroad.

## 5.1 Theoretical Elements

Although prior research contended that numerous factors, including academic and financial difficulties, interpersonal problems, cultural barriers, racial discrimination, alienation and homesickness, and loss of social support, can influence international students' performance in school (Hsu, 2003; Yeh & Inose, 2003; Altbach & Teichler, 2001), this study did not find evidence to substantiate the factor of financial difficulties, which verified

the analysis from the literature review that this challenge might not be a major issue for Chinese international students.

However, the clusters of significant responses indicating acculturation barriers reflected the previous findings of cultural barriers, racial discrimination, alienation and homesickness, and loss of social support. The researcher believe the theme of acculturation barriers also expounded the report from Fischer (2012) and Gareis (2012) that Chinese international students are inclined to have little or no U.S. friends and are normally dissatisfied with the quality of their friendships with American peers.

This study also progressed research by beginning to trace causation of student challenge. Through in-depth student interviews, researchers found significant clues for justification of "educational shock" experienced by Chinese students. The response from Chinese students explicitly indicated their preparation programs in China had missed the opportunity to adequately develop their academic potential. However, Chinese principals did not approve this unilateral idea, siting external variables as the source of trouble, but a unanimous negative attitude from Chinese students reflect room for improvement in Chinese preparation programs and suggest the need for future research.

## 5.2 Possible Solutions and Implications

*U.S. higher education institutions*. More social activities could be planned for international students to meet American friends and connect with the local communities. For instance, universities could incorporate cultural ambassadors and host family programs. Student feedback highly supported programs where local students and families voluntarily helped international students' acclimation process. Comments as "my ambassador helped me with registration, which I have never done before. Without the help, I would have struggled at the beginning", or "my parents (host family) show me around the school and community and told me what I can do for recreation so I don't feel like I'm just a foreign student but a resident of the town" are widely recognized by students as direct contributors to their success in the United States.

Additionally, U.S. universities should consider providing a more comprehensive guide for new Chinese students. Student feedback emphasized the importance of receiving pre-departure information as a critical component to reduce stress. In many cases, this was the first time students and families had applied for visas, booked international flights, arranged ground transport from airports, and signed housing agreements. All these details were mentioned as stress factors simply because of the planning process.

Chinese students stated "I wish my school offered me a flow chart of all the information and tasks I needed to complete from starting my application to attending my first class" and "my parents were very anxious because they could not understand the admission documents and were worried that I may run into trouble after entering the U.S. without a full plan". A more transparent, pre-departure guide for Chinese students would likely alleviative these difficulties. Furthermore, a guide with a second version in Chinese would be highly recommended as a best-practice to communicate with parents and grandparents of enrolled Chinese students.

U.S. universities should also consider arranging transitional courses for international students to prepare for real classroom scenarios prior to the first day of classes. Transitional courses should focus solely on authentic classroom immersion and activity engagement. Students specifically reported an interest in learning about environmental scenarios, course and lesson arrangement, testing schedules and organization, and general classroom demeanor.

Chinese educational institutions. Increasing authenticity of U.S. education exposure is suggested in the preparation phase. The first, and most obvious student suggestion was to increase the number of qualified native English speaking teachers. However, budgets and access play a significant role in the existing number of teachers. So, if the initial suggestion is not possible, student also suggest resolving the shortage through incorporation of technological tools and Internet based online courses. A secondary suggestion was shifting coursework materials to be entirely in English.

Additionally, many students suggested that Chinese international preparation programs should focus on developing relationships which can offer exchange program opportunities to students. This should not significantly affect the cost or structure of Chinese schools, but rather increase access for Chinese students and families to seek additional experience-based preparation opportunities. Students consistently mentioned the value of such opportunities and highly recommended Chinese schools placing more emphasis on encouraging students to pursue experience-based education opportunities.

*Personal Preparation*. Best-practices for success in the transition to U.S. institutions are known to be engaging in extra curricular activities, interacting with peers and developing friendship circles, and actively participating

in class. The variables require self-awareness, confidence, and dedication in order to be implemented. One can not assume that it is entirely the responsibility of Chinese and U.S. institutions to mitigate student challenges without the exertion of internal effort. However, the ideal mitigation technique will involve both internal and external initiatives.

Internally, self-motivation and confidence area very significant contribution to success, as students described, "keep using the language and don't be afraid that you will make mistakes". This study notices that students from higher-ranking universities generally described employing more academically rigorous learning strategies, such as reading grammar books, memorizing vocabulary, practicing speaking with a language partner, and so forth. Responses such as "I'm still reading academic papers everyday", and "find ways to discuss an academic topic with you American friends" emerged more frequently in this group of participants. By contrast, students from low-ranking schools preferred more entertaining manners to study their language. The sense is evident in a number of descriptions such as, "I just watch movies all the time. It makes me relax while learning the language" and "I love TV shows and I think it's a good way to practice your listening skills. Some channels even have subtitles and it's a fun way to learn".

The practice of English language development techniques should not wait for living in the United States. Rather, students should be more self-aware of the necessity of communication skills and be personally developing them outside of Chinese classrooms prior to U.S. enrollment. Then, students should be sustaining this practice in the U.S.

#### 6. Conclusion

Through analyzing the student and Chinese perspective surrounding transitional challenges, the researchers were able to provide insightful information for education administrators from both the U.S. and China in order to begin mitigation of the well known challenges facing Chinese international students studying in the United States. Research findings may also serve as a guide for individuals and their families when preparing for study abroad, as it is clear that the responsibility of a successful transition process is not entirely on the shoulders of Chinese and U.S. institutions. All three stakeholders have improvement that can be made in order to most effectively mitigate the challenges and promote student success.

Moving forward, student interviews have suggested that international high school programs in China should maintain an effective balance between a test-oriented academic culture and practical language training, which is more aligned with the real U.S. school environments. Successful international preparation programs should focus on structuring authentic U.S. classroom experiences in Chinese. This would include using authentic textbooks, evaluation standards, and English as a teaching medium. Furthermore, Chinese teaching practices among international schools should provide exposure to learning activities such as pop quizzes, presentations, term papers, group projects, and consistent class participation that is integrated into the course grade book.

U.S. higher education institutions need to approach mitigation from a services and policy perspective. Chinese students specifically expressed an expectation of my comprehensive and transparent pre-departure information. Additionally, Chinese students expressed serious interest in a pre-semester orientation of the U.S. classroom. However, the third complementary piece of improvement is for internal professional development of institutional teaching faculty. As professors are in the front line of communication with Chinese international students, they need to be aware of this information. For newly transitioned students, it may be beneficial to initiate policies which announce assignments involving participation and group work further in advance to allow Chinese students to do extra preparation.

Chinese students as individuals are the third stakeholder, and potentially the most crucial element of challenge mitigation. This category includes personal work ethic and attitude, but also extends beyond into family life. The researchers are suggesting that without losing connection with the strong family values shared among the Chinese culture, Chinese parents should begin working more closely with administrators of Chinese international preparation schools. As it is clear that both home and school environments have contributions to the pre-transition preparation process.

#### 6.1 Future Research

Some limitations of this study include (1) the absence of complete post-graduate tracking data from Chinese high schools, (2) a fairly small sample size of high school principal respondents in relation to the size and variability of China, and (3) the inability to accurately collect data from schools without receiving diplomatic-style responses.

While 100% of Chinese principals stated their school is currently doing some type of post-graduate tracking of students attending U.S higher education, the researchers were not given any tangible data or provided with many specifics to exact policies for student tracking. Only one principal offered additional information regarding student tracking; that school tracks students for one-year post-graduation. This type of data on a much larger scale would be very beneficial for evaluating the effect of preparation changes and improvements. Additionally, follow up studies would benefit from data that spans a duration greater than one year after high school graduation.

Furthermore, this study was heavily focused on the Chinese students' perspective that were currently studying in U.S. universities toward mitigating transition challenges. Additional research that collects data of students currently studying in Chinese preparation programs and recent graduates from U.S. high education may be valuable for providing a more holistic interpretation of Chinese student challenges, the origins of their challenges, and affect of mitigation strategies on such challenges.

### References

- Abelmann, N., & Kang, J. (2014). A Fraught Exchange? U.S. Media on Chinese. International Undergraduates and the American University. *Journal of Studies in International Education*, 18(4), 382-397. http://dx.doi.org/10.1177/1028315313479852
- Adelman, M. B. (1988). Cross-cultural adjustment: A theoretical perspective on social support. *International Journal of Intercultural Relations*, 12, 183-204. http://dx.doi.org/10.1016/0147-1767(88)90015-6
- Alspaugh, J. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research*, 92, 20-25. http://dx.doi.org/10.1080/00220679809597572
- Altbach, P. G., & Teichler, U. (2001). Internationalization and exchanges in a globalized university. *Journal of Studies in International Education*, 5(1), 5-25. http://dx.doi.org/10.1177/102831530151002
- Anders, M. (2014). Luxury cars on campus: Chinese students at MSU flock to BMWs, Maseratis, other high-end autos. MLive Media Group. Retrieved from http://www.mlive.com/lansing-news/index.ssf/2014/04/michigan\_state
- Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education*, *5*(2), 131-154. http://dx.doi.org/10.1177/1475240906065589
- Bartlett, T., & Fischer, K. (2011, November 3). The China Conundrum. *The New York Times*. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic/
- Bochner, S., McLeod, B., & Lin, A. (1977). Friendship patterns of overseas students: A functional model. *International Journal of Psychology*, 12, 277-297. http://dx.doi.org/10.1080/00207597708247396
- Chang, S. J. (1990). A study of language learning behaviors of Chinese students at the University of Georgia and the relation of those behaviors to oral proficiency and other factors (Unpublished doctoral dissertation). University of Georgia.
- Chen, L. (2009). The effects of tutoring in preparing Chinese students for the scholastic aptitude test (Doctoral dissertation).

  Retrieved from http://0-search.proquest.com.source.unco.edu/docview/1140142578?accountid=12832
- Chu, T. (2004). 150 Years of Chinese Students in America. Harvard China Review, 5(1), 2-7.
- Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. Valee, & M. King (Eds.), *Existential phenomenological alternatives in psychology* (pp. 48-71). New York: Oxford University Press.
- Conaway, M. (1982). Listening: Learning too and retention agent. In A. S. Algier, & K. W. Algier (Eds.), *Improving reading and study skills*. San Francisco: Jossey-Bass.
- Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Diamond, N. A., Sharp, G., & Ory, J. C. (1983). *Improving your lecturing*. Retrieved from http://0search.proquest.com.source.unco.edu/docview/63126256?accountid=12832
- Donovan, K. C. (1981). Assisting students and scholars from the People's Republic of China: A handbook for community groups. The committee on scholarly communication with the People's Republic of China and the National Association for Foreign Student Affairs, Washington, D.C.: National Association for Foreign Student Affairs.

- Editorial. (2009, December 22). *Great initiative for local students*. The Press-Republican. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic
- Fischer, K. (2012, June 14). Many foreign students find themselves friendless in the U.S., study finds. *The Chronicle of Higher Education*. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic/
- FlorCruz, M. (2013, October 30). 1 In 4 Chinese students drop out of ivy universities and return home for jobs. *International Business Times*. Retrieved from http://www.ibtimes.com/1-4-chinese-students-drop-out-ivy-universities-return-home-jobs-1446382
- Frankel, R. M. (1999). Standards of qualitative research. In B. F. Crabtree, & W. L. Miller (Eds.), *Doing qualitative research* (2nd ed., pp. 333-346). Thousand Oaks, CA: Sage.
- Furnham, A., & Alibhai, N. (1985). The friendship networks of foreign students: A replication and extension of the functional model. *International Journal of Psychology*, 20, 709-722. http://dx.doi.org/10.1080/00207598508247565
- Gao, S. (2012). The biggest english corner in china. *English Today*, 28(3), 34-39. http://dx.doi.org/10.1017/S0266078412000296
- Gareis, E. (2012). Intercultural friendship: Effects of home and host region. *Journal of International and Intercultural Communication*, 5, 309-328. http://dx.doi.org/10.1080/17513057.2012.691525
- Golden, H. (2014). Perception of Chinese students as wealthy overlooks majority. *Daily Emerald*. Retrieved from http://dailyemerald.com/2014/03/11/perception-of-chinese-students-as-wealthy-overlooks-majority/
- Harris, D. (2012, January 11). Chinese students in America. It's bad out there. *China Low Blog*. Retrieved from http://www.chinalawblog.com/2012/01/chinese\_students\_in\_america\_why\_do\_they\_even\_bother.html
- Holmes, P. (2004). Negotiating differences in learning and intercultural communication: Ethnic Chinese students in a New Zealand University. *Business Communication Quarterly*, 67, 294-307. http://dx.doi.org/10.1177/1080569904268141
- Hsu, P. Y. (2003). An assessment of counseling needs of international students at University of Wisconsin Stout (Masters of Science thesis). WI University of Wisconsin-Stout, Menomonie.
- Jie, L., & Xiaoqing, Q. (2006). Language learning styles and learning strategies of tertiary-level English learners in china. *Regional Language Centre Journal*, *37*(1), 67-90. http://dx.doi.org/10.1177/0033688206063475
- Jinyan, H. (2005). Challenges of Academic Listening in English: Reports by Chinese Students. *College Student Journal*, 39(3), 553-569.
- Kao, C. C. (1987). Adjustment problems perceived by Chinese students attending universities in the metropolitan Washington D.C. area (Unpublished doctoral dissertation). Catholic University of America.
- Kettle, M., Yuan, Y., Luke, A., Ewing, R., & Shen, H. (2012). The pedagogical, linguistic, and content features of popular english language learning websites in china: A framework for analysis and design. *Frontiers of Education in China*, 7(4), 534.
- Kuo, L. (2014). Are US universities choosing rich Chinese students over Asian Americans? *QUARTZ*. Retrieved from http://qz.com/203273/are-us-universities-are-choosing-rich-chinese-students-over-asian-americans/
- Lebauer, R. S. (1984). Using lecture transcripts in EAP lecture comprehension courses. *TESOL Quarterly*, *18*, 41-54. http://dx.doi.org/10.2307/3586334
- Lin, L. (1998). Chinese graduate students' perception of their adjustment experiences at the University of Pittsburgh (Unpublished doctoral dissertation). University of Pittsburgh.
- Liu, D. (1995). Social cultural transfer and its effect on second language speaker's communication. *International Journal of Intercultural relations*, 19, 253-265. http://dx.doi.org/10.1016/0147-1767(94)00008-L
- Liu, D., Brancato, V., & Da, F. (2014). International high school development in Chongqing: Test preparation vs. university preparation. *ICEMSS-14*, 48-52.
- Liu, S. (2013, November 7). *Chinese students are dropping out of school in US*. Sino-US. Retrieved from http://www.sino-us.com/292/Chinese-students-are-dropping-out-of-school-in-US.html
- Liu, S., & Teddlie, C. (2005). A follow-up study on teacher evaluation in china: Historical analysis and latest trends Springer. *Journal of Personnel Evaluation in Education*, *18*(4), 253-272. http://dx.doi.org/10.1007/s11092-007-9029-4

- Liu, Y., & Lu, Z. (2011). Trajectories of Chinese students' sense of school belonging and academic achievement over the high school transition period. *Learning & Individual Differences*, 21(2), 187-190. http://dx.doi.org/10.1016/j.lindif.2010.12.007
- Lou, H. (1989). A study of adjustment problems of Chinese students in selected higher education institutions in the U.S. (Unpublished doctoral dissertation). University of Minnesota.
- Luo, C. (2013, October 29). One in four Chinese students drop out of Ivy League schools. *South China Morning Post.*Retrieved from <a href="http://www.scmp.com/news/china-insider/article/1342846/study-one-four-chinese-students-drop-out-ivy-league-schools">http://www.scmp.com/news/china-insider/article/1342846/study-one-four-chinese-students-drop-out-ivy-league-schools</a>
- Marklein, M. B. (2009, December 8). Chinese college students flocking to U.S. campuses; "Strong dialogue" spurs a surge in enrollment. *USA Today*. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic/
- McClure, J. W. (2007). International graduates' cross-cultural adjustment: Experiences, coping strategies, and suggested programmatic responses. *Teaching in Higher Education*, *12*(2), 199-217. http://dx.doi.org/10.1080/13562510701191976
- Meadows, L. M., & Morse, J. M. (2001). Constructing evidence within the qualitative project. In J. M. Morse, J. M. Swansen, & A. Kuzel (Eds.), *Nature of qualitative evidence* (pp. 187-200). Thousand Oaks, CA: Sage. http://dx.doi.org/10.4135/9781412986236.n8
- Moller, S., Stearns, E., Potochnick, S. R., & Southworth, S. (2011). Student Achievement and College Selectivity: How Changes in Achievement During High School Affect the Selectivity of College Attended. *Youth & Society*, 43(2), 656-680. http://dx.doi.org/10.1177/0044118X10365629
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage. http://dx.doi.org/10.4135/9781412995658
- Nelson, C. (2013, November 1). Chinese Students Drive Record Number of International Students at US Campuses. *China Business Review*, 4.
- Perkins, C. (1977). A comparison of the adjustment problems of three international groups. *Journal of College Student Personnel*, 18(7), 382.
- Pope, D., & Donald, B. (2013, April 22). *Re: Are AP courses worth the effort? An interview with Stanford education expert Denise Pope* [Stanford Report]. Retrieved from http://news.stanford.edu/news/2013/april/advanced-placement-courses-032213.html
- Robinson, J., & Guan, X. (2012). The changing face of international education in china. *On the Horizon*, 20(4), 305-312. http://dx.doi.org/10.1108/10748121211272443
- Ruiz, N. G. (2014, August 29). The geography of foreign students in U.S. higher education: Origins and destinations.

  \*\*Brookings\*\*.\*\* Retrieved from http://www.brookings.edu/research/interactives/2014/geography-of-foreign-students#/M10420
- Sam, D. L. (2001). Satisfaction with life among international students: An exploratory study. *Social Indicators Research*, *53*, 315-337. http://dx.doi.org/10.1023/A:1007108614571
- Sawir, E. (2005). Language difficulties of international students in Australia: The effects of prior learning experience. *International Education Journal*, 6(5), 567-580.
- Sawir, E., Marginson, S., Deumert, A., Nyland, C., & Ramia, G. (2008). Loneliness and international students: An Australian study. *Journal of Studies in International Education*, 12(2), 148-180. http://dx.doi.org/10.1177/1028315307299699
- Shao, H. (2014, January 17). Cash Heifers Are Here: The Luxurious Spending Habits of Overseas Chinese Students. Forbes. Retrieved from http://www.forbes.com/sites/hengshao/2014/01/17/cash-heifers-are-here-the-luxurious-spending-habits-of-o verseas-chinese-students/
- Steinberg, J. (2011, February 11). Recruiting in China pays off for U.S. colleges. *The New York Times*. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic/
- Suido, S. M., Shaunessy, E., Michalowski, J., & Shaffer, E. S. (2008). Coping strategies of high school students in an International Baccalaureate program. *Psychology in the Schools*, *45*, 960-977. http://dx.doi.org/10.1002/pits.20345

- Sumer, S., Poyrzli, S., & Grahame, K. (2008). Predictors of depression and anxiety among international students. *Journal of Counseling & Development*, 86(4), 429-443. http://dx.doi.org/10.1002/j.1556-6678.2008.tb00531.x
- Sun, W., & Chen, G. (1997). Dimensions of difficulties Mainland Chinese Students encounter in the United States (Eric Document Reproduction Service No. Ed408635).
- Taylor, T., Pogrèbin, M., & Dodge, M. (2002). Advanced placement-advanced pressures: Academic dishonesty among elite high school students. *Educational Studies: Journal of the American Educational Studies Association*, 33, 403-421.
- Tweed R. G., & Lehman, D. R. (2002). Learning considered within a cultural context. *American Psychologist*, 57(2), 89-99. http://dx.doi.org/10.1037/0003-066X.57.2.89
- Upton, T. A. (1989). Chinese students, American universities, and cultural confrontation. *Minne TESOL Journal*, 7, 9-28.
- USNEWS. (2015). *National Universities Rankings*. Retrieved from http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/nationaluniversities?int=9ff208
- Van Manen, M. (1990). Researching lived experience: Human science for an action sensitive pedagogy. Albany: State University of New York Press.
- Wan, G. (2001). The learning experience of Chinese students in American universities: A cross-cultural perspective. *The College Student Journal*, *35*, 28-44.
- Wang, Y. (2003). The contextual knowledge of language and culture: Exploring the American academic experiences of Chinese graduate students (Unpublished doctoral dissertation). The University of Southern Mississippi.
- World Bank. (2013). GDP per capita. Retrieved from http://data.worldbank.org/indicator/NY.GDP.PCAP.CD
- Yan, K., & Berliner, D. (2009). Chinese International Students' Academic Stressors in the United States. *College Student Journal*, 43(4), 939-960.
- Yangyang, L. (2012). International Note: Between-domain relations of Chinese high school students' academic achievements. *Journal of Adolescence*, 35(4), 1097-1098. http://dx.doi.org/10.1016/j.adolescence.2012.02.004
- Ye, Y. W. (1992). *Chinesestudents' needs and adjustment problems in a U.S. university* (Unpublished doctoral dissertation). University of Nebraska-Linclon.
- Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly*, *16*(1), 15-28. http://dx.doi.org/10.1080/0951507031000114058
- Yeh, Y. (2000). *Chinesestudent stress: A further clarification of Merton's anomie theory* (Unpublished doctoral dissertation). University of Pennsylvania.
- Zhang, Y. (2007). The new American university entrance examination enlightenment-SAT II: American history and social studies assessment. Wangfang Data. Beijing, China. Retrieved from http://www.wanfangdata.com
- Zhao, Y., Jindal-Snape, D., Topping, K., & Todman, J. (2008). Theoretical models of culture shock and adaptation in international students in higher education. *Studies in Higher Education*, *33*(1), 63-75. http://dx.doi.org/10.1080/03075070701794833

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