ATHABASCA UNIVERSITY

ENVISIONING SINO-FOREIGN UNIVERSITY PARTNERSHIPS AND STRATEGIES IN

2030

BY

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A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTORATE IN BUSINESS ADMINISTRATION

FACULTY OF BUSINESS ATHABASCA UNIVERSITY APRIL 2016

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Approval Page



The future of learning.

Approval of Thesis

The undersigned certify that they have read the thesis entitled

"Envisioning Successful Sino-Foreign University Partnerships and Strategies in 2030"

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Dedication

I would like to dedicate this thesis to my wife Yang Bo for her support during my

journey to complete my DBA.

Abstract

The inspiration for this dissertation came from the researcher's decade of work experience at a type 3 Sino-Foreign University. The complexity and uncertainty about their future led the researcher to envision the qualities of successful Sino-Foreign University partnerships and strategies in 2030 through a Delphi study. To envision the future of Sino-Foreign Universities, data was collected from an elite set of participants representing the senior management of type 3 and 4 Sino-Foreign University partnerships. This dissertation includes a proposed typology that merges the typologies of the 4 partnership types in Mainland China, the 4F Framework, and the GATS typology with the findings of this dissertation. The findings also suggest a review of the Ministry of Education's preference for type 4 partnerships (stand-alone model) given the advantages of type 3 partnerships (embedded model) toward 2030. The findings of this dissertation also provides further insight related to the intervention of foreign resources in developing countries' higher education systems by 2030. Separate contributions of this dissertation include a methodological framework for conducting a Sino-Foreign University Delphi study and practical contributions related to the strategic planning of current and prospective Sino-Foreign Universities. This dissertation also provides knowledge for further futures research related to Sino-Foreign Universities.

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Chapter I-Introduction

Universities in Mainland China has been undergoing significant growth and change over the last decade due to the expansion of the industry (Ngok, 2008). This phenomenon is a result of the centrally-planned higher-education projects known as Project 985 and Project 211, and further industry changes are expected in the future. Sino-Foreign university partnerships are established and important components of higher education in Mainland China, but they are facing substantial uncertainty as the pace of change in this industry has accelerated recently. Specifically, the future of Sino-Foreign universities is uncertain in light of the reforms in the higher education system, especially regarding Projects 985 and 211. In order for these organizations to plan for their own futures and understand their place in the Chinese educational system, they, and we, must devote attention to understanding how the central planning of the Chinese education sector, the growth in domestic and foreign student numbers, and the changes that Western universities are experiencing will likely impact Sino-Foreign universities. These issues are the focus and motivation for this Delphi driven Futures study.

This chapter explains the origin, purpose, objectives and research questions that will be addressed in this study, and provides the background for the research. Specifically, this dissertation outlines the importance of this topic for educational administration in general, and within the Mainland Chinese context in particular. The following chapters will cover the literature, methodological approach, analysis and achieved research contributions. The objective of this dissertation is to identify the elements of success and envision Sino-Foreign University partnerships in 2030.

The dissertation's origin

Sino-Foreign universities, for the purpose of this study, are defined as fully licensed transnational higher education campuses situated in Mainland China. The researcher has had a significant role over the past decade in establishing a fully licensed Sino-Foreign university operating today. Sino-British College is located on an original Sino-Foreign university campus mentioned in the Treaty of Versailles regarding the handover of a German college to Mainland China (Yale Law Lillian Goldman Law Library, 2008). This historic site, which was one of the original Sino-Foreign universities 100 years ago, is where the researcher is located and thus was ideal to investigate how Sino-Foreign universities will change their future. This experience provided insights and access to resources integral to this dissertation and motivated the use of Future studies approaches to help with strategic planning for this specific type of institution. The experience and resources built up over ten years in this industry both contributed to, and made possible, this contribution to knowledge relating to transnational higher education, Sino-Foreign universities, and future research.

Purpose of the dissertation

The purpose of this study was to envision the future Sino-Foreign university partnership models in 2030. First, the dissertation addressed how the Sino-Foreign University partnerships will change between now and 2030. Sino-Foreign university partnerships have struggled and changed over the past ten years due to many partnership misunderstandings (Willis, 2001b). Understanding how partnerships will change over the next fifteen years will also help prospective western universities that are applying to

enter into the higher education market of Mainland China with an approved partnership bid.

The second purpose of this study was to address the large number of Sino-Foreign university partnership proposals that are rejected. Sino-Foreign university policies have not yet been formalized by the Ministry of Education, a fact that calls the future of transnational higher education programs in Mainland China into question. Many proposals of transnational higher education programs in Mainland China are rejected without a complete understanding by the western university applying as to why. Given the failure of many Sino-Foreign university programs and applications, there is also further confusion as to which elements are required by the Ministry of Education to prepare for the context of Mainland China's higher education system in the future.

Third, strategies for ensuring Sino-Foreign university partnership stability have largely failed. It has been difficult to implement partnership strategies over the past decade in light of the expansion of Mainland China's higher education system. Sino-Foreign Universities have adopted different strategies, and the lack of clarity regarding the best strategy to help partnerships achieve stability is problematic. Providing insight into the appropriate strategy (ies) will benefit both current and future programs entering the higher education market of Mainland China.

Main research question

As discussed above, this research sought to envision the future of Sino-Foreign Universities in 2030. The date of 2030 was chosen to envision future changes as it represents a change from a current 50% to 80% percent of urban residency in Mainland China, which will require further educational services. The year 2030 was also chosen to confirm whether transnational higher education would be needed at that time given the ongoing maturity and strength of China's Higher Education system (Blass & Woods, 2012); and also because the Ministry of Education has a planning agenda until 2020 but does not have one planned for 2030. Clearly this research fits into the broad category of Futures research that seeks to explore future conditions in a specific setting.

This research endeavor sought to answer the question of which Sino-Foreign university partnership(s) and strategy (ies) will be the most likely to succeed in Mainland China's higher education context in 2030. Success is defined in this context as a Sino-Foreign university partnership that can withstand the forces of Mainland China's contextual environment. Success is furthermore defined as a partnership maintaining operational stability in terms of various factors including student enrollment, facilities, and academic quality. The past decade's history of Sino-Foreign universities in a quickly changing market paints an unclear picture of this unstable niche industry (Willis, 2001b). Despite the government's encouragement of their development (Willis, 2001b; Mu, 2011) only a handful of independent, fully licensed Sino-Foreign universities have been approved (Huang, 2007; Zhang, 2008; Gow, 2012). The limited number of successful Sino-Foreign university partnerships prompted this investigation into what partnership(s) and strategy (ies) will ensure their institutional success in 2030.

The partnership types of interest in this dissertation were Type 3 and Type 4 partnerships as per Willis's (2001a) publication. Specifically, Type 3 partnerships (embedded model) deliver single degrees taught partially in China from a wing of the local joint venture partner's state university campus. They are also funded from tuition streams, with the additional purpose of attracting foreign students to study in Mainland China. Type 4 partnerships (stand-alone model) are full campuses offering multiple degrees and conducting research (Willis, 2001a). The priority of Type 4 partnerships is to enroll Chinese state university students with a minority of open market students.

Sub research questions

What are the qualities of a successful Sino-Foreign university partnership in 2013? This dissertation answered that question by understanding the qualities that make current Sino-Foreign university partnerships successful. Understanding success is important because Mainland China needs Sino-Foreign universities to raise their higher education system standards (Mu, 2011); to assist in achieving world-class universities; and to enhance their research quality (Ennew & Yang, 2009; Ngok, 2008; Halachmi & Ngok, 2009). Over the past decade, many partnerships have failed (Damast, 2008), a fact that emphasizes the importance of defining and understanding the unique set of attributes that has allowed a handful of these partnerships to succeed.

Which qualities of successful Sino-Foreign university partnerships will change towards 2030?

The qualities that make Sino-Foreign university partnerships successful are expected to change over time as 2030 approaches. The standard Sino-Foreign university partnership of the past decade has been the twinning model with undergraduate business degrees. The suggested qualities of successful Sino-Foreign universities in the future, as indicated in the literature, include partnership types that offer full degrees in Mainland China and those which involve an increased amount of commitment (Willis, 2001a). Clarifying which successful partnership qualities will change, and how they will change, will assist in envisioning the Sino-Foreign universities of 2030.

Which strategy (ies) would support successful Sino-Foreign university partnerships in 2030?

A successful strategy for Sino-Foreign university partnerships will address the two trends that have been identified in the literature:

- That developing nations will not need transnational higher education programs in 15 years given the ongoing maturity and strength of China's Higher Education system (Blass & Woods, 2012).
- The large failure rate and operational problems of Sino-Foreign university partnerships (Damast, 2008; Willis, 2006b; Willis, 2008; Ennew & Yang, 2009; Li & Morgan, 2008).

The literature has suggested three possible strategies to overcome these trends: a costcompetitive strategy, a research-based strategy, and a global awareness strategy (Wilkins & Huisman, 2011; Lewin, 2008; Naidoo, 2007). Whether any of these three strategies, or

an alternative strategy, could ensure successful Sino-Foreign university partnerships in 2030 was investigated in this study. The research revealed strategies that best achieves success, and due to the findings other Western nations are expected to increase their interest in entering the Sino-Foreign university market. Subsequently, knowledge of a successful strategy helped us understand Sino-Foreign university futures. The successful strategy was able to endure in Mainland China's higher education context as envisioned by the participants in 2030.

Objectives of the dissertation

This research endeavor has two main objectives. The following introduces each objective and provides insights into transnational higher education campuses that may become increasingly used. The two objectives discussed below guided the collection of data to assist in envisioning Sino-Foreign university partnerships and models for 2030.

Test the elements of success in Willis's Type 3 and 4 Sino-Foreign University partnerships.

As only a handful of Type 4 Sino-Foreign university partnerships are present and stable in Mainland China's higher education market at the moment, the elements that make them successful were examined. The success of Sino-British university partnerships, which represent three of the five fully licensed Sino-Foreign universities, will be used as examples of effective strategies. The researcher's access to elite participants at the Type 3 and 4 Sino-British university partnerships provided a perfect testing ground for exploring the elements of these institutions' success.

Testing the elements of partnership success was accomplished by highlighting the similarities between the participants' responses and the common elements of Type 3 and 4 Sino-Foreign University partnerships. The elements of Sino-Foreign university success were tested to determine whether these elements are expected to continue or change in the higher-education context of Mainland China in 2030. This was accomplished by interviewing participants who are the leading experts in Sino-Foreign Universities. Examining the successful qualities of current partnerships allowed participants to reflect on the needed qualities for successful Sino-Foreign university partnerships and strategies between now and 2030.

Envision Sino-Foreign university strategies and partnerships in 2030.

Strategies identified in the literature include cost-competitive, research-based, and global citizen strategies. The researcher's privileged access to Sino-Foreign University stakeholders allowed for the collection of data that might otherwise be difficult to obtain. Expert participants were used to explore possible strategies for Sino-Foreign universities in response to the higher education context in Mainland China in 2030. Other strategies not present in the literature were developed through the elite participants' participation, which provided the most up-to-date data for Sino-Foreign university Delphi research.

This introduction presents the origins, purpose, objectives and research questions of this study. Chapter 2 reviews the literature of Mainland China's higher education history and trends. Reviewing many topics relating to Sino-Foreign universities reveals gaps in the body of knowledge on the subject. Specifics of these gaps and the proposed partnerships

will be discussed within the literature review, which highlights the higher education research context of Mainland China. Chapter 3 assesses the task of university planning through reviewing, foresight, research and methodologies. Chapter 4 presents the specific Delphi method procedures used in this study, Chapter 5 and 6 outline the quantitative and qualitative findings. Finally, Chapter 7 concludes the dissertation by summarizing the study's contributions to knowledge and practice and outlining areas for future research.

Chapter II - Higher Education in Mainland China

The literature review begins with a general discussion of global higher education trends and moves to a more specific focus on Mainland China and Sino-Foreign universities. The chapter reveals gaps in the literature regarding the current and understood future state of Sino-Foreign Universities and further supports the need of this dissertation. The conclusions set the foundation for Chapter 3 that explores the methodological approaches for futures studies. Chapter 3 confirms the Delphi study as the most suitable futures methodology when considering mainland China's Higher Education context as per the literature reviewed in Chapter 2.

Higher Education Globally

Since formal Western universities began in the 13th century (Blasman, Jasman & Shelley, 2012), they have constantly changed (Elena-Perez, Saritas, Pook & Warden, 2011). Social changes have forced universities to evolve from intellectual shrines to nonprofit corporations pressured by marketing and economic forces (Dearlove, 1995). The financial challenges facing universities today (Ngok, 2008; Armstrong, 2007; Healey, 2008) drives further change, often in the form of a search for increased undergraduate enrollment. These increased undergraduate enrollments are expected to come either from targeting higher internal enrollments, for example equating to 50% of the UK's senior school population (Blasman et al., 2012), or by targeting higher international enrollments, such as when Western universities are dependent on Mainland China's students for recruitment purposes (Ennew & Yang, 2009; Ayoubi & Al-Habaibeh, 2006; Elkin, Farnsworth & Templer, 2008). Increasing university's rankings and status is

another tool universities are employing in this search for more students. Transnational higher education campuses address these challenges by both recruiting international students (Healey, 2008) and providing research funding, and helping to increase a university's international rankings because of its ability to prepare globally aware graduates (Lewin, 2008).

Transnational higher education campuses are international branch campuses for Western universities (Wilkins & Huisman, 2011) that began in the 1950s for military personnel abroad (Verbik & Merkley, 2006). Specifically, Transnational education (TNE) is defined as a situation where "universities deliver their educational services to foreign students in their own countries, rather than the students travelling to the foreign university to study" (Healey & Michael, 2015, p.369). Transnational education includes a variety of programmes and educational services where the learners are studying in a different country from that of the degree awarding institution (Council of Europe, 2002). It is important to note the terms transnational higher education and cross border higher education are used interchangeably (Knight, 2004) but cross border education involves the concept of courses, faculty and campuses rather than students travelling to another nation (Knight, 2005). All Sino-Foreign University partnership activity as investigated in this dissertation reflects a transnational higher education partnership although some of the participants in this dissertation have had previous experience with cross border higher education programs given their extensive leadership backgrounds in international higher education collaborations.

Partnership models include independent overseas university campuses; joint campuses; dual degree programs; joint programs or projects; and overseas Chinese university campuses abroad (Zhang, 2008). The acceptability of these various transnational higher education partnerships suggests that an ideal model does not yet exist (Naidoo, 2009). Despite their potentially significant roles in global education, many transnational higher education programs have failed, and forecasts of the failure or success of these educational projects are lacking in the literature (Paul, 2005). From the host nation's perspective, transnational higher education campuses can be very beneficial. For instance, these institutions have been credited with allowing Malaysia to move from a manufacturing to a knowledge-based nation (Wilkins & Huisman, 2011). Transnational higher education programs kept 1 billion dollars of educational investments in Malaysia instead of being spent abroad (Sato, 2005).

Asian students are expected to have a significant impact on Western universities, representing 70% of foreign students enrolled in Western universities by 2020 (British Council, 2004). It is expected that half of Australia's international student enrollments will come from transnational higher education programs by 2025, demonstrating their importance (Bohm, Davis, Meares & Pearce, 2002). These statistics and predictions suggest that transnational higher education campuses will challenge the ways in which universities are defined and operated (Armstrong, 2007; Halachmi & Ngok, 2009; Huang, 2007). The increase in prospective students from the Eastern hemisphere could lead to a larger demand for Sino-Foreign universities, which would help to alleviate Western universities' financial issues through international students' tuition. These

students' enrollment in transnational higher education programs would compensate for the West's declining student numbers in terms of domestic students in the UK (Paton & Stubbons, 2013), America (Korn, 2014), Canada (Serebin, 2010) as well as international students at UK home campuses (Garner, 2014). The potential to recruit similar student numbers in their home campus, due to Asia's high population and rising middle class who can now afford a higher education, is relevant as international recruitment targets are often not achieved (Naidoo, 2009). With UK undergraduate tuition tripling, for example, it is increasingly challenging for UK universities to attract local students (The Guardian, 2011).

At the same time, Blass and Woods (2012) predict that developing nations will have their own independent higher education systems by approximately 2030, suggesting that the boom of Asian international students may not transpire. The contextual forces existing in Mainland China's higher education system are currently at a level that higher education has never before experienced, and it is thus difficult to envision its future; but these forces and those that come into existence within the next fifteen years will further influence the possibility of whether Blass and Wood's (2012) statements will come true. This further strengthens the necessity of investigating the future of Sino-Foreign university partnerships and strategies, particularly in light of Mainland China accounting for 20% of the global population.

There are several factors involved in attracting students to transnational higher education campuses (Healey, 2008), including a new-found affordability, prospective employment

with a high salary, and the status associated with attending a prestigious university (ibid). American degrees are the most attractive educational goals for Mainland Chinese students, a fact that is credited to America's global dominance in recruiting students and faculty (Armstrong, 2007). The limited seats of top state universities, government intervention regarding the number of institutions granted operational licenses, and a deregulation in fees resulting in higher international student fees are all catalysts for the formation of transnational higher education campuses (Healey, 2008). Mainland China's development and booming economy in recent years, in contrast to the recessionary markets of many Western nations, has resulted in Western graduates seeking employment in Beijing and Shanghai (Han, 2011; Rekai, 2012). Western students aiming to study or work in Mainland China could increase the demand and importance of Sino-Foreign universities.

Online education may be a possible solution to educate the growing numbers of undergraduates in Mainland China. The amount of distance education programs offered by accredited U.S. institutions ballooned from 44% to 56% from 1998 to 2001, and this rise was credited to the rising number of international students who were seeking U.S. degrees (The Report on International Distance Education, 2005). Distance education was defined and based on the University of Phoenix model in the literature (ibid), which is facilitated by an online platform for delivering their educational services. Despite the lack of abundant literature to support his argument, Wild (1997) claims there is an agreement among researchers regarding the influence of culture on the acceptability of distance education in a particular region; however, this claim has not yet been

empirically tested. While distance education has expanded in America, it has not yet come to Eastern Asia and Mainland China, through a Western university's transnational higher education campus. Furthermore, the Ministry of Education has not yet approved foreign online degrees for study in Mainland China, which means students who study for foreign online degrees will not have their degrees recognized (Robinson, Wei, Gong, Schwalb, n.d.). The lack of approval of foreign online degrees also means that any other degrees completed afterwards will be considered invalid by the Ministry of Education, thus eliminating or reducing the employment prospects of graduates (Ministry of Education, 2012).

As well, distance higher education in Mainland China, whether through independent study or specifically through online applications, is considered unpopular and impractical. Mainland China is similarly far behind in accepting online and distance methods of instruction; currently, this form of education is recognized only for certain age groups and privileged urban residents. Evans' (2009) book review of Wei Runfang's (2008) comparison of the UK Open University and Mainland China's radio and TV universities highlights the difference between these two systems. The book's author, Wei Runfang, sees distance education in Mainland China as non-egalitarian, which counters the concept of the UK Open University and her perspective of what distance education should be and should represent. Her book notes that the profiles of the students in Mainland China's distance learning institutions do not represent the average national citizen profile, unlike those of the UK Open University. She explains that China's distance learning, radio, and communication educational institutions are still only for the

upper class and are not intended for adult learners in general. Her review notes that Mainland China requires time to develop a system of equal opportunity education like that in the West.

Additionally, Chen, Bennett and Maton's (2008) work found online learning for Mainland Chinese students a less beneficial experience than comparatively studying overseas in a traditional Western classroom. The main weakness highlighted in online education is acculturative stress, meaning the struggle to preserve both one's original and new culture. Acculturative stress largely manifested itself in Chen et al.'s (2008) research with students avoiding both disagreements and the suggestions of alternate opinions in an online learning environment in order to both give and save face between classmates. On the other hand, Thompson and Ku (2005) and Yildiz and Bichelmeyer (2003) showed increased participation rates for Mainland Chinese students in an online text-based educational environment, a phenomenon that Ku and Lohr (2003) credit to a confidence to state their views more often online as compared to in person. In terms of student instruction, Chinese students prefer a traditional classroom teacher as a result of Chinese learners' expectations that instructors disseminate knowledge and enforce learning in an autocratic manner (Li, 2001; Samarawickrema, 2005). Furthermore, Chinese students prefer the classroom experience to develop interpersonal relationships with their classmates, which is considered important in Mainland China (Tu, 2001).

Finally, Samarawickrema's (2005) research highlighted Biggs' (1996) work showing that Mainland Chinese students are taught a "right way" (p. 55) to learn, making them

dependent on instructors. Biggs (1996) found that Asian students without an instructor's guidance were disorganized, weak in time management and overall struggled in an online learning environment. In concluding her paper, Samarawickrema (2005), who used Biggs (1996) work as a basis for hers, says: "If universities are actively seeking overseas student enrollments and require them to pay substantial fees, then these students will be seeking value for money and rightly demand better access to teaching staff when they need help" (p. 15). Developments associated Mainland China's higher education system need to consider the literature (ibid) and recognize the different models that universities face.

Over time the world has seen universities change with different models and there is no clearly defined future model identified in the literature (Blass, 2003). Boxal and Lambert (2009) highlight the different strategic positions that universities may take based on the resources of funding, research, and teaching, which demonstrates the complexity and uncertainty of the future state of the university. These strategic positions include: a primary research institution, a research-led teaching institution, a professionally formed institution, a blue-chip focused research-based solutions institution, and finally, a niche industry practitioner focused research institution (ibid).

Given that the two original fully licensed Type 4 Sino-Foreign universities partnerships have British partnerships, their roles as transnational higher education institutes could influence UK universities. This is particularly apparent with UK universities reducing their home campuses' international student numbers due to high graduate unemployment

rates (Travis, 2011). *The Quality Assurance Agency for Higher Education (QAA)*, which has audited Sino-British College as an example of transnational higher education standards, suggests that Sino-Foreign universities are being used as a standard of transparency and accountability in British transnational higher educational programs (QAA, 2013). To further understand Sino-Foreign universities' influence on Mainland China's universities, the greater higher education system of Mainland China must be reviewed first.

Higher education in Mainland China

Mainland China is the only lower-income nation to be completely transforming its higher educational sector (Li, Whalley, Zhang & Zhao, 2011). Since the 1990s, Mainland China has expanded its higher education system, resulting in university enrollments increasing from 3.5% in 1991 to 24.2% of Chinese high school graduates in 2009 (Ministry of Education of China, 2010). To demonstrate this growth in terms of raw student numbers, undergraduate education enrollment in 1997 was over 3 million (Ministry of Education of China, 1997) and in 2009 jumped to over 21 million students (Ministry of Education of China, 2010). According to Sun (2010), the expansion of Mainland China's higher education system was achieved by broadening the number of universities and relaxing entrance requirements due to its under-serviced higher education system (Ngok, 2008). The expansion of the higher education institutions resulted in their average size growing from 2,591 students in 1994 to 9,086 in 2009 (Ministry of Education of China, 2010).

According to the Ministry of Education website, there are 2101 regular higher education institutions; 386 non-state regular higher education institutions; 354 adult higher education institutions; 2 non-state adult higher education institutions; and 309 state approved independent colleges (Ministry of Education of China, 2010). Given Mainland China's population of approximately 1.4 billion citizens, this equates to one university for every 444,162 citizens. This differs to Canada which has 1 university for every 368,421 citizens (AUCC, 2012). Given that mainland China has experienced a large higher education expansion in just a decade it is difficult to conclude if or when the access to university will reach an identical number as Canada and other Western nations. The intensity of Mainland China's past decade of higher education expansion is quite astonishing and is historically unprecedented by the speed and size of other nation's educational development.

Ma Yan (2011) suggests that student enrollment numbers in Mainland China may in fact decline until 2018. Ma Yan claims that the one-child policy and the limited job prospects that a university degree gives will contribute to declining enrollment figures. Data from Mainland China's Ministry of Education support Ma Yan's claim of a future decline in university enrollments with a declining enrollment rate in primary schools. Primary schools have dropped their net enrollment from over 123 million in 1999 to approximately 95.5 million in 2009 (Ministry of Education of China, 2010). Additionally, senior secondary school enrollments in Mainland China have dropped from over 25 million in 2007 to 24.3 million in 2009 (Ministry of Education of China, 2010). This drop represents 56% of the total type of secondary school students, which includes

vocational college track students, in 2007 to 53% in 2009 (Ministry of Education of China, 2010). Thus, while growth was the mantra of the middle class for the last decade, constriction may be the reality facing Sino-Foreign universities.

Another notable trend is the entrance of international students to universities in Mainland China. In 2010, there was a total of 117,548 registered international students in Mainland China's universities, including 62,583 students in their first year of studies and another 18,361 who had registered earlier in the spring of 2010 (Ministry of Education, 2010). These numbers demonstrate a significant increase in recent enrollment. Of these international students, 18,967 receive financial support from the Chinese government with the remainder being self-supported (Ministry of Education of China, 2010). Alternatively, Mainland China has more international students studying abroad than any other nation, as well as having 34 domestic programs delivered in English (Lasanowski, 2009). These programs, the declining number of public school students, and the increasing presence of international students suggest that Sino-Foreign universities may be further reliant on international students as part of their academic cohort in the future. Sino-Foreign universities will, however, have to compete with Mainland China's state universities that have been given quotas to enroll international students in English and Mandarin programs (Ministry of Education, 2012).

Mainland China's higher education reform program includes Project 211 and Project 985 to prepare Mainland universities for an era of globalization (Ennew & Yang, 2009; Ngok, 2008; Halachmi & Ngok, 2009). Project 211, which was initiated in 1996, focused

on improving the quality of lecturing, research and campus facilities in the top 100 national academic institutions. A crucial element of Project 211 is that it allows local governments to govern provincial academic institutions (Ennew & Yang, 2009). Decentralization does require provincial systems to be monitored by the State Education Commission, and Mok (2003) defines decentralization as a move from a model of state control to state supervision and will achieve a more efficient management of daily educational operations.

In May 1998, Project 985 was proposed by former President Jiang Zemin to create world- class universities in Mainland China. This project was initially limited to a handful of top universities; yet, according to Halachmi and Ngok (2009), 37 of Mainland China's top universities are currently under the project. They specify that Project 985 aspires to develop top-tier creative graduate talent, quality research and academic staff who make major research contributions to society. Apart from the descriptions above, the literature states that world-class universities are vaguely defined and understood (Ennew & Yang, 2009; Ngok, 2008; Halachmi & Ngok, 2009). Alternatively, the literature is clear that, in order to create world-class universities, Mainland China needs to invite the best foreign researchers worldwide to these institutions (Ennew & Yang, 2009; Ngok, 2008; Halachmi & Ngok, 2009).

Li et al. (2011) note that Project 985 and 211 were synchronized with the 11th five-year plan, which ran from 2006 to 2011, in which Mainland China's national congress met to plan economic developments, industry reforms and update benchmarks. This recently-

completed five-year plan was focused on funding higher education in Mainland China, which has resulted in 4% of Mainland China's 2010 GDP being allocated towards the higher education budget, up from 3.4% percent in 2002 (Whalley & Zhou, 2007). As Mainland China moves towards higher rankings (Paton, 2012) and world-class universities, the efforts towards Project 211 and Project 985 continued in the government's 12th five-year plan. In the plan, the government spent 2.2% of the nation's GDP on research and development that stimulated the research agenda for universities to achieve greater academic standing (KPMG, 2012).

In comparison, Canada spent 1.8% of their GDP in 2007 and 1.6% in 2008 on their tertiary education (UNESCO, n.d.). Additionally Canada spent 4.9% of their GDP in 2007 and 4.8% in 2008 on their total public education spending. Furthermore America spent 1.3% of their GDP in 2007 and 2008 on tertiary education and 5.5% in 2007 and 2008 on their total public education spending (UNESCO, n.d.). The result of this spending is beginning to be felt in that Mainland China and India's large research output is quickly decreasing America's global stronghold position on research results (Li et al., 2011). Less funding of tertiary education in the western or developed nations may result in a greater reliance on transnational higher education partnerships, given their lower cost of operations, access to students abroad and potential for research funding. The improvement of Mainland China's Higher Education system requires the support of Western institutions (Roberts, 2010). However, some foresee a time when Mainland China could overcome America as the leading nation for university education worldwide (Armstrong, 2007).

As the percentage of urban residency moves from 40% to 80% of Mainland China's national population by 2030 (Tse, 2010; Johanneson & Palona, 2010), several megacities of over 100 million residents will be developed (China Business Forecast Report, 2010). This large-scale urbanization trend will require a number of higher education programs and a new level of development. Whether this new stage of development to accommodate an upcoming change in Mainland China's ratio of urban residents will include Sino-Foreign universities is as yet uncertain; however, given the changes that mega-cities will bring to Mainland China, it is of interest to predict how Sino-Foreign universities.

Problems with higher education in Mainland China

The rapid expansion has resulted in issues of quality programs and graduates (Ennew & Yang, 2009; Mazzarol, Soutar & Seng, 2003; Ngok, 2008; Armstrong, 2007) and high graduate unemployment (Ennew & Yang, 2009; Li & Morgan, 2008; Ngok, 2008; Li et al., 2011; Ma, 2010). Specifically, Li et al. (2011) note that, out of 4 million graduates in 2006, the labor market only demanded 1.7 million for employment. Graduate employment is increasingly important in an era of Western students seeking careers in Mainland China, which is intensifying the job market competition (Han, 2011; Rekai, 2012). Another reason for high graduate unemployment is the decentralization of the higher education system (Ngok, 2008; Li et al., 2011; Ngok, 2008; Willis, 2010). With the move to state supervision, gaps in communication and accountability, such as monitoring employment demands, were left open, weakening the Ministry of Education's quality assurance (Ennew & Yang, 2009; Li & Morgan, 2008; Ngok, 2008; Li et al.,

2011; Halachmi & Ngok, 2009; Huang, 2007). Currently, Mainland China's higher education system is fully monitored by government bodies (Willis, 2007), which differs from Western nations' systems of partial or minimal government intervention (Lingenfelter, 2004). Strategic plans to reduce unemployment levels are imperative for the Mainland Chinese government to ensure social stability, which is an already pressing problem in Mainland China (Wong, 2009). Sino-Foreign Universities have taken the initiative of offering Career Service Centers at their campuses to ensure employment success for their graduates (Appendix C). Higher Education institutes in Mainland China face also face the issue to allow academics freedom of speech. This is a challenge in Western countries, but it is particularly problematic in a communist nation like Mainland China, which controls media communication and information (Halachmi & Ngok, 2009; Lai, 2009). An additional challenge for Project 985 and Project 211 is to incorporate Sino-Foreign universities into Mainland China's higher education environment, particularly when considering their historical presence.

History of Sino-Foreign University Partnerships

The original Sino-Foreign universities began in the mid-19th century and ceased to operate in the early 20thcentury (Liu, 1960; Tian & Chen, 2008). Further details of the original Sino-Foreign universities can be seen in Appendix D. The impact of the World Wars and the Cultural Revolution resulted in the need to redevelop Mainland China's education system, which was largely dormant throughout this time period. A shortage of academics in the 1970s resulted in Western involvement returning to post-Cultural-Revolution Mainland China (Mok, 2010). The Ministry of Education re-formalized

higher education in the 1980s with some Mainland Chinese students receiving permission to study abroad (ibid). By the late 1990s, foreign joint venture programs boomed through various partnership models (Huang, 2003). Further details of modern Sino-Foreign universities are explained in detail below.

Sino-Foreign Universities

In 2003, the government began, and is still promoting, Sino-Foreign university development in Mainland China (China Business Forecast Report, 2010). Sino-Foreign Universities and Colleges for the purpose of this dissertation are defined as fully licensed institutes that meet the requirements of either Willis's (2001a) Type 3 or 4 partnerships. According to Mainland China's Educational Research Institute, Sino-Foreign universities are needed to drive the development of state universities (Mu, 2011). Despite their positive influence on state universities, Sino-Foreign universities have their own challenges. According to Huang (2003), one of these challenges is that transnational higher education programs must be approved according to the same criteria as Mainland Chinese universities. The application must be submitted by the local university partner in order to receive a full license to legally offer programs. Additionally, Huang notes that the board or governing body of a Sino-Foreign university must have Chinese citizens living in China as more than half of its membership, including the president or institutional leaders. He also states that, from the Ministry of Education's perspective, transnational higher education policies have not yet been formalized. He further states that the Ministry of Education clearly desires full degree programs to be offered in Mainland China with minimum or no study time abroad. Despite the increasingly

stringent requirements there has been continuous student interest in attending Sino-Foreign universities for over a decade as indicated by the full enrollment of several new Sino-American universities (Mu, 2011).

Reasons for Attending Sino-Foreign Universities and Colleges

Currently, Willis (2010) claims that students attend foreign universities to achieve highpaying jobs upon graduation, yet Ngok (2008) notes average salaries to be very low for most graduates. Other reasons for attending a Sino-Foreign University include the elite status and rank of the foreign university involved in the partnership (Healey, 2008; Armstrong, 2007). Sino-Foreign Universities are also cost competitive which improves their students' educational investments, this is largely due to the considerably lower living costs of studying in developing countries than at the foreign home campuses (Naidoo, 2007). Sino-Foreign universities may become recognized as cheaper alternatives to the home campus and therefore more popular choices for Western university students seeking alternative educational pathways that offer greater educational return on investment (The Guardian, 2012). Some foreign students have studied at Sino-Foreign universities due to limited seats in the UK (Verdickas 2011). Despite the continuous student interest, Sino-Foreign universities have been fraught with many problems for over a decade.

Problems with Sino-Foreign programs

Many Sino-Foreign programs have been discontinued, or are struggling, due to decreasing enrollment, increasing government regulation, difficult local partners and a

lack of cultural understanding related to daily operations (Damast, 2008). Since Huang's (2003) study many foreign MBA degrees have closed their operations in Mainland China due to a lack of demand and operational issues. Mazzarol et al. (2003) view Mainland China as a dangerous market for higher education programs; yet, Armstrong (2007) suggests this is to be expected. In Armstrong's (2007) opinion, overseas programs cannot attain the same quality as home campuses due to the decades of resources, time, effort and experience used to develop the home university. An additional challenge for Sino-Foreign programs is that they are facing steeper competition from Chinese state universities that offer similar degrees, cheaper tuition and programs taught in Mandarin or Cantonese (Damast, 2008). The Ministry of Education website, although currently under construction, indicates that state universities now have international recruitment targets, which increases the competition level (Ministry of Education, 2012).

In response, and possibly a cause, of some of the Sino-Foreign University struggles is an increased amount of higher education regulations. The English People's Daily online (2011) noted that Sino-Foreign program regulations are tightening and students who fail to comply with the registration process at the beginning of their degree will not have their degree validated by the Ministry of Education. Garrett and Verbik (2003) emphasize that China's more stringent requirements for licensing and operations of Sino-Foreign programs may indicate a desire on the part of the government to reduce and prevent future Sino-Foreign programs. The literature above demonstrates the continued tightening of regulation standards for registering students over the past 13 years and

highlights the continued challenges of establishing and operating Sino-Foreign Universities within this context.

Due to the reasons as indicated above many Type 3 and 4 Sino-Foreign University programs have struggled to exist or failed over the past decade. A list of failed transnational higher education programs in Mainland China is long, incomplete and impossible to obtain because of:

- the changing legal structure and record keeping of the Ministry of Education;
- the expansion of the higher education system; and,
- the cultural element of face.

One reason for this lack of centralized information is the fact that Mainland China's higher education system is decentralized and empowers local provincial authorities (Ennew & Yang, 2009), making it increasingly difficult to obtain a single list from both local and state level authorities. Second, legislation and policies related to Sino-Foreign University and College partnerships were not completely formalized a decade ago (Huang, 2003), and still require further clarity which makes it difficult to classify a partnership as being active in Mainland China's higher education industry in the early years of the 21st century. This is further complicated by Mainland China's joint-venture agreement legislation in a legal system that is considered non-transparent and flexible (Willis, 2007; Li & Morgan, 2008; Huang, 2007). Mainland China's flexible legislation combined with the rapid-expansion of the national higher education system only increases the challenge of obtaining a list of failed programs.

The intense expansion of Mainland China's higher education system over the past decade has been intense (Li, Whalley, Zhang & Zhao, 2011). This rapid growth and change in the system makes any documentation go out of date very quickly and any available is likely to be untrustworthy. The expansion of Mainland China's higher education has been considered very successful, and it is assumed that less focus has been placed on partnership failures.

Finally, it is questionable, even if such a list exists, as to whether a list of failed Type 3 or 4 Sino-Foreign University partnerships or proposals would ever be made accessible by the relevant authorities as it may only jeopardize the willingness of elite institutions to participate in future partnerships. The lack of such a list could be evidence of the cultural element of face.

Face is defined by Ho (1976) as a type of prestige and reputation or "the respectability and/or deference which a person can claim for himself from others" (p.883). Hsu (1996) describes face as a "positive public image" (p. 71). In Chinese, *lian* and *mianzi* both mean *face*, but these words have different contextual meanings (Hu, 1944). *Mianzi* relates to prestige and status based on education, wealth and social position, while *lian* relates to moral integrity and social conduct. Losing face, when translated as losing *mianzi*, does not necessarily include losing *lian*; yet alternatively, losing *lian* guarantees *mianzi* being lost (ibid). The use of *lian* and/or *mianzi* can be based on the quantity of face given or lost, with *lian* being the larger loss. This alternative application of face results in the word *lian* being used for more important situations related to moral

principles and the word *mianzi* to less important incidents such as courtesies and manners (Hsu, 1996). The recognition of failed partnerships would bring a loss of face to both the foreign and Chinese state partner as well as the Ministry of Education, and this is a possible reason for the lack of a listing of all the failed partnerships of Sino-Foreign universities.

It could be argued that obtaining a list of failed programs is immaterial, as such a list would be offset with an equally lengthy list of new programs waiting for approval (Willis, 2006b; Willis, 2008; Ennew & Yang, 2009; Li & Morgan, 2008). The two successful Type 4 (Willis, 2001a) Sino-Foreign university partnerships that have been operating in Mainland China for some time include the University of Nottingham-Ningbo, established in 2004 (Huang, 2007); and Suzhou Liverpool Xian-Jiao Tong University, established in 2006 (Zhang, 2008). The partnerships have slightly different models and strategies despite all being Type 4 partnerships. One of the most successful Type 3 Sino-Foreign University partnership to date is Sino-British College, the present researcher's employer, allows for alternative models from those discussed in the whole academic literature. Sino-British College is a consortium of UK universities, and proves that alternative models exist and can create successful partnerships (Gow, 2012). At the same time there are a large number of programs, most of which are very small, running in Mainland China which are listed in Chinese on the Ministry of Education website (Ministry of Education, 2004; Chinese Foreign Cooperation in Running Schools, 2012). According to Naidoo (2009), Mainland China has 410 foreign higher education jointventure programs, which do not include distance learning programs. This variety of

small programs has both questionable legal status and compliance under the Ministry of Education's laws. With the continued development of Mainland China's higher education system, their future existence is questionable. Many aspects of Sino-Foreign University partnerships have evolved over time.

The Evolving Nature of Sino-Foreign University Partnerships

Initially, foreign partners were concerned with student tuition streams while Mainland Chinese partners desired to learn from Western universities through student exchanges and improve their programs and institutional status (Willis, 2006b). However, due to the ambiguous legal status of joint venture partnerships in Mainland China, foreign universities were often confused about the nature of their partnership agreement (Willis, 2007; Li & Morgan, 2008; Huang, 2007). The different expectations of partnerships, including the student expectations of a hybrid of Eastern and Western teaching practices that proved difficult to implement (Willis, 2008; Elkin et al., 2008), resulted in failures.

The number of failed partnerships has led Mainland Chinese universities to demand prestigious foreign institute partnerships which would be highly desired by prospective students (Willis, 2001b; Willis, 2006b; Willis, 2008). Government legislation only allows state universities to meet all university standards, making them the dominant partner (Huang, 2007). This is beyond written legislation as state universities consider themselves to have greater importance and knowledge in partnerships (Willis, 2006a; Willis, 2008; Steensma, Tihanyi, Lyes & Dhanaraj, 2005). Currently, the state universities' feeling of greater importance in Sino-Foreign university partnerships is

becoming exceedingly prominent after a decade of failed programs which gave excessive autonomy to foreign partners (Willis, 2006a). The state universities' perceived superiority in partnerships makes it unclear as to how future partnerships, particularly with elite foreign universities, will operate. There is also a size and human-resource limitation of some nations such as Hong Kong and Singapore that constrains their involvement in Sino-Foreign universities (Huang, 2003). This and the fact that transnational higher education campuses normally have American, Australian or UK partners limits the nations of prospective foreign partners (Naidoo, 2009). The various transnational higher education typologies in light of the dynamics of Sino-Foreign university partnerships and the Mainland China's higher education will be discussed in the following section.

Considering Transnational Higher Education Typologies in Greater Detail

Healey and Michael (2015) claim that the external context can force change to the structure and content of a transnational higher education partnership during an institute's existence. They also note the external context can force changes that result in the closure of a transnational higher education institute. Based on the increasing expectation for prestigious partners emanating from the Chinese state universities due to the perception that a university's status and rank are the main criteria for studying in a transnational higher education program, future Sino-Foreign universities are expected to focus on research (Healey, 2008). Elite partnerships will attract students from other Asian nations and international school students, given the lack of Western higher education options in

Mainland China. The longevity of Sino-Foreign universities without prestigious partnerships, which is the norm for many Type 3 partnerships, remains in question.

The literature notes that transnational higher education programs have various typologies due to their different forms of educational delivery and legal contracts in terms of their teaching and research commitments (Healey & Michael, 2015). The first and most dominant typology is based on the General Agreement on Trade in Services (GATS) and categorizes transnational higher education programs into 4 modes (ibid). Mode 1 is a form of distance learning where educational resources are transferred from a foreign university to students in their home nations. Mode 2 is when students leave their home nation to study abroad at a foreign university's home campus. Mode 3 is where educational services are provided through franchising or validating a degree to a foreign university in a physical location in the student's home nation. Mode 4 involves foreign universities sending their staff to the student's home nation in a format known as "flyins" to deliver courses in a condensed format. Currently there are no examples of Mode 1, distance learning, in transnational education partnerships in Mainland China. All of the Sino-Foreign University partnerships included in this study are examples of Mode 3 and possibly Mode 4 transnational higher education programs. It should be noted that Mode 4, fly in faculty, approaches have proven largely ineffective in Mainland China, perhaps suggesting that this typology is not useful in this context.

Another typology in the literature that is regularly used by quality assurance and regulatory bodies is called the 4F Framework (Healey & Michael, 2015). Similar to the

GATS typology, the 4F Framework is separated into 4 types of transnational higher education. In the 4F Framework the first type is distance learning that includes online delivery and the second is a franchised model where a foreign university permits a university to deliver one of its degree programs with the resources of the foreign university. The third type is a program that is validated through a higher education partner institute that independently delivers a programme of a foreign university. The fourth is an international branch campus (IBC) that delivers and awards multiple degrees of the foreign university. This typology again ignores the context of transnational higher education in Mainland China where distance education is not an appropriate consideration.

A third typology that was found in the literature was formed by Healey and Michael (2015) who separated transnational education into 3 spectrums. The first spectrum of their typology represented partnerships being created as a stand-alone institute to those created as a local hub to access foreign universities' program. The second spectrum of their typology represented partnerships that were focused on being multidisciplinary institutes to those that focused on becoming subject specific institutes. The third spectrum of their typology represented partnerships that were focused on being either teaching focused institutes or research focused institutes. Using this typology, the Sino-Foreign University partnerships could be represented as somewhere between a stand-alone institute and embedded in a Chinese state university model, closed to subject specific, and teaching focused institutes. But even in this last scale the measure is not precise as some institutes are beginning to discuss the possible transition from being

teaching focused to becoming research focused. Thus this model does not really differentiate partnerships in a meaningful way and in particular, is limited when conducting a futures study that will have unheard of changes when envisioning Sino-Foreign University partnerships in 2030.

A fourth typology that is specifically formed for Sino-Foreign Universities in Mainland China is Willis's (2001) model. Willis (2001) suggests that four Sino-Foreign university partnership types are possible. Type one partnerships, the simplest, involve student exchanges, research collaborations and building courses. Type two partnerships are delivered across Mainland China. in a multi- campus format, have longer commitment times, and focus on degrees taught partially in Mainland China, also including some fulltime locally-based foreign staff. In type two partnerships, the majority of the foreign staff has short term fly-in commitments. Type two partnerships were the platform for many foreign MBA programs that started in Mainland China and reflect Mode 4 of the GATS typology above. Type three and four partnerships are discussed in detail, given their dominance in the Mainland Chinese higher education market. To understand the needs of future partnerships of Sino-Foreign universities, a deeper review of type three, the most popular partnership; and type four, the most preferred by the Ministry of Education (Willis, 2001a) yet most complex type, is necessary.

Type Three Partnerships

According to Willis (2001), type three partnerships are mostly a program of 2+2 or 3+1 delivery, referring to the time spent studying in Mainland China and abroad. Type three

partnerships are largely limited to single degrees in management, which are held in a state university wing or high school. Their operations are purely funded from tuition streams, with the additional purpose of attracting foreign students to study in Mainland China. Type three partnerships require substantial commitment in the form of resources, time and capital, are problematic for partnerships, and, in comparison with type four partnerships, are undesired by the Ministry of Education (Willis, 2001a).

Type Four Partnerships

Type four partnerships require a stand-alone Sino-Foreign University campus offering multiple full degrees and research conducted in Mainland China (Willis, 2001a). These joint venture campuses are built for a state and foreign university and are designed to, as the majority, enroll state university students from the local joint venture partner as well as a minority of open market students. Type four partnerships are highly desired by the Ministry of Education and operate very differently in terms of students and operations as compared to type three partnerships (Willis, 2001a). Type four partnerships require large degrees of commitment of time, resources and capital from the foreign partner, which many consider as overly demanding, particularly with the many failures in the industry. It is relevant to note that in Healey and Michael's (2015) research there was little research collaboration in the transnational higher education partnerships examined except for 6 institutes that were all located in Mainland China. The current research activity at transnational higher education institutes as found in Healey and Michael's (2015) emphasized the importance of research in Sino-Foreign University partnerships.

Willis's (2001) typology was considered most suitable for this research because it was explicitly developed based on the Mainland China context and does not include models that are extraneous to this context but included in the typologies of the 4F Framework and GATS. Willis's (2001) type 3 Sino-Foreign University partnerships typology represents a franchising type partnership that is similar to both Mode 3 (institutional mobility) and Mode 4 (staff mobility) in the GATS categories as well as the Franchise and Validation categories in the 4F Framework that is less financially risky but more risky in terms of quality assurance as noted in Healey and Michael (2015). Willis's (2001) type 4 Sino-Foreign University partnerships typology represents an international branch campus and is similar to both Mode 3 (institutional mobility) in the GATS categories as well as an International Branch College in the 4F Framework. An independent campus is more financially risky but less risky in terms of quality assurance that was also noted in Healey and Michael (2015). In considering the risk and failure of many Higher Education Joint-Venture programs in Mainland China over the past decade, inclusion of franchising and international branch campus type arrangements, that are the most important and successful types of partnerships are important to explore the future of these types of organizations in this dissertation (Damast, 2008).

Willis' four types were classified based on partnership similarities during the time of his research that, once entered, cannot move to another form of partnership. Willis (2001b) allows for overlap between types one, two and three, but none between three and four. This creates an opportunity to explore the possibility of a new potential partnership through the data collected in this dissertation.

Envisioned Future Partnership Models

There was a need to explore further flexibility in the types of partnerships to address the trends and challenges facing Sino-Foreign universities. Exploring alternative partnership models is an important consideration, as the high set-up costs that are required by a Western university partner have impeded the commencement of many partnerships. Commitment in terms of time, money and resources is a partnership issue that has caused universities to avoid a type four partnership despite the Ministry of Education's encouragement (Willis, 2001a). Further, legal complexity has been cited to explain why partnership types could not change once began (Willis, 2001a). This project was designed to envision the ability and potential for a successful future partnership to overcome the above-mentioned challenges and explore possibilities as based on Willis's (2001a) Type 3 and 4 partnerships. The potential for a new Sino-Foreign university partnership-was worthwhile to explore, as the definition, perception and role of universities has changed over the past 50 years (Elena-Perez, Saritas, Pook & Warden, 2011; Dearlove, 1995; Paul, 2005). Envisioning a new future Sino-Foreign university partnership was also worthwhile at this specific time, given Project 211's allowance for provincial governments to control academic institutions, thus potentially providing more flexibility in moving between types (Ennew & Yang, 2009).

This chapter has described the challenges facing Sino-Foreign universities within the context of Mainland China's higher education expansion. Planning higher education futures will be explored in the literature in the next chapter. A future study of Mainland China's higher education context was a complex undertaking that incorporates a variety

of variables. Some of these variables include demographic trends on a scale unknown in other contexts; the cultural issues of face, power distance, collective decision making; and the impact of a central planning government system. Despite this dissatisfaction from a variety of stakeholders in the reforms that Mainland China's Higher Education system has undergone, the government's attempts to achieve multiple world class universities via Project 985 and Project 211 has increased its nation's global university rankings. Exploring the position and purpose of Sino-Foreign Universities within this context of increasingly competitive state universities required a futures based study.

The next chapter reviews literature in the area of future and foresight analysis, in order to explore more fully the future of Sino-Foreign universities. Common approaches to planning the future of higher education such as scenario analysis and the Delphi method, among other paradigms, will be reviewed. The chapter concludes with a discussion of the Delphi method as the most suitable futures methodology for this dissertation. Following this, Chapter 4 provides the specific methodological procedures selected for using the Delphi method in this study; Chapter 5 and 6 describes the quantitative and qualitative analysis and findings; and, Chapter 7 concludes the dissertation by discussing the contributions of this project.

Chapter III - Research Approaches to Planning Higher Education Futures

This chapter lays out the considerations that went into the research design for this study. The relevant supply and demand models for higher education planning were reviewed in order to set the context for a futures based study and identify the variables likely to be important for our study. Literature related to futures paradigms are reviewed, followed by those related to futures. Finally, the selection of both interpretivist and positivist paradigms as the basis for this Delphi is justified. The interpretivist paradigm takes into consideration the uncertainty, multiple languages, and cultural differences of participants, requiring meaning making between individuals through the lens of the researcher himself. The positivist paradigm reflects the Delphi Methods required quantitative analysis of participant's responses and search for consensus. The Delphi method was been chosen for this dissertation's methodology, given its complimentary attributes for research conducted in Mainland China. The Delphi method was deemed to be the most appropriate methodology due to its ability to handle uncertainty and diverse participant groups with a group of multilingual and multi-cultural participants as is found in Sino-Foreign university partnerships.

Supply and Demand Models in Higher Education Planning Research

Any study of the future of a system requires a solid understanding of the variables likely to influence both supply and demand in that system. Luckily, supply and demand models for transnational higher education are quite prevalent in the higher education planning literature (Baldwin & James, 2000; Bodycott, 2009; Li & Bray, 2007; Maringe & Carter, 2007; Mazzarol & Soutar, 2002; McMahon, 1992). Pull factors from a university's

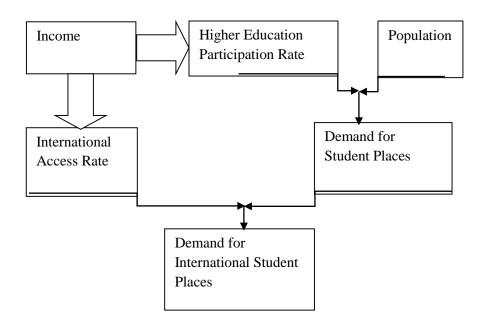
institute abroad largely influence a student's choice to study abroad (Wilkins & Huisman, 2011).

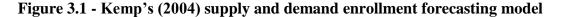
Push factors that influence a student to study abroad originate from a lack of programs in the student's home nation (Wilkins & Huisman, 2011). However, the improved political, economic and educational conditions within Mainland China have reduced the influence of push factors to less significant levels. Specifically, Mainland China's recent higher education expansion and the government's encouragement of completely domestic Sino-Foreign university programs have made it increasingly difficult for Western universities to recruit students into their programs based on push factors. Additionally, the Ministry of Education website (1999) notes that Sino-Foreign universities have an enrollment ceiling policy, which contrasts with the surplus structure model for student recruitment found in universities and governments in many other nations (Glystos, 1990). There are however no enrollment ceilings for international student and adult students studying part time at Sino-Foreign Universities. The intense change taking place in Mainland China's higher education system and the lack of historical data availability discussed above make supply and demand models that forecast student enrollment infeasible for this dissertation. However, the variables used in such models were used to classify the themes found in the reviewed literature and compared to the data collected in this research endeavor. This classification was possible through the development of an analytical framework based on the enrollment supply and demand literature.

Using context and methodological considerations to build an analytical framework

The contextual factors and changes mentioned above suggest that, while similarities exist between Sino-Foreign universities and transnational higher education supply and demand models, unique variables need to be incorporated to deal with challenges not common in other contexts. Chapter 2 exposed the rapid changes of Mainland China's higher education system, which is planned by the central government. Despite the large number of failed partnerships, Mainland China's continued higher education expansion could result in an increasing number of Type 4 Sino-Foreign university partnerships with the current stand-alone model of an independent campus. Expanding Mainland China's Sino-Foreign universities could assist the national goal of enhanced research and development and benefit Western universities by expanding their global presence.

Given the complexity of Mainland China's higher education context, the researcher paid careful attention to various methodological aspects related to future studies. A suitable methodological approach was therefore needed to confirm the data collection when the participant's envisioned the future of Sino-Foreign university partnerships. Kemp's (2004) supply and demand model applies to International students studying in Australia, and was found in the British Council's (2004) publication, *Vision 2020: Forecasting international student mobility*. The Kemp model consolidates findings from several other studies and serves as the foundation understanding of enrollment forecasting for this research endeavor.



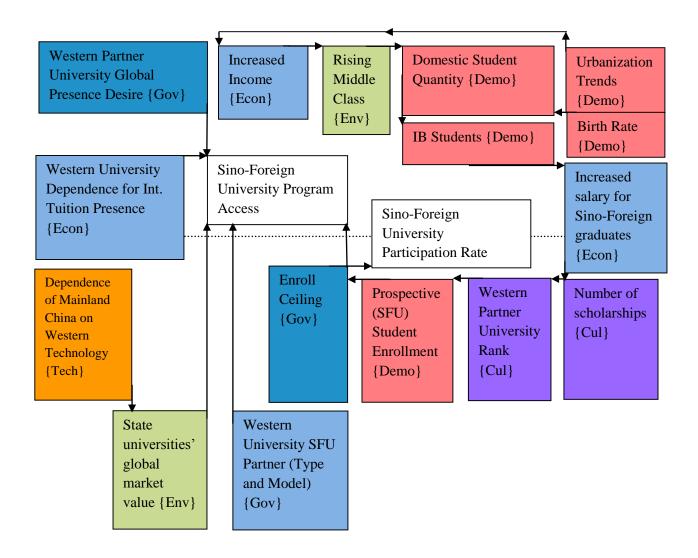


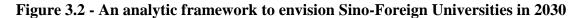
Kemp's (2004) model (see Figure 3.1) contains the basic formula needed for forecasting the supply and demand of student enrollment as per the literature. Income feeds into international access, which represents the supply of students, as well as the higher education participation rate. Higher income allows more international students to access student places. The population multiplied by the higher education participation rate creates the size of the demand. Students who enroll in a Western university and study abroad are multiplied by the student demand, creating the demand for international student places. In this way the model uses the student demand to forecast the enrollment for Australian university programs. This model provides a base from which to create a supply and demand model for Sino-Foreign universities institutions. However, demand for Sino-Foreign universities is expected to require consideration of more than just student demand because of the unique contextual elements at play in Mainland China's higher education system.

The proposed analytic framework adds the supply items of the type of partnership, the Sino-Foreign university model, the global value of Mainland China's state universities, Western universities' achievement of global presence, Mainland China's dependence on Western research, Western universities' dependence on foreign tuition fees, and enrollment ceilings. The types of Sino-Foreign university partnerships, their models and strategies were added to reflect Mainland China's goals of having world-class universities (Halachmi & Ngok, 2009), to enhance their research and development (Johanneson & Palona, 2010) or to aid the financial strains of Western universities through a cost-competitive campus. The global market value of Mainland China's state universities was added, given the development of Mainland China's higher education system, to review the need of Sino-Foreign universities. Including the value of Mainland China's state universities is imperative given Blass and Wood's (2012) statement that in 20 years' time, developing countries would have self-sufficient higher education systems and would not need transnational higher education programs. Western universities' achievement of global presence was added because such global presence will in turn increase the presence of Sino-Foreign universities. Mainland China's dependence on Western technology requires research-focused Sino-Foreign universities to achieve these goals (Healey & Michael, 2015). Western universities' dependence on foreign tuition fees was added because this increased dependence will increase the supply of Sino-Foreign universities. Enrollment ceilings were added because they are of interest to Western partners who will have their student numbers and their subsequent tuition capped by the enrollment ceiling.

Additionally, the proposed model adds the demand items of urbanization trends, the rising middle class, scholarships, salary expectations for overseas degrees, the rank of the Sino-Foreign University being applied to, and local as well as international student applications. Urbanization trends that contribute to the rising middle class were added because these trends provide new sources of students who will enroll in higher education in Mainland China. Some of the students from this rising middle class will enroll in Sino-Foreign universities. Scholarships were added to support the rising middle-class students to attend an elite Sino-Foreign university in order to attract the top student talent, as per Lapovsky (1999). Salary expectations for overseas degrees were added because their higher value will increase the demand for Sino-Foreign universities. Local and international student applications were added because they will determine the student profile and, subsequently, the type of programs taught at Sino-Foreign universities.

The added variables help explain the institutional supply and demand of Sino-Foreign universities. Finally, Western universities' involvement to gain from tuition revenues (Ngok, 2008; Armstrong, 2007; Healey, 2008) and global presence (Lewin, 2008) is possible with successful Sino-Foreign university partnerships. As teaching-focused universities are undesired by prospective parents and elite research-focused universities are desired by the Ministry of Education, the type of foreign university and their respective model of being research or teaching focused was included in the model (Healey, 2008). The model as displayed in **Figure 3.2** was used to categorize the forces, as per the literature, into analytic categories based on six sectors as per other futures research exercises.





The supply and demand model above has been classified into six analytic categories: economic, environmental, governance, technological, cultural, and demographic (Ratcliffe, 2002). These six categories were used to organize the main issues identified in the literature when being compared to the results of the data collection in this dissertation.

Selection of Futures Research Methodology

Futures research broadly, views problems through a long-term lens, providing a suitable methodological approach to accomplish the task of envisioning the future of Sino-Foreign Universities in 2030 (Stewart & Green, 2004). However, futures research is a very broad tent that includes such methodologies as cross impact analysis, trend analysis, scenario analysis and the Delphi method, each of which are reviewed and evaluated in this section. Ultimately, the Delphi method was selected for conducting Sino-Foreign university research in Mainland China.

Cross Impact Analysis

When expert opinions are largely used, cross-impact analysis assesses a trend's impact and influence in modifying other trends (Stewart & Green, 2004). Specifically participants would assess events or trends on a row, to other events or trends on a column thus creating a matrix. The average of the participant's assessments would create the outcome, being the cross impact analysis. Because of its traits, the methodology is often considered part of, or similar to, a Delphi study. Cross-impact analysis highlights points of convergence and divergence within a hypothesis developed from disparate scenarios. Cross-impact analysis was a possible approach in many ways, given its use of experts involved and its ability to generate foresight into a variety of issues.

Having said that, cross-impact analysis was judged not the most suitable methodology for this study because of the multi lingual, multi-cultural participants and the lack of reliable historical data. One of the most important activities in this method is identifying a trend's impact to modify other trends. This approach of trend identification, naming of

potential futures based on historical data, may also be unwelcome and too culturally sensitive, given the elite participant profiles and their conflicting agendas, particularly in the context of the uncertainty of the future of Sino-Foreign universities. Finally, the rapid growth in the higher education sector in Mainland China in recent years and the lack of quality and or available historical data suggested that this approach would not be appropriate for this study.

An alternative form of this methodology was also considered: Qualitative trend analysis, which highlights and describes trends in their early formation. The main weakness of qualitative trend analysis, however, is that trends are not guaranteed to continue in the same format as in the past or present as observed (Stewart & Green, 2004). Given the contextual uncertainty, the likelihood of trends being ephemeral and transitory could easily occur happen in Mainland China's rapidly changing context that has a central planning system of government. This approach was judged to also hold the same risks of cultural sensitivity as the more quantitative comparative analysis approaches and so too was rejected as inappropriate for this context.

Scenario Analysis

Scenario analysis was the next methodology considered and is currently used in academic and professional settings to generate estimates in future planning (Stewart & Green, 2004). To create the scenarios, forces of change are first derived via brainstorming sessions (Millett, 2007; Ratcliffe, 2000), expert interviews, literature reviews, workshop surveys or questionnaires (Ratcliffe & Sirr, 2003), and each interview

style has its associated strengths and weaknesses (Ratcliffe, 2002). The data collection through brainstorming generates alternate outcomes that are based on phases on the scenario analysis methodology. These phases are found in **Table 3.3** (Stewart & Green, 2004). The main goal of scenario planning is to derive action plans. A danger of using scenarios is that the results are not put into action through policy-making (Ratcliffe, 2003) meaning that all the work of the experts is wasted.

Table 3.3

Phases in a Scenario Analysis study

Set the Strategic Question
Identifying Driving Forces of Change
Determine the Main Issues and Trends
Clarify their Level of Impact and Degree of Uncertainty
Create Different Scenarios
Test Policy Options Against Scenarios and visions of Future
Repeatedly Test Policy Options Against Scenarios and visions of Future
Agree Priorities

This approach was eliminated from further consideration for this study for two reasons; the labor intensity of using this technique in this setting is problematic and, the use of this expert labor in developing planning scenarios that would not realistically be implemented seemed wasteful. The multi-cultural and multi-lingual group of participants would make collective brainstorming an issue in this research endeavor. Beyond that, the large amount of work involved in managing the power relationships and power distance within such a multi-cultural and multi-lingual group of participants is another impracticality in using scenario analysis in this context. In addition, while, the recent popularity of scenario analysis in public policy planning appears relevant to our research

questions, given the Ministry of Education's involvement in Sino-Foreign universities (Green, 2012). The reality of actually becoming involved in policy decisions in a communist nation is both unrealistic and beyond the scope of this study. This suggests that an alternative method is best for this project.

Delphi Method

The Delphi method is another methodology used in both Futures and Foresight research. There are four methodological phases that are required for a futures study to be classified as a Delphi study (Rowe & Wright, 1999). The four phases include anonymity or confidentiality in the identity of the expert participants, an iterative data collection process that allows participants to modify their responses, feedback in allowing participants to view the responses of others in the study, and the achievement of consensus in the participant responses. The Delphi method is one of the most flexible Futures studies methodologies and as such is extremely popular (Skulmoski, Hartman, Krahn, 2007).

Finally, the Delphi method was considered because of its appropriateness for strategy and planning-based research (Weatherman & Swenson, 1974). This methodology is particularly suited for educational research because it is designed to involve multiple expert stakeholders in a value based discussion (Van de Ven, 1971). The methodology combines qualitative and quantitative methods, using surveys to collect expert opinions of future problems under investigation in order to work towards a consensus of

understanding, takes various forms as discussed in Appendix B (Hasson & Keeney, 2011). The choice of the Delphi method for this study is explained below in detail.

Delphi Method's Suitability for research in Mainland China

The Delphi method was chosen as this study's methodology as it allowed the researcher to envision the future of Sino-Foreign universities based on qualitative knowledge from Sino-Foreign University experts. The Delphi method permitted the researcher to factor in the uncertainty caused by Mainland China's centralized government structure, ambiguous legal system and rapid economic growth. It also permitted the research to incorporate cultural sensitivity into the research to facilitate working with the multiple groups of participants that compose Sino-Foreign universities. Specifically, the Delphi method was selected due to its suitability for Sino-Foreign universities and for Mainland China's higher education in terms of dealing with uncertainty, cultural sensitivity and expert participants, and the ability to be assessed via its methodological trustworthiness.

Dealing with Uncertainty

Both the research questions (dealing with the future of Sino-Foreign Universities) and the context (Mainland China cultural sensitivities, short history of post-secondary education and rapid growth in same) are fraught with high levels of uncertainty. Mainland China, being a communist nation, mandates the state to oversee and influence variables which, in a Western context, would be deemed uncontrollable. Even in modern-day Mainland China, the state controls to a degree one's residency, education and employment, suggesting that the variables that influence Mainland China's future higher education

system may be different than in Western systems. Furthermore, uncertainty exists in the legal system's flexibility, which explains why data collection in a centrally planned economy was challenging. This high level of uncertainty prevents the system from being tested empirically (Li & Morgan, 2008). The Delphi method is specifically designed to address such questions by promoting discussions of the most influential uncertainties within a research problem (Ratcliffe & Sirr, 2003).

Specifically, the Delphi method uses the consolidation of expert opinion as was a way to address such uncertainty. In addition, the Delphi method has been adapted to a great many research settings and questions and so encompasses a wide variety of approaches to creating a Delphi study (see Appendix 2). This flexibility in the data collection and analysis process further complemented the research endeavor in light of Mainland China's higher education context and the need to handle high levels of uncertainty (Hasson & Keeney, 2011) and to incorporate cultural sensitivity.

The Delphi method's ability to deal with the uncertainty, arising from Mainland China's ambiguous environmental context, coupled with its capacity to deal with culturally sensitive discussions from expert participants made it the ideal method for these research questions.

Cultural Sensitivity and Expert Participants

The Delphi method is a particularly appropriate methodological approach for dealing with uncertain future scenarios to be assessed by an elite set of diverse participant groups

who would normally not be interviewed (Stewart & Green, 2004). According to the literature elite participants must have the requirements of knowledge and experience related to the problem under investigation, interest, ability and time to participate in the Delphi study as well as strong communication skills (Adler & Ziglio, 1996). There is a particular cultural sensitivity necessary for studies of elite participants that lend itself well to incorporating both cultural and deference sensitivity required in this study. Not only are the participants of this study of much higher social standing than the researcher, many of them also come for a social context where "face" (see discussion in last chapter) is particularly important. This means that the design of the study must be adjusted for these elite participants.

To understand the qualities that influence the future of Mainland China's higher education in general and Sino-Foreign universities in particular, it was necessary to find the right participants in the data collection process. The influence of Chinese government officials on policies within a centrally planned communist nation made the participation of individuals who regularly and closely meet and work with them, necessary in this Delphi study. This was emphasized given the long-term planning difficulties faced by entrepreneurs in Mainland China due to rapid state-led policy changes (Tse, 2010). In a Delphi study, the use of experts who have close contact with the Ministry of Education was imperative given their insight and wisdom. It was also important to include participants from both Type 3 (embedded model) and Type 4 (stand-alone model) partnerships to understand the role of these different models in the potential future of Sino-Foreign Universities. The above aspects were of use when collecting data from elite

participants who represented either Type 3 or Type 4 partnerships. The differing motivations driving these two types of potentially competing Sino-Foreign University models made diplomacy and careful adherence to a controlled process important.

The wisdom and knowledge of the key participant groups, was needed to cooperatively envision Sino-Foreign universities in an uncertain, complex and competitive higher education market. Mainland China's culture of large power distances carried the risk of low participation or, alternatively, participation domination given the participant stakeholders' spread (Buck, Filatotchev, Nolan & Wright, 2000). A Delphi study has controlled feedback and aims to achieve consensus, which was particularly beneficial in a more complex data collection process with a multi-cultural and multi-lingual participant group of stakeholders, as was found in Sino-Foreign universities (Hasson & Keeney, 2011). Collecting data from participants individually did overcome the risk of participant domination during the data collection process. In managing the risk of low participation, a pilot study was used to ensure cultural sensitivity, comfort, give "face" and familiarize participants with the researcher and research objectives (Chermack, 2006). An open-ended pilot study was used to provide a richer data collection, which was appropriate not only due to the uncertainty associated with this futures study but also due to the insufficient historical or relevant data available (Rowe, Wright, Bolger, 1991). With an open-ended pilot study, the participants freely expressed their opinions while avoiding peer pressure from their participant group, as the data was collected individually (Lang, 1995). This freedom of expression was important as Mainland China is a collectivist culture (Hui & Triandis, 1986) and peer pressure was expected and would

influence the data collection process if not handled properly (Hasson & Keeney, 2011). Through isolating participants individually during the data collection process, a Delphi study provided a solution to the risk of groupthink, and enhanced the study's quality based on the avoidance of group bias (Gordon, 1992; Ziglio, 1996; Clayton, 1997).

The process of receiving feedback, which is a characteristic attribute of a Delphi study, was particularly important in this research endeavor, with Mainland China being a culture of indirect communication (Brew & Cairns, 2004). Ensuring clarity in the data through participant feedback was imperative, given the multi-lingual and multi-cultural nature of the research endeavor, as slight changes in the researcher's words could have altered participant responses (Gordon, 1994). Collecting data from participants in a face-to-face format allowed the researcher to receive feedback and clarified any data that lacked clarity (Gordon, 1994; Schmidt, 1997; Okoli & Pawlowski, 2004).

Given Mainland China's state control, the insight from participants who have close involvement with the higher educational authorities were best able to envision future Sino-Foreign university partnerships. Their participation was only possible through the researcher's privileged contacts and considering their understanding of the implications for the future of Mainland China's higher education system the best futures for Sino-Foreign Universities were envisioned. The researcher's privileged contacts and overall experience in working at a Sino-Foreign University did increase the number of elite expert participants and, in turn, enhance the trustworthiness of the study. Having an appropriate research methodology to address these issues of dealing with elite

participants and the uncertain context aided to increase the trustworthiness of this research.

Trustworthiness

In any research study, it is important to follow methods and procedures appropriate to the method to ensure the value of the findings. In many studies, this is achieved by following procedures that allow for reliability and validity. Reliability is defined as "the consistency of measurement within a study" (Gerrish & Lacey, 2010) that includes: "the degree to which a measurement given repeatedly remains the same" (Kirk & Miller, 1986), "the stability of a measurement over time" (ibid) and "the similarity of measurements within a given time period" (ibid). External validity is defined as "the generalisability of the findings" (Hasson & Keeney, 2011) and internal validity is defined as "the confidence placed in the cause and effect relationship, normally proven by experimental research" (ibid).

Delphi methods, due to their methodological requirements do not lend themselves to reliability and validity measures. First, the use an open ended first round was used in this Delphi study in order to have the assurance and comfort of the participants and did allow the participants who are the most leading experts to form the data collection process (Riger, 1986). A down side of using open ended questions was the variation of responses that reduced consensus compared to close ended questions, as well as, a Delphi studies reliability (Loo, 2002). A lack of empirical evidence regarding the impact of participant numbers towards the reliability and validity of the consensus process steered the researcher

to find alternative methods to assess the rigor of his dissertation (Murphy, Black, Lamping, McKee, Sanderson, Askham, 1998). One of the researcher's strengths was his experience and access to the Senior Management teams of leading Sino-Foreign Universities' that gave him a unique advance in being a key methodological instrument, he wanted to use a method to assess rigor that was complementary to his unique contributions.

Second, the standard use of validity, to replicate results from a specific sample of expert participants to the general population, does not work in a Delphi study given its qualitative research properties and efforts to achieve results that cannot be replicated with a non-expert population from the general public (Krefting, 1991). Specifically this dissertation's findings are opinions at a moment in time rather than answers to future outcomes (Pill, 1971). The regeneration of this Delphi study with the same or alternative participants may yield different results based on the changing context and knowledge they have about Sino-Foreign Universities. Given the constraint of applying generalizability to a Delphi study, the alternative application of the transferability, a requirement of trustworthiness, was a feasible substitute for assessing generalization in this dissertation.

Third, the presentation of the participant's demographics should be presented for the reader to judge the relevance and reliability of the participants as experts (Schmidt, 1997). The confidentiality agreement of this Delphi study however, did not permit for the participant's name, title or institution to be directly used in this dissertation, implying their demographic information would also remain confidential. The assessments for

participants to be experts in a given field as used with trustworthiness was more appropriate for this context. Furthermore the measure as used in trustworthiness for a participant's expertise was more accurate than a participant's demographic location to assess their expertise in a given field.

Fourth, the application of reliability and validity to assess the rigor of Delphi dissertations appears to historically have not been consistently or significantly applied. In an older study Riger (1986) found that 70% of Delphi dissertations did not establish questionnaire reliability. In more recent publications, trustworthiness has been claimed to be superior to reliability and validity in assessing a Delphi studies' methodological rigor (Hasson & Keeney, 2011; Cornick, 2006; Holloway & Wheeler, 1996; Day, 2005). Specifically trustworthiness is considered superior due to its integration and consideration of qualitative research assessment methods (Krefting, 1991) which complements the qualitative as well as quantitative methodological traits of a Delphi study (Bowles, 1999; Day & Bobeva, 2004).

Specifically trustworthiness is considered superior due to its integration and consideration of qualitative research assessment methods (Krefting, 1991) which complements the qualitative as well as quantitative methodological traits of a Delphi study (Bowles, 1999; Day & Bobeva, 2004). The Delphi method can be assessed by its trustworthiness that specifically includes a studies' credibility, dependability, conformability and transferability (Lincoln & Guba, 1985; Polit & Hungler, 2001). These are superior measures to use in a Delphi study instead of attempting to establish rigor and

validity, which have their own challenges in future studies (Cornick, 2002; Holloway & Wheeler, 1996; Day & Bobeva, 2005). By offering continuous feedback and iterations to participants, credibility was achieved in the data set (Engles & Kennedy, 2007). Being joint ventures, Sino-Foreign universities have a range of main stakeholders, which the use of a Delphi study supported and in fact thrived from, which did help the study's results achieve dependability (Cornick, 2006). The recording of data and the entire data collection did respectively establish confirmability (Powell, 2003) and transferability (Kennedy, 2004), which are forms of validity for a Delphi study. Finally, maintaining the confidentiality of the participants' statements was imperative, considering the elite profiles of participants and the fact that most Delphi studies are anonymous (Hasson & Keeney, 2011). The specific techniques used to establish trustworthiness in this Delphi study (credibility, dependability, conformability and transferability) will be assessed in the qualitative analysis found in Chapter 6.

Participants as Experts

From the material discussed above, it is seen that the Delphi method suited the contextual elements of Mainland China's higher education system and Sino-Foreign universities. Judging from the researcher's elite and varied participant contacts, the Delphi method became a more convincing choice for this research endeavor that supported the creation of the best (Habana, 1993) and most unique data collection (Ratcliffe, 2002). The researcher had access to and invited the Senior Management team of the key Sino-Foreign universities and the Executive Director of the Beijing UNESCO Association to participate. The participation of an accessible elite UNESCO representative was

imperative as UNESCO influences global educational discourse (Blasman et al., 2012). Elite expert participants to whom the researcher had access also ensured reliability through the consistency of their opinions (Riger, 1986). The researcher also had access to student and parent groups whose participation was undervalued and underused in similar research (Georghiou & Harper, 2008).

The term "expert" is unclear in the Delphi method; therefore, the researcher's elite contacts are deemed to be experts (Hasson & Keeney, 2011). Additionally, the variety of expert participants produced the most dependable data set (Engles & Kennedy, 2007; Cornick, 2006) by exposing the biases of the participants (Hasson & Keeney, 2011), and by allowing the participants to view familiar situations in novel ways (Chermack, 2006). Futures research methods such as the Delphi have flexible timescales, pending the context and organizational culture of the research endeavor, which was complementary to this research endeavor (Ratcliffe & Sirr, 2003). The researcher's contacts with the elite participant group did assist in the quickest possible data collection in Mainland China, a non-punctual society, to minimize the time between rounds and thereby reduce bias (Hasson & Keeney, 2011).

Given that Sino-Foreign universities are a small niche market, the participant numbers were small, with 16 participants accepting the invitation to participate and finally 13 participants completing round 4. There are several examples of Delphi research using similar sample sizes, which confirmed the appropriateness of the quantity of elite expert participants in this study (Uhl, 1975; Duffield, 1993). A smaller sample size was also

supported as the participant selection approach and size can be adjusted in a Delphi exercise based on the specific needs of the question under investigation (Hasson & Keeney, 2011; Engles & Kennedy, 2007). The smaller sample size of participants within Sino-Foreign universities, which are a new niche market, was suitable to the Delphi study as a methodological approach. As well, given the sensitivity of information and the lack of full anonymity, as in other Delphi studies, only maintaining confidentiality of opinions, a simpler involvement with fewer people is viewed as beneficial in achieving the richest possible data set. The selection of paradigms for this research endeavor are discussed below. An interpretivist and positivist paradigm were selected given the context of the fieldwork.

Paradigms for future methods

The Delphi method is unique in that it has quantitative methodological traits that complement a positivist paradigm as well as qualitative methodological traits that complement an interpretivist paradigm (Bowles, 1999; Day & Bobeva, 2004). When selecting the most relevant paradigm, the research context and the intricacies of futures methodologies were first considered. The researcher selected both the positivist paradigm and the interpretive paradigm for this dissertation.

The interpretive paradigm was selected for this study given the uncertainty, multiple languages, and cultural differences of participants. In using an interpretive paradigm, the "perspective is based on the view that people socially and symbolically contrast and sustain their own organizational realities" (Gioia & Pitre, 1990, p.588). Also "Of

importance to theorists of this tradition are the descriptions, insights, and explanations of events that reveal the system of interpretations and organizing processes that are associated with modern organizations" (Vibert, 1962, p.117). An interpretive paradigm that expects individuals to have separate, different, and unique world views fit the Sino-Foreign university context of collecting data from a multi-lingual and multi-cultural participant group. The understanding that the data was based on each participant's specific wisdom and experience was relevant in using an interpretive paradigm on a Delphi study. An interpretive paradigm complemented the overall popularity of interpretive paradigms in futures research, which strengthened the argument for its selection (Slaughter, 2002).

The positivist paradigm was selected for this study given the need to quantitatively analyze the consensus achieved in the participant's responses that formed the themes and their subsequent ranks. With a positivist paradigm, "*the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition*" (Easterby-Smith, Thorpe, Jackson, 2008, p. 57). The combination of subjectively interacting with the participants through an interpretivist paradigm in rounds 1 and 2 of the data collection and objectively analyzing the consensus through a positivist paradigm in rounds 3 and 4 was essential for this research endeavor.

A third paradigm considered but not used was the critical future studies paradigm. Slaughter (2002) states that positivist and interpretivist paradigms are most popular in

futures research; yet the paradigm of critical future studies challenges the paradigm norms and attempts to prove the methodological depth of scenario analysis through the power struggles of social order. Although power dynamics are applicable to participants, both interpretivist and positivist paradigms were used in this dissertation. The critical future studies paradigm was only found in one source and its value was questionable, as power struggles could have become confused in the multi-lingual data collection process. The importance of selecting both a positivist and interpretivist paradigm as a methodological tool clarified some research aspects such as the selection of an interpretivist paradigm in addition to a positivist paradigm.

Role of the Researcher

One of the main methodological tools used in this study is the researcher himself. The researcher's participation in the fieldwork and his privileged access to the Senior Management team of the key Sino-Foreign Universities as well as individuals who work closely and regularly with government officials made this research possible. While political connections and approval are important yet undervalued features in futures research, the researcher's connections provided opportunities to contribute to academic knowledge (Stewart & Green, 2004). The importance of the researcher as a methodological instrument is complementary to using an interpretivist paradigm with data collected from an elite participant group. The relevance and importance of the researcher as a methodological instrument has been discussed in the literature (Guba & Lincoln, 1981; Janesick, 2001; Janesick, 2003; Patton, 2002; Piantanida & Garman, 1999; Shindler & Case, 1996). Without the expertise and wisdom of the researcher,

effective interpretation and negotiation of the cultural complexities inherent in this project would not be possible. In this study, the researcher's biases and assumptions from his industry experience were both validated and also disconfirmed by the data collection's results – as is appropriate.

Conclusions

In order to envision Sino-Foreign university futures, the research used a qualitative and quantitative methodological approach, particularly the Delphi method, in order to complement the environmental and cultural context. Conducting a Delphi study required a deep understanding of futures research and the ability to access an elite and influential group of participants. The researcher developed a new approach to the methodology for conducting a Delphi study in Mainland China. The use of the Delphi method appears to be new to communist nations in higher education research.

The above use of a Delphi method in this setting required extreme cultural sensitivity given the participant's elite profiles. The Delphi study entailed the preparation of resources such as a researcher, participants, and administrative support, as well as decisions regarding the participant selection process, data collection and analysis. The researcher used seven steps to complete the study, which will be explained in detail in Chapter 4.

Chapter 4 discusses the methodological approach used in this dissertation, which includes the pre-research tasks, participant selection, data collection process and analysis.

The methodological approach included a pilot study and an open- ended first round for data collection. Following discussion of the methodological steps, Chapter 5 and 6 will detail the quantitative and qualitative analysis and Chapter 7 will discuss the potential methodological, theoretical and policy contributions of this dissertation.

Chapter IV – Data Collection and Establishment of Themes

Chapter 3 outlined the challenges and methods associated with futures studies and justified the choice of a Delphi methodology for this study. Chapter 4 discusses the specific choices involved in the design of the methodological approach used in this dissertation, including pre-research tasks, participant selection, data collection processes and analysis. The chapter begins by outlining the seven methodological steps involved in collecting data for this study: achieving ethics approval, selecting the participants, distributing the confidentiality consent forms, conducting the pilot round, completing rounds 1 to 4, and analyzing the data. Finally, step 7, which involves analyzing the data, will be summarized. The purpose of this discussion is to provide an understanding of how the data were collected and analyzed at each step in the process.

Data Collection and Analysis - Steps 1-6

Some scholars have suggested that a Delphi with 1 or 2 rounds is acceptable as the emphasis is to match the methodology with the data collection and research questions required (Skulmoski, Hartman, Krahn, 2007) and that a 4th round provides sufficient new information (Altschuld, 1993). Taking the nature of the questions that were asked, the interest of the participants and the tradeoffs discussed above, a four round Delphi was conducted. The four round approach allows the Delphi study to establish a list of themes, pair down the list, and rank the paired-down list (Schmidt, 1997). The four rounds of data collection that were completed identified and confirmed the most important factors for the success of Sino-Foreign Universities in 2030. Round 1 asked five open-ended questions, which were amended based on the participants' feedback in

the pilot round, to collect a more refined set of responses as compared to the pilot round and form themes from the participants' responses. Round 2 involved confirming the collected responses of round 1 while making some minor amendments as well as confirming the themes in which the participant's responses were classified. Round 3 involved selecting the fifteen themes that participants viewed as the most important to ensure the success of Sino-Foreign Universities in 2030. Round 4 involved ranking the themes selected in the previous round in terms of their importance as well as their likelihood of occurring by 2030. These procedures provide the foundation in order to collect the appropriate data.

Finally, the literature suggests that data collection will take up to 5 months when participants are in one country (Delbecq Van de Ven, Gustafson, 1975) and a minimum of 45 days for the administration preparation is needed (Delbecq, Van de Ven, and Gustafson, 1975; Ulschak, 1983; Ludgwig, 1994). Acting on this guidance, the data collection was planned to take place over a period of 6-8 months between 2013 and 2014. The chronology of each step is included in **Table 4.1**, followed by detailed descriptions of the research activities included in each step. The interviews of all participants throughout all rounds were conducted in English, except for participant 11, who used an interpreter to respond and requested a Chinese-character version of the theme summary document (Appendix O) for rounds 1 and 2. Participant 11 conducted Round 3 and 4 entirely in English.

Table 4.1

Delphi Study Timeline

Step	Activity	Date
1	AU ethics committee approval, participant selection and ethics consent forms	Summer 2013
2	Selecting Participants and attaining informed consent	Summer 2013
3	Pilot Round	Summer 2013
4	Round 1	Autumn 2013
5	Round 2	Winter 2014
6	Rounds 3 and 4	Spring and Summer 2014

Step 1 - Athabasca University Ethics Committee Approval

The researcher completed the application form and applied for ethics approval through Athabasca University's Research Ethics Board in May 2013. The only significant challenge in obtaining ethics approval for this study lay in the need to adjust normal ethics procedures for obtaining signed informed consent to allow data collection in a society in which signed consent was not appropriate. Based on this modification, successful approval by the ethics committee was granted in June 2013, which enabled the researcher to embark on collecting the data for this dissertation (Appendix E).

Step 2 - Participant Selection and Informed Consent

In July 2013 a list was created of the main Sino-Foreign universities, their host state university, and their respective senior management staff to create a prospective list of participants (Stewart & Green, 2004). The Sino-Foreign University prospective participant list included current and former CFOs, Operational Directors, Executive Presidents, Presidents, Vice Presidents, Provosts and Vice Provosts, Chancellors and

Pro-Vice Chancellors and members of the Senior Management Team. This list contained a total of 38 potential participants. The second prospective participant list included government officials who play roles in the higher education context, such as party secretaries within Sino-Foreign universities and the education bureau involved in higher education planning. This list included a total of 5 potential participants. A total of 43 participants were identified.

A review of the participants' backgrounds was conducted by examining the participants' online profiles, contributions to higher education, and overall professional experience. The researcher followed Adler & Ziglio's (1996) assessment criteria of experts based on their knowledge, keenness, availability and ability to communicate about Sino-Foreign Universities. The contact details of the senior management staff were retrieved from a review of institutional websites, emails and phone calls to the various educational institutions, and personal contacts.

In supporting the inclusion of participants the researcher knew, the literature recognizes the difficulty to avoid not knowing the participants in specialist areas like Sino-Foreign Universities where there are few relevant experts (Murphy et al., 1998). The participant selection process also considered bias to ensure dependability when collecting data from the participants. This was important as the researcher knew some of the participants prior to conducting this Delphi study, yet their participation was imperative given their role within leading Sino-Foreign Universities. To ensure dependability with bias being considered reflexivity was used where the researcher had to conscientiously preserve a

dual role as a DBA student and as a Sino-Foreign University manager when collecting data (Krefting, 1989).

A total of 43 stakeholders were sent participation invitation letters that outlined step 2's participant confidentiality terms, which are a key aspect of a Delphi study (Appendix F). The researcher prepared an invitational script when contacting the participants via phone to ensure a consistent form of communication with each prospective participant (Appendix H). The participant confidentiality terms ensured the participants' names, titles and institutions would not be directly associated with their responses. Each participant's responses and their respective institutions would be given a confidential identity for analysis purposes. The institutions were classified as either type 3 (embedded model) or 4 (stand-alone model) of Willis's (2001) partnership model, as discussed in chapter 2.

The response rates for the invitations to participate in this Delphi study are presented in Table 4.2 as advised by the literature (Schmidt, 1997). The invitations resulted in 16 acceptances, six declines and 24 non-responses. The researcher attempted to increase the response rate to the invitation by re-contacting via email the 24 non-responding participants as recommend in the literature (Dillman, 1991). The researcher also took the advice of Hsu and Sandford (2007) and asked the declining participants for referrals to other relevant experts they knew to participate in this Delphi study. Unfortunately no additional participant responses or participant referrals resulted from this attempt by the researcher.

The six participants that declined included prospective Sino-Foreign University personnel as well as government officials. The reasons given for the six participants' decision not to participate were mostly related to work commitments though one participant declined due to the evolving nature of their associated Sino-Foreign University. From the 16 participants that accepted the invitation to participate, one participant later dropped out due to work commitments and two others dropped out due to discomfort with the Delphi study's time horizon of 2030. From the three participants that dropped out after accepting the invitation to participate, one participant was a party secretary who was a representative of one of the institutes that included other academic senior managers and another participant meets regularly with the government on a fortnightly basis, with the rest of the confirmed participants representing the senior management teams of Sino-Foreign Universities. In the end, 13 of the 16 participants who accepted the invitation participated in the pilot study and two additional participants joined the Delphi study after the pilot. From the 13 participants in the pilot round, eight were contacted via email and five were contacted through the researcher's network. Before the pilot round began, the researcher distributed confidentiality consent forms to all 13 participants.

Table 4.2

Institution Number	Type of Institution	Participant Number
1	3	1, 2, 3, 11
2	4	5, 9, 14
3	4	7, 15, 12
4	3	8, 4
5	4	6
6	3	13

Participants per Anonymous Associated Institution

Institute 1 began with six participants, two of whom later dropped out of the study. Institutions 5 and 6 each had one participant, but the institution is noteworthy for the study given the strength of those participants' backgrounds. Participant 6 was the Vice-President of the newest established type 4 Sino-Foreign University partnership in Mainland China. Meanwhile, Participant 13 was a Vice-President for Internationalization with a focus on China, who could provide a unique insight into the expansion of Sino-Foreign Universities. The researcher felt the best overall grouping was to separate the participants based on their representation of type 3 or 4 Sino-Foreign University partnerships in order to have an equal number of participants per group and to establish findings that would contribute to the literature (Willis, 2001a).

Confidentiality consent form

An ethics consent form representing the researcher and Athabasca University was sent via email and provided in person to the 13 confirmed participants to guarantee the confidentiality of their comments while participating in the Delphi study (Appendix G). The participants were only required to read the ethics consent form in order to give

consent to the form's details, due to the concept of face and the desire to preserve the participants' anonymity to all who read the dissertation (Ho, 1976; Hsu, 1996; Rowe & Wright, 1999). A requirement for signed consent may in fact have brought the research objectives into question, given that Mainland China's laws do not protect an individual's privileged information as the collective interests of society are considered above any individual interests (Liang & Lu, 2006). As mentioned in the participant invitation letter, the participants would be given a confidential identity (e.g. *participant 1*) to record and categorize their responses while maintaining their confidentiality. Once the participants read the ethics consent form, thus giving consent to the confidentiality agreement, the researcher began the pilot round.

Step 3 - Pilot Round

The 13 confirmed participants were contacted via email to reserve one hour of their time, at an appropriate date for their participation in the pilot round. The pilot round began in August 2013 with nine participant interviews throughout Zhejiang province, Jiangsu province, Beijing and Shanghai, requiring extensive train travel for the researcher. Another four participants were interviewed by phone, with participant 8 being located in Canada, participant 6 in Zhejiang province, and participants 12 and 13 in the UK. Participant 12 called once, but preferred to participate through email communication, which the researcher accommodated.

The pilot round used a research instrument containing the seven open-ended questions provided in **Table 4.3** which were derived from the futures literature (Ratcliffe, 2002;

Amara & Lipinski, 1983). The pilot also had an alternative objective: to familiarize the

participants with the research endeavor and ensure their comfort with the data collection

process (Ratcliffe, 2003; Chermack, 2006; Kruus, 1983; Amara & Lipinski, 1983).

Table 4.3

Pilot Round Questions

1.	In the best possible world, what would you hope for Sino-Foreign University partnerships in 2030?
2.	In the worst possible world, what are your greatest fears for Sino-Foreign University partnerships in 2030?
3.	What pivotal events from the last few years provide good lessons for the future of Sino-Foreign University partnerships in 2030?
4.	What major decisions with long-term implications do Sino-Foreign University partnerships face at the moment?
5.	What major constraints do you experience inside/outside the organization/system of Sino-Foreign University partnerships?
б.	If all constraints were removed, and you could direct what is done, what would you do for Sino-Foreign University partnerships?
7.	If you could pose three questions to a clairvoyant who can foretell the future, what would you ask regarding Sino-Foreign University partnerships in 2030?

The participants' responses were typed by the researcher on his laptop and were labeled according to their confidential identity. The researcher interjected when appropriate to assist the participants in responding, as supported by the literature (Ratcliffe, 2002). The researcher occasionally checked for participant fatigue by asking whether the participants were comfortable in continuing to respond (Shepard, 1981). The participants responded in English, except for participant 11, who used an interpreter. The researcher orally confirmed the typed responses with each participant at the end of each interview to increase the reliability of the collected data (Skulmoski, Hartman, Krahn, 2007).

Feedback from the participants was examined to amend, clarify and change the order such that the seven questions in the pilot round became five questions in round 1. Participants 1, 2 and 3 were hesitant and uncomfortable responding to question 2, given the question's negative connotation. The three participants' discomfort resulted in the researcher removing question 2 after the third pilot round interview. The decision to remove question 2 was further justified upon review of the participants' responses in that they did not answer the dissertation's research questions. With question 2 being removed participants 4 to 13 had 6 questions to answer. Participant 7 felt that questions 1 and 6 were too similar and that questions 5 and 6 needed an explicit link. Participant 9 felt that question 4 needed clarification regarding whether the decisions being asked were at the government or institutional level. Feedback from participants 7 and 9 indicated that question 7 was unclear and participants 5 and 11 did not feel comfortable answering the question. Participants 1, 4 and 5 requested further clarity regarding how Sino-Foreign Universities were defined in terms of their institutional independence or location. The researcher amended all questions to "Sino-Foreign Universities and Colleges" in round 1 to reflect and define the institutions under discussion to match Willis's (2001) type 3 model being the embedded model of a College program existing within a State University. The change also reflects Willis's (2001) type 4 independent institutional models of Sino-Foreign Universities representing a newly established institute and campus of an existing foreign and state university. The final feedback was from participant 10 who felt the timeline of 2030 to be too distant, given Mainland China's 5 year planning system. After the interviews were complete, the researcher used the feedback from the participants to amend the questions to be used in round 1.

The approach of creating themes from the participant's responses was supported by the literature (Powell, 2002). The researcher coded the 27 pages in a participant response document resulting in the creation of 61 themes with accompanying summaries (Appendix I). The participants' confidential identity was listed in the left column to trace accountability to each of the participant's responses. After analyzing the pilot rounds' themes, the researcher decided to remove question 7 and to clarify the remaining questions as per the participants' feedback. The participant's response from question 7 repeated their responses in questions 1 to 6 or did not answer the research question. The final five questions which became the research instruments for round 1 are in **Table 4.4**.

Table 4.4

Round 1 Open-ended Questionnaire

- 1. In the best possible world, what would you hope for Sino-Foreign University & College partnerships in 2030?
- 2. What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?
- 3. What major decisions with long-term implications do the Sino-Foreign University and College partners and the Chinese government currently face?
- 4. a) What major constraints do you experience inside/outside Sino-Foreign University and College partnerships?

b) How are these constraints handled?

5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University and College partnerships?

In assessing the time to respond to the pilot round questions, eight participants took one hour, and five participants took two hours. The two-hour duration raised concerns regarding potential participant dropout rates despite being at the maximum amount of participant interview time as per the Futures literature (Ratcliffe, 2002). The potential for

the length of some of these interviews to increase dropout rates was particularly concerning, as Delphi studies are prone to higher dropout rates in the early rounds of data collection (Zolingen & Klassen, 2003). As such, it was imperative to manage the time to complete each round to manage the dropout rate. It was hoped that the reduced number of questions would help reduce the duration of these interviews.

Step 4 - Round 1

The researcher then began to prepare for round 1 in step 4 of the Delphi study. Part of this preparation was to provide a final invitation to any additional participants to manage the participant dropout rate while ensuring sufficient participants to fully participate in the four required rounds. As the researcher prepared for round 1, participant 10 informed the researcher of his inability to continue with the Delphi study due to work commitments. This left the researcher with 12 participants in round 1. The researcher then re-contacted individuals from the original list of 43 participants who did not originally respond. The participants were re-contacted and an additional 11 new prospective participants were invited to participate in round 1, of which two participants agreed to participate. The researcher arranged round 1 interviews with the 12 continuing participants and 2 new participants.

The goal of round 1 was to use the five open-ended questions to collect responses from the participants, which would then be used to create the themes for the following rounds of this Delphi study. The 14 confirmed participants were contacted via email to reserve one hour of their time (Ratcliffe, 2002). Round 1 began in September 2014, with the

continuing participants interviewed in the same manner and location as the pilot round. The two new participants were interviewed via phone and responded to the five questions in English as did all participants except for participant 11, who used his personal translator. The participants' responses were again typed on the researcher's laptop and labeled according to their confidential identity. The researcher orally confirmed the typed responses with each participant at the end of each interview (Engles & Kennedy, 2007) to increase the accuracy of the recorded data (Skulmoski, Hartman, Krahn, 2007). After the interviews were complete, the responses were compiled and coded in 23 pages documenting 68 themes, which are presented in Chapter 5 (Appendix K). From these coded responses, 14 themes were identified for question 1, 10 themes each for questions 2 and 3, 16 themes for question 4a, 6 themes for question 4b, and 12 themes for question 5 (Appendix J).

A brief analysis of the participants' responses and the themes was conducted. The researcher first noticed the number of themes with which participants' responses varied, from 9 themes from participant 6 and 14 to 27 themes from participant 9. Despite participant 1 feeling question 2 to be a leading question and participant 3 feeling question 1 and 5 to be similar, the researcher observed that the participants had improved comfort levels and clarity of responses. Round 1 also reduced the participants' response time, with 9 participants requiring 1 hour and 5 participants requiring less than 1 hour to respond to the open ended questions.

Step 5 - Round 2

The goal of round 2 was to confirm the participants' responses as well as the placement of those responses within the themes created by the researcher. The 14 confirmed participants were re-contacted via email to reserve one hour of their time at an appropriate date for their participation in round 2. Round 2 began on February 19th 2014, and was completed on April 4th 2014.

In round 2, the participants were provided with the round 1 participant response document and round 1 theme summary document (Hasson & Keeney, 2011). The participants were instructed to review all theme summaries for each question, and once reviewed, the researcher would inform them as to which themes their responses were placed (Appendix N). The participants' responses within the respective themes were read orally to the participants, saving the participants from reading the document themselves, placing them in a higher position within the interview process and thus giving face (Ho, 1976). The participants had the liberty to read by themselves from their own copy if they so desired. Participants then confirmed, suggested amendments, or annulled their recorded responses and their responses' placement in the 68 themes (Habana, 1993; Millett, 2007; Schmidt, 1997; Okoli & Pawlowski, 2004). The majority of the participants' responses from round 1 were confirmed with minor amendments to the wording of the participants' responses. The amendments, added responses and participant confirmations also enhanced the accuracy of the data set and enhanced the rigor under which the data were collected (Hasson & Keeney, 2011; Okoli & Palowski, 2004). The participants' amendments or annulments were recorded via a note pad to facilitate a more relaxed environment for the participants.

The added, moved and removed responses were recorded in the round 2 participant response document in the color coded guidance as found in **Table 4.5**. Participants 1, 2, 5, 7, 14 and 15 added responses in the round 2 participant response document (Appendix N). Participants 7, 11, 13 and 15 moved their responses to other themes. Two new themes were identified: responses from participants 7 and 15 resulting in the creation of theme 69; and another moved response from participants 7 and 11 resulted in the creation of theme 70. Specifically, participant 7 moved their response from theme 25 to theme 70, and moved their response from theme 67 to theme 69. Participant 11 moved their response from theme 51, and participant 15 moved their response in theme 67 to theme 67 to theme 69. In completing the confirmation of responses in round 2, the contribution of participants' responses towards the themes was reviewed, which varied from 9 themes from participant 6 to 33 themes from participant 1. The researcher also noticed a reduced participation time of 45 minutes on average per participant.

Table 4.5

Color	Representation
Blue	Responses added by participants.
Green	Responses moved to current theme.
Purple	Responses removed from current theme.

Color Legend for Round 2 Response Amendments

The theme summaries were also amended to more accurately reflect the participants' original responses in round 1 and the added responses by the participants in round 2. Themes 24, 43 and 57 were amended to more accurately reflect the participants' original responses in round 1. All other themes were amended due to the added responses from the participants in round 2. Themes 10, 15 and 61 were edited for grammar and clarity of the overall essence of the theme without any direct relation to a participant's added responses in round 2 or original responses in round 1. A detailed record of the researcher's reasons for the amendments were kept to have an audit trail justifying the changes made to the theme summaries (Appendix P).

Upon completion of the interviews, an updated participant response document and theme summary document was created (Appendix M and N). The participants were also emailed the overall responses of all participants that included the number of participants whose responses were placed in each theme to aid in achieving credibility. The quantity of information fed back to participants was supported by Woudenberg (1991) who noted statistical feedback in a Delphi study can be a single number as he found in Jolson & Rossow (1971). The data collection process also recorded the participants' amendments

or moved responses and the researcher's reasons for changing the theme summaries (Appendix P). In completing round 2, the themes were confirmed and ready to be narrowed down through a selection process in round 3. The selection process resulted in a different number of themes per question, as can be seen in **Table 4.6**.

Table 4.6

Round 2 Summary of Themes per Question

Question	Number of Themes
1	14
2	10
3	11
4a	16
4b	6
5	13

As the theme summary sheet would be used in round 3, the themes' numeric order was rearranged for each question, in order to reduce selection bias (Hasson & Keeney, 2011; Schmidt, 1997). Given the largely accurate placement and recordings of responses by participants in round 1, the participants were not asked to re-check the minor amendments that were made by the researcher during the round 2 interviews. At this time the participants were given a two-week period as adapted from Delbecq, Van de Ven and Gustafson (1975) to review their hard copies of the round 1 responses, and they could email the researcher for further changes if needed. Once the two-week period had passed without any changes requested, the researcher closed round 2 with 25 pages of confirmed responses placed into 70 themes.

Step 6 - Round 3 and 4

The goal of round 3 is for the participants to select the 15 most important themes from the 70 confirmed themes in round 2. Schmidt (1997) suggested that Delphi studies with fewer than 100 themes should have a theme selection rate over 10%, and his 1997 study had almost a 20% selection rate that parallels the quantity and selection rate of the themes in this dissertation. The 14 confirmed participants were re-contacted via email to reserve 30 minutes of their time at an appropriate date for their participation in round 3. Round 3 began on April 12th and was completed on May 23rd; the interview method which each participant chose (face-to-face, phone, or email) remained the same as round 2, except for participant 7, who opted to select the most important themes via email communication. Many of the participants who were interviewed via phone completed the tasks associated with round 3 prior to the phone call with the aid of instructions (Appendix O). This allowed for a quick confirmation of their round 3 responses and time to address any other questions they had during the phone call. The themes per open ended question were rearranged in random order to minimize bias when selecting the themes of most importance (Schmidt et al., 2001). Participants were also told there was no obligation to select exactly 15 themes if they felt a smaller number of themes were the most important.

Upon completing round 3, the researcher reviewed the timing of participation, noting that all participants took between 20 and 30 minutes to select the themes. The reduced time in comparison to round 2 met the researcher's expectation of managing the participant dropout rates to ensure a continued participation from the participants in round 4. Despite the reduced time, participant 5 confirmed his unavailability to participate in round 4 due

to work commitments. The researcher still did have 13 participants, which suffices to meet the Delphi study criteria to successfully complete the data collection in round 4 (Mitchell, 1991).

The participants' selected themes were then resubmitted via email for confirmation, in order to ensure the accuracy of the collected data (Appendix R) (Adler & Ziglio, 1996; Delbeg, Van de Ven, Gustafson, 1975; Linstone & Turloff, 1975). The email also informed the participants of a two-week period to email the researcher regarding any needed changes related to their selected themes. During this two-week time period, participant 13 emailed the researcher to remove theme 21 from their original selection of 16 themes. All participants selected 15 themes, except for participant 11, who selected 8 themes, and participant 14, who selected 13 themes. After the two-week period had passed, the themes were analyzed based on their selection frequency. The consensus was analyzed based on the number of participants who selected one of the 70 themes, divided by the total number of round 3 participants, which was 14. The researcher retained the themes that had achieved a frequency of selection of at least 4/14, which resulted in 22 themes to be ranked in round 4. The consensus of preserving themes with at least a 4/14frequency of selection is also deemed acceptable given that the flexibility of the Delphi study to arbitrarily pair down themes in the event of a lower-than-expected consensus (Schmidt, 1997). Separately, the retention of themes with a 4/14 consensus or greater achieved a questionnaire length that fell between 20 and 25 themes, as advised in the literature (Mitchell, 1991; Parenté, Anderson, Myers, O'Brien, 1984). The final 22 themes per question are seen in Table 4.7:

Table 4.7

Question	Themes	
1	1, 4, 5, 8, 10	
2	15, 16, 18, 20	
3	31, 34	
4a	36, 40, 43, 44, 45, 46	
4b	51, 52, 53	
5	63, 69	

The 22 Final Themes per the 5 Open-Ended Questions

The goal of round 4 was to rank the 22 themes with the highest frequency of selection in round 3 in terms of their importance and likelihood of occurrence. The decision to take a single questionnaire and split it into 2 questionnaires to rank both the importance and likelihood was supported by the literature (Mitchell, 1991). The conciseness of ranking the final 22 themes in terms of importance and likelihood of occurrence prevented the questionnaire from being too long or too short that would make consensus either impossible or too easy (Masini 1993). Splitting the questionnaire into 2 questionnaires also made the data collection process more streamlined to facilitate the participants ranking of the themes.

In round 4, 13 confirmed participants were re-contacted via email to reserve 20 minutes of their time at an appropriate date for their participation in round 4. Round 4 began on June 9th, 2014, and was completed on July 3rd, 2014; the interview methods each participant chose (face-to-face, phone, or email) remained the same as round 3. Many of the participants who were interviewed via phone completed the tasks associated with

round 4 prior to the phone call, allowing for a quick confirmation of their round 4 responses and time to address any other questions they had during the phone call. Participants who participated face-to-face were given hard-copy instructions; those who participated via phone or through email communication were emailed a soft copy of the instructions (Appendix S). The round 4 instructions were accompanied by four documents and required three steps. The four documents included the round 4 *questionnaire*, which was the main instrument to collect data for round 4 in ranking the 22 most-frequently selected themes from round 3 (Appendix W). As China is a nonconfrontational culture, a 4 point Likert scale was used as midpoints can become locations to place socially sensitive responses (Johns, 2010), or they can be non-decisive ranking point (Raaijmakers, Hoof, Hart, Verbogt & Wollebergh, 2000), and finally can be a location to place undesired or avoided rankings by the participants (Kulas, Stachowski, Haynes, 2008). The second document, round 4 theme frequencies, contained the frequency of selection for the 22 themes from round 3 that were to be ranked in round 4 (Appendix X). The third document, round 3 participant responses, contained the themes selected by each respective participant in round 3 as the most important to the success of Sino-Foreign Universities in 2030. The fourth document, round 2 participant responses, contained the participant's confirmed responses from round 2, which formed the 22 most-frequently selected themes in round 3. The ranking guide used in the round 3 questionnaire is in Table 4.8.

Table 4.8

Importance (Ranking Guide)		Likelihood (Ranking Guide)		
1.	Most Important	1.	Most certain by 2030	
2.	Important	2.	Likely by 2030	
3.	Unimportant (Low importance)	3.	Unlikely by 2030	
4.	Trivial	4.	Almost impossible by 2030	

Importance and Likelihood Ranking Guide

After the questionnaires from all 13 participants were collected, the participant's rankings were transferred to an Excel spreadsheet to be analyzed. The participants ranked all 22 themes in terms of importance and likelihood, except for participant 15, who did not rank themes 40, 43, or 44 in terms of their likelihood of existence. Participant 15 was reluctant to rank the constraints that were reflected in his round 2 responses. The researcher had no problems with participant 15's reluctance to rank the 3 themes, as the literature suggested participants should not have to answer any questions that they were uncomfortable in answering (Zolingen & Klassen, 2003). The ranked themes were resubmitted to participants via email for confirmation, with a two-week period to inform the researcher of any needed changes in their rankings (Appendix T). No participants changed their rankings during the two-week period, which confirmed their initial rankings. Once the themes were confirmed by all participants, the consensus in terms of rankings was analyzed with respect to the consensus. Chapter 5 provides details on the findings from each round of data collection and analysis.

Step 7 - Data Analysis and Synthesis

The goal of step 7 was to determine the importance of, and likelihood of occurrence for, the 22 final themes to answer the research questions of this dissertation (Millett, 2007). This final step entailed examining the data from the four rounds of collection to understand the future of Sino-Foreign Universities in Mainland China by 2030, as well as understanding the Delphi study's potential methodological and theoretical contributions. The researcher had to make sense of the participants' responses and the overall data set. The themes' response rates, the participants' stability in responses, and other statistical measures were used to examine the consensus levels per round and variances over the four rounds of data collection.

Once the researcher had made sense of the collected data, he examined the final 22 themes based on their importance and likelihood of occurrence in light of the dissertation's research questions. To do so, the researcher classified final 22 themes by the three main research questions based on the five open-ended questions and the theme summaries of the final 22 themes. Once the final 22 themes were classified according to the research questions, the researcher delved into a further thematic exploration of the themes by carefully reviewing the participants' responses within the themes. In the quantitative analysis found in Chapter 5 the participants' responses were compared to their round 4 theme rankings to review the consistency of their responses and rankings towards the themes' importance and likelihood of occurrence. The participants' responses per anonymous institution were similarly compared to their respective round 4 theme rankings to also review the consistency of the data regarding the themes'

importance and likelihood of occurrence. For each round, the researcher also assessed the trustworthiness of the Delphi study that will be explicitly detailed in chapter 5.

Conclusion

The eight steps outlined above describe a data collection process that required hours of transportation via plane or train to interview the individual participants for each round. Each interview outside Shanghai required at least a day to arrive at and return from the participant's location to collect a relevant data set for this Delphi study. The extensive efforts to interview participants from multiple locations in China, the UK and Canada were worthwhile in order to achieve as robust a data set as possible. The data analysis conducted in step 8 will be explained in greater detail in chapters 5 and 6 that outline the quantitative and qualitative analysis. The findings of the data analysis will be further explained in chapter 7, which outlines the practical, theoretical and methodological contributions of this Delphi study. The researcher hopes that the contributions as outlined in chapter 6 will assist all Sino-Foreign University stakeholders, as well as their respective institutions, in their current and future planning.

Chapter V - Quantitative Analysis of Delphi Findings

Chapter 4 described the data collection and how the themes were established as most important for, and most likely to occur in, Sino-Foreign Universities in 2030. Chapter 5 provides the quantitative analysis of the themes as established in Chapter 4 from the four rounds of data collection. This analysis involved assessing the response rates that represented the theme's consensus during each round. In this chapter, the themes are represented by their corresponding reference number as used in each round of data collection. Once the response rates were established, the qualitative analysis of the themes that compared the participants' responses with the response rates of the associated themes was completed; these will be discussed further in Chapter 6.

The researcher had overall confidence in the findings of the four rounds of analysis. Although the comparison was dated, the data collection yielded a response rate that was greater than 75%, surpassing the published Delphi dissertations in Riger's (1986) publication. The few questions to which the participants did not respond, due to discomfort or disagreement with the questions, demonstrates a rigorous and rich method of data collection (Riggs, 1983). Separately, question 4a related to the constraints that participants currently or have experienced and 4b, the methods participants used to handle the constraints they raised in 4a, were analyzed separately as they were different questions. The researcher was also satisfied with the increase in the various measures of consensus established over the rounds of data collection, given the nature of a classical Delphi study to reach consensus. The various measures of consensus reflect the specific tasks of each round. Consensus was first analyzed in terms of the themes' response rates

in rounds 1 and 2, their frequency of selection in round 3, and their rankings in round 4. Rounds 1 and 2 involved the analysis of the frequency of similarities in the participants' responses to open-ended questions (Riger, 1986; Habana, 1993). All four rounds of this Delphi study required a consensus in terms of a ranked, selected or responded agreement (Butterworth & Bishop, 1995) from at least 50% of the participants (Williams & Webb, 1994; McKenna, 1989) in the themes of each respective round. The decision to require consensus to achieve agreement from 50% of the participants was also supported by the literature, which notes that consensus in a Delphi study can be arbitrarily set (Hill & Fowles, 1975). A second consensus was also analyzed based on the participant's stability in responding, confirming, selecting and finally ranking an identical theme (Duffield, 1993). This method of consensus adapted elements of Chaffin and Talley's test for individual stability between rounds (Riger, 1986). Third, a group consensus was analyzed in every round from participants' responses that proposed either Willis' (2001) type 3 or 4 partnerships as potential models for Sino-Foreign universities. Group consensus from Willis' (2001) type 3 and 4 partnerships were analyzed to assess Parenté et al.'s (1984) claim that, apart from the most elite experts, panels provide the greatest predictive accuracy. For the purpose of this dissertation, Parenté et al.'s (1984) claim of predictive accuracy was interpreted as a greater level of consensus.

In addition to analyzing consensus, further analyses of the data were conducted at various times across the four rounds. First, the analysis of the data in round 2 also involved reviewing the amendments requested by participants for each question, as well as assessing whether a theme was solely created with a type 3 or 4 partnership. Similarly,

the analysis of the data in round 4 involved reviewing adjacent ranks in that round of the data-gathering, with a specific focus on outlying themes as well as the range of ranks for each theme. Finally, the analysis of the data across all rounds involved analysis of the various interview methods and their influence towards the quantity of responses, of the response rates per question, and an assessment of themes that achieved consensus in more than one round. The consensus findings and answers to this dissertation's research questions are discussed in Chapter 6, and the practical, theoretical, and methodological contributions of the Delphi study are examined in Chapter 7.

Round 1 - Data Analysis Introduction

The data collected in round 1 were analyzed from several quantitative perspectives, including the response rates representing the themes per question, the quantity of responses per interview method chosen by participants, and group consensus per partnership type of the participants' responses to the themes. The analyses and accompanying tables are presented in the order in which they were collected. The analysis of the data collected in round 1 demonstrated that the majority of the themes could be formed from the responses of three or participants, establishing a base of consensus that would increase over the subsequent rounds. A similar presentation of the quantitative analysis needed to complement each round's task to move the data collection towards consensus. Furthermore, analyses of the following rounds were needed to complete a rich quantitative analysis, in order to analyze the participants' responses in chapter 6.

Round 1 - Response Rates per Question

The round 1 theme response rates per each of the five open-ended questions were analyzed to review the consensus of the themes derived from each question. Consensus as represented by the round 1 theme response rates was calculated by totaling the number of participants whose responses were placed in a particular theme and then dividing that by the total number of participants. As shown in **Table 5.1**, there were 4 themes representing 3 open-ended questions that achieved the needed consensus of 7/14 (50%), and the majority of themes had a response rate of 3/14 (21%) or greater. The ability to create most of these themes from the responses of three different participants in an openended questionnaire that achieved a low level of agreement was deemed successful as per the literature (Schmidt, 1997). The emphasis on participant quality ensured all respective themes received a sufficient number of responses prior to the establishment of the themes' consensus (Morgan, Lam-McCullough, Herold-McIlroy, Tarshis, 2007; Mullen, 2003). In completing the analysis of the response rates per question, the researcher began to prepare the analysis of the interview methods per quantity of participants' responses.

Table 5.1

Round 1	1	2	3	4a	4b	5
8/14 (57%)	-	18	-	-	-	-
7/14 (50%)	-	15	26	43	-	-
6/14 (43%)	-	-	-	36, 46	52	-
5/14 (36%)	-	20	-	45	55	-
4/14 (29%)	4, 5, 8	17	32	44	51	59, 61, 67
3/14 (21%)	1, 6, 9	23	25, 28, 29, 31, 33, 34	40, 41, 47, 48, 49	53	62, 63, 65 66, 68
2/14 (14%)	2, 3, 7, 10, 11, 12, 13, 14	16, 19, 21, 22, 24	27, 30	35, 37, 38, 39, 42, 50	54, 56	57, 58, 60 64

Round 1 Response Rates per Questions

Round 1 - Interview Method Analysis

Analysis of the interview methods per quantity of participant responses revealed that all participants answered all questions, with the exception of participant 3, who, due to discomfort, declined to answer question 3. As displayed in **Table 5.2**, a further analysis was conducted, which found that the number of themes into which a participants' responses were placed varied from 9 to 27, and an average of 15.6 themes were provided per participant. All the participants that were interviewed face-to-face, and only one participant that was interviewed via phone, had a greater number of responses placed in the themes than the average. The findings suggested that a face-to-face interview medium generated a greater number of responses; as the literature suggests (Van Dijk, 1990), this method is best at motivating participants toward the research endeavor and achieving the greatest number of original and additional responses. Another finding that

did contrast with Van Dijk's (1990) study was the association of a face-to-face interview medium for the two participants who dropped out of the study.

Table 5.2

Participant	Interview Method	Round 1
1	Face to face	22
2	Face to face	16
3	Face to face	21
4	Face to face	13
5	Face to face	14
6	Phone	9
7	Face to face	16
8	Phone	15
9	Face to face	27
11	Face to face	15
12	Email	15
13	Phone	17
14	Phone	9
15	Phone	10

Round 1 Interview Method Analysis

Completion of the analysis of the interview methods and their associated quantity of responses per participant led to the analysis of the data based on group consensus. This required the data gathered from each of the participants to be separated, based on the participants' associated institution being classified as either Willis's (2001) type 3 or type 4 partnership in order to assess any unique findings particular to each respective type of partnership. The balanced number of participants associated with either type 3 or 4 partnership models further justified the analysis. Analysis of the groups according to nationality (Schmidt et al., 2001) or institution was also considered; however, due to the imbalance in the number of participants per group and the lack of justification in the

research context to do so, this approach was not taken. Instead, the group consensus was solely reviewed in terms of Willis's (2001) type 3 and 4 partnerships.

Round 1 - Partnership Type Consensus Analysis

The data were first analyzed per partnership type with a consensus requirement of 50% of the participants from either type 3 or 4 partnerships to have their responses placed within a theme. The figure of 50% was adopted from Okoli & Palowski's (2004) study that used the requirement of 50% consensus in a group's identical response to a theme to retain the respective theme for the following round. Once the consensus requirement was decided, the participants were then classified based on their anonymous institution being associated with either Willis's (2001) type 3 or 4 partnership model. As displayed in **Table 5.3**, two themes were found that achieved consensus for type 3 partnerships, and four themes that achieved consensus for type 4 partnerships. Further analysis also revealed that all themes that achieved consensus for either type 3 or type 4 partnerships were created by the responses of participants from both type 3 and 4 partnerships. This led to the further exploration of a theme created exclusively by type 3 (embedded model) or type 4 (stand-alone) partnerships.

Table 5.3

Round 1 Themes with the Responses of 50% of the Participants from Type 3 or 4 Partnerships per the 5 Open-Ended Ouestions

Type/Questions	1	2	3	4a	4b	5
3	-	20	-	43	-	-
4	-	15, 18	26	36	-	-

Round 1 - Partnership Type Creation Analysis

The themes were then analyzed based on the type of partnership, type 3 or 4, from which the participants whose responses inspired their creation originated. As a result of the analysis as displayed in **Table 5.4**, there were 10 themes created from the responses of participants from type 3 partnerships across 4 of the open-ended questions. In addition, there were 4 themes created from the responses of participants from type 4 partnerships across 3 of the open-ended questions. The rest of the themes were created from the responses of participants from type 4 partnerships across 4 of this Delphi study. Separately, five partnerships' inclusion in the data collection for this Delphi study. Separately, five participants representing type 3 partnerships selected a face-to-face interview medium, compared to three participants representing type 4 partnerships. This slight imbalance in participants who selected a face-to-face interview method per partnership type may have contributed to the slight increase in quantity of themes created by type 3 partnerships that reflects the earlier analysis of the interview media.

Table 5.4

Type/Questions	1	2	3	4a	4b	5
3	-	16, 22	30	35, 39, 48	53	57, 58, 65
4	14	19	-	42	54	-
3 & 4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	15, 17, 18, 20, 21, 23, 24	25, 26, 27, 28, 29, 31, 32, 33, 34	36, 37, 38, 40, 41, 43, 44, 45, 46, 47, 49, 50	51, 52, 55, 56	59, 60, 61, 62, 63, 64, 67, 68

Round 1 Themes Created by Partnership Type per the 5 Open-Ended Questions

In summary, the quantitative analysis of the data collected in round 1 found the need for participants to represent both type 3 and 4 partnerships, as the majority of the themes

were established from responses from participants of both partnership types. As the faceto-face interview method resulted in the greatest quantity of created themes from participants' responses, its methodological superiority will continue to be analyzed in the following rounds of data. Finally, as the majority of the themes achieved a consensus of at least 3/13 participants, the 5 open-ended questions achieved a result that provided the researcher a base of consensus to build on in the subsequent rounds. The majority of the themes having achieved a consensus of least 3/13 participants was expected in an open first round of data collection as per the literature (Schmidt, 1997). To build on the analysis of round 1, additional analysis in terms of the response amendments per participant and per open-ended question was planned. The additional analysis was imperative in order to establish a rich analysis of the data that reflected the task in round 2 of confirming the participants' responses within the themes. With the analysis of the data collected in round 1 completed, the analysis of the data collected in round 2 could begin.

Round 2 - Data Analysis Introduction

The data collected in round 2 were analyzed from several quantitative perspectives that reflected and continued the analysis of round 1. Additional analysis of amendments to the responses, per participant and per open-ended question, were implemented in the analysis of the round 2 data, as the themes, their summaries, and the participants' responses were all confirmed. The findings from the analysis of the collected data in round 2 indicate an increased response rate and increased group consensus for the themes as compared to round 1. The findings also confirmed round one's findings with respect

to the benefits of a face-to-face interview method to establish a richer data set and greater participant involvement in the Delphi study. As a high rate of confirmation in the placement of the participants' responses was achieved in round 2, the decision to use Schmidt's (1997) requirement to narrow down the final themes in round 3 required assessment. This ensured all the correct themes were retained for round 4, to be ranked in terms of importance and likelihood of occurrence. The data in round 2 were analyzed much as those in round 1 had been, by reviewing the response rates per open-ended question.

Round 2 - Response Rates per Questions

This round began with an analysis of the round 2 theme response rates as per the 5 openended questions, to review the range of consensus achieved from the confirmed themes per question. Consensus as represented by the round 2 theme response rates was calculated by dividing the number of participants whose responses were placed and confirmed in a particular theme by the total number of participants. As displayed in **Table 5.5**, the analysis showed 6 themes across 3 questions which now included 4b in round 2, compared to 4 themes in round 1 that achieved the needed response rate of 7/14 (50%) to achieve consensus. The 4 themes that achieved consensus in round 1 did so again in round 2, which reflected an accurate recording and interpretation of the participants' responses during round 1. The additional participant responses that increased the number of themes achieving consensus were then assessed.

Round 2	1	2	3	4a	4b	5
8/14 (57%)	-	15, 18	26	-	-	-
7/14 (50%)	-	-	-	36, 43	52	-
6/14 (43%)	-	-	-	45, 46	51	-
5/14 (36%)	5	20, 23	32, 34	-	-	-
4/14 (29%)	1, 4, 8	16, 17, 21	-	40, 44, 47	53, 55	59, 61, 62, 65
3/14 (21%)	2, 3, 6, 7, 9, 12	22	28, 29, 30, 31, 33	41, 48, 49, 50	-	58, 63, 66, 68, 69
2/14 (14%)	10, 11, 13, 14	19, 24	25, 27, 70	35, 37, 38, 39, 42	54, 56	57, 60, 64, 67

Round 2 Response Rates per Questions

Round 2 - Added Moved Response Analysis

As shown in **Table 5.6**, the increase in consensus was a result of the added responses of 6 participants throughout 28 themes, as well as the moved responses of 4 participants to 3 themes. The 6 added responses resulted in 2 additional themes achieving consensus at both a response rate of 8/14 (57%) and 5/14 (36%), as well as 5 additional themes achieving consensus at a response rate of 4/14 (29%). Given the nature of this study, the increase in the number of themes that achieved consensus was encouraging. A deeper review of the theme summary amendments made per open-ended question was then conducted.

Participants	Added Themes	Moved Themes
1	5, 7, 12, 21, 22, 34, 36, 45, 50, 58, 65	-
2	23, 47, 51	-
3	-	-
4	-	-
5	2, 3, 16, 21, 25, 30, 34, 52, 53, 69	-
6	-	-
7	16, 23, 32	25 to 70, 67 to 69
8	-	-
9	-	-
11	-	25 to 70
12	-	-
13	-	55 to 51
14	26, 40, 62	-
15	1, 15	67 to 69

Round 2 Response Amendments

Round 2 - Theme Summary Amendments Analysis

The amended theme summaries were analyzed to complement the added responses of the 6 participants, and to better reflect the responses of the participants per the 5 open-ended questions. The justification for each theme summary amendment is recorded in detail and can be found in the Appendix (Item 16). As shown in **Table 5.7**, 3 theme summaries were amended due to overlooked comments from round 1, and 5 theme summaries that were amended due to added participant responses in round 2. There were also 6 theme summaries that were amended to better reflect the responses of participants in rounds 1 and 2, and 4 theme summaries that were amended to improve the grammar. A further 15 theme summaries received additional responses in round 2, but were not amended. The researcher would carefully monitor the themes whose summaries were amended when

considering the influence of changes in wording on a participant's decision in selecting a theme in a Delphi study (Gordon, 1994). The detailed recording of the amendments made in round 2 were helpful in achieving conformability, a requirement for trustworthiness (Powell, 2003; Kennedy, 2004).

Table 5.7

Round 2 Theme Summary Amendments per Question

Round	1	2	3	4a	4b	5
1	-	24	-	43	-	57
2	-	22	25	40, 50	-	65
Both	7, 12	16, 21	-	45	-	58
Grammatical	10	15	-	-	-	61,68
No Amendments	1, 2, 3, 5	23	26, 30, 32, 34	36, 47	52, 53, 55	67

The lack of amendments and ease of confirmation for the vast majority of the participants' responses within the themes suggested an accurate data collection process in round 1. The increased number of responses and consensus achieved in the themes demonstrated the participants' commitment and interest in the Delphi study and helped enhance credibility in round 2, as supported in the literature (May, 1991; Krefting, 1991). Furthermore, the increased number of responses from 6 of the 14 participants prompted an assessment of the possible relationship between the interview method and the likelihood of participants providing additional responses in round 2.

Round 2 - Interview Method Analysis

As shown in **Table 5.8**, the analysis of the interview methods found the number of themes in which participants' responses were placed varied from 9 to 33, with an average

of 17.9 themes. The average number of themes responded to was only surpassed by 6 participants. Of these six, four were interviewed face-to-face and two were interviewed over the phone. The analysis also found 2 participants interviewed face-to-face and 2 via phone who moved their responses, suggesting a similar attention to detail across the interview methods in terms of moving responses. Overall, the findings suggest that a face-to-face interview medium generated more participant interaction via added responses, and was the preferred method for data collection. To complete the analysis of interview methods, amendments made and single participant consensus, the data were analyzed based on the group consensus as per Willis's (2001) type 3 and 4 partnerships.

Table 5.8

Dantiain ant	Interview Method	Round 1	Round 2
Participant	Method	Koulia I	
1	Face to face	22	33
2	Face to face	16	19
3	Face to face	21	21
4	Face to face	13	13
5	Face to face	14	24
6	Phone	9	9
7	Face to face	16	19
8	Phone	15	15
9	Face to face	27	27
11	Face to face	15	15
12	Email	15	15
13	Phone	17	17
14	Phone	9	12
15	Phone	10	12

Round 2 Interview Method Analysis

Round 2 - Partnership Type Creation Analysis

The analysis of the themes created by the responses of participants from type 3 or type 4 partnership continued in round 2. As demonstrated in **Table 5.9**, the researcher found 7 themes created from the responses of the participants from type 3 partnerships and 5 themes created from the responses of the participants from type 4 partnerships. All other themes were found to be created from the responses of participants from the responses of participants from both partnership types. In round 2, there were three fewer themes created from the responses of participants from type 3 partnerships, and 1 more theme created from the responses of participants from type 4 partnerships, than in round 1. As per round 1, the findings demonstrated the importance of the participation of participants from both partnership types to create the majority of the themes. The findings also reflected a face-to-face interview medium as the preferred method of data collection, considering that the majority of the themes involved responses from both partnership types, partially due to the added responses of participants who selected a face-to-face interview medium.

Table 5.9

Type/Questions	1	2	3	4a	4b	5
3	-	22	-	35, 39, 48	-	57, 58, 65
4	14	19	-	42	54	69
3 & 4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	15, 16, 17, 18, 20, 21, 23, 24	25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 70	36, 37, 38, 40, 41, 43, 44, 45, 46, 47, 49, 50	51, 52, 53, 55, 56	59, 60, 61, 62, 63, 64, 66, 67, 68

Round 2 Themes Created by Partnership Type per the 5 Open-Ended Questions

Round 2 - Partnership Type Consensus Analysis

In requiring the confirmed responses of 50% of the participants from either type 3 or 4 partnerships in a theme, the same requirement for group consensus that had been used for

round 1 was retained in round 2 (Okoli & Palowski, 2004). As shown in **Table 5.10**, there were 3 themes that achieved consensus from the responses of participants from type 3 partnerships, compared to 2 themes in round 1. There were also 6 themes that achieved consensus from the responses of participants from type 4 partnerships, compared to 4 themes in round 1. All the themes that achieved group consensus in round 1 continued to achieve group consensus in round 2. Furthermore, all of the themes that achieved group consensus were formed from the responses of participants from both type 3 and 4 partnerships, which reflects the findings of round 1.

Table 5.10

Round 2 Themes with the Responses of 50% of the Participants from Type 3 or 4 Partnerships per the 5 Open-Ended Questions

Type/Questions	1	2	3	4a	4b	5
3	-	20	-	43	-	65
4	-	15, 18	26	36	51, 52	-

Quantitative analysis of the data collected in round 2 revealed an increased response rate and increased group consensus for the themes, as compared to round 1. The findings of an increased consensus were expected in a classical Delphi study. The findings continued to suggest the benefits of a face-to-face interview method, which yielded a greater number of added responses compared to other interview methods. The stability between round 1 and the confirmation and placement of the themes in round 2 was analyzed by adapting Brink and Wood's (1998) requirement of a correlation of over 0.8 with a parallel test to achieve strong consensus (Polit & Beck, 2004). As the responses of the participants from only 3 of the 68 themes needed to be moved, the stability found

between the initial responses in round 1 and their confirmation in round 2 was interpreted as meeting an equivalent of Brink and Wood's (1998) requirement. To build on the analysis of round 2, an additional analysis of the themes that achieved consensus in at least one round, and an analysis of the participant's response stability as well as the selection of themes per question and per partnerships type in round 3, were planned. These additional analyses established a rich analysis of the data that reflected round 3's task of selecting the final themes that were most important to ensure the success of Sino-Foreign Universities in 2030. With the analysis of the data collected in round 2 completed, the themes selected by the participants as most important could be analyzed in round 3.

Round 3 - Data Analysis Introduction

The data collected in round 3 were analyzed from several quantitative perspectives that were related to the round's task of selecting the final themes. The quantitative perspectives built on and continued the analyses conducted in rounds 1 and 2, and additional analysis from new perspectives, including a summary of themes that achieved consensus, and an examination of the stability of the participants' responses. The findings from the analysis of the data collected demonstrate Schmidt's (1997) requirement of paring down 20% of the themes with the highest consensus to ensure a retention of all themes. Round 3 also found differences in the themes that achieved consensus from the selection of participants from either type 3 or type 4 partnerships. This achievement prompted the need to further analyze the differences in consensus per partnership in round 4 in order to structure the qualitative analysis in Chapter 6.

Round 3 – Analysis of the Selection Rate per Question

As in the previous rounds, the round 3 theme selection rates per the 5 questions were analyzed to assess the theme's consensus level per question. Consensus was represented by the round 3 theme selection rates, and was calculated by dividing the number of participants who selected the theme by the total number of participants. As **Table 5.11** illustrates, the round 3 theme selection rates achieved the highest level of consensus, in comparison to rounds 1 and 2, at 9/14 (64%). The findings of round 3 do, however, reflect a lower consensus per theme, as represented by the selection rate, due to the plan to narrow down the list of final themes in round 3. This narrowing was accomplished by retaining the top 20% of the themes with the highest selection rate, as recommended by Schmidt (1997), for a quantity of themes being less than 100. Following Schmidt's (1997) recommendation, all themes achieving a selection rate of at least 4/14 (29%) were retained for round 4. This decision did, however, have several results that regressed the built consensus of the 2 previous rounds. The first observed result was that the data of round 3 included 4 themes that achieved a consensus of 7/14 (50%), compared to 6 themes in round 2 and 4 themes in round 1. Of the 4 themes that achieved consensus in round 3, only theme 52 had previously achieved consensus in round 2. The trend of regressed consensus found in round 3 prompted a review of the themes that achieved consensus in at least one of the 3 rounds.

Round 3	1	2	3	4a	4b	5
9/14 (64%)	1	-	-	-	-	-
7/14 (50%)	4	-	-	45	52	-
6/14 (43%)	5	20	-	43, 46	51	-
5/14 (36%)	-	-	31, 34	40, 44	-	-
4/14 (29%)	8, 10	15, 16, 18	-	36	53	63, 69
3/14 (21%)	6, 7, 9, 13	21, 23	26, 30, 70	47	-	59, 62, 64, 67
2/14 (14%)	2, 3, 14	17, 19	25, 28, 29	39, 41	55, 56	58, 61, 68
1/14 (7%)	11, 12	22, 24	32, 33	38, 42, 49, 50	54	57, 60
0/14 (0%)	-	-	27	35, 37, 48	-	65, 66

Round 3 Selection Rates per Questions

Round 3 - Analysis of Themes that Achieved Consensus in One Round

The themes that achieved a consensus of 50% or greater in one of the 3 rounds were reviewed and displayed in **Table 5.12**, which shows that, despite the regressed consensus for some of the themes in round 3, all the themes apart from theme 26 became final themes for round 4. **Theme-26-Enhancing Academic Quality** possibly did not become a final them as part of the narrowing down stage of the themes, particularly given its similarity to **Theme 16-Academic Quality Developments** that became a final theme. The finding also supports the researcher's decision to follow his methodological decisions, and in particular to use round 3 as the narrowing down stage, with Delphi literature (Okoli & Pawloski, 2004). The retention of all but one theme that achieved consensus for the final round suggests that the statistical guidance as followed by Schmidt (1997) was suitable for this Delphi study. The variation in response rate,

represented by consensus, was assumed to be partially attributed to different tasks of each round. The themes that had variations in their response rates to themes with summary amendments in round 2 were also compared. Of the 9 themes that had achieved consensus in at least one round, themes 1, 36, 52 had no theme amendments and had a mixed result of increasing and decreasing consensus. Interestingly, themes 15, 43 and 45 received amendments to their theme summaries and also produced mixed results of increasing and decreasing consensus. These findings did not draw strong conclusions to support Gordon's (1994) cautions regarding possible changes in participant answers due to changes in the wording of themes. The variation is also attributed to the expectation that qualitative research will display variations in the participants' experiences throughout the data collection, resulting in variations in their responses (Field & Morse, 1985). As participants are expected to review and reflect on their and other participants' previous response in every successive round of data collection (Rowe & Wright, 1999), the findings coincide with a healthy review by the participants. This reflection separated the findings from a purely quantitative research endeavor that would expect an identical set of responses in the data collected from participants (Field & Morse, 1985). The variation found in the themes' response rates over the 3 rounds prompted the researcher to similarly analyze the participants' individual responses and selections.

Theme/Round	1	2	3	Final Theme
1	3/14 (21%)	4/14 (29%)	9/14 (64%)	Yes
4	4/14 (29%)	4/14 (29%)	7/14 (50%)	Yes
15	7/14 (50%)	8/14 (57%)	4/14 (29%)	Yes
18	8/14 (57%)	8/14 (57%)	4/14 (29%)	Yes
26	7/14 (50%)	8/14 (57%)	3/14 (21%)	No
36	6/14 (43%)	7/14 (50%)	4/14 (29%)	Yes
43	7/14 (50%)	7/14 (50%)	6/14 (43%)	Yes
45	5/14 (36%)	6/14 (43%)	7/14 (50%)	Yes
52	6/14 (43%)	7/14 (50%)	7/14 (50%)	Yes

Round 3 Themes Achieving Consensus in At Least 1 Round

Round 3 - Participant Response Stability Analysis

The participant response stability was analyzed by adopting elements of Chaffin and Talley's test for individual stability between rounds (Riger, 1986). The adoption of Chaffin and Talley's test allowed an equivalent of reliability to be established: dependability, a requirement for trustworthiness (Krefting, 1991). The entire test could not be adapted for use in this project because of the different tasks and data collection instruments used in each round of the study. **Table 5.13** provides a summary of my analysis of the participants' reselected, abandoned, and newly selected themes in order to assess the participants' stability of responses as a measure of consensus (Appendix U). Reselected themes were those that the participants selected in round 3 that contained their confirmed responses from round 2. The reselected themes varied from 20% to 89%, and despite theme selections being an aid to measure stability, I was confident in the selections of the participants, given their unique positions in Sino-Foreign Universities (Riger, 1986). As a result, the consensus was implied in the findings (Beech, 1997) as a

synergy of selected themes representing a thorough reflection and review of all the participants' responses to select the themes of most importance, which was the main task of round 3. Specifically, the reselection rate of participant 11, who used a translator, was not different from the response rate of other participants whose native language was English. The finding paralleled Schmidt et al.'s (2001) suggestion that translations may limit, but do not necessarily hinder, a research's findings and contributions. It also helped establish truth value in the participants' responses, thus enhancing the Delphi study's credibility, a requirement to achieve trustworthiness (Krefting, 1991). In addition, the moved themes, 51, 69 and 70, were re-selected as well as abandoned, which suggested that the participants took a careful rather than capricious review (Dalkey, 1969) of the themes that strengthened the rigor of the data. The analysis of the reselected themes served as a preparation for the analysis of the new themes.

New themes were those that the participants selected in round 3 that did not contain their confirmed responses in round 2. Per participant, the new themes selected varied from 2 to 12 themes. A unique observation was that theme 67 initially contained participant 7's response in round 1 and was moved to theme 69, a theme created in round 2 by participant 7, who selected theme 67 instead in round 3. The observation suggests a sincere review of the themes by the participant in order to select the most important themes, rather than merely repeating the themes containing the participants' responses in round 2. This observation also supports the quality of responses from participants that establishes credibility, a requirement to achieve trustworthiness in a Delphi study (Krefting, 1991).

The next step was to analyze abandoned themes. Abandoned themes were those that contained the participants' confirmed responses in round 2 but were not selected in round 3. Per participant, the total number of abandoned themes varied from 1 to 20. The analysis found 17 abandoned themes from all 6 participants that had added responses, and 2 abandoned themes that were moved in round 2. This finding suggests that the added responses were less reliable than their initial responses in round 1. The analysis found 8 abandoned themes that had added responses and no theme summary amendments, and 9 themes that had added responses and theme summary amendments. The equal level of abandoned themes, with or without theme summaries, did not support Gordon's (1994) caution that changes in wording in themes can also change a participant's theme selection. The analysis of the participants' individual data continued with a review of the interview methods conducted in rounds 1 and 2.

Participant	Reselection Rate	Abandoned Themes	New Themes
1	13/15 (87%) (5, 34, 36, 45, 58)	20 (7, 12, 21, 22, 50, 65)	2
2	9/15 (60%) (51)	10 (23, 47)	6
3	4/15 (27%)	17	11
4	5/13 (38%)	8	10
5	6/15 (40%) (52, 53)	18 (2, 3, 16, 21, 25, 30, 34, 69)	9
6	8/9 (89%)	1	7
7	5/15 (33%) (16, 69)	14 (23, 32, 70)	10 (67)
8	7/15 (47%)	8	8
9	10/15 (67%)	17	5
11	3/8 (38%) (70)	12	5
12	3/15 (20%)	12	12
13	7/15 (47%) (51)	10	8
14	4/12 (33%) (62)	8 (26, 40)	9
15	7/12 (58%) (1, 15)	5 (69)	8

Round 3 Participant Response Stability

Note: The non-bracketed numbers in the "abandoned themes" and "new themes" fields represent the total quantity of abandoned and new themes.

Round 3 - Interview Method Analysis

The findings of the various interview methods were less varied, given the greater structure of round 3 compared to the previous rounds. As illustrated in **Table 5.14**, all but one face- to-face and one phone interview participant selected 15 themes, which led to no strong conclusions to draw in terms of the interview method's influence on the quantity of selected themes. However, the data suggested that the decision of two participants to select fewer than 15 themes supports the credibility of the Delphi study, as

participants were instructed to only select the themes they viewed as most important and were comfortable in answering, rather than an arbitrary selection of 15 themes (Zolingen & Klassen, 2003). These participants' decisions to select less than the maximum number of themes reflect the truth value of the participants' responses, thus enhancing the Delphi study's credibility, a needed requirement to establish trustworthiness (Krefting, 1991).

Table 5.14

Round	3	Interview	Metl	hod I	Anai	lysis
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Participant	Interview Method	Round 1	Round 2	Round 3	Round 4 Importance	Round 4 Likelihood
1	Face to face	22	33	15	22	22
2	Face to face	16	19	15	22	22
3	Face to face	21	21	15	22	22
4	Face to face	13	13	15	22	22
5	Face to face	14	24	15	22	22
6	Phone	9	9	15	22	22
7	Face to face	16	19	15	22	22
8	Phone	15	15	15	22	22
9	Face to face	27	27	15	22	22
11	Face to face	15	15	8	22	22
12	Email	15	15	15	22	22
13	Phone	17	17	15	22	22
14	Phone	9	12	13	22	22
15	Phone	10	12	15	22	19

Round 3 - Partnership Type Selection Analysis

Following the analysis of the round 3 interview methods was the group analysis. The themes were analyzed based on their selection from the participants who were in type 3 or type 4 partnerships. As demonstrated in **Table 5.15**, 13 themes were selected by participants from type 3 partnerships, 12 themes were selected by participants from type

4 partnerships, and the remaining themes were selected by participants from both partnership types. Round 3 featured 6 more themes associated with participants from type 3 partnerships, and 7 more themes associated with participants from type 4 partnerships, than round 2. None of the themes that were exclusively selected by the participants from either type 3 or type 4 partnerships became final themes in round 4. The findings suggest the need for participants from both type 3 and type 4 partnerships, and supports a Delphi study objective in bringing together the opinions of individuals who normally would not easily meet (Stewart & Green, 2004). The findings coupled with the literature confirmed the correct methodological decisions related to the collection of data had been made (ibid). The grouped data analysis then continued with an assessment of the themes that achieved consensus from the participants from either type 3 or type 4 partnerships.

Table 5.15

Round 3 Themes Created by Partnership Type per the 5 Open-Ended Questions

Type/Questions	1	2	3	4a	4b	5
3	11, 12	17, 19, 22, 24	29, 32, 33	39, 49	-	57, 61
4	6, 9	21	25, 30	38, 42, 50	54, 55	60, 62
3 & 4	1, 2, 3, 4, 5, 7, 8, 10, 13, 14	15, 16, 18, 20, 23	26, 28, 31, 34, 70	36, 40, 41, 43, 44, 45, 46, 47	51, 52, 53, 56	58, 59, 63, 64, 67, 68, 69

Round 3 - Partnership Type Consensus Analysis

The same requirement for group consensus as conducted in the analysis of the grouped data in rounds 1 and 2 was maintained for the task of selecting themes in round 3 (Okoli & Palowski, 2004). As **Table 5.16** shows, 5 themes achieved consensus from

participants in type 3 partnerships, and 6 themes achieved consensus from participants in type 4 partnerships. Only theme 1 achieved consensus from the selections of participants representing both types of partnerships. There were no themes that were associated with question 5 that achieved consensus. It was also observed that the themes that achieved consensus were created by the confirmed responses of participants from both type 3 and type 4 partnerships in round 2. As per previous rounds and analysis, the findings suggest the importance of including participants from both partnership types in this Delphi study.

Table 5.16

Round 3 Themes with the Responses of 50% of the Participants from Type 3 or 4 Partnerships per the 5 Open-Ended Questions

Type/Questions	1	2	3	4a	4b
3	1	-	31	45, 46	51
4	1,4	20	-	43, 44	52

The quantitative analysis of the data collected in round 3 found Schmidt's (1997) paringdown requirement retained all themes that achieved a 50% consensus over the previous rounds, except for theme 26. The round 3 analysis found differences in the themes that achieved consensus from the selection of participants from either type 3 or type 4 partnerships. The findings suggested the necessity to further analyze the differences in consensus per partnership in round 4, as increasing differences in the consensus from type 3 and 4 partnerships were observed. An additional analysis of the data from the adjacent ranks the range of ranks per theme in round 4 was planned, to build on the analysis of round 3. The additional analysis of the consensus in terms of the range of ranks for type 3 and type 4 partnerships was imperative to best support the qualitative

analysis and their produced narratives, which will be discussed further in Chapter 6. The narratives would answer the questions asked in this dissertation in terms of the themes' importance and likelihood of occurrence in successful Sino-Foreign Universities in 2030. With the analysis of the data collected in round 3 completed, the analysis of the participants' rankings of the themes in round 4 could begin.

Round 4 - Data Analysis Introduction

The data collected in round 4 were analyzed from several quantitative perspectives that were similar to the previous rounds, yet considered the rankings of importance and likelihood as required in the final round. Analyses of the adjacent ranks and the range of ranks per theme were new perspectives in round 4 that had not occurred in the previous rounds, as the rankings occurred only in round 4. The findings from the analysis of the data collected in round 4 indicate more consistent results in the ranks of importance than the ranks of likelihood that support the final themes selected as most important in round 3. Further differences in consensus were found from the themes' range of ranks achieved by either type 3 or type 4 partnerships in round 4. The consensus as observed in the range of ranks provided additional proof for the decision to structure the narratives per type 3 and type 4 partnerships in the qualitative analysis found in chapter 6.

Round 4 - Single Ranking Rates (Importance) Analysis

The round 4 theme single rank consensus per the 5 questions was analyzed to review the consensus level per question. Consensus, as represented by the round 4 theme single rankings was calculated by dividing the number of participants who identically ranked a

theme by the total number of participants who ranked the theme. For the consensus of ranking the likelihood of occurrence of themes 40, **External Monitoring**, theme 43, **Finances** and theme 44, **Leadership** that are constraints, the number of identically ranking participants was divided by a total of 12, as participant 15 declined to answer those questions. Consensus was achieved when 50% of the participants gave a theme an identical rank. As **Tables 5.17 and 5.18** illustrate, there were 14 themes that achieved consensus at a rank of either most important or important, compared to 6 themes in round 2 and 4 themes in rounds 1 and 3 that achieved a consensus of at least 50%. This was expected as the data collection method changed from open-ended interviews in rounds 1 and 2, to the selection of final themes in round 3, followed by their respective ranking in round 4. The round 4 single rankings were then analyzed in terms of the themes' likelihood of occurrence.

Round 4 - Imp	1	2	3	4a	4b	5
9/13 (69%)	1	-	34	-	-	69
8/13 (62%)	4, 5	18	31	-	51, 52	-
7/13 (54%)	8	15, 16	-	45	-	63
6/13 (46%)	-	20	-	36, 40, 43, 44, 46	53	-
5/13 (38%)	10	-	-	-	-	-
4/13 (31%)	-	-	-	-	-	-
3/13 (23%)	-	-	-	-	-	-
2/13 (15%)	-	-	-	-	-	-
1/13 (7%)	-	-	-	-	-	-
0/13 (0%)	-	-	-	-	-	-

Round 4 Single Ranking Rates (Importance) per Questions

Table 5.18

Round 4 Importance Consensus (minimum 7/13 (54%) per Single Rank

Importance (Ranking Guide)	Theme(s) Achieving Single Rank Consensus
1. Most Important	1, 15, 34, 51, 52, 69
2. Important	4, 5, 8, 16, 18, 31, 45, 63
3. Unimportant (Low importance)	-
4. Trivial	-

Round 4 - Single Ranking Rates (Likelihood) Analysis

As demonstrated in **Table 5.19 and Table 5.20**, 13 themes achieved consensus at a rank of most certain or likely. Of the themes that did not achieve consensus, three themes had tied rankings for being most certain and likely. The three themes were theme 1, **Policy and Regulation Developments**, and theme 63, **Internet & Social Media Strategy**

which had a tied ranking at 5/13 (38%), and theme 34, Understanding SFU's Future **Purpose (s) & Position (s)** which had a tied ranking at 6/13 (46%). The findings demonstrate an increase in the number of themes achieving consensus. The researcher specifically observed themes 1, 15 and 36 that had thematic similarities achieved different levels of consensus in terms of likelihood of occurrence. Theme 1, Policy and Regulation Developments, did not achieve consensus, and focused on the development of further clarity of current policies and to remove any ambiguity in those policies that would facilitate the operations of Sino-Foreign Universities. Theme 15, Government Developments, did achieve consensus, and focused on government developments (e.g. SFU sub branch) that may not necessarily be directly related to, but do impact Sino-Foreign Universities. Theme 36, Policies and Legislation, did achieve consensus, and focused on policies and legislation as a constraint for Sino-Foreign Universities, regardless of any developments as could be found in Theme 1 or 15. After completing the assessment of the themes' consensus from a single rank perspective. I then compared the findings to the themes that achieved consensus in the previous rounds.

Table 5.19

Round 4 - Lik	1	2	3	4a	4b	5
11/13 (85%)	-	16	-	-	-	-
10/13 (77%)	-	-	-	-	-	-
9/13 (69%)	-	-	-	-	-	-
8/13 (62%)	5	-	-	-	51	-
7/13 (54%) or 7/12 (58%)	8	15, 18, 20	-	36, 40, 43, 45	53	69
6/13 (46%)	10	-	34	46	52	-
5/13 (38%) or 5/12 (42%)	1, 4	-	31	44	-	63
4/13 (31%)	-	-	-	-	-	-
3/13 (23%)	-	-	-	-	-	-
2/13 (15%)	-	-	-	-	-	-
1/13 (7%)	-	-	-	-	-	-
0/13 (0%)	-	-	-	-	-	-

Round 4 Single Ranking Rates (Likelihood) per Questions

Table 5.20

Round 4 Likelihood Consensus [minimum 7/13 (54%) or 7/12 (58%)] per Single Rank

Likelihood (Ranking Guide)	Theme(s) Achieving Single Rank Consensus
1. Most Certain by 2030	8, 20, 36, 40
2. Likely by 2030	5, 15, 16, 18, 43, 45, 51, 53, 69
3. Unlikely by 2030	-
4. Almost Impossible by 2030	-

Round 4 - Analysis of Themes that Achieved Consensus in one Round

As **Table 5.21** demonstrates, the themes that achieved consensus in all 4 rounds were compared, though the themes that achieved consensus in terms of likelihood were not

compared because round 3 involved the selection of those themes that were most important for the success of Sino-Foreign universities in 2030. The comparison found that all but 2 themes that had achieved consensus in at least one round achieved consensus in round 4. Two themes fell just short of achieving consensus, and further quantitative analysis could not produce any strong evidence to explain the anomaly. Thus, a qualitative analysis was applied to the findings, by coupling the themes that achieved consensus, in terms of the likelihood of their occurrence, with the participants' responses within those themes, to produce the narratives. The absence of consensus in terms of importance required the use of a qualitative analysis, and further emphasized the importance of conducting both quantitative and qualitative analyses in a Delphi study.

With the analysis of the single ranking of themes complete, the themes were then analyzed according to their adjacent rankings, in order to understand them better. It was necessary for the purpose of this project to further analyze the themes in terms of their adjacently ranked consensus, as the Delphi literature was inconclusive regarding the structure needed to judge the findings (Powell, 2003).

Theme/Round	1	2	3	4 – Single Rank Importance	Importance
1	3/14 (21%)	4/14 (29%)	9/14 (64%)	9/13 (69%)	Most important
4	4/14 (29%)	4/14 (29%)	7/14 (50%)	8/13 (62%)	Important
15	7/14 (50%)	8/14 (57%)	4/14 (29%)	7/13 (54%)	Most important
18	8/14 (57%)	8/14 (57%)	4/14 (29%)	8/13 (62%)	Important
26	7/14 (50%)	8/14 (57%)	3/14 (21%)	N/A	N/A
36	6/14 (43%)	7/14 (50%)	4/14 (29%)	6/13 (46%)	No consensus achieved
43	7/14 (50%)	7/14 (50%)	6/14 (43%)	6/13 (46%)	No consensus achieved
45	5/14 (36%)	6/14 (43%)	7/14 (50%)	7/13 (54%)	Important
52	6/14 (43%)	7/14 (50%)	7/14 (50%)	8/13 (62%)	Most important

Round 4 Themes Achieving Consensus in at Least 1 Round

Round 4 - Adjacent Ranking Rates (Importance) Analysis

Adjacent consensus was calculated by dividing the number of participants who selected 2 adjacent ranks for a theme by the total number of participants who ranked the theme. This calculation was based on Green's (1982) requirement that 70% of a theme's rankings be adjacently ranked in order to achieve consensus. However, Green's (ibid) requirement of a median higher than 3.25 (from 3 and 4 ranks) from the results was not applied. The decision to not apply the median requirement in the analysis was made because the median in the findings had no decimals. The decision was also supported by the literature: specifically, Hasson and Keeney's (2011) note that a Delphi study's methodology can partially use the designs of other Delphi studies.

In terms of importance, 21 themes achieved adjacent consensus, as displayed in **Table 5.22**, compared to 14 themes that achieved single rank consensus. All the themes that

achieved adjacent consensus occurred between the ranks of "most important" or "important", except for theme 4, that also achieved adjacent consensus between "important" and "unimportant", as outlined in Table 5.23. Despite quantitative analysis of the findings related to theme 4, no reason for this anomaly could be determined. However, qualitative analysis found a slight nuance between theme 4, 5 and 16. This slight difference was related to the emphasis in theme 4 that Sino-Foreign Universities would lead higher education developments rather than the government, whereas theme 5 and 16 emphasized Sino-Foreign Universities' strong academic quality standards. Specifically, theme 5, Increasing Academic Quality, focused on Sino-Foreign University partnerships achieving world leading levels of academic quality by 2030. Theme 16, Academic Quality Developments, focused on the independently set academic program standards of Sino-Foreign Universities that are subsequently followed by ambitious state universities. Theme 4, Higher Education System Development, focused on Sino-Foreign Universities to lead the Higher Education system developments rather than being led by the government. This was the only possible reason found for the ranking anomaly of theme 4, which emphasizes the importance of conducting a qualitative analysis for this Delphi study.

Round 4 - Imp	1	2	3	4a	4b	5
13/13 (100%)	5, 8	-	34	45	-	-
12/13 (92%)	1	18	-	36	51, 52	-
11/13 (85%)	-	15, 16, 20	31	40, 44, 46	53	69
10/13 (77%)	4	-	-	43	-	63
9/13 (69%)	10	-	-	-	-	-
8/13 (62%)	-	-	-	-	-	-
7/13 (54%)	-	-	-	-	-	-
6/13 (46%)	-	-	-	-	-	-
5/13 (38%)	-	-	-	-	-	-
4/13 (31%)	-	-	-	-	-	-
3/13 (23%)	-	-	-	-	-	-
2/13 (15%)	-	-	-	-	-	-
1/13 (7%)	-	-	-	-	-	-
0/13 (0%)	-	-	-	-	-	-

Round 4 Adjacent Ranking Rates (Importance) per Questions

Table 5.23

Round 4 Importance Consensus (minimum 10/13 (77%) per Adjacent Rank

Importance (Ranking Guide)	Theme(s) Achieving Single Rank Consensus
1. Most Important	1, 4, 5, 8, 15, 16, 18, 20, 31, 34, 36, 40, 43, 44, 45, 46, 51, 52, 53, 63, 69
2. Important	4
3. Unimportant (Low importance)	-
4. Trivial	-

Round 4 - Adjacent Ranking Rates (Likelihood) Analysis

In terms of likelihood, 19 themes achieved adjacent consensus, as shown in **Table 5.24**, compared to 13 themes that achieved single rank consensus. The adjacent consensus occurred between the ranks of "most certain" and "likely", except for themes 16 which achieved an adjacent consensus between the rank of "likely" and "unlikely", and theme 53 that had tied adjacent consensus between "most certain" and "likely" and "likely" and "unlikely" as seen in Table 5.25. Themes 31 and 44 did not achieve adjacent consensus, yet had had equivalent adjacent rankings of "most certain" and "likely", as well as "likely" and "unlikely". The unique finding of tied rankings for may reflect the sensitivity of theme 44, Leadership, as a constraint, and theme 31, Developing New Institutional Model (s), for participants who are leading the present Sino-Foreign Universities and their current models as institutes. In light of the sensitivity of ranking themes 44 and 31, theme 51, Leadership, as a solution to handling constraints, achieved high level of adjacent consensus. The unique findings of tied rankings during the analysis prompted a search for other anomalies in the participants' stability over the 4 rounds of data collection and supported the further qualitative analysis of all themes in Chapter 6 to draw insight from all themes to envision the status of Sino-Foreign Universities in 2030.

Table 5.24

Round 4 - Lik	1	2	3	4a	4b	5
13/13 (100%)	-	16, 20	-	-	-	-
12/13 (92%)	8	-	34	-	-	69
11/13 (85%)	5	15, 18	-	36, 46	51	-
10/13 (77%)	1, 10	-	-	40, 43, 45	52, 53	63
9/13 (69%)	4	-	31	-	-	-
8/13 (62%)	-	-	-	44	-	-
7/13 (54%)	-	-	-	-	-	-
6/13 (46%)	-	-	-	-	-	-
5/13 (38%)	-	-	-	-	-	-
4/13 (31%)	-	-	-	-	-	-
3/13 (23%)	-	-	-	-	-	-
2/13 (15%)	-	-	-	-	-	-
1/13 (7%)	-	-	-	-	-	-
0/13 (0%)	-	-	-	-	-	-

Round 4 Adjacent Ranking Rates (Likelihood) per Questions

Table 5.25

Round 4 Likelihood Consensus (minimum 10/13 (77%) per Adjacent Rank

Likelihood (Ranking Guide)	Theme(s) Achieving Single Rank Consensus
1. Most Certain by 2030	1, 5, 8, 10, 15, 18, 20, 34, 36, 40, 43, 45, 46, 51, 52, 53, 63, 69
2. Likely by 2030	16, 53
3. Unlikely by 2030	-
4. Almost Impossible by 2030	-

Round 4 - Participant Response Stability Analysis

Elements of Chaffin and Talley's test for individual stability between rounds were adapted for this dissertation (Riger, 1986). As per previous rounds of analysis, consensus was achieved when the participants had ranked over 50% of their selected responses from round 3 as most important in round 4. The participant stability rate was defined as the number of themes participants selected as being most important in round 3 which they ranked as most important in round 4. As seen in **Table 5.26**, all but 3 participants achieved consensus, with 6 participants achieving over 70% stability (Appendix V). The findings of overall individual stability in the majority of the participants' responses between rounds 3 and 4 implies group stability between those respective rounds (Chaffin & Talley, 1980). The other themes that participants selected as most important in round 3 were ranked as important, except for 5 themes, of which theme 4, Higher Education System Development, from participant 15, theme 18, New Sino-Foreign Universities, from participant 9, and theme 43, **Finances**, from participant 4 were themes that contained their confirmed responses in round 2. The findings suggested overall stability in the majority of the participants' responses. The findings also demonstrate the merit of participants' reflections on their responses from previous rounds, as required for a classical Delphi study (Rowe & Wright, 1999), and reflects the variation in responses as expected and desired in a qualitative study (Field & Morse, 1985). The completion of the analysis of the participants' response stability was followed by the analysis of the various interview methods in round 4.

Participant	Stability Rate	Number of themes in Rounds 2 and 3	Not important	Trivial	
1	8/9 (89%)	8	-	-	
2	8/10 (80%)	5	-	-	
3	4/8 (50%)	3	-	-	
4	3/9 (33%)	5	43	-	
6	8/11 (73%)	6	-	-	
7	11/12 (92%)	5	-	-	
8	4/7 (57%)	3	-	1	
9	2/6 (33%)	5	18	-	
11	2/4 (50%)	1	-	-	
12	1/8 (13%)	1	4	-	
13	7/9 (78%)	4	-	-	
14	5/6 (83%)	2	-	-	
15	4/8 (50%)	5	4, 10	-	

Round 4 Participant Response Stability

Round 4 - Interview Method Analysis

As **Table 5.27** shows, all but one of the participants ranked the 22 themes in terms of importance and likelihood of occurrence. Participant 15, who was interviewed via phone, declined to rank three of the themes that were constraints in terms of their likelihood of occurrence, as he alternatively viewed them as significant issues. Further analysis revealed that participant 15's decline in ranking those themes reflected his round 2 responses, as well as Zolingen & Klassen's (2003) suggestion that participants only respond to questions they are comfortable answering. No further conclusions could be drawn from the analysis of the interview methods, so the analysis of consensus through grouped data of type 3 and type 4 partnerships was carried out next.

Participant	Interview Method	Round 1	Round 2	Round 3	Round 4 Importance	Round 4 Likelihood
1	Face to face	22	33	15	22	22
2	Face to face	16	19	15	22	22
3	Face to face	21	21	15	22	22
4	Face to face	13	13	15	22	22
5	Face to face	14	24	15	22	22
6	Phone	9	9	15	22	22
7	Face to face	16	19	15	22	22
8	Phone	15	15	15	22	22
9	Face to face	27	27	15	22	22
11	Face to face	15	15	8	22	22
12	Email	15	15	15	22	22
13	Phone	17	17	15	22	22
14	Phone	9	12	13	22	22
15	Phone	10	12	15	22	19

Round 4 Interview Method Analysis

Round 4 - Partnership Type Range of Ranks (Importance) Analysis

The range of ranks assigned to each theme by participants associated with type 3 or type 4 partnerships was analyzed. In terms of importance, the participants who were from type 3 partnerships placed 11 themes within a range of ranks between 1 and 2, and 4 themes in a range of ranks between 1 and 4, as seen in **Table 5.28**. Participants from type 4 partnerships ranked 8 themes within a range between 1 and 2, and 7 themes in a range of ranks between 1 and 4, as shown in **Table 5.29a**. The findings reflect the selection of the final themes as the most important in round 3. They also suggest that participants from type 3 partnerships had greater consensus in the themes' importance, which is possibly due to 4 of the participants representing anonymous institution 1, the largest number of participants representing a single institution. The findings additionally

suggested a further analysis of the interquartile range for the ranking of the theme's importance.

Table 5.28

Round 4 Range of Ranks in Terms of Importance for the 5 Open-Ended Questions for

Type 3 Partnerships

Range/Questions	1	2	3	4a	4b	5
1-2	5, 8	18, 20	31, 34	36, 40, 44, 45	51	-
1-3	-	16	-	43	52, 53	63, 69
1-4	1, 10	15	-	46	-	-
2-4	4	-	-	-	-	-

Table 5.29a

Round 4 Range of Ranks in Terms of Importance for the 5 Open-Ended Questions for

Range/Questions	1	2	3	4a	4b	5
1-2	1, 5, 8	15, 16	34	45	52	-
1-3	4, 10	18, 20	-	36	51	-
1-4	-	-	31	40, 43, 44	53	63, 69
2-3	-	-	-	46	-	-

Type 4 Partnerships

According to Raskin (1994), a theme reaches consensus by achieving an interquartile range equal to 1.00 or less. The analysis of the themes' interquartile range found that all but 1 final theme, Improved Higher Education Access (**10**), that achieved consensus, as

demonstrated in **Table 5.29b**. The three themes' achieving an interquartile range of 0 suggests that a perfect consensus was achieved in terms of interquartile range analysis. The analysis was unable to assess the difference in ranked agreement for the themes that achieved consensus with an interquartile range of 1; therefore, the findings were compared to the other forms of analysis of the themes' interquartile range, as based on the ranks of likelihood of occurrence.

Table 5.29b

Round 4 Themes That Achieved Interquartile Range Consensus in Terms of Their Ranks of Importance

Themes	Interquartile Range
4, 31, 63	0
1, 5, 8, 15, 16, 18, 20, 34, 36, 40, 43, 44, 45, 46, 51, 52, 53, 69	1
10	2

Round 4 - Partnership Type Range of Ranks (Likelihood) Analysis

In terms of likelihood, the majority of the themes were ranked between 1 and 3 for both type 3 and 4 partnerships, as seen in **Table 5.30** and **Table 5.31a**. This suggests that the broader range of ranks reflected the challenges in envisioning the likelihood of occurrence in 2030 for each theme. The participants from type 3 partnerships ranked 6 themes in the range between 1 and 2, and participants from type 4 partnerships placed 3 themes within this range of ranks. The findings suggest that the participants who came from type 3 partnerships were slightly more confident in the likelihood of these themes occurring. Participants from type 3 partnerships ranked 5 themes in the range between 1

and 4, and their responses were highly concentrated around themes from question 4a (Table 5.28). The findings suggest that participants from type 3 partnerships feel the constraints are less likely to exist in 2030, and also suggested further analysis of the interquartile range for the ranking of the theme's likelihood.

Table 5.30

Round 4 Range of Ranks in Terms of Likelihood for the 5 Open-Ended Questions for

Type .	3 Partners	hips
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Range/Questions	1	2	3	4a	4b	5
1-2	5, 10	15, 20	34	-	-	69
1-3	1, 4, 8	18	31	36, 46	52, 53	63
1-4	-	-	-	40, 43, 44, 45	51	-
2-3	-	16	-	-	-	-

Table 5.31a

Round 4 Range of Ranks in Terms of Likelihood for the 5 Open-Ended Questions for

Type 4 Partnerships

Range/Questions	1	2	3	4a	4b	5
1-2	8	18, 20	-	-	-	-
1-3	1, 4, 10	-	31, 34	36, 40, 43, 44, 45, 46	51, 52, 53	63
1-4	-	-	-	-	-	69
2-3	5	15, 16	-	-	-	-

As noted above, Raskin (1994) defined consensus as an interquartile range equal to or less than 1.00. Upon completion of the analysis of the themes' interquartile range, all but three final themes achieved consensus, as seen in **Table 5.31b**. Specifically, the achievement of an interquartile range of 0 for five themes suggests that a perfect consensus in terms of the interquartile range analysis was achieved. As the analysis was unable to assess the difference in ranked agreement for the themes that achieved consensus with an interquartile range of 1, the findings were compared to the other forms of analysis; the consensus was found from the interquartile range, single rank response rate, adjacent rank and group response analysis. The consensus achieved in the majority of the themes from multiple forms of analysis demonstrated that consensus, the goal of a classical Delphi study, was achieved in this dissertation.

Table 5.31b

Round 4 Themes That Achieved Interquartile Range Consensus in Terms of Their Ranks of Likelihood of Occurrence

Themes	Interquartile Range
5, 16, 45, 51, 53	0
43	0.25
1, 8, 10, 15, 18, 20, 34, 36, 40, 46, 52, 63, 69	1
44	1.25
4, 31	2

Round 4 - Partnership Type Consensus (Importance) Analysis

The same requirement for group consensus was maintained as in the previous rounds,

which required 50% of the participants from type 3 or 4 partnerships to identically rank a

theme (Okoli & Palowski, 2004). Due to participant 5 dropping out after round 3, type 4 partnerships needed 3 participants to achieve consensus, while type 3 partnerships needed 4 participants to achieve consensus. The study found 10 themes at the rank of "most important" and 8 themes at the rank of "important" that achieved consensus from the participants from type 3 partnerships, as seen in **Table 5.32**. There were also 8 themes at the rank of "most important", 14 themes at the rank of "important" and 1 theme at the rank of "unimportant" in the responses of the participants from type 4 participants, as shown in **Table 5.32**. Further analysis found 5 themes that achieved consensus at the rank of "most important" and 4 themes that achieved consensus at the rank of "important" for both type 3 and 4 partnerships. These findings suggest that a theme's importance will differ based on the type of partnership, and this influenced the writing of the narratives, as will be seen in Chapter 6, from the perspectives of both type 3 and type 4 partnerships. The next step in the investigation was an analysis of the ranking of the themes' likelihood of occurrence by the participants from type 3 and type 4 partnerships.

Table 5.32

Round 4 Themes Ranked Identically by 50% of the Participants from Type 3 or 4 Partnerships per the 4 Rankings of Importance

Type/Rank	Most Important	Important	Unimportant	Trivial
3	1, 15, 20, 34, 36, 45, 46, 51, 53, 69	4, 5, 8, 18, 31, 40, 44, 63	-	-
4	1, 8, 15, 34, 44, 51, 52, 69	1, 5, 8, 15, 16, 18, 20, 31, 36, 43, 45, 46, 53, 63	10	-

Round 4 - Partnership Type Consensus (Likelihood) A	Analysis
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The analysis found 8 themes at the rank of "most certain" and 8 themes at the rank of "likely" that achieved consensus from the participants from type 3 partnerships, as seen in **Table 5.33**. There were 3 themes ranked as "most certain", 15 themes as "likely", and 3 themes as "unlikely" that achieved consensus from the participants from type 4 partnerships, as shown in **Table 5.33**. Upon further analysis, 1 theme at the rank of "most certain" and 7 themes at the rank of "likely" achieved consensus for both type 3 and 4 partnerships. These findings were similar to the analysis of the ranking of importance and suggested a theme's likelihood of occurrence will differ based on the type of partnership. This further influenced the writing of the narratives in Chapter 6 from the perspectives of both type 3 and type 4 partnerships.

Table 5.33

Round 4 Themes Ranked Identically by 50% of the Participants from Type 3 or 4 Partnerships per the 4 Rankings of Likelihood

Type/Rank	Most Certain by 2030	Likely by 2030	Unlikely by 2030	Almost Impossible by 2030
3	8, 10, 15, 20, 34, 36, 40, 63	5, 16, 18, 43, 44, 45, 51, 69	-	-
4	18, 36, 46	1, 5, 8, 15, 16, 18, 20, 34, 43, 45, 51, 52, 53, 63, 69	4, 10, 31	-

Round 4 - Partnership Type 3 Summary Consensus Analysis

The themes that achieved consensus from the participants of type 3 partnerships over the 4 rounds of data collection were analyzed as displayed in **Table 5.34**. The analysis found that theme 1, **Policy and Regulation Developments**, theme 31, **Developing New Institutional Model (s)**, the constraints as found in theme 45, **Staffing**, and theme 46,

Culture, as well as the method to handle the constraints via theme 51, **Leadership**, achieved consensus over rounds 3 and 4 for the participants from type 3 partnerships. Furthermore, theme 20, **Research Emphasis**, and theme 43, **Finances**, achieved consensus over rounds 1, 2 and 4 for type 3 partnerships. Theme 16, **Academic Quality Developments**, and theme 53, **Blending Higher Education Systems**, created by the participants from type 3 partnerships, only achieved consensus in round 4. The observations of the themes achieving consensus per partnership type suggests the need for participants from both partnership types over the 4 rounds of data collection. The overall findings of the true values of the participants' responses to and reflections on the questions asked over the 4 rounds of data collection helped establish the equivalent of concurrent validity (Hasson & Keeney, 2011) or credibility, a requirement to establish trustworthiness in a Delphi study (Krefting, 1991).

Table 5.34

Summary of Rounds 1-4 for Themes Achieving Consensus from 50% of the Participants

Round/Questions	1	2	3	4a	4b	5
Round 1 - Type 3	-	20	-	43	-	-
Round 2 - Type 3	-	20	-	43	-	65
Round 3 - Type 3	1	-	31	45, 46	51	-
Round 4 - Type 3 - Most Important	1	15, 20	34	36, 45, 46	51, 53	69
Round 4 - Type 3 - Important	4, 5, 8	18	31	40, 44	-	63
Round 4 - Type 3 - Most Certain	8, 10	15, 20	34	36, 40	-	63
Round 4 - Type 3 - Likely	5	16, 18	-	43, 44, 45	51	69

from Type 3 Partnerships

Round 4 - Partnership Type 4 Summary Consensus Analysis

The themes that achieved consensus from the participants from type 4 partnerships over the 4 rounds of data collection were analyzed as displayed in **Table 5.35**. The analysis found that theme 1, **Policy and Regulation Developments**, theme 4, **Higher Education System Development**, theme 20, **Research Emphasis**, theme 43, **Finances** and theme 44, **Leadership** achieved consensus over rounds 3 and 4 for the participants from type 4 partnerships. In addition, theme 15, **Government Developments**, theme 18, **New Sino-Foreign Universities**, and theme 36, **Policies and Legislation**, achieved consensus over rounds 1, 2 and 4 for type 4 partnerships. As well, theme 26, a non-final round theme, achieved consensus over rounds 1 and 2. Theme 51, **Leadership**, achieved consensus in rounds 2 and 4, and theme 52, **Communication**, achieved consensus over rounds 2, 3

and 4 for type 4 partnerships. Theme 69, Societal Involvement Strategy, which was created by the participants from type 4 partnerships in round 2, was found to have only achieved consensus in round 4. These findings further point to the necessity of participation from both partnership types over the 4 rounds of data collection, because only with the combined responses, selections and rankings from participants from both partnership types was the creation of the questionnaire of 22 themes, while complying with the various consensus criteria and measures recommended in the literature, possible. This creation ultimately enabled the formulation of the narratives in Chapter 6 that answered the research questions asked in this dissertation. As in the previous analyses, these findings further established the equivalent of concurrent validity (Hasson & Keeney, 2011), or credibility, which is required for trustworthiness in a Delphi study (Krefting, 1991). These findings then led to a comparison of the consensus achieved in the themes by partnership types to the consensus achieved by individual participants. This comparison was of interest in order to assess Parenté et al.'s (1984) claim in a current Delphi study and in a very different context.

Table 5.35

Summary of Rounds 1-4 for Themes Achieving Consensus from 50% of the Participants

Round/Questions	1	2	3	4a	4b	5
Round 1 - Type 4	-	15, 18	26	36	-	-
Round 2 - Type 4	-	15, 18	26	36	51, 52	-
Round 3 - Type 4	1,4	20	-	43, 44	52	-
Round 4 - Type 4 - Most Important	1, 8	15	34	44	51, 52	69
Round 4 - Type 4 - Important	1, 5, 8	15, 16, 18, 20	31	36, 43, 45, 46	53	63
Round 4 - Type 4 - Unimportant	10	-	-	-	-	-
Round 4 - Type 4 - Most Certain	-	18	-	36, 46	-	-
Round 4 - Type 4 - Likely	1, 5, 8	15, 16, 18, 20	34	43, 45	51, 52, 53	63, 69
Round 4 - Type 4 - Unlikely	4, 10	-	31	-	-	-

from Type 4 Partnerships

Round 4 – Assessment of Parenté et al.'s (1984) claim

Group consensus from Willis' (2001) type 3 and 4 partnerships were analyzed to assess Parenté et al.'s (1984) claim that, apart from the most elite experts, panels provide the greatest predictive accuracy, given the differences between Parenté et al.'s (1984) study and the Delphi study conducted in this dissertation. Their claim that a group's greater predictive accuracy was interpreted as being represented by the achievement of consensus in ranking a greater number of themes, as compared to the consensus achieved by participants individually ranking the themes. Analysis revealed a slightly greater number of combined themes that achieved consensus from type 3 and 4 partnerships, as shown in **Table 5.36** and **Table 5.37**. These findings support Parenté et al.'s (1984) conclusions, despite the gap between the time of their publication and the production and context of this dissertation.

Table 5.36

Round 4 Consensus by Single Ranking Rates and Partnership Type (Importance) per

Questions

Round 4 - Imp	1	2	3	4a	4b	5
Single Rank	1, 4, 5, 8	15, 16, 18	31, 34	45	51, 52	63, 69
3	1, 4, 5, 8	15, 18, 20	31, 34	36, 40, 44, 45, 46	51, 53	63, 69
4	1, 5, 8, 10	15, 16, 18, 20	31, 34	36, 43, 44, 45, 46	51, 52, 53	63, 69

Table 5.37

Round 4 Consensus by Single Ranking Rates and Partnership Type (Likelihood) per

Questions

Round 4 - Lik	1	2	3	4a	4b	5
Single Rank	5, 8	15, 16, 18, 20	-	36, 40, 43, 45	51, 53	69
3	5, 8, 10	15, 16, 18, 20	34	36, 40, 43, 44, 45	51	63, 69
4	1, 4, 5, 8, 10	15, 16, 18, 20	31, 34	36, 43, 45, 46	51, 52, 53	63, 69

Round 4 - Analysis Summary

The quantitative analysis of the data collected in round 4 found that most themes showed an adjacent consensus between the rank of "most important" and "important", or between the rank of "most certain" and "likely". The findings from the analysis of the adjacent

consensus of the ranks complements the fact that a Likert scale without a midpoint has more positive than negative rankings that in this Delphi study is represented by more themes being found to be important or likely instead of trivial and unlikely (Worcester & Burns, 1975). The findings were encouraging as consensus, being the result of the convergence of participant opinions, had increased over the rounds (Linstone & Turoff, 1975). This further suggests that a theme's consensus in terms of importance and likelihood will differ based on the type of partnership, emphasizing the importance of taking both partnership types into account in the narratives that will be presented in Chapter 6. The difference in consensus per partnership type further underscored the need to conduct qualitative and quantitative analysis with the methodological traits of this Delphi study. As well, the analysis of consensus frequently integrated a variety of approaches suggested in the literature about which I had certain assumptions. The assumptions concerning the evaluation of consensus were clearly stated, as the method of aggregating the data to establish consensus is open to arbitrary judgement (Murphy et al. 1998, Stewart et al. 1999). An additional analysis from a qualitative perspective, building upon the analysis conducted in round 4, was planned for Chapter 6 of this study. This additional examination of the data is imperative in order to link the consensus in ranking achieved by each theme to the participants' responses within each theme, in order to envision the future of Sino-Foreign universities and answer the questions of this dissertation. The amalgamation of quantitative and qualitative investigations would allow this Delphi study's consensus, as described in the narratives in the following chapter, to be left to the readers' interpretation (Lindeman 1975, Bond & Bond 1982, Gabbay & Francis 1988, Hartley 1995, Gibson 1998). Upon completion of the

quantitative analysis, alternative methods of analysis were then reviewed in order to ensure that all appropriate methods of examination were completed. This review served as preparation for the qualitative analysis of the collected data, which will be discussed in the next chapter.

Alternative Analysis Methods

Several alternative methods of analyzing data, such as Kendall's coefficient of concordance, IQD (interquartile range), chi-square distribution and the McNamara test, were assessed in comparison to the methods that were employed in this study. All of these alternative methods were found to be unsuitable for the purposes of this dissertation due to its methodological arrangement of data collection. First, Kendall's Coefficient of Concordance requires ordered ranking of a set of data, as opposed to the Likert scale that was used in this dissertation (Schmidt et al., 2001; Okoli & Pawloski, 2004). Kendall's Coefficient of Concordance is, however, intriguing for a possible further study that would apply an ordered ranking of this dissertation's final 22 themes. Other methods included the use of the chi square distribution (Riger, 1986), the test-retest method and the Mcnamara test, all of which were deemed inapplicable to assess consensus, as the results of 2 rounds with identical data collection and participant tasks would be needed for comparison (Raskin, 1994; Spinelli, 1983; Rowe, Wright & Bolger, 1991). Because each of the 4 rounds had a different methodological task of collecting the data, these methods were considered not only inapplicable but also inappropriate to try for this study. The decisions regarding which method was used, and which methods were not, are supported by the fact that measuring consensus is the least-developed aspect of a

policy Delphi study (Crisp, Pelletier, Duffield, Adams, & Nagy, 1997; Rayens & Hahn, 2000).

Preparation for Chapter 6

After 4 rounds, which normally suffices to achieve consensus in Delphi studies, a 5th round was deemed unnecessary (Erffmeyer & Erffmeyer, 1986). The institutional (Dajani, Sincoff, Talley, 1979) and individual participant stability (Chaffine & Talley, 1980; Mitchell, 1991) demonstrated sufficient consensus per the literature, and thus the next step was to discuss the ways in which the findings of the study answered the research questions being asked in this dissertation. Because a Delphi study's methodology can be adapted to a research question, the themes within the open-ended questions were classified into the 4 research questions (Adler & Ziglio, 1996; Delbecq, Van de Ven, Gustafson, 1975; Linstone & Turloff, 1975). This classification process was necessary to analyze the individual participants' responses in order to answer the questions being asked in this investigation, as a Delphi study must undergo both qualitative analysis (Day & Bobeva, 2005).

Chapter VI - Qualitative Analysis of Delphi Findings

The ultimate goal of a futures-based Delphi study is to develop narratives about possible future scenarios, as foreseen by study participants. This chapter features narratives, based on the findings of the analyses outlined in the previous chapter, envisioning successful Sino-Foreign universities in 2030. The narratives were constructed by pairing the research questions with the most appropriate open-ended questions and the round 4 themes that were related to those questions. Three main aspects of the pairing process need to be clarified: first, themes that were associated with the context were paired with the main research question regarding the context of 2030. Second, the qualities of successful Sino-Foreign Universities in 2013 were paired with the constraints that currently exist in Sino-Foreign Universities, as well as various methods of handling those constraints. Third, the likeliness of the constraints occurring in 2030 were paired with the qualities of successful Sino-Foreign Universities that are most likely to change by 2030. The themes of each research question were ordered according to, first, their likelihood of occurrence, and then, their ranking of importance. When ordering the themes based on their likelihood of occurrence, the consensus achieved based on single rank and partnership type was used to order the themes from "most certain" to "uncertain". Once the themes were organized, the process of writing the narratives could begin.

The narratives were written using the theme summaries and quotations from each participant's responses within the round 4 themes as well as the consensus levels achieved by each partnership type. The quotations from the participants' responses were

divided according to partnership type, either type 3 (embedded model) or 4 (stand-alone model), so that a narrative for each type could be written. Arranging the responses and ranks as described ensured that the answers to the research questions would be driven by the data collected over all four rounds, and that these answers would be derived from the insight and wisdom of the leaders of various Sino-Foreign Universities. It was imperative to separate the narratives based on Type 3 or Type 4 partnerships to conduct a full qualitative analysis of their respective envisioned futures for Sino-Foreign Universities in 2030.

The consensus levels achieved by each partnership type required themes to be ranked identically by 50% of the participants from either type 3 or 4 partnerships in order to write the narrative. Type 4 partnerships had tied ranks of consensus for some themes that were both included in the narratives. When a partnership type had no consensus for a theme, single rank consensus was used to develop the narratives with the participants' quotes from the partnership type that had no consensus. Single rank consensus required a round 4 theme to be ranked identically in terms of either importance or likelihood by 7/13 (54%) of the participants. The only exceptions to this requirement were themes 40, 43 and 44, which, in terms of likelihood, were required to be ranked identically by 7/12 (58%) of the participants.

All of the round 4 themes, apart from themes 4, 10, 16, 31 and 44, achieved an adjacent rank consensus between "most important" and "important" and between "most certain" and "likely" by 2030. The 5 themes that did not achieve the adjacent rank consensus as

mentioned above had their adjacent rank consensus discussed in the narratives. Apart from these 5 themes, the adjacent rank consensus was not used as a key element for organizing or writing the narratives due to their identical consensus. Separately, adjacent ranks were not used, as the distance between the ranks can be interpreted differently and would add unnecessary subjectivity to the narratives (Schmidt, 1997). The use of adjacent rank consensus provided an additional method to analyze the themes and enhanced the trustworthiness of the collected data.

In this chapter, the theoretical contributions to and findings of this Delphi study will be discussed in terms of the consensus of the themes and their similarities to and differences from the literature on Sino-Foreign universities. Most of the themes demonstrated either similarities or differences, although some themes showed both similarities and differences due to the differing consensus achieved by type 3 or type 4 Sino-Foreign University partnerships. The practice of comparing the findings to previous and recent publication is recommended by the literature (Hasson & Keeney, 2011), and helped to establish transferability, which is one trait of establishing a studies' trustworthiness (Krefting, 1991). The themes were discussed in the order of the research questions and were based around the associated open-ended questions whose responses by the participants helped to form the themes.

Following the completion of the narratives envisioning Sino-Foreign Universities in 2030 in Chapter 6, Chapter 7 outlines the methodological, theoretical and practical contributions that have been achieved in this dissertation. Chapter 7 also assesses the

dissertation's trustworthiness, which for a Delphi study, was considered a superior alternative to assessing a study's reliability and validity (Hasson & Keeney, 2011). Following the comparison of the Figure 2 model to the final themes, the future scenarios envisioned for Sino-Foreign universities in 2030 are discussed below.

Analysis of Round 4 Final Themes and Figure 2 Forces

The findings of the data collection were compared to the literature as recommended by Hasson and Keeney (2011). A qualitative analysis was further conducted by comparing the final themes and their embedded participant responses of this Delphi study to the literature review conducted throughout chapters 2 and 3. A more specific comparison of the literature review to the final themes and the embedded participant responses was also covered, based on the forces related to program access and participant rate of Sino-Foreign university partnerships in 2030 that were shown in Figure 2. The comparison found 10 Figure 2 forces that were similar to the response within the final themes of round 4, as seen in **Table 6.1**; 3 figure 2 forces that were similar to confirmed themes in round 2 but did not become final themes, as displayed in **Table 6.2**. The similarity between the themes and the forces suggested that a correct framework for the models of successful Sino-Foreign University partnerships in 2030 was created from Figure 2. The envisioned futures were enhanced by the remainder of the 70 themes that were found to be different from the literature reviewed. The similarity between the themes and the forces achieved credibility, a requirement for trustworthiness (Krefting, 1991).

Table 6.1

Round 4 Theme	Figure 2 Force	Participant
1	Prospective (SFU) Student Enrollment {Demo}	9
10	Western Partner University Global Presence Desire {Gov}	5
10	State Universities' Global Market Value {Env}	5
18	IB Students {Demo}	1
20	Dependence of Mainland China on Western Technology {Tech}	1,4
20	Urbanization Trends {Demo}	8
31	Western University SFU Partner (Type and Model) {Gov}	2, 9, 13
36	Enrollment Ceiling {Gov}	9
43	43 Western University Dependence on International Tuition Presence {Econ}	
69	Number of Scholarships {Cul}	7

Analysis of Round Final 4 Themes and Figure 2 Forces

Table 6.2

Similar Confirmed Round 2 Themes (Non-Final Round 4 Themes) and Figure 2 Forces

Round 4 Theme	Figure 2 Force	Participant
21	Rising Middle Class {Env}	8
21	Increased Income {Econ}	8
22	Rising Middle Class {Env}	13
50	Increased Salary for Sino-Foreign Graduates {Econ}	1, 9

Figure 2 was also compared to the participants' responses within the themes. This process served as a stakeholder analysis to assess the balance and spread of the participants in this Delphi study (Stewart & Green, 2004). As the participants were not shown figure 2 during the data collection, the similarity between the figure 2 forces and a portion of the themes demonstrates the participants' knowledge of the Sino-Foreign

university context. It confirms the appropriateness of the participants selected and enhances dependability, a requirement for trustworthiness (Krefting, 1991).

What are the qualities of a successful Sino-Foreign university partnership in 2013? In order to answer the research question, "What are the qualities of a successful Sino-Foreign university partnership in 2013?" the participant responses from 9 themes described in **Table 6.3** will be examined to determine the current qualities of successful partnerships by their ability to handle the constraints as raised in the data collection. These 9 themes were selected because they were the only ones from the five open questions that focused on the current situation of Sino-Foreign Universities. The themes are also appropriate because of their discussion of the issues, as represented by the constraints that Sino-Foreign Universities currently face and possible solutions to those constraints. The themes were the final themes from a larger number of themes representing constraints that were selected in round 3 to be most important to ensure the success of Sino-Foreign Universities in 2030. Because the question focused on the current reality of Sino-Foreign Universities, the participants were also asked to select the themes from question 4a based on their current importance in 2013 and their importance in the years leading up to 2030 (Appendix S). The specifics as outlined above resulted in the decision to use these themes to answer the research question in **Table 6.3**. A narrative summary of the qualities needed to ensure the success of present-day Sino-Foreign University partnerships will conclude the discussion of this question.

Table 6.3

Organization of Open-Ended Questions, Themes, and Research Questions

Questionnaire and Themes	Research Question		
4. a) What major constraints do you/have you experience(d) inside/outside Sino- Foreign University & College partnerships?	What are the qualities of a successful Sino- Foreign university partnership in 2013?		
Themes 36, 40, 43, 44, 45, 46			
4. b) How are the constraints handled?			
Themes 51, 52, 53			

Theme 36 - Policies and Legislation

For type 3 partnerships it is **most certain** that by 2030, a major constraint will be to work within the higher education policies and legislation found in Mainland China. Policies and legislation are most certain considering "the old Higher Education law, which is not suitable for Sino-Foreign University cooperatives" (1). A great deal of reform will be needed within the next 15 years, which is why policies and legislation will continue to be constraints. For type 3 partnerships, policies and legislation are **most important** to maintain successful Sino-Foreign University partnerships in 2030, and "an example is the tuition pricing structure for Sino-Foreign Universities, which is inconsistent even for partnerships in the same region" (3). Clearer policies and legislation will help ease the process of "validating the program and degrees being offered" (4) and the reform process can be a benchmark for other nations that will be developing transnational higher education legislation.

Participants from type 4 partnerships and single rank consensus also felt the constraint of policies and legislation to be **most certain** to exist by 2030, as *"there is no guidance or*

absolute lists given by the government to prepare various documents for program bids or other institutional developments" (7). For type 4 partnerships, policies and legislation are **important** for successful Sino-Foreign University partnerships in 2030 as many requirements for validating programs and degrees are expected based on the current policies and legislation. According to one participant's response, "you need to apply for the program and prepare for it (recruit staff, prepare the laboratories and facilities, etc.) before it is accepted. A program can be cancelled or not approved even if the preparation is all in place by an institution" (9). Similarly, another participant notes "that in China, you can be granted an institutional license giving permission to teach, but not a license to graduate students, which is done to see if teaching has gone satisfactory" (14). Thus, type 4 partnerships also recognize that "constraints also include policies and regulations from the government" (5).

The findings suggest that Sino-Foreign Universities will continue to experience the challenge of dealing with policies and legislations in 2030. A decade ago, the literature suggested the need for improved Sino-Foreign University policies and legislation (Huang, 2003). Despite policies and legislation continuing to be constraints, policy and legislation development to support Sino-Foreign Universities in 2030 will also be present, as suggested by **theme 1**. The findings of **theme 1** and **theme 36** demonstrate the complex context in which Sino-Foreign Universities exist. The constraints associated with Policies and legislation comprise one of many forms of external monitoring that exist for Sino-Foreign Universities.

Theme 40 - External Monitoring

For type 3 partnerships, it is **most certain** that by 2030 external monitoring from the foreign home campus, partners involved, associated quality assurance agencies and needed reviews of who should be monitoring quality will be significant constraints. External monitoring is due to "a difference in timelines" (2) where the "host (state) university partner wants information that our foreign partner university does not have at the time the information is requested" (2). For type 3 partnerships, it is **important** for Sino-Foreign University partnerships to learn how to handle external monitoring, as "it is not sure why the Chinese quality assurance system needs to be enforced on a foreign institution of world ranking" (1).

For single rank consensus, the constraint of external monitoring is also **most certain** to exist by 2030. One reason for the existence of external monitoring is that *"the micro management from the home campus has extraordinary control, which will restrain the institution's development as an authentic university campus"* (6). This restraint will continue until a resolution regarding the *"confusion between internal and external monitoring and where responsibilities lie"* (14) can be reached. Some of the confusion regarding external monitoring and responsibility is potentially due to cultural differences between the various stakeholders involved in Sino-Foreign University partnerships.

The findings suggest that Sino-Foreign Universities will continue to experience external monitoring in 2030. External monitoring by the government was previously noted in the literature (Willis, 2007; Huang, 2007; Lingenfelter, 2004) to be a constraint. It reflects

the more stringent requirements for licensing and operations of Sino-Foreign University programs that began when formal foreign joint venture cooperation legislation began over a decade ago (Garrett & Verbik, 2003). It is important to note that external monitoring will continue to be a constraint despite legislation intended to decentralize autonomy to the provincial level, which began several years ago (Ennew & Yang, 2009).

Theme 46 – Culture

Culture, if not handled correctly, may exacerbate the external constraints. For Type 3 partnerships, it is **most important** to manage foreign and Chinese cultural and educational differences, for both staff and students. Considering *"the internal constraints include language and cultural differences which create misunderstandings"* (2), culture is an important factor influencing the success of Sino-Foreign universities in 2030. Misunderstandings include *"the management of such issues as plagiarism and referencing"* (3) as *"there are very different perceptions from each side"* (3). If Sino-Foreign Universities *"do not understand the cultural realities and work through our differences, major problems will arise"* (8). For type 3 partnerships as well as single rank results, no consensus was achieved in terms of the likelihood that culture would be a constraint. No specific conclusions can be drawn as to why only type 4 partnerships had achieved consensus for the theme of culture.

For type 4 partnerships, the constraint of culture is **most certain** to exist by 2030, as "*the conflicts of culture are always present but can easily be handled*" (5). Culture is **important** for the success of Sino-Foreign Universities in 2030, as staff "*bring their*

different cultures and expectations and it is difficult to align their views with the direction of the university" (7). One example of the influence of culture is "the communication between local and international staff where both sides feel a problem is understood, but afterwards it is found there was a misunderstanding" (9)". From the perspective of type 3 and 4 partnerships, it is important for Sino-Foreign universities to handle cultural differences to ensure future success.

The findings suggest that Sino-Foreign University partnerships will continue to experience cultural constraints in 2030. The constraint of culture was found in the literature related to the expectations of Chinese learners and the challenges in facilitating a Western learning environment for Chinese students (Li, 2001; Samarawickrema, 2005; Tu, 2001; Samarawickrema, 2005; Biggs, 1996). Type 3 partnerships did not achieve consensus in terms of the likelihood of culture being a constraint in 2030, which may reflect the embedded model and a greater expectation from the state partner to resolve the constraints of cultural differences in students and staff by 2030.

Theme 45 – Staffing

In addition to the aspect of culture, staffing as a whole is a constraint that successful Sino-Foreign Universities must learn to handle. For type 3 partnerships, it is **likely** that by 2030, a major constraint will be to find and develop high quality and culturally sensitive staff with long-term interests of supporting the Sino-Foreign University. The constraint of staffing is **most important** to ensure successful Sino-Foreign Universities in 2030, considering "the H.R. arrangement, which is quite unique as it involves multiple

cultures (representing the staff and students) to manage and support" (**3**). Successful staffing requires the management "*to deal with individuals who are just entering academia and then develop them*" (**1**). The development of staff can result in "*foreign partners that, out of a variety of reasons, do not want to make their staff more localized*" (**11**). Having non-localized staff puts the Sino-Foreign University partnership relationship at risk when considering the other constraints such as culture.

In addition to type 3 partnerships, type 4 partnerships and single rank consensus also felt the constraint of staffing to be **likely** to exist by 2030, considering the "*difficulties in recruiting high end expatriate staff, the tax implications that expatriate staff face, and the challenges in finding appropriate education for their children*" (**9**). It is **important** for successful Sino-Foreign Universities to address this constraint, as the "*staff lack commitment and come for short periods of time with a dual purpose of China tourism*" (**7**). Sino-Foreign Universities need "*buy in from a sufficiently large number of colleagues from across the university is to send out on secondment staff*" (**15**).

The findings suggest that Sino-Foreign University partnerships will continue to experience constraints related to staffing. This complements the literature's earlier indication that Sino-Foreign Universities will recruit higher quality faculty to increase their research output and institutional reputation (Naidoo, 2007). Increased staff hiring requirements creates further challenges in appointing the desired staff member. The constraint of staffing is also a considerable aspect of the broader constraint of finances that Sino-Foreign Universities must handle in their daily operations.

Theme 43 – Finances

For type 3 partnerships, it is **likely** that by 2030, finances, costing, fees and their respective objectives will be major constraints within Sino-Foreign University programs. Finances are likely to be a constraint because "there is an illogical and inflexible pricing scheme that, from the surface, is based on costs, yet turns out to be based on the status of the host (state university involved) and their local fees" (1). Financial constraints are likely to continue because of "the desire for the foreign partner to make profits instead of focusing on the long-term development of the academic program" (11). The desire to make profits is likely to continue by 2030, since "most UK universities do not have much cash to invest in a major offshore operation and most cannot do more than one offshore activity" (13). As a result, "[t]he major constraint is the costing of the program" (4). It is interesting to note that type 3 partnerships did not reach a consensus on the importance of finances as a constraint, which may be due to their greater reliance on their state partner as an embedded model, as compared to a type 4 partnership's stand-alone institutional model.

Like type 3 partnerships, type 4 partnerships and single rank consensus also felt the constraint of finances to be **likely** to exist by 2030, as *"many international institutions are facing the challenge of sustainable development"* (5). To remedy the constraint of finances, *"funding by third parties (donations) is helpful"* (7), yet this occurs only infrequently. Financial constraints are **important** considerations to ensure the success of Sino-Foreign Universities when considering *"the lack of student support mechanisms (no student bank loans), which has not yet allowed for the institute to reach its target of*

having a 10% foreign student population" (9). From the perspective of both type 3 and 4 partnerships, the constraint of finances will continue into 2030.

The findings suggest Sino-Foreign Universities will continue to experience financial concerns in 2030. The constraints of finances may be addressed by the Ministry of Education's preference for full programs offered in Mainland China with little or no time being spent abroad (Willis, 2001a). This would reduce the currency outflow of students studying overseas, paralleling the actions taken by Malaysia's Higher Education Ministry (Wilkins & Huisman, 2011). Financial issues can only be solved by strong leadership, which is the final and most unresolved constraint faced by Sino-Foreign Universities.

Theme 44 – Leadership

For Type 3 Partnerships, the lack of experienced, strong and committed leadership within Sino-Foreign Universities to manage the contextual challenges is a condition that is **likely** to exist by 2030. The constraint of leadership is an **important** challenge to the success of Sino-Foreign Universities in 2030, and one possible remedy is to "*add substantial financial resources*" (**13**). A further possible solution is to consider a consortium partnership model "*with half a dozen strong partner institutions*" (**13**). A type 4 partnership model with a consortium of universities would be a new and promising partnership type for Sino-Foreign Universities in 2030.

For Type 4 partnerships and single rank results, no consensus was achieved in terms of likelihood of occurrence for the constraint of leadership. Leadership was, however, adjacently ranked between **most important** and **important**, and also held a tie between

most certain and **likely** by 2030 as well as between **likely** and **unlikely** by 2030. For Type 4 partnerships, the constraint of leadership is **most important** for the success of Sino-Foreign Universities in 2030, as "Sino-Foreign Universities can have an unsuitable governance structure and a relatively low capability from their senior management team" (5). The challenge of leadership also stems from the foreign universities' "innate conservatism and fear of the unknown within academic departments and their leadership" (12). To override the constraints of leadership, "a university needs to make sure they have the commitment and proper planning from their staff members" (15).

The findings of type 3 partnerships may be due to their dual leadership structure and their embedded model, with a power struggle occurring between foreign and state university leaders. The findings of type 4 partnerships, on the other hand, may be due to their single leadership structure in a stand-alone-modelled independent institution that is not reliant on dual leadership structure as type 3 partnerships are. Both partnership types stressed the importance of having correct and strong leadership instead of a constraining leadership.

Theme 51 – Leadership

For single rank consensus and for type 3 and 4 partnerships, strong leadership is **likely** and **most important** to face the challenges and constraints affecting Sino-Foreign universities. For type 3 partnerships, leadership is **likely** by 2030 from *"the top management and academics who want to go to China"* (13). China's growing global importance will attract further leadership talent to lead Sino-Foreign Universities by

2030. For type 3 partnerships, leadership is **most important** for successful Sino-Foreign Universities, to "hopefully allow more people in the host university to realize the nature of Sino-British Universities which are not rich (as finances and other resources are quickly absorbed by both partners)" (1). Separately, "the important points must be upheld by the leadership so they are not lost in issues of communication, cultural or language" (2).

For type 4 partnerships, leadership is a **likely** factor by 2030, as "the Chinese government has pushed the reformation of the market economy while many sectors like education still have the habits of a planned economy" (5). As a result, leadership is **most important** for successful Sino-Foreign Universities to "deal and help the institution survive in the struggle between the planned and market economy" (5). One leadership method is to "provide as much mentorship and guidance to the partners here on site [as possible]" (6) and "to nurture their greater natural instincts for more autonomy" (6). Effective leadership would result in "senior management pushing through investments in Sino-Foreign partnerships with verve and enthusiasm. (**12**)"

The findings suggest that Sino-Foreign University partnerships will continue to deal with leadership constraints and challenges in 2030. The theme of leadership as a constraint in **theme 44** and a solution to the constraints in **theme 51** reflects the joint-venture aspect of Sino-Foreign Universities, by which a leader from the state university may become president and the leader from the foreign university may, at most, become vice-president. Effective leadership may also carefully blend aspects from Eastern and Western higher

education systems to ensure the most successful combination for a Sino-Foreign University.

Theme 53 - Blending Higher Education Systems

For type 3 partnerships, blending higher education systems is **most important** for Sino-Foreign Universities in 2030 as a needed "solution to partnerships that do not want to localize their program . . . to develop and improve their level of cooperation with their state partner" (**11**). Examples of blending higher education systems include the possibility that "some Western universities will consider tier 1 Gao-Kao scores in combination with an English language score of IELTS 6.5 to go directly into year 1 of their university program" (**3**). Carefully blending higher education systems will result in foreign universities "not bringing the partner into our cultural milieu and operating in a shared cultural environment" (**8**). Type 3 partnerships did not achieve consensus in terms of the likelihood of occurrence of blending higher education systems by 2030, which suggests that state universities using the embedded model will be dominant by that time. The findings from Type 3 partnerships reflects the difficulties to implement a hybrid of Eastern and Western teaching practices that proved difficult to implement according to the literature (Willis, 2008; Elkin et al., 2008).

For single rank consensus and type 4 partnerships, it is **likely** that blending aspects of Eastern and Western academic and operational practices can help ease the constraints. For type 4 partnerships it is **important** *"for new universities to use their high qualities and blend the best practices together of Sino (state) and foreign universities"* (5). These findings suggest that Sino-Foreign University partnerships will continue to handle the

constraints they face by blending practices from both Eastern and Western teaching practices, though the literature of the past decade has suggested that such hybridization is difficult to implement and was at the infant stage of development (Willis, 2008; Elkin et al., 2008). Implementing blended higher education systems has since become easier due to the decade's worth of experience of Sino-Foreign University operations.

Theme 52 – Communication

In order to blend the best practices of East and West, communication must occur between Sino-Foreign University partners. For single rank consensus, communication is **most important** for the success of Sino-Foreign Universities in 2030, considering that "dual degrees, for example, are handled by dual systems" (2). Successful communication among the various systems associated with Sino-Foreign universities requires leadership from "the relevant individuals to shape up a solution" (3). The individuals involved must also include "the governments of each respective partner rather than just the universities concerned" (4).

For type 4 partnerships, it is **likely** that by 2030, communication, including internal and external meetings (Sino-Foreign University meetings), can help universities meet the challenges. For type 4 partnerships, communication has been ranked **most important** and **important** for successful Sino-Foreign Universities in 2030, as *"any type of conflict needs communication"* (5). Communication is *"very time-consuming but is required to gain an understanding where each partner is coming from"* (14); specifically, *"to find the correct partner a lot of communication needs to happen to ensure you have the same*

dream for establishing a Sino-Foreign University" (7). Clear communication to the government is especially imperative, as "*they only want to approve programs that can develop society and a respective community while developing local talent to support the community development. How this can happen must be clearly explained in the bid application*" (9).

These findings suggest that Sino-Foreign University partnerships will continue to develop communication skills and strategies in 2030. Communication as a method of dealing with constraints was mentioned across many issues that were reflected in the final themes of this dissertation and in the literature of the past decade. The qualities of leadership, blending higher education systems, and communication will continue to be important towards 2030. The qualities that will change towards 2030 will be discussed in the qualitative analysis outlined below.

In 2013, the participants in this study regarded the most successful Sino-Foreign universities as those that possess the qualities to handle the constraints of **36-Policies and Legislation**, **40-External Monitoring**, **46-Culture**, **45-Staffing**, **43-Finances**, and **44-Leadership**. The analysis of the final themes further revealed that the qualities most desired for dealing with those constraints are **51-Leadership**, **53-Blending Higher Education Systems**, and **52-Communication**. Type 3 and 4 partnerships showed similarities and differences in terms of their respective qualities regarding the constraints themselves and how they presently handle those constraints. The themes in **Table 6.4a**

were ranked as either most certain or likely to occur in 2030, and will aid in summarizing the qualities of current successful Type 3 Sino-Foreign Universities.

Currently, type 3 partnerships view the constraints of 36-Policies and Legislation and

40-External Monitoring as most certain to occur in 2030; and 45-Staffing, 43-

Finances, 44-Leadership as likely to occur in 2030. They viewed 51-Leadership as the

most likely way to handle those constraints. There was no consensus achieved in terms

of likelihood and importance for **52-Communication**.

Table 6.4a-Summary of the themes' rankings that represent the qualities of successful

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Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030	36	40			
Likely by 2030	45, 51	44			43
Unlikely by 2030					
Almost Impossible by 2030					
No Consensus (likelihood)	46, 53				52

As displayed in **Table 6.4b** Type 4 partnerships currently view the constraints of **36**-**Policies and Legislation** and **46-Culture** as most likely to occur in 2030, and **45**-**Staffing** and **43-Finances** as likely to occur. These themes were all either ranked as "most important" or "important" by type 3 partnerships, as noted above. Type 4 partnerships viewed **51-Leadership**, **Theme 53-Blending Higher Education Systems**, and **52-Communication** as likely ways to handle those constraints. For both type 3 and type 4 partnerships, all seven themes mentioned above also achieved a rank of either "most important" or "important" for the success of Sino-Foreign Universities, except for **43-Finances**. Separately, there was no consensus achieved in terms of likelihood and importance for **40-External Monitoring** for Type 4 partnerships. These findings suggest contributions to the literature that will be discussed in further detail in Chapter 7.

Table 6.4b-Summary of the themes' rankings that represent the qualities of successful

Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030		36, 46			
Likely by 2030	51, 52	43, 45, 52, 53			
Unlikely by 2030					
Almost Impossible by 2030					
No Consensus (likelihood)	44				40

Answering the research question "What qualities of successful Sino-Foreign university partnerships will change towards 2030?" involved analysis of the constraints facing Sino-Foreign universities and the methods to handle those constraints. The findings suggested that neither the constraints nor the strategies to handle them would change in the years approaching 2030, but would continue.

What qualities of successful Sino-Foreign university partnerships will change towards 2030?

Answers to the research question "*What qualities of successful Sino-Foreign university partnerships will change towards 2030?*" involve participant responses from 6 themes, described in **Table 6.5**, to envision the changing qualities of type 3 and 4 Sino-Foreign University partnerships towards 2030. Four themes were selected from the first openended question, which focused on participant responses reflecting their current situation followed by their hopes for the future. Two themes were selected from the third openended question, which focused on current decisions and their long-term effects that represent the changes that Sino-Foreign Universities would face in 2030. The participants' responses to the questions that formed the themes were all in the future tense, and these responses reflected either internal or external future changes for Sino-Foreign Universities. The specifics as outlined above resulted in a decision to use these themes to answer the research question below. A summary narrative to answer the question regarding the qualities of successful Sino-Foreign Universities that will change towards 2030 will conclude the discussion of this research question.

Table 6.5

Organization of Open-Ended Questions, Themes, and Research Questions

Questionnaire and Themes	Research Question		
1. In the best possible world, what would you hope for Sino-Foreign University & College partnerships in 2030?	What qualities of successful Sino-Foreign university partnerships will change towards 2030?		
Themes 4, 5, 8, 10			
3. What major decisions with long-term implications do the Sino-Foreign University & College partners and the Chinese government currently face?			
Themes 31, 34			

Theme 8 - Closer Partnership Cooperation

For single rank consensus and for type 3 partnerships, it was **most certain** that by 2030, Sino-Foreign University partners will work closer together. For type 3 partnerships, closer partnership cooperation is **important** for the success of Sino-Foreign Universities in 2030, as "globalization trends will force the partnerships to become more integrated and standardized. (**3**)" Further integration and standardization would result in "the perspectives of Sino-Foreign Universities to become more aligned between their state and foreign partners. (**11**)" Participants from type 3 partnerships would like to see that more "partner institutes are publishing together (**13**)".

For type 4 partnerships, closer partnership cooperation is **likely** by 2030 and is tied with being **most important** and **important**. Single rank consensus also viewed closer partnership cooperation as **important** in order to see "*a comprehensive two way partnership of equals between sister-universities covering research, teaching, and commercial relationships* (**12**)". A partnership of equals would allow for stronger daily operations and would ultimately enhance the overall staff and student experience. Closer partnership cooperation will be a changing quality for successful type 4 Sino-Foreign University partnerships in 2030.

The findings suggest that Sino-Foreign Universities will increase cooperation between partners in 2030. Increasing partnership cooperation is indicated in the literature (Willis, 2006b), which notes the concerns of foreign partners to maximize student tuition streams, while the concerns of the Chinese partners are to learn from the Western universities through student exchanges, and to improve their programs and institutional status. With

increases in cooperation, it is expected that the concerns of both respective partners will be aligned in Sino-Foreign Universities in 2030. The increases in partnership cooperation do complement the lack of partnership commitment in the past decade, as indicated in the literature (ibid). The unfavorable balance has also resulted in a lack of understanding related to the future purposes and positions of Sino-Foreign universities, which will be clarified by 2030.

Theme 34 - Understanding SFUs' Future Purpose (s) & Position (s)

For type 3 partnerships it is **most certain** that by 2030, the future purpose and position of Sino-Foreign Universities will be understood. In considering finances as a constraint for type 3 partnerships, "the biggest challenge is to re-imagine what Higher Education should be about and how it can be funded" (8). The constraint of finances, as a result, will be an important part of understanding the future purpose and position of Sino-Foreign Universities in 2030. For type 3 partnerships, understanding Sino-Foreign Universities' future purpose and position is **most important** as "there is currently a research mission, yet they are still focusing on large numbers of undergraduates, which are difficult to support in a research-based institution" (1).

For type 4 partnerships, understanding Sino-Foreign Universities' future purpose and position is **likely** by 2030, as *"the future may bring a lower comparative competitive advantage for Sino-Foreign Universities"* (5). A lower comparative competitive advantage will require a clear understanding of their purpose and position. Like type 3 partnerships, type 4 partnerships and single rank consensus also felt that understanding the standing of t

Sino-Foreign Universities' future purpose and position is most important to establish whether "the institutions exist for research, teaching or as small, isolated institutions"
(15). Such an understanding will ultimately result from whether Sino-Foreign universities "move from a pilot stage led by individual institutions to something that is more systemic" (14).

These findings suggest that Sino-Foreign Universities will increase their understanding of their purpose and position in 2030, as compared to a decade ago, when foreign universities were often confused about the nature of their partnership agreements (Willis, 2007; Li & Morgan, 2008; Huang, 2007). Sino-Foreign Universities' understanding of their purpose and position in the market by 2030 indicates the maturity of Mainland China's higher education market, which also supports Blass & Wood's (2012) predictions for higher education systems in developing countries by 2030. Once the institution's purpose and position is understood, it will hopefully allow for improved higher education access.

Theme 10 - Improved Higher Education Access

For type 3 partnerships it is **most certain** that by 2030, more students around the world will have access to Higher Education through Sino-Foreign Universities and/or social media platforms, which will increase institutional competition levels. It is expected that institutional competition levels will increase as "*social media platforms in Higher Education in 2030 will be in a completely new phase, which will result in all nations receiving a global education solution which everyone can access*" (4). Type 3

partnerships, adjacent and single rank results had no consensus in terms of the importance of improved higher education access. This lack of consensus reflects the idea that full access to social media technology may increase overall institutional competitiveness, but will not be a competitive advantage for successful Sino-Foreign Universities in 2030.

Type 4 partnerships considered improved higher education access via Sino-Foreign Universities as **unlikely** by 2030 and "*ultimately depends on the reformation of Chinese Society and the Higher Education sector in China*" (5). Separately, no single rank consensus in terms of likelihood was achieved for improved higher education access. The consensus results are not surprising, considering that a fundamental quality of type 4 partnerships is their independent brick-and-mortar campus, which contradicts the trends of social media technologies applications in higher education. For type 4 partnerships, improved higher education access is **unimportant** for the success of Sino-Foreign Universities in 2030, as "*the end result will be a narrowed difference between Sino universities, Sino-Foreign Universities and overall international education if Higher Education continues to take progressive strides forward*" (5). The ranking by type 4 partnerships of this concern as unimportant echoes the suggestion, as with the lack of consensus found with type 3 partnerships, that social media applications will not be a competitive advantage.

These findings suggest that Sino-Foreign Universities and/or their social media will improve higher education access for students through its type 3 partnerships. The change

reflects the type 3 partnership's non-traditional embedded model of delivering higher education programs, a model that is more open to new initiatives, such as social media, to provide greater access to higher education. These findings are not surprising, considering that type 3 partnerships were the initial partnerships that allowed increased higher education access for students in Mainland China. Over a decade ago, before the expansion of Mainland China's higher education system, there were minimal access opportunities for prospective university students in Mainland China, apart from type 3 partnership programs. Although no importance was determined for the influence of higher education access, the importance of increased academic quality standards was determined for Sino-Foreign Universities in 2030.

Theme 5 - Increasing Academic Quality

For single rank consensus and for type 3 and 4 partnerships, it is **likely** and **important** that by 2030, the academic quality of Sino-Foreign Universities will increase over time to a world-leading level. For type 3 partnerships, increasing academic quality is **likely** by 2030 as "*a result of moving from a teaching to research focused institute*" (1). Increasing academic quality is **important** to ensure successful Sino-Foreign Universities in 2030, as "*[in] the past the trend was for state universities to focus on low cost co-operations in areas such as general commerce; but in the future, the focus will be shifted towards finding partners for specific areas of education" (11). This will result in a potential change of partners if specialized programs cannot be offered by the foreign partner university.*

For type 4 partnerships, increasing academic quality is **likely** by 2030, as Sino-Foreign Universities would be "gaining further status in China for research and key lab status on the local, provincial and national level" (**15**). Increasing academic quality is **important** for the success of Sino-Foreign Universities in 2030, as "high level prizes (research Nobel prizes) will be achieved by researchers at Sino-Foreign Universities" (**9**). Increasing academic quality is also important to allow these universities to achieve "credibility on the world stage of higher education for authentic academic inquiry and unfettered access to the world knowledge bank and full participation on world subjects (full academic freedom)" (**6**). From the perspective of both type 3 and type 4 partnerships, increasing academic quality is definitely important and likely to occur in successful Sino-Foreign Universities in 2030.

These findings suggest that it is likely and important that Sino-Foreign University partnerships will increase their academic quality to 2030. This complements Blass and Wood's (2012) statement that developing nations will have their own independent and developed higher education systems by approximately 2030; however, it also challenges Armstrong's (2007) opinion that overseas programs cannot attain the same quality as home campuses due to the decades of resources, time, effort and experience required to develop them. Although increasing academic quality is likely, new institutional models are less certain for Sino-Foreign Universities in 2030.

Theme 31 - Developing New Institutional Model (s)

For type 3 partnerships, developing new institutional model(s) are **important** "to decide what type of Higher Education joint venture (Sino-Foreign University/imbedded model/lower key project) the government wants to develop" (2). A "major decision would be to move away from the currently used model of a single UK university which is invested with one province in China, given the heavy financial burden for both sides" (13). Despite type 3 partnerships finding no consensus in terms of likelihood of occurrence, developing new institutional model(s) was adjacently ranked between **likely** and **unlikely** by 2030. The overall consensus suggests little confidence for a new institutional model to develop by 2030.

Similarly, for type 4 partnerships, it is **unlikely** that new institutional models (tiers/pathways/partnership requirement/sponsoring) will be developed for Sino-Foreign University partnerships by 2030. In agreement with type 3 partnerships, type 4 partnerships and single rank consensus also felt that developing new institutional model(s) is **important**. A possibility to contemplate is whether "*a Sino-Foreign University will be involved in a high level joint venture cooperation. If so, this will change the definition of Sino-Foreign Universities and the overall Higher Education environment. Sino-Foreign Universities are now considered to be set up by 2 previously established universities (one purely state, one purely foreign)*" (**9**). Based on the consensus, there will most likely be no change in the institutional models by 2030. The findings from this theme is aligned to the literature that Sino-Foreign University partnerships are unable to change their form of partnerships once begun (Willis, 2001b; Healey & Michael, 2015). These findings suggest Sino-Foreign Universities in 2030 will

be unable to change their partnership level, size and sophistication, as suggested by Willis (2005) a decade ago. As discussed below, it is expected that there will be no change in the involvement of Sino-Foreign Universities in developing Mainland China's higher education system by 2030.

Theme 4 - Higher Education System Development

For a single rank consensus, it is **important** for Sino-Foreign Universities to help lead Higher Education system developments in Mainland China. In considering single rank consensus, higher education system development was **important** for the "government and private owned universities to undergo a huge change in the future that will positively benefit the quality of China's Higher Education system" (11). A development for China's Higher Education system would allow "more joint ventures between second-tier joint venture universities (both foreign and state)" (1). Furthermore, higher education system development was adjacently ranked between **most important** and **important**, as well as between **important** and **unimportant**. Despite the importance of the higher education developments led by Sino-Foreign Universities, there was no single or adjacent rank consensus for the likeliness of these developments occurring, which suggests leading a variety of conflicting opinions related to Sino-Foreign Universities' involvement in Mainland China's higher education system developments.

For type 4 partnerships, higher education system development led by Sino-Foreign Universities is **unlikely** by 2030. Although Sino-Foreign Universities may not lead the developments in China's higher education system, *"the most impressive models could be*

used to assist Chinese universities in their efforts at reform" (**15**). For type 4 partnerships, it is **important** that "*Sino-Foreign Universities be transformative in the development of China as a whole for open social discourse*" (**6**). Whether this will happen is questionable, based on the likelihood rank achieved by this theme.

These findings suggest that the participation of Sino-Foreign Universities in the development of formal higher education will be unlikely, and that the higher education developments will remain in the control of the Ministry of Education or provincial authorities, considering the decentralization of higher education autonomy that has occurred in the past decade (Ennew & Yang, 2009). The findings also reflect the current status of Mainland China's higher education system being fully monitored by government bodies (Willis, 2007). Having said this, Sino-Foreign Universities will be important for improving standards of academic quality, as found in Theme 16 -Academic Quality Developments. Whatever qualities change or remain stable, a correct strategy is needed to support successful Sino-Foreign Universities in 2030. By 2030, the participants foresee successful Sino-Foreign University partnerships demonstrating the qualities of: 8-Closer Partnership Cooperation, 34-Understanding SFU's Future Purpose(s) & Position(s), 10-Improved Higher Education Access, 5-Increasing Academic Quality, 31-Developing New Institutional Model(s), and 4-**Higher Education System Development,** as observed in the analyzed final themes. Type 3 and 4 partnerships showed similarities and differences in terms of their respective assessment of changing qualities of successful Sino-Foreign Universities towards 2030.

As displayed in **Table 6.6a**, Type 3 partnerships viewed the changing qualities of **8**-**Closer Partnership Cooperation**, **34-Understanding SFU's Future Purpose(s) & Position(s)**, and **10-Improved Higher Education Access** as most certain to occur in 2030, and **5-Increasing Academic Quality** as likely to occur in 2030. All four of these themes achieved a rank of either most important or important for successful Sino-Foreign Universities, except for **10-Improved Higher Education Access**. Separately, there was no consensus achieved in terms of likelihood and importance for **4-Higher Education System Development**.

Table 6.6a-Summary of the themes' rankings that represent the changing qualities ofsuccessful Type 3 Sino-Foreign university partnerships towards 2030

Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030	34	8			10
Likely by 2030		5			
Unlikely by 2030					
Almost Impossible by 2030					
No Consensus (likelihood)		31			4

As displayed in **Table 6.6b**, Type 4 partnerships viewed the changing qualities of **8**-**Closer Partnership Cooperation**, **34-Understanding SFU's Future Purpose(s) & Position(s)**, and **5-Increasing Academic Quality** as likely to occur in 2030, and **10-Improved Higher Education Access**, **31-Developing New Institutional Model (s)**, and **4-Higher Education System Development** as unlikely to occur, suggesting the latter three will not be changing qualities for type 4 partnerships. All six of these themes also

achieved a rank of either most important or important for successful Sino-Foreign Universities, except for **10-Improved Higher Education Access**. The following section outlines the strategies of type 3 and 4 partnerships to develop the qualities necessary for successful Sino-Foreign Universities in 2030. The discussion of the strategies that can support the qualities of successful Sino-Foreign Universities in 2030 will be followed by a discussion of Mainland China's projected higher education context in 2030.

Table 6.6b-Summary of the themes' rankings that represent the changing qualities ofsuccessful Type 4 Sino-Foreign university partnerships towards 2030

Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030					
Likely by 2030	8, 34	5, 8			
Unlikely by 2030		4, 31	10		
Almost Impossible by 2030					
No Consensus (likelihood)					

What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

In order to answer the research question, "*What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?*" the participant responses from 2 themes described in **Table 6.7** were assessed to envision the strategies that will best support the qualities necessary for successful Sino-Foreign Universities in 2030. These 2 themes were selected as they are focused on the decisions the participants would take that related to their strategic action(s) taken for Sino-Foreign Universities. The fifth open-

ended question was framed from a current rather than future perspective, yet the participants elaborated in their responses beyond the present to the effects of their decisions in the future. Additionally, the focuses of the two themes derived from this open-ended question were ranked from the perspective of likelihood and importance in 2030. The specifics of these 2 themes as outlined above resulted in the decision to use these themes to answer the research question. A summary narrative to answer the question of which strategies will be needed to support the qualities of Sino-Foreign University partnerships in 2030 will conclude the discussion of this research question.

Table 6.7

Organization of Open-Ended Questions, Themes, and Research Questions

Questionnaire and Themes	Research Question
5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University & College partnerships?	What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?
Themes 63, 69	

Theme 63 - Internet & Social Media Strategy

For type 3 partnerships it is **most certain** that by 2030 the academic and administrative departments of Sino-Foreign Universities will integrate internet and social media platforms throughout all work aspects. This is most certain given the available *"technology platforms, cloud based environment and global platforms"* (8). For type 3 partnerships, an internet and social media strategy is **important** because successful Sino-Foreign Universities must be able to integrate *"social media (online and mobile learning) and research and development to make the information clear for approval"*

(4). A strategy involving the internet and social media reflects theme 10, higher

education access, as most important and suggests that a successful Sino-Foreign University bid requires extensive incorporation of the technologies used to support the institute.

For type 4 partnerships, internet and social media strategy is **likely** by 2030, considering the importance of "*trends such as the future internet generation of students*" (**5**). Similarly, type 4 partnerships and single rank consensus also found internet and social media strategies to be **important** when considering the upcoming generation of university students, who will only have known a world with social media: "*trends will greatly change education in terms of how it is delivered, re-thought, re-shaped and re-defined*" (**5**). The findings outline the necessity for both type 3 and 4 partnerships to integrate internet and social media aspects into their overall strategy.

These findings suggest Sino-Foreign Universities will increase their integration of the internet and social media in their program strategy by 2030. The importance of an internet and social media strategy challenges the current lack of recognition of foreign online degrees in Mainland China (Ministry of Education, 2012; Robinson, Wei, Gong, Schwalb, n.d.). Sino-Foreign Universities should carefully integrate their online and social media strategies when considering Chen, Bennett and Maton's (2008) work that found online learning for Mainland Chinese students a less beneficial experience than comparatively studying overseas in a traditional Western classroom.

Whether an increasing strategic internet and social media effort by Sino-Foreign Universities would lead to changes in the recognition validation of a foreign online degree by the Ministry of Education is still open to question. Upcoming policy changes will need to consider the overall integration of the internet and social media when approving Sino-Foreign University programs. An internet and media strategy may remedy the lack of importance, as viewed by the participants, of **Theme 10-Improved Higher Education Access,** which had social media integrated into the theme. The future internet- and social-media-savvy generation of students will not only change Sino-Foreign Universities, but will also help contribute to and change the societies in which the institutes will exist.

Theme 69 - Societal Involvement Strategy

For single rank consensus and type 3 and 4 partnerships, it is **likely** and **most important** to actively work and contribute to the local society in which a Sino-Foreign University is located, with a long-term focus on returns of various kinds. For type 4 partnerships, a societal involvement strategy is **likely** by 2030, as *"the time taken to build a university is long, so one must be going into the project for the long haul and be extremely patient while providing all the commitment"* (**15**). Type 4 partnerships are designed with long-term approaches in mind, and contributing to society demonstrates the highest level of commitment for the institute. This ethos of commitment through societal involvement is imperative, as *"[a]n institution needs to be part of society including the knowledge economy, and the social economy.* (**5**)*"* For type 4 partnerships, a societal involvement strategy is **most important** for successful Sino-Foreign Universities, as *"a strong and*

correct feedback circle towards society needs to be established. This would result in more society involvement, with society giving resources to the university, and finally, the university returns resources . . . to society in a variety of forms and outputs" (7). Society could return resources to a university through a form of "endorsement for graduates to obtain jobs (number given by government when registering)" (15). A correct feedback circle would yield an optimal societal involvement strategy.

These findings suggest Sino-Foreign Universities will increase their societal involvement as part of their institutional strategy in 2030. The development of societal involvement strategies reflects the recommendations of the literature in terms of the need for more commitment as mentioned by the foreign partners (Willis, 2006a). Additionally, the strategy reflects **Theme 8 - Closer Partnership Cooperation**. The upcoming five-year plan in October 2015 should provide insight regarding the development of societal involvement as a strategy for successful Sino-Foreign universities.

The participants foresee that a **63-Internet & Social Media Strategy** and a **69-Societal Involvement Strategy** will best support the qualities of successful Sino-Foreign Universities in 2030. These themes should be considered when planning strategies for success in 2030. Type 3 and 4 partnerships display similarities and differences in terms of their strategies to support successful Sino-Foreign Universities in 2030, which will be reviewed in detail below.

Type 3 and 4 partnerships both viewed a **69-Societal Involvement Strategy** as likely to occur in 2030 and most important. However, the differences between the partnership types became apparent when ranking the likelihood of **63-Internet & Social Media Strategy**, which type 3 partnerships viewed as most certain in 2030 and important, and type 4 partnerships viewed the theme as likely to occur in 2030 and important. Both of these themes also achieved a rank of either most important or important for successful Sino-Foreign Universities, in the opinion of both type 3 and type 4 partnerships. The similarities and differences between the strategies adopted by type 3 and 4 Sino-Foreign University partnerships reflects the different past experiences and future expectations of the higher education industry in Mainland China. The next section will outline the specific expectations of type 3 and type 4 partnerships of the higher education context in which successful Sino-Foreign Universities will exist in 2030, followed by a discussion of the strategies needed to support the qualities of Sino-Foreign Universities in 2030.

What Sino-Foreign university partnership and strategy will be successful in Mainland China's Higher Education context of 2030?

In order to answer the research question "*What Sino-Foreign university partnership and strategy will be successful in Mainland China's Higher Education context of 2030?*" the participant responses to the 5 themes described in **Table 6.8** will envision the research context of the changing qualities and strategies of successful type 3 and 4 Sino-Foreign Universities in 2030. These 5 themes were selected as they reflected the Sino-Foreign University context rather than the current or changing qualities of the partnerships. One theme selected from the open-ended questions focused on participant responses reflecting

on their current situation and their hopes for the future. Four other themes focused both on current pivotal events and on insights for Sino-Foreign universities in 2030. The five themes were all related to greater external traits of the context rather than specific qualities of Sino-Foreign University partnerships. The specifics as outlined above resulted in the decision to use these themes to answer the research question in **Table 6.7**.

Table 6.8

Organization of Open-Ended Questions, Themes, and Research Questions

Questionnaire and Themes	Research Question			
1. In the best possible world, what would you hope for Sino-Foreign University & College partnerships in 2030?	What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?			
Theme 1				
 What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030? 				
Themes 15, 16, 18, 20				

Theme 20 - Research Emphasis

For type 3 partnerships and single rank consensus, it is **most certain** that by 2030, Sino-Foreign Universities and the Chinese government will move towards a research emphasis to develop China's research strength. Research emphasis is most certain to occur in type 3 partnerships, considering in the spring of 2014 "the 18th congress meeting that was held 2 months ago as well as the more recent economic meetings held last weekend. From these meetings, education (with an emphasis on creativity) was ranked as their 4th current priority, as they know without educational reform, it is very difficult for China to become the number one nation in the world" (4). An example of the government's priority on research emphasis is through the "1,000 talents program" (13) that recruits the top researchers in the world to conduct further study in Mainland China. Further reasons for research emphasis to be most certain by 2030 is due to Mainland China's "continued urbanization as urban centers are where the creative and talented energy will have the greatest impact" (8). Because the greatest global urbanization trends are occurring in Mainland China, research will play a significant role in a further number of educational institutions and partnerships. For type 3 partnerships, research emphasis is **most important** for the success of Sino-Foreign universities in 2030, as "there is a growing awareness that the embedded model may be better for knowledge transfer to the host (state) university while the stand-alone Sino-Foreign Universities are not helping their own universities because their mission is to get a higher ranking by themselves as Chinese legal entities" (1). This suggests a further number of type 3 partnerships may be approved due to the advantages they bring to the process of knowledge transfer.

For type 4 partnerships, research emphasis is **likely** by 2030 as "*the government is seeking this to happen; they are providing us with more human resources and more technological equipment to improve and develop the local economy*" (**7**). The role that type 4 partnerships would have in research would be larger than type 3 partnerships in terms of community and societal impact, and would be more ambitious to achieve. For type 4 partnerships, research emphasis is **important** for successful Sino-Foreign Universities in 2030, as "*the local government and central government would like the city area to be leading in this field*" (**7**). For type 4 partnerships that currently conduct research, a further emphasis on research would require a change in the institutional design that currently focuses on a large number of undergraduate students.

These findings suggest that Sino-Foreign Universities will increase research initiatives in 2030 for type 4 as well as type 3 partnerships, which were previously focused on teaching initiatives. This changing quality complements Sharma's (2013) discussion of the deepening research initiatives between British and Chinese research think tanks. This change will be significant for the staffing and operations of type 3 partnerships. Research emphasis can only be realized with the support of institutions and, most importantly, government developments and support.

Theme 15 - Government Developments

Type 3 partnerships felt it was **most certain** that by 2030 government developments will either enhance operations or increase the difficulty of operations. Government developments are considered most certain, as in Shanghai, "*after the free trade zone, the government released a document on deepening Sino-Foreign University type partnerships*" (**11**). For type 3 partnerships and single rank consensus, government developments were considered **most important** to ensure the success of Sino-Foreign Universities in 2030, as "*a recent pivotal event is the imposition of the social fund which is designed to make companies pay into for their employees*" (**1**). Further government developments are necessary to understand and treat Sino-Foreign Universities as non-profit entities instead of for-profit multinational corporations. For type 3 partnerships, government developments are also most important for successful Sino-Foreign Universities in 2030, as there is "*a movement towards third party participants being unable to run programs or recruit students in Mainland China*" (**2**). This implies that only state universities and not foreign universities can operate partnerships or recruit

students in Mainland China, which, if this happens, will greatly change the foreign involvement in Sino-Foreign Universities.

For type 4 partnerships and single rank consensus, government developments are **likely** by 2030 because of the initial "enactment of the 2003 Higher Education legislation" (14) and the "high level of continued interest and involvement of Chinese University leaders in these developments through, e.g., the directive policy statements on these issues from the Chinese Ministry of Education" (12). The most recent government development is "the creation of the Sino-Foreign University sub-department at the Ministry of *Education*" (9), which suggests more commitment from the government to support Sino-Foreign Universities. For type 4 partnerships, government developments are tied as being most important and important for the success of Sino-Foreign Universities in 2030. These government developments will ultimately be influenced by the current President of the People's Republic of China, Xi Jing Ping, and it is expected that "in the next 10 years, he will have a huge impact on the development of the Sino-Foreign University cooperative agreements" (6). Considering that Xi Jing Ping was Party Secretary for Zhejiang Province between 2002 and 2007, the time period in which Nottingham Ningbo was developed, "There should be positive governmental developments under his leadership for Sino-Foreign Universities" (15).

These findings suggest that Sino-Foreign Universities will receive increased support from government development programs in 2030, which represents a change from the support, or lack thereof that Sino-Foreign Universities received a decade ago. The lack

of supporting government mechanisms for Sino-Foreign Universities resulted in an operational crisis and even the discontinuation of some programs (Damast, 2008; Willis, 2006b; Willis, 2008; Ennew & Yang, 2009; Li & Morgan, 2008). Positive government developments can most easily be assessed based on the quality and quantity of Sino-Foreign Universities in Mainland China.

Theme 18 - New Sino-Foreign Universities

For type 3 partnerships and single rank consensus, new Sino-Foreign Universities are **likely** and **important**. For type 3 partnerships, it is **likely** that the recent approval of several new Sino-Foreign University programs will signal a new stage of their institutional involvement and overall presence in Mainland China's Higher Education system. For type 3 partnerships, new Sino-Foreign Universities are **important** for the institutions' success in 2030 because "the establishments of the two UK campuses" (13) were "*important steps*" (13) since they were the first type 4 partnerships established in Mainland China. Until the establishment of the two UK campuses, type 3 partnerships were the most complex higher education partnership possible in Mainland China. The entrance of new Sino-Foreign universities under a new partnership type demonstrates the evolving nature of Sino-Foreign University partnerships, with the Sino-British Universities as examples, and keeping in mind that "the letter of the Sino-Foreign University Higher Education cooperative legislation (2003) to educate Chinese citizens. Now the emphasis is changing as the establishment of Duke and NYU is taking American driven wishes (campus internationalization to internationalize students from America) and converting that into taking Chinese students" (1). This suggests a new partnerships

type as well as the question of how the Sino-Foreign University Higher Education cooperative 2003 legislation will be applied to all existing and new partnerships by 2030. When planning successful Sino-Foreign Universities for 2030, it is also important to include "the technological innovations to establish the mass of online academic programming which the participant considers to be the single most important variable in this time and will become integrated in new Sino-Foreign University projects" (8). Integrating online academic programs would be a change to the context of Sino-Foreign Universities, as the Ministry of Education does not currently recognize foreign universities with distance programs or online universities in Mainland China.

For type 4 partnerships, new Sino-Foreign Universities were tied as being **most certain** and **likely** by 2030, considering "the freeing up of the Chinese Ministry of Education moratorium on new Sino Foreign partnerships" (**12**) through "[t]he establishment and approval of the 3 major American Sino-Foreign University ventures (Duke, NYU, Kean University) which have all occurred within the last 2 years" (**6**). The establishment of new Sino-Foreign Universities "will put the international cooperation into the next hot wave, which should be a repeat of 2003, which had a big boom following the 2003 legislation, but since then had closed the door" (**5**). As did type 3 partnerships and single rank consensus, type 4 partnerships also felt that new Sino-Foreign Universities are **important** for successful Sino-Foreign University partnerships in 2030, as the new partnerships such as "NYU will help the next generation in China and USA to work together and develop their respective countries and help each other out" (**7**). Similarly to type 3 partnerships, type 4 partnerships also viewed new Sino-Foreign Universities as

important to establish a new partnership type, considering the "potential in a Sino-Foreign University with another foreign university to set up a future Sino-Foreign university in China. This will change the whole definition of Sino-Foreign universities"
(9).

These findings suggest that Sino-Foreign Universities will increase in numbers, compared to the handful that existed a decade ago (Ennew & Yang, 2009; Huang, 2007). The recent increase in numbers represent Sino-American Universities with an internationalization agenda for their American students, instead of prioritizing the education of Chinese citizens as required in the initial 2003 foreign university decree on which Sino-Foreign Universities were based (Healey, 2008). Whether or not new Sino-Foreign Universities change the definition of Sino-Foreign Universities, the academic quality of higher education partnerships in Mainland China will also change.

Theme 16 - Academic Quality Developments

For type 3 partnerships it was **likely** that by 2030, the development of the academic quality of Mainland China's Higher Education programs would occur thanks to the standards set by Sino-Foreign Universities. Academic quality developments are likely, considering *"the development of the 2010 Chinese educational reform, which is designed to improve and enhance the Higher Education joint ventures"* (**3**). This is imperative as *"in China, the majority of universities are government-owned, so they have been government-oriented"* (**11**). The emphasis in Mainland China over the past decade has been to increase the quantity of higher education institutes. With the current emphasis to

increase quality developments of higher education institutes, the round 4 findings suggest that Sino-Foreign Universities will set the academic quality development standard. For type 3 partnerships, no consensus was achieved in terms of the importance of academic quality developments, despite this theme being adjacently ranked between **most important** and **important** for successful Sino-Foreign University partnerships in 2030. The lack of consensus in crediting a Sino-Foreign University to set academic quality development standards may be in part to the nature of a Type 3 partnership being a foreign university existing within a Chinese state universities' campus, and thus a less unified identity compared to Type 4 partnerships. The bias to assume the superiority of a Western higher education system as implied in the data may have an equal, or favorable competence towards the Sino partners by 2030.

Type 4 partnerships and single rank consensus also felt academic quality developments to be **likely** by 2030 because "the reason for Chinese cooperatives (Sino-Foreign Universities) to exist is believed by the participant to be an effort to develop Mainland China's Higher Education system" (5). Despite achieving consistent consensus in terms of likelihood of occurrence by single rank and partnership type, academic quality developments were adjacently ranked between **likely** and **unlikely** by 2030. The adjacent rank consensus suggests the skepticism of some participants that Sino-Foreign Universities will lead the academic quality developments for one of the most important nations in the world. For type 4 partnerships, academic quality developments led by Sino-Foreign Universities are **important** for successful Sino-Foreign University partnerships in 2030, considering that the past decade experienced "a huge increase in

the quantity of educational institutions available for students" (7). These findings suggest that Sino-Foreign universities will continue to drive the development of state universities via the standards they set for academic quality developments, as mentioned by Mu (2011).The findings do also reflect the bias that of a superior Western higher education system that may not exist by 2030 given the development of China's state universities as supported by the Ministry of Education and China's overall government. Further policy and regulation developments are imperative for quality initiatives in Sino-Foreign Universities to occur.

Theme 1 - Policy and Regulation Developments

For type 3 partnerships and single rank consensus, it is **most important** for policy developments to become clearer and less ambiguous, and to allow for more autonomy for Sino-Foreign University partners. For type 3 partnerships, policy and regulation developments are most important for successful Sino-Foreign University partnerships in 2030 because "*currently the policies are not sufficiently developed*" (**3**). It is most important to develop these policies, as the current context results in "*blending the 2003 Sino Foreign University law with the old Chinese law, which is enacting laws that were never intended and not compatible for Sino-Foreign University joint ventures*" (**1**). Participants from Type 3 partnerships also felt that "*More trust is needed so that a Sino-Foreign University can be run by a foreign leader*" (**1**).

For type 4 partnerships, policy and regulation developments were **likely** by 2030. Policy and regulation developments were tied as being **most important** and **important** for

successful Sino-Foreign University partnerships in 2030. Type 4 partnerships at minimum felt policy and regulation developments were important, as "*applying to the central government is very time-consuming and uses a lot of the universities' resources to deal and negotiate with the government to open new programs and recruit more students*" (9). Policy and regulation developments are needed as "*a roadmap as to where Sino-Foreign Universities are going and to clarify their purpose within Mainland China's Higher Education system*" (15).

These findings suggest that the Chinese government will increase their policy and regulations for type 4 partnerships. The change in increased policy and regulations reflects Huang's (2003) suggested need for Sino-Foreign University policy development. Type 3 partnerships, on the other hand, reached no consensus on the likelihood of further policy and regulation developments, which may be due to the government's preference for type 4 partnerships with full programs delivered in Mainland China (Willis, 2001a). As a result of the need for policy and regulation developments, they are considered constraints for Sino-Foreign Universities in 2013 and will continue to be constraints for type 4 partnerships in 2030.

What Sino-Foreign university partnership and strategy will be successful in Mainland China's Higher Education context of 2030?

By 2030, the participants foresee that Mainland China's higher education context will display the characteristics of **20-Research Emphasis**, **15-Government Developments**, **18-New Sino-Foreign Universities**, **16-Academic Quality Developments**, **1-Policy**

and Regulation Developments, as defined in the final themes of this dissertation. Type 3 and 4 partnerships showed some differences in their envisioned contexts for Mainland China's higher education system in 2030 as based on these themes.

As displayed in **Table 6.9, 20-Research Emphasis** and **15-Government Developments** are most certain to characterize Mainland China's higher education context for type 3 partnerships in 2030, while **18-New Sino-Foreign Universities**, **16-Academic Quality Developments** are likely to characterize Mainland China's higher education context for type 3 partnerships in 2030. Theme **1-Policy and Regulation Developments** was considered most important but achieved no consensus in terms of likelihood. All four of these themes also achieved a rank of either most important or important for successful Sino-Foreign Universities, except for theme **16-Academic Quality Developments**. For type 3 partnerships, successful Sino-Foreign Universities in 2030 must handle the constraints of these themes, recognize the qualities that will change, and embrace the strategy that will best support them, as mentioned above. The contextual details for type 4 partnerships are outlined below and include some personal reflections on the future envisioned here.

Table 6.9-Summary of the themes' rankings that represent Mainland China's Higher

Education context that successful Type 3 Sino-Foreign university partnerships and

Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030	15, 20				
Likely by 2030		18			16
Unlikely by 2030					
Almost Impossible by 2030					
No Consensus (likelihood)	1				

strategies will face in 2030.

As displayed in **Table 6.10** theme **18-New Sino-Foreign Universities** were tied as being most certain and likely to characterize Mainland China's higher education context for type 4 partnerships in 2030, and **20-Research Emphasis**, **15-Government**

Developments, 16-Academic Quality Developments, and 1-Policy and Regulation

Developments are likely to characterize Mainland China's higher education context for type 4 partnerships in 2030. All six of these themes also achieved a rank of either most important or important for successful Sino-Foreign Universities. The only exceptions were the rankings of theme **15-Government Developments** and **1-Policy and**

Regulation Developments, which were tied between most important and important. The expectations of Mainland China's Higher Education context, Sino-Foreign University qualities, and strategies to support those qualities in 2030 between type 3 and 4 partnerships should reflect the different experiences of each partnership type in Mainland China's higher education system over the past ten years, first documented by Willis (2001).

Table 6.10-Summary of the themes' rankings that represent Mainland China's Higher

Education context that successful Type 4 Sino-Foreign university partnerships and

Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030		18			
Likely by 2030	1, 15	1, 15, 16, 18, 20			
Unlikely by 2030					
Almost Impossible by 2030					
No Consensus (likelihood)					

strategies will face in 2030.

A Comparison to Willis's (2001) Type 3 and 4 Partnership Models

The narratives of successful Sino-Foreign University type 3 and type 4 partnerships have been envisioned as discussed above. The narratives formed from the participants' confirmed responses in round 2 and the ranked consensus of the themes in round 4 showed both similarities to and differences from the work of Willis (2001). Comparatively similar themes were themes that had similar qualities, constraints or contexts for Sino-Foreign Universities to those outlined by Willis, while comparatively different themes are themes with different or opposite qualities, constraints or contexts for Sino-Foreign Universities to those described by Willis. The comparison between these comparatively similar or different themes for both type 3 and type 4 partnerships can help us understand how knowledge about Sino-Foreign University partnerships has changed over time.

Type 3 Sino-Foreign University Partnerships according to Willis (2001)

This study found similarities between 3 themes outlined here and Willis's (2001) qualities of type 3 partnerships, as can be seen in **Table 6.11a**. The first theme, **31** -

Developing New Institutional Model(s), was found to be unlikely and unimportant for type 3 partnerships. Similarly, Willis (2001a) previously noted that type 3 partnerships operated from state universities or high schools, and were unable to expand their operations to type 4 partnerships, as referred to in his later work (Willis, 2001b). The second theme, **43 - Finances**, was found to be a continuing constraint towards 2030. Similarly, Willis (2001) previously noted that type 3 partnerships had no public funding support and their operations were financed by tuition streams, providing a constraint. The third theme, **18 - New Sino-Foreign Universities,** was found to be a future context for type 3 partnerships with increasing amounts of international students, particularly with the more recent Sino-American partnerships as examples. Similarly, type 3 partnerships set a goal to increase the number of international students in Mainland China (Willis, 2001a).

Table 6.11a

The Similarities Between Willis' (2001a) Type 3 Sino-Foreign University Partnerships and Those Found in This Study

Willis' (2001a) Qualities	Comparatively Similar Themes			
Operations at a state university or high school.	31 - Developing New Institutional Model(s)			
Tuition streams finance their entire operations with no public funding.	43 - Finances			
The goal of attracting foreign students to study in mainland China.	18 - New Sino-Foreign Universities			

This study found differences between 3 themes and Willis's (2001) qualities of type 3 partnerships, as seen in **Table 6.11b**. The first theme, **8 - Closer Partnership Cooperation**, was found to be a changing quality that would occur towards 2030. Previously, Willis (2001) noted the lack of commitment from type 3 partnerships. The second theme, **1 - Policy and Regulation Developments**, had no consensus for the context that type 3 partnerships would exist in 2030. The lack of consensus reflects the Ministry of Education's preference for type 4 partnerships, as well as prospective partners' decisions to select a type 3 instead of a type 4 partnership, due to the latter's simpler legal and operational frameworks (Willis, 2001a). The third theme, **20 - Research Development**, was found to be part of the context for type 3 partnerships in 2030. Alternatively, Willis (2001) noted that type 3 partnerships only offered single degrees, mainly in management, with little to no research output.

Table 6.11b

The Differences Between Willis' (2001a) Type 3 Sino-Foreign University Partnerships and Those Found in This Study

Willis' (2001a) Qualities	Comparatively Different Themes		
A single management degree offered partially in mainland China.	20 - Research Emphasis		
A lack of partnership commitment.	8 - Closer Partnership Cooperation		
A simpler legal and operational framework, and as such were desired by prospective partners.	1 - Policy and Regulation Developments		

Type 4 Sino-Foreign University partnerships, according to Willis (2001)

This study found similarities between 3 themes and Willis's (2001) qualities of type 4 partnerships, as shown in **Table 6.12**. The first theme, **8 - Closer Partnership**

Cooperation, is projected to improve towards 2030 and was similar to Willis' (2001) comment that type 4 partnerships generally boast large amounts of resources and partnership commitments. The second theme, **15 - Government Developments**, is predicted to improve towards 2030, particularly with the more recent introduction of a Sino-Foreign University sub-department in Beijing. Similarly, Willis (2001) noted that type 4 partnerships have received support from the Ministry of Education, which was reflected in this project's findings. The third theme, **18 - New Sino-Foreign Universities**, was found to be part of the context of type 4 partnerships, and despite the increasing number of foreign students as found in the new Sino-American Universities, the majority of the students would be state-enrolled. Such a student majority reflects Willis's (2001) findings.

Table 6.12

The Similarities Between Willis' (2001a) Type 4 Sino-Foreign University Partnerships and Those Found in This Study

Willis' (2001a) Qualities	Comparatively Similar Themes
Large amounts of resources and partnership commitment.	8 - Closer Partnership Cooperation
A majority enrollment of state university students from the local joint venture partner.	18 - New Sino-Foreign Universities
Support from the Ministry of Education.	15 - Government Developments

In addition, this study found differences between the theme of **20 - Research Emphasis** and Willis's (2001a) qualities of type 4 partnerships that were described as having multiple degrees offered completely in Mainland China with research initiatives. Research initiatives were included in Willis's (2001) qualities of type 4 partnerships, but

towards 2030, type 4 partnerships will have a complete focus and priority towards research to improve China's research and development agenda, as discussed in this study. The comparison demonstrates how the theory in the literature of Sino-Foreign Universities will change due to the work conducted in this project. The comparison that demonstrated changes from 2001 to the present also prompted a summary of the envisioned scenarios towards 2030 in terms of the themes' likelihood of occurrence for type 3 and type 4 partnerships. Other similarities and differences compared to Willis's other publications works that were outlined above were not related specifically to type 3 or 4 partnership models.

The narratives were summarized and formed scenarios with varying levels of detail to envision the future of Sino-Foreign University partnerships. There were 3 scenarios that provided some insight into the future of Type 4 partnerships yet were not deemed sufficient to fully envision their future. The first was an unconfirmed scenario that had the sole constraint of **44-Leadership** as most important. The second was a most certain scenario that had the constraints of **36-Policies and legislation** and **46-Culture** in a context of **18-New Sino-Foreign Universities** that were all important. The third was an unlikely scenario that had the changing qualities of **10-Improved Higher Education Access** as unimportant, and **31-Developing New Institutional Model (s)** as well as **4-Higher Education System Development** as important. The remaining scenarios allowed the researcher to understand the future of Type 3 and 4 partnerships as based on the narratives.

To summarize the narratives, scenarios based on each theme's likelihood of occurrence were created by using symbols. The legend in **Table 6.13a** is a summary of the symbols used to illustrate the futures for type 3 and 4 Sino-Foreign University partnerships. The colors that represent the theme's importance are listed in **Table 6.13b**. In forming the scenarios, the themes that achieved consensus in terms of importance, but not in terms of likelihood as current and non-continuing constraints, were considered. The themes of constraints that achieved consensus in terms of likelihood were classified as continuing constraints; similarly, changing qualities, strategies and context all required consensus in terms of likelihood to be considered more than current themes. Finally, themes that did not achieve consensus in terms of importance and likelihood were excluded from the scenarios.

Specifically the themes of **1-Policy and Regulation Developments**, **8-Closer Partnership Cooperation**, **15-Government Developments** and **52-Communication** had tied ranks for either type 3 or 4 partnerships and thus were duplicated in each envisioned model below. The timeline of each illustrated scenario starts at the top of each page as indicated by "**From Year 2015**" and continues to the bottom of each page as indicated by "**To Year 2030**". In completing the scenarios for type 3 and 4 partnerships the researcher began to prepare for the contributions of this dissertation that are outlined in Chapter 7.

Table 6.13a

Legend of Symbols for Future Scenarios 6.15 to 6.19

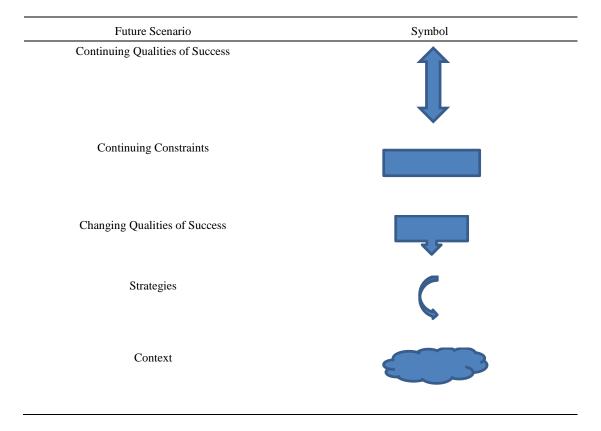


Table 6.13b

Legend of Colors for Future Scenarios 6.15 to 6.19

Color	Importance
Blue	Important
Red	Most Important
Orange	Not Confirmed (importance)
Green	Unimportant

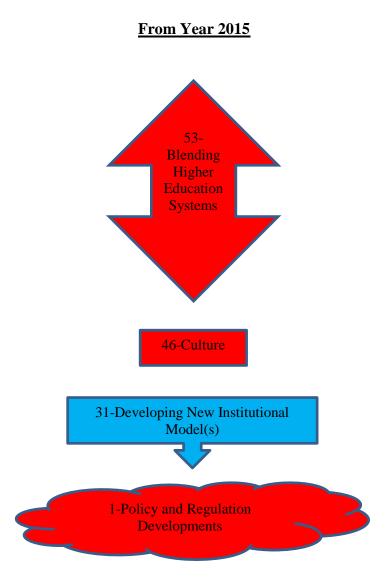
Table 6.14-A summary of the themes' for successful Type 3 Sino-Foreign university

partnerships towards 2030.

Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030	15, 20, 34, 36	8,40,63			10
Likely by 2030	45, 51, 69	5, 18, 44			16, 43
Unlikely by 2030					
Almost Impossible by 2030					
No Consensus (likelihood)	1, 46, 53	31			4, 52

Figure 6.15 An unconfirmed scenario in terms of likelihood for successful Type 3 Sino-

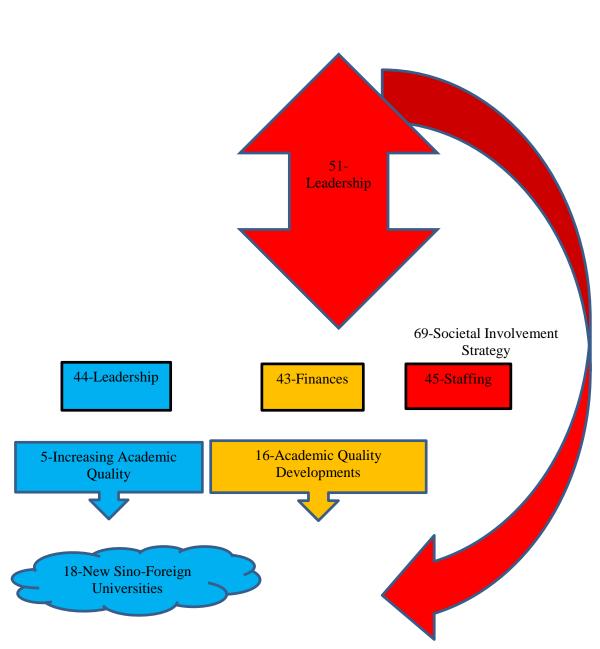
Foreign University partnerships towards 2030



To Year 2030

Figure 6.16 A likely scenario for successful Type 3 Sino-Foreign University partnerships

towards 2030

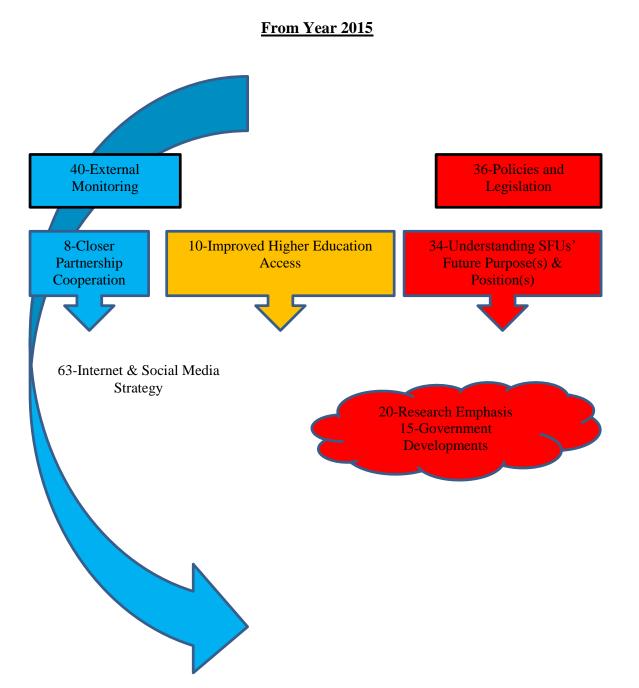


From Year 2015

To Year 2030

Figure 6.17 A most certain scenario for successful Type 3 Sino-Foreign University

partnerships towards 2030



To Year 2030

Table 6.18-Summary of the themes' for Type 4 Sino-Foreign university partnerships

towards 2030.

Likelihood Rank/Certainty Rank	Most Important	Important	Unimportant	Trivial	No Consensus (importance)
Most Certain by 2030		18,36,46			
Likely by 2030	1,8,15, 34, 51, 52, 63, 69	1,5,8,15, 16,18, 20, 43, 45, 52, 53			
Unlikely by 2030		4, 31	10		
Almost Impossible by 2030					
No Consensus (likelihood)	44				40

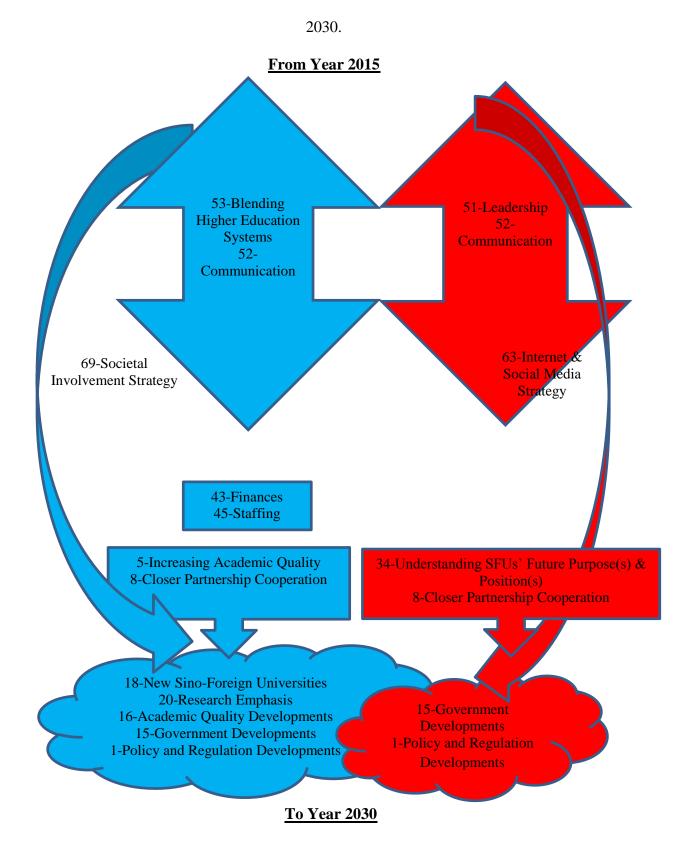


Figure 6.19 A likely scenario for Type 4 Sino-Foreign University partnerships towards

Preparation for Chapter 7 Contributions

The envisioned futures show similarities and differences in the constraints, changing qualities, and expected context as per in the envisioned futures of Type 3 and Type 4 partnerships. The narratives of the envisioned futures will provide a practical contribution to help guide partnerships to consider the themes that are important and likely to occur in 2030. The narratives as formed in Chapter 6 in combination with the quantitative analysis in Chapter 5 achieved theoretical contributions in this dissertation. The methodological steps as outlined in chapter 4 also provide methodological contributions in this dissertation. The next chapter discusses the specifics of the methodological, theoretical and practical contributions that have been achieved as well as trustworthiness of this study.

Chapter VII - Research Trustworthiness and Contributions

This dissertation was designed to envision various future partnership models for Sino-Foreign Universities in 2030, based on the wisdom and insight offered by the elite system participants involved. These future scenarios show similarities to, and differences from, the current models of Sino-Foreign university partnerships and the higher-education context of Mainland China. These findings have increased our knowledge of the methodological choices applicable to future Sino-Foreign University research, related to the context, culture, data collection, participant access and the epistemology of this study. This dissertation also contributes to the theoretical and practical understanding of current and future management of Sino-Foreign universities. The theoretical contributions arise from the similarities and differences identified in the findings of this project from those described in the literature. Practical contributions related to how those findings can be applied to further futures or foresight research, the preparation of a successful Sino-Foreign University program application, and strategic planning for current Sino-Foreign Universities. This chapter begins with a review of the trustworthiness, highlights these contributions and concludes with the limitations of this dissertation. The researcher's experience in completing this study in conjunction with his work in a Sino-Foreign university has also been a continued inspiration toward future research, and it is his hope that the contributions of this study will be equally inspiring for readers interested in Sino-Foreign university studies.

Trustworthiness

Delphi studies are evaluated on the basis of the perceived trustworthiness of their findings based on their credibility, dependability, conformability and transferability. The many methodological decisions that were made to increase the trustworthiness of this study are also outlined below.

Credibility

Some ways in which credibility was established in this study include the participants' offering personal email addresses, cell phone numbers, Skype accounts, and recommended articles, as well as the extensive time of approximately four to five hours spent with each participant that surpassed the reserved time per round (Krefting, 1991). Credibility was further enhanced via the use of supplementary methodology that included the use of a pilot round and an open-ended questionnaire in the first round, features that were lacking in the majority of dissertations during the time of Riger's (1986) research.

Several participants expanded on their responses from the round 1 questions during this time, which further enhanced the study's credibility (May, 1991). Credibility was also achieved by the recognition of similar participants' experiences in the recorded responses and theme summaries (Lincoln & Guba, 1985). Specifically, credibility was enhanced through vigorous iterations and feedback to and from the participants (Engles and Kennedy, 2007) and the application of additional methodology (Zolingen & Klaassen, 2003). The qualitative and quantitative information feedback surpassed the recommendations of the literature (Woudenberg, 1991). The study retained 13 of the 15 participants, a minimal yet acceptable number of participants (Delbecq, Van de Ven,

Gustafson, 1975), though a satisfying result when considering the time constraints of the elite set of participants (Ludwig, 1997).

Dependability

Dependability was achieved by ensuring an adequate sample of experts participating in this Delphi study (Cornick, 2006). Adequacy was deemed to have been achieved when considering that an adequate sample in a Delphi study is based on the resources available to the researcher as well as the question under investigation (Delbecq, Van de Ven, Gustafson, 1975; Fink, Kosecoff, Chassin, Brook, 1991; Hasson, Keeney, McKenna, 2000). In terms of the collected data, dependability was also achieved by making the effort to trace and explain any variations in the responses per round (Lincoln & Guba, 1985). As the number of participants can range from 10 to over 1,000 in a Delphi study, the participation of 15 senior managers from either type 3 and 4 Sino-Foreign Universities fit within the requirement (Reid, 1988). Additionally, the quality, rather than quantity, of the participants was prioritized in order to ensure accurate findings that reflect a consensus from expert rather than public opinion to establish the equivalent of generalizability (Woudenberg, 1991; Rowe, Wright, Bolger, 1991; Sackman, 1975; Williams & Webb, 1994; Yousuf, 2007), or applicability, which is a requirement to establish trustworthiness as per the literature (Krefting, 1991).

Conformability

Conformability was enhanced by the detailed records of the data collection in terms of participants' responses, amendments, and the theme summary amendments (Powell,

2003; Kennedy, 2004). Conformability was also enhanced by the detailed record of data analysis, as seen in Chapter 5, and demonstrates the multiple aspects of how the data was analyzed.

Second, deciding on an appropriate response rate for the themes, as outlined in Chapter 5, contributed to the study's conformability (Crisp, Pelletier, Duffield, Adams, Nagy, 1997; Efstathiou, Ameen, Coll, 2008). Third, the detailed record of the methodological decision to select the Delphi study as the model for this project, as outlined in Chapter 3, enhances its conformability (Suklmoski, Hartman, Krahn, 2007). The selection of the Delphi study proved appropriate, as demonstrated by the prolonged contact with the participants, as is desirable in a qualitative study (Lincoln & Guba, 1985). In addition, the low participant dropout rate, which is difficult to achieve in a Delphi study, demonstrated the participants' commitment and supported the appropriateness of the Delphi study (Zolingen & Klassen, 2003). The open-ended questions were amended and approved by the participants in the pilot round rather than through a panel of expert individuals as per the literature (Rayfield & Croom, 2010). This allowed the participants to form the data collection instrument and allowed the researcher to maintain a degree of neutrality in the data collection instrument that would be used.

Transferability

Transferability was enhanced by the presentation of sufficient detail in the findings to be transferred to another research endeavor (Lincoln & Guba, 1985; Powell, 2003; Kennedy, 2004). The final determining factor of this Delphi's transferability will be

whether other Sino-Foreign University researchers successfully apply this dissertation's findings to similar contexts (Guba, 1981). Finally, transferability was enhanced by the qualitative analysis that found a correlation between the participant's title, for example as VP of student affairs, and their responses, such as discussing student support mechanisms. Due to the confidentiality agreement of this dissertation, further details of the analysis could not be provided, to protect the anonymity of the participants. This project is, in the researcher's opinion, as trustworthy as any such research project can be, but the ultimate test of trustworthiness rests with the perceptions of the reader, and the use to which future researchers and practitioners put this study. The theoretical, methodological and practical contributions are detailed below to demonstrate further demonstrate the trustworthiness of this dissertation.

Theoretical Contributions

The theoretical contributions of this Delphi study were reviewed in Chapter 6 in terms of the themes' consensus and their differences from and similarities to the Sino-Foreign University literature. Most of the themes displayed either similarities or differences; yet, some themes showed both similarities and differences due to the differing consensus achieved by type 3 or type 4 Sino-Foreign University partnerships. The practice of comparing the findings to previous and recent publication is recommended by the literature (Hasson & Keeney, 2011) and helped establish transferability, which is one trait of establishing a study's trustworthiness (Krefting, 1991). The comparison revealed 5 themes that were similar to, and 3 themes that were different from, Willis's (2001) original model of type 3 and 4 partnerships, as seen in **Tables 6.11a, 6.11b**, and **6.12** in

Chapter 6. These similarities and differences as found helped establish trustworthiness in this dissertation and provide a stronger foundation for the theoretical contributions. The remaining 22 final themes that achieved consensus for type 3 or 4 partnerships were contributions to the literature and are illustrated in the scenarios from **Item 6.15** to **Item 6.19**. These themes demonstrate the current qualities, continuing constraints, changing qualities, strategies and aspects of the contexts that type 3 (embedded model) and type 4 (stand-alone model) partnerships should expect to face in the years leading up to 2030. The framework of the model scenarios provide a contribution to the futures literature that can be applied by other academics who are conducting Sino-Foreign University futures research.

Themes that contribute to Willis's (2001) Typology

The research questions were answered by reviewing the qualitative analysis of the final 22 themes that outlined the qualities, strategies and context for successful Sino-Foreign University partnerships in 2030. Specifically, the themes listed in **Table 7.1** are contributions to the knowledge of type 3 partnerships that Willis (2001a) established when Sino-Foreign Universities came into existence over a decade ago. As discovered in the qualitative analysis of Chapter 6, the themes in **Table 7.1** demonstrated neither comparatively similar, different or opposite qualities to Willis (2001a) type 3 partnership model. These themes have established a greater understanding of how Willis's (2001a) partnership types will change as 2030 approaches. The themes provide a more up to date understanding of Sino-Foreign Universities and suggests that both partnership types have a challenging yet rewarding future. The findings of current and future changes and

developments in type 3 partnerships since Willis (2001a) publication challenges his notion that partnership types once started, cannot evolve to a higher level of partnership type (Willis, 2001b). The findings imply a greater level of complexity when compared to Willis's (2001a) partnership types.

Table 7.1

Summary of the Themes for Type 3 Partnerships that Contribute to Willis's (2001)

Continuing Qualities	Continuing Constraints	Changing Qualities	Strategies	Context
51 - Leadership	45 - Staffing	5 - Increasing Academic Quality	69 - Societal Involvement Strategy	16 - Academic Quality Developments
-	44 - Leadership	34 - Understanding SFU's Future Purpose(s) and Position(s)	63 - Internet and Social Media Strategy	-
-	36 - Policies and Legislation	10 - Improved Higher Education Access	-	15 - Government Developments
-	40 - External Monitoring	-	-	-

Partnership Model

Additionally, the themes in **Table 7.2** contribute to the knowledge of type 4 partnerships that Willis (2001) established at the time Sino-Foreign universities began to appear. Similarly to the contributions of type 3 partnerships, the themes in **Table 7.2**, as discovered in the qualitative analysis outlined in Chapter 6, showed neither comparatively similar, different, nor opposite qualities to Willis' (2001a) type 4 partnership model. The themes listed in **Tables 7.1** and **7.2** have established a greater understanding of how Willis's (2001a) partnership types will change before and in 2030.

The themes build on the knowledge of Willis' (2001a) Type 4 partnerships that were the preferred partnership type by the Ministry of Education at the time of Willis's (2001a) publication. The findings demonstrate their continued development is not without challenges which questions the assumption that Type 4 partnerships will remain the preferred partnership type by the Ministry of Education in 2030. A number of themes and their specific findings will challenge the assumed preference of type 4 partnerships in the theoretical contributions below.

Table 7.2

Summary of the Themes for Type 4 Partnerships that Contribute to Willis's (2001) Partnership Model

Continuing Qualities	Continuing Constraints	Changing Qualities	Strategies	Context
53 -Blending Higher Education Systems	43 - Finances	5 - Increasing Academic Quality	69 - Societal Involvement Strategy	16 - Academic Quality Developments
52 - Communication	45 - Staffing	34 - Understanding SFU's Future Purpose(s) and Position(s)	63 - Internet and Social Media Strategy	1 - Policy and Regulation Developments
51 - Leadership	36 - Policies and Legislation	-	-	-
-	46 - Culture	-	-	-

Themes that are Important and have Unconfirmed Likeliness

The themes of Blending Higher Education Systems (**53**) and Culture (**46**) were undiscussed in Willis's (2001) partnership model: these themes achieved partnership consensus in terms of importance, yet their likelihood for type 3 partnerships is

unconfirmed. The difficulties in blending higher education systems were discussed in the literature (Willis, 2008; Elkin et al., 2008). A further investigation of the likelihood of occurrence of these themes in the complex and uncertain context of Sino-Foreign universities in Mainland China is imperative as they represent continuing qualities and constraints for type 3 partnerships. The inconclusive findings of themes 53 and 46 may reflect the dynamics of a type 3 partnership (embedded model). Regardless, the findings of these two themes importance raises the need to understand the factors that would improve their likeliness of occurrence in a future research endeavor. For type 4 partnerships, the theme of Leadership (44), similarly achieved partnership consensus in terms of importance, but its likelihood is unconfirmed and suggests a degree of uncertainty in the strength of their future leadership. It is of particular interest for discussion in future research projects especially considering the theme did not achieve adjacent consensus, yet had had equivalent adjacent rankings of "most certain" and "likely", as well as "likely" and "unlikely".

Themes that are Important and Unlikely

Themes Developing New Institutional Model (s) (**31**), Higher Education System Development (**4**) and Improved Higher Education Access (**10**) were associated with the changing qualities of type 4 partnerships. These themes, previously undiscussed in Willis's (2001) partnership model, achieved partnership consensus in terms of importance, but are unlikely to occur for type 4 partnerships. The findings confirm the unlikely future of these changing qualities occurring, and thus type 4 partnerships are advised to avoid preparatory measures related to these three themes based on the current

knowledge available. These findings also illustrate the importance in a Delphi study of confirming the themes that are unlikely to occur as well as those that are likely to occur in the future. Alternatively, the findings of these themes importance raises the need to understand the factors that would improve their likeliness of occurrence in a future research endeavor. Developing New Institutional Model (s) (31) is of particular interest for discussion in future research projects as it had equivalent adjacent rankings of "most certain" and "likely", as well as "likely" and "unlikely". The uncertainty of the theme's likeliness of occurrence is of interest as new models beyond Type 4 partnerships (standalone model) have not been formed in Mainland China's higher education context. If further institutional models are not developed it raises the question of whether type 4 partnerships will continue to be the preferred model of the Ministry of Education. Improved Higher Education Access (10) also deserves a further investigation through future research given the contrasts between type 3 partnerships who felt the theme was most certain and type 4 partnerships who felt it was unlikely. Understanding and addressing the causes of unlikeliness for Type 4 partnerships can allow them to review the overall value of this theme in their strategic planning.

Proposed Typology

This dissertation also established a theoretical contribution for a new transnational higher education typology that includes aspects of GATS, 4F Framework and Willis's 4 types. The new typology is specific for Sino-Foreign Universities and provide an up to date typology specifically for transnational higher education partnerships in Mainland China. The comparative elements of these typologies are annotated by an "X" and are found in

Table 7.3 and 7.4. Willis's (2001) typology was chosen for this dissertation as the most suitable because it does not include distance learning programs that are included in the typologies of the 4F Framework (Distance learning) and GATS (Mode 1 programme mobility). The literature reviewed found that foreign online degree programs were not recognized by the Ministry of Education as recent as last year's literature (Healey & Michael, 2015). In this dissertation, the theme of Internet & Social Media Strategy (63) was found to be most certain and important for type 3 partnerships and was likely and important for type 4 partnerships. The contribution of the internet and social media strategy which was previously unaccounted for in a Sino-Foreign University context, is a theoretical contribution that would considerably change the strategic direction of any current Sino-Foreign University. The contribution of further integrated internet and social media resource support through aspects of distance learning is described in the GATS and 4F Framework. Specifically, the 4F Framework defines distance learning to take place when "students study the university's award at distance, with learning materials supplied to the student via mail or internet." (Healey & Michael, 2015, p. 372) The GATS Mode 1 defines programme mobility as the process of "Universities supplying educational services across borders directly to students in their home countries, via distance learning." (Healey & Michael, 2015, p. 373).

The definitions as found in the literature do overlap with aspects of the participant's responses that formed the Internet & Social Media Strategy (**63**) theme and its theme summary. The ranking results suggest the increasing importance of integrating distance and online education in Sino-Foreign Universities and further aligns transnational higher

education programs in Mainland China to the GATS and 4F Framework typologies as per the literature (Healey & Michael, 2015). The finding also suggests a possible acceptance of foreign online education providers in mainland China. A potential change in degrees from foreign online education providers to be validated by the Ministry of Education would allow greater access to foreign Higher Education for Chinese nationals.

Table 7.3-A comparison of this dissertation's Type 3 and 4 findings to the 4F Framework

	Distance Learning	Franchise	Validation	International Branch College
Type 3	Х	Х	Х	
Type 4	Х			Х

Table 7.4-A comparison of this dissertation's Type 3 and 4 findings to the GATS

Framework

	Mode 1 Programme Mobility	Mode 2 Student Mobility	Mode 3 Institutional Mobility	Mode 4 Staff Mobility
Type 3	Х		Х	Х
Type 4	Х		Х	

The theoretical similarities to and differences from the literature provide bases for expanding Willis's (2001) partnership-type model towards 2030. The similarities and differences also offer a picture of how Sino-Foreign Universities, as institutes, have and will change and the comparison to the literature establishes trustworthiness in the Delphi study. Other contributions to the literature beyond Willis's (2001) model were also found, which further assisted in answering the research questions of this dissertation. The methodological and practical contributions of this study are of particular interest to those who either aspire to conduct a Delphi study in a Sino-Foreign university context or hope to see the application of these findings to Sino-Foreign universities. Prior to arriving at these contributions, the theoretical contributions of the four research questions asked here are discussed in detail below.

What are the qualities of a successful Sino-Foreign university partnership in 2013?

The research question "What are the qualities of a successful Sino-Foreign university *partnership in 2013?*" was answered by the nine themes derived from questions 4 a) and **b**): "What major constraints do you (have you) experience (d) inside/outside Sino-Foreign University & College partnerships?" and "How are the constraints handled?". These two questions were selected to answer the research question as they were the only open-ended questions that focused on the current reality of Sino-Foreign Universities. As based on the themes expressed within these questions, the current qualities of successful Sino-Foreign Universities were found to be leadership (51), communication (52) and blending higher education systems (53) in order to handle the constraints they currently face. These constraints include external factors such as policies and legislation (36) and external monitoring (40); and internal issues such as finances (43), leadership (44), staffing (45), and culture (46). It was interesting to see the constraint of Leadership (44) being raised, confirmed and actively discussed amongst the senior managers of Sino-Foreign Universities. The theme in, combination with Leadership (51) as a possible solution to handle constraints emphasizes the relevance of leadership as a whole for successful Sino-Foreign Universities. It was refreshing to see that Blending Higher Education Systems (52) has moved from being a constraint as per the literature, to a solution in handling the constraint as found in this dissertation (Willis, 2008; Elkin et al.,

2008). The change in the theme Blending Higher Education Systems (52) reflects a maturity in Sino-Foreign universities as institutes.

As the current qualities of successful Sino-Foreign Universities have been reviewed above, their changing qualities will be reviewed. Both type 3 and 4 Sino-Foreign University partnerships will need to refine and review the three methods for handling the various constraints for every respective institution. Type 3 and 4 Sino-Foreign University partnerships need to be aware of the themes that are currently viewed as constraints, in order to ensure increased operational efficiency with nothing overlooked. In addition, because the current constraint of finances did not achieve consensus in terms of importance for type 3 partnerships yet is likely in 2030. Type 4 partnerships found finances (43) to be likely and important. Type 3 partnerships should individually assess whether their institution faces financial constraints. The findings related to the theme of finances suggest type 3 partnerships (embedded model) as a preferred model for prospective foreign partnerships that have been intimidated by the finances needed for a type 4 partnerships (Willis, 2001a). The findings related to the theme of finances (43) raises the question whether type 3 partnerships could replace type 4 partnerships as the preferred model by the Ministry of Education.

What qualities of successful Sino-Foreign university partnerships will change towards 2030?

The research question of "What qualities of successful Sino-Foreign university partnerships will change towards 2030?" was answered by some themes derived from

questions 1 and 3: "In the best possible world what would you hope for Sino-Foreign University & College partnerships in 2030?" and "What major decisions with long term implications do the Sino-Foreign University and College partners and the Chinese government currently face?". These two questions were selected to answer the research question, as their associated participant responses were in the future tense, reflecting the participants' future hopes for successful Sino-Foreign Universities in 2030. As based on the themes within these questions, the changing qualities of successful Sino-Foreign Universities are: increasing academic quality (5), closer partnerships cooperation (8), improved higher education access (10), Developing New Institutional Model(s) (31), and Understanding Sino-Foreign Universities' purpose and position in 2030 (34). The changing quality of higher education developments was found to be unlikely, which reflects their inactive role in making broader policy changes for Mainland China's higher education system (4). Type 3 Sino-Foreign University partnerships will need to avoid efforts to improve global higher education access, as no consensus in terms of importance was achieved in improved higher education access (10).

Type 4 Sino-Foreign University partnerships, on the other hand, will need to increase academic quality and cooperate more closely with partnerships to ensure success towards 2030. The themes were expected to be present in type 3, rather than type 4 which is the preferred model as endorsed by the Ministry of Education. The finding that was a surprise and suggests the differences between type 3 (embedded model) and 4 partnerships (stand-alone model) will narrow towards 2030. Type 4 partnerships will need to avoid efforts to improve global higher education access, develop new

institutional model(s), or develop Mainland China's Higher Education System, as all three of these factors received a consensus of "unlikely". The findings suggest the need for further research to be conducted to understand what can increase their likeliness of occurrence, given their level importance.

What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

The research question "What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?" was answered by the 2 themes of question **5**, "If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University & College partnerships?". This question was selected because of its focus on the strategic decisions the participants would make, and in answering it, the participants elaborated in their responses beyond the present to the impact of their decisions in the future. As based on the themes within the question, the strategies that will best support the success of Sino-Foreign University partnerships in 2030 will be internet and social media strategy (**63**) and a societal involvement strategy (**69**); while globally improved higher education access (**10**) via Sino-Foreign universities was found in another research question to be most certain, with no consensus achieved for its importance.

As a result, type 3 and 4 Sino-Foreign University partnerships will need to develop their information technology to support their internet and social media strategies for local Chinese students. An internet and social media strategy (63) will need to consider

Mainland China's common internet restrictions when providing an environment of open academic discourse to their staff and students. A strong internet and social media strategy could drive the standards for open academic discourse in Mainland China's Higher Education system to minimize, and optimally eliminate, all academic censorship. The internet and social media strategy (**63**) also has the potential to also facilitate the access to resources from the home institute of either partner, thus reducing the financial strain of partnerships.

An internet and social media strategy raises questions regarding the perceived superiority and preference for a type 4 (stand-alone model) partnership with an independent brick and mortar campus (Willis, 2001a). Further integration of the internet and social media in Sino-Foreign Universities may help to provide a balance between finances and reputation for type 3 partnerships that have a franchised programs and type 4 partnerships that have an International Branch College (Healey & Michael, 2015). An Internet & Social Media Strategy (63) would also change the delivery methods, as partnerships have had varied reliance on flying faculty over the past decade (ibid). It could also change the financial commitment that has intimidated prospective foreign partners (Willis, 2001a) by facilitating the ability to access resources from the home campuses of both partner institutes. Ultimately, a greater integration of internet and social media higher education resources may narrow the differences of type 3 and 4 partnerships in terms of their access to resources and overall student and academic services. Partnerships will have to overcome the various censorship issues related to online data, websites and knowledge that are present in Mainland China.

Type 3 and 4 partnerships also need to understand their future purpose and position to help develop their societal involvement strategy (69). A societal involvement strategy (69) represents a new level of maturity that Sino-Foreign Universities are achieving as institutes in Mainland China. The strategy is knowledge that the environment has changed from Sino-Foreign University partnerships of the past (Willis, 2006b). The strategy should be caution to prospective foreign partners to reconsider any strategic motives they may have in terms of financial gains or for student enrollment numbers through the partnership (ibid). The strategy confirms that current foreign partnerships must have a long term approach while integrating into the local societies' various stakeholders.

What Sino-Foreign University partnership and strategy will be successful in Mainland China's Higher Education context of 2030?

The research question "What Sino-Foreign University partnership and strategy will be successful in Mainland China's Higher Education context of 2030?" was answered by the 5 themes deriving from questions 1 and 2: "In the best possible world what would you hope for Sino-Foreign University & College partnerships in 2030?" and "What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?". These themes were selected to answer this research question as they reflected the Sino-Foreign University context rather than their current or changing qualities of the partnerships. As based on question **1**, the context in which successful Sino-Foreign University partnerships and strategies will exist in 2030 will be constrained by policy and regulations (**1**). As based on question **2**, in 2030, successful Sino-Foreign

University partnerships and strategies will be influenced by government developments (15), academic quality developments (16), new Sino-Foreign Universities (18) and research initiatives (20). Our participants paint a picture of the Sino-Foreign Universities of 2030 existing in a very different context than today.

As a result, type 3 Sino-Foreign University partnerships will need to significantly increase their research output to meet their expectations for success in 2030. Research initiatives will change the focus of type 3 partnerships that have been led by teaching initiatives since they began over a decade ago. The change to move towards research initiatives suggests that although type 3 partnerships (embedded model) cannot move to a Type 4 partnership (stand-alone model) they can increase their complexity and sophistication to compete with type 4 partnerships (Willis, 2001b). They will also need to realize that policy and legislation, despite the developments foreseen in theme 1, will remain constraints as determined in theme 36.

Separately the future context that includes New Sino-Foreign Universities (18) for type 3 and 4 partnerships suggests there will be opportunities for prospective foreign partners to enter Mainland China's higher education system. The moratorium on Sino-Foreign University partnerships has ended and a new generation of partnerships has begun and new partnerships are expected to be established until 2030. The theme suggests that present and new Sino-Foreign University partnerships will exist in 2030 despite Blass and Woods (2012) statement that developing nations will not need transnational higher education programs in 15 years. Blass and Woods statement was due to their predictions

of the ongoing maturity and strength of China's Higher Education system. Regardless of the need for Sino-Foreign universities in a supporting role they will be present in 2030 based on the findings from this dissertation. Their future presence provides an ongoing discussion of Blass and Woods (2012) statement and suggests the reasons for their existence may change by 2030.

Current and changing qualities, strategies and context for 2030 presented some similar and changing aspects when compared to the literature, giving rise to the following illustration of the possible futures for successful Sino-Foreign universities. The futures envisioned in this discussion are organized according to the quantitative rankings of importance and likelihood, and the qualitative findings in terms of the themes established in Chapter 6. These themes were also compared to Willis's (2001) definitions of type 3 and 4 partnerships, which represented the models of the past. The result is an illustration of the qualities that currently ensure success, and the constraints to which they respond. The illustrations outline the likely, most certain, and uncertain futures of Sino-Foreign Universities in 2030, highlighting the changing qualities, constraints, strategies and contexts for type 3 and 4 partnerships, as well as the significant amount of work that type 3 and 4 partners must do to achieve success.

The chapter began with a discussion of the changing body of knowledge related to Sino-Foreign Universities, as evidenced by the theoretical contributions. The themes above have been examined in terms of their theoretical similarities to, and differences from, the literature. The theoretical similarities and differences to the literature were only possible

with a solid methodology as prepared by the researcher of this dissertation. The careful preparation by the researcher did result in the achievement of some methodological contributions. The methodological contributions will help current and prospective researchers achieve greater success when conducting a Delphi study or futures related research endeavor related to Sino-Foreign universities.

Methodological Contributions

<u>Context</u>

The history of academic research on management in China is relatively short. Over the last twenty or so years, academics have only begun to identify the challenges of conducting research in China (Patton, 1990; Ozturgut, 2007; Li & Sun, 2010). Methods research explores the challenges of language, culture, participant and data access, and the utilization of the researcher as a key data collection instrument (Guba & Lincoln, 1981; Janesick, 2001; Janesick, 2003; Patton, 2002; Piantanida & Garman, 1999; Shindler & Case, 1996), all of which are inherent in conducting research in developing countries such as Mainland China. The completion of this specific project in a previously unproven context in terms of the topic of transnational higher education and the use of the Delphi Study approach contributes to our understanding of the challenges of conducting research in the context of Mainland China. The reality of actually becoming involved in policy decisions in a communist nation is unrealistic, however, and this suggests that an alternative method is best for this project. The theme of Academic Quality Developments (16) suggests Sino-Foreign Universities will not be actively involved in policy decisions with the respective government departments. The result of

this continuing trend is that the Delphi method will continue to be a suitable methodology for Sino-Foreign University futures research. Alternatively the findings suggest a methodology that considers foresight as unsuitable for this context. A danger of using scenarios is that the results are not put into action through policy-making, which is a possible risk for projects such as this one (Ratcliffe, 2003).

Adapting futures research, using the Delphi Method, to the Chinese culture required skillful handling of key elements of methodology, such as culture, data collection, data analysis, participant access, and epistemology. Each of these contributions is discussed in detail below.

Culture

From the outset, it was recognized that a western researcher managing this Delphi study using a methodology unproven in Mainland China and with Sino-Foreign University research would require careful consideration and management of face, power distance, collectivism, and indirect communication. The methodological decisions taking culturally sensitive issues into consideration, as described in Chapter 4, facilitated four rounds of data collection from the multilingual and multicultural participant group. This Delphi study provides a starting point for a culturally sensitive approach for future studies related to Sino-Foreign Universities. The cultural issues of face, power distance, and indirect communication were taken into consideration when deciding the correct methodological steps. Specifically, these cultural issues were handled within each of the 7 applied methodological steps in this Delphi study. This approach to handling the

cultural elements allowed for successful data collection, with the researcher as the main data collection instrument, over a pilot and 4 rounds of data collection in this Delphi study. The approach can be confidently applied to other Sino-Foreign University Delphi studies.

Data Collection

Taking into account the Chinese context of this project, careful selection of certain aspects of the data collection approach was necessary. The methods documented in this study now stand as guidelines for successful data collection in Sino-Foreign University futures research. The first aspect was prioritizing the researcher as the main data collection instrument which is recommended to future Delphi studies related to Sino-Foreign universities. The success of this Sino-Foreign University futures research project was dependent on a researcher with multicultural sensitivities, insight, and a network of individuals to facilitate access to Sino-Foreign Universities. It is imperative for Sino-Foreign university futures studies that researchers have Chinese, Western, and Sino-Foreign university experience in order to collect the needed data and prevent a high participant drop-out rate that is common in the early rounds of a Delphi study (Zolingen & Klassen, 2003). The second aspect was to ensure the participants' endorsement of the other data collection instruments used. This endorsement was achieved by using an open-ended questionnaire pilot, derived from the futures literature, which created a neutral beginning for the questions that would be asked (Ratcliffe, 2002; Amara & Lipinski, 1983). The use of the pilot as a starting point, refined by the interaction and participation of the informants, created a culturally acceptable and shared understanding

of the nature and expectations of the study. Separately, the reduced consensus of using an open rather than closed ended first round questionnaire did not outweigh the benefits of having themes that were formed by the participants' responses (Loo, 2002). The amendment and approval of the questions gave the participants greater confidence in the data collection instrument that was used to collect a rich data set over 4 rounds; this enhanced the equivalent of the content and face validity (Rayfield & Croom, 2010), or credibility, a requirement to establish trustworthiness in a qualitative study. The success in collecting the data over 4 rounds while minimizing the participant drop-out rate proved that data collection from an elite, multi-cultural and lingual set of participants will not stifle the data collection process.

Another important aspect of the study was to allocate one round for confirming the participants' responses to the themes, and a following round for the participants' selection of the final themes, a methodology that was different from what has been done in previous Delphi studies (Habana, 1993). The decision to allocate the confirmation and selection of the final themes over two separate rounds allowed for greater accuracy and attention to the data collection process. As many of the themes received responses from only 2 or 3 participants, it became necessary to avoid the possibility of themes being simultaneously annulled in the amendment process and selected as final themes, as this would ultimately damage the data collection process. The more detailed approach to confirm the themes enhances the equivalents of construct validity, generalizability (Schmidt, 1997; Okoli & Palowski, 2004) and applicability, requirements to achieve trustworthiness in a Delphi study. Despite the extra work that it would require the

separation of the confirmation and the selection of final themes into two separate rounds is beneficial for individuals aspiring to conduct Sino-Foreign University Delphi studies. Extra diligence to ensure the proper methodological framework to aid both the researcher and the participants through the issues of language and cultural indirectness can never be underestimated in a multicultural study. The framework for collecting data through one pilot, two qualitative rounds, followed by two quantitative rounds, can be applied to future Sino-Foreign University Delphi studies.

Data Analysis

The data were analyzed from first a quantitative and then qualitative perspective. The dual analysis in the order conducted is essential for this Delphi study to fully utilize all quantitative and qualitative aspects of each theme in the event of a theme being anomalous or not achieving consensus. The use of both a quantitative and qualitative analysis allowed for a better understanding of the data collected, a narrative that reflected both the qualitative and quantitative aspects of the themes, a better vision of the future of Sino-Foreign universities, and more effective answers to the research questions asked in this project. Finally, the analytic framework for the future of Sino-Foreign Universities in 2030, shown in **Figure 3.2** in Chapter 3, was compared to the themes developed from the data collection. This comparison confirmed the richness of the data collected and the appropriateness of the selection of participants for this Delphi study. The combined application of the six sectors approach with Kemp's (2004) supply and demand enrollment forecasting model allowed the researcher to form the analytical framework to envision Sino-Foreign Universities in 2030 as per **Figure 2** in Chapter 3. The analytical

framework contributed a retrospective avenue to the difficult and unresolved process of confirming the participants as experts (Hasson & Keeney, 2011) by acting as a stakeholder analysis tool, to ensure a balanced spread of participants participated in the Delphi study (Stewart & Green, 2004). **Figure 2** also acted as a methodological tool to assess whether a correct chronological framework was established that transitioned the scenarios from the current literature as per the six sectors approach to the future as per the insight of the elite participants.

Separately, a slightly greater number of combined themes that achieved consensus from type 3 and 4 partnerships was found, compared to themes that achieved consensus from the individual ranks of the participants; this finding supported Parenté et al.'s (1984) claim that, apart from the most elite experts, panels provide the greatest predictive accuracy. Thus, Parenté et al.'s claim of predictive accuracy was interpreted as reflecting a greater consensus. The framework for grouping participants based on Willis's (2001a) type 3 and 4 partnerships can be used for future Delphi research and can build on Parenté et al.'s (1984) claim.

The analysis of the themes with summary amendments did not produce strong conclusions regarding Gordon's (1994) cautions of possible changes in participants' answers, due to changes in the wording of themes or their summaries. No strong evidence was found indicating a decrease in consensus for themes that achieved consensus in at least one round and received summary amendments, nor whether any themes had been abandoned due to summary amendments. The finding suggests future

researcher's to be prudent but not dismiss or fear any requests for amendments to the participant's responses.

The findings that most themes had adjacent consensus between the rank of "most important" and "important", or between the rank of "most certain" and "likely", parallels Worcester and Burns' (1975) assertion that a Likert scale without a midpoint has more positive findings than one with a midpoint. There was also a greater rate of response from participants who were interviewed face-to-face than from those who were interviewed by phone or email. This result suggests that future Delphi studies with the participation of the senior managers of Sino-Foreign Universities should conduct the majority of the interviews face-to-face, in order to ensure a greater number of responses and a rich collection of data. The suggestion of a preferred approach to have a face to face data collection established a preferred methodological approach adds credibility as being a preferred interview technique, and has enhanced the trustworthiness of this Delphi study (Krefting, 1991). The preferred approach also adds richness in terms of the collected data's quantity and detail and establishes transferability, a requirement of trustworthiness in a Delphi study (Krefting, 1991). The choice of face-to-face interviews representing 57% (8 of 14) of the participants should be a benchmark on which to improve for future studies and is a methodological contribution to enhance the trustworthiness of a Sino-Foreign University Delphi study.

Participant Access and Language

The methodological absence of the Delphi study in Sino-Foreign University research was assumed to be a product of the novelty of the niche market and the difficulty of accessing senior managers at Sino-Foreign Universities. However, the senior managers, the majority of whom were unknown to the researcher of this dissertation, did respond positively to this project, proving that their cooperation could be accessed and reflecting the importance they placed on the study. Despite the participation of elite participants from Sino-Foreign universities, there was no participants from the Ministry of Education participating in this Delphi study. The absence of participants from the Ministry of Education reflects Higher Education System Developments (4) that there will continue to be a distance between Sino-Foreign Universities and their government counterparts. The participation of the senior managers in 4 rounds of data collection suggests the feasibility of further Sino-Foreign University futures research and demonstrates that Sino-Foreign University research can be conducted in English. Interviewing the participants in English did not seem to inhibit any of the senior managers' participation, as only one participant required an interpreter for the initial round and subsequently used English once he was comfortable with the researcher of this dissertation and with the Delphi method. The low reselection rate of the participant who used a translator was similar to other participants whose native language was English. These findings paralleled Schmidt et al.'s (2001) suggestion that translations may limit, but do not necessarily hinder, the findings and contributions of a research project. The finding suggests that prospective researchers do not need Mandarin language skills or translation assistance to successfully conduct Sino-Foreign University research. Although all the participants were comfortable using English, the essence of their responses was important for the success

of the project. This prompted the use of an interpretivist paradigm with the initial openended data collection in addition to the positivist paradigm typically used in calculating the consensus and statistical analysis of the data. The ease to use both positivist and interpretivist paradigms as per other Delphi study research was a benchmark for future research as found in this dissertation.

Epistemology

In a classical Delphi study, qualitative elements require an interpretivist paradigm and quantitative elements require a positive paradigm. The outcomes of this aspect of the study were uncertain, considering the context and the participants. Interviewing the participants required an interpretive ontology in the initial rounds and a positive ontology in the later rounds in which consensus was analyzed. The adoption of interpretivist questioning was deemed successful when considering the high confirmation rate of the participant's responses within the themes created for the project. The high confirmation rate supports an interpretivist approach involving an instinctive construction of the themes based on an understandings of the participant's responses, interaction with the participants, and the participant's subsequent agreement of the placement of their responses within the themes and their draft summary. The framework to use an interpretivist ontology for the pilot round and the first 2 rounds of qualitative data collection followed by the use of a positivist ontology for the last 2 rounds of quantitative data collection is a methodological contribution for future research. The subsequent use of a positivist paradigm to rank the themes was judged a success when considering the high level of consensus achieved in terms of importance and likelihood. The successful

adoption of both interpretivist and positivist approaches assisted this Delphi study in contributing to knowledge of higher education. The methodological contributions as outlined above allowed for a successful commencement and completion of this Delphi study and will, hopefully, help others to undertake this kind of research in the future. The findings of this project also have practical contributions for the stakeholders of Sino-Foreign universities.

Practical Contributions

Foundation for Further Futures or Foresight Research

A Delphi study's findings can be debated, but not necessarily concluded (McKenna, 1994; Kennedy, 2004). Therefore, this dissertation provides a foundation for further futures or foresight research, in order to refine these findings and better understand Sino-Foreign University partnerships (Zolingen & Klaassen, 2003; Van Dijk, 1990; Engles & Kennedy, 2007; Skulmoski, Hartman, & Krahn, 2007; Mitchell, 1991; Nambisan, Agarwal, & Tanniru, 1999; Wynekoop & Walz, 2000; Keil, Tiwana, & Bush, 2002). This is a unique trait of Delphi studies, whose goal is to develop further questions rather than specific answers or conclusions in the topic under investigation. In turn, the qualitative research properties of a Delphi study allow its findings to generate rather than test a hypothesis (Sandelowski, 1986).

The application of this dissertation's findings in a scenario analysis study can develop the themes that achieved consensus as important yet unlikely (Niederman, Brancheau, & Weherbe, 1991). The 6 themes lacking consensus for at least one of the aspects of

consensus analyzed, that included single rank, type 3, and type 4 partnerships, are in **Table 7.5**. Themes 4, 31, 16 and 44 achieved consensus as being important or most important for either Type 3 or 4 partnerships yet achieved consensus of being unlikely or did not achieve consensus in terms of likelihood of occurrence. The findings of these themes importance raises the need to understand the factors that would improve their likeliness of occurrence in a future research endeavor. Theme 10 and 43 both lacked consensus in terms of their importance yet achieved consensus in terms of likelihood of occurrence for type 3 partnerships. Alternatively, theme 10 achieved consensus as unimportant and unlikely for type 4 partnerships. Exploring theme 10 that had the greatest contrasts of findings per partnership type consensus would provide a deeper understanding of Sino-Foreign university partnerships. Separately, none of the themes that were exclusively selected by the participants from either type 3 or type 4 partnerships became final themes in round 4. This pattern of findings could be further explored in a future research endeavor to understand and examine the failure of exclusively selected themes by participants of a specific partnership type to become final themes in this Delphi study. Given that an equal number of participants from type 3 and 4 partnerships participated in round 3 that had a retention requirement of 4/14, the themes exclusively formed by each partnership type had an equal chance of becoming final round themes. The finding of having only final themes that were formed by participants of both partnership types suggests a greater amount of similarities, than differences, will be present between type 3 and 4 partnerships in the future. The finding also raises the methodological question as to whether participants representing both partnership types are preferred or needed in Sino-Foreign University Delphi research.

Table 7.5

Theme	Theme Summary
4 - Higher Education System Development	Sino-Foreign Universities will help lead higher education system developments in Mainland China.
10 - Improved Higher Education Access	Globally, more students will have access to higher education through Sino-Foreign Universities and/or social media platforms, which will increase institutional competition levels.
16 - Academic Quality Developments	Developing the academic quality of Mainland China's higher education programs through standards set by Sino-Foreign Universities.
31 - Developing New Institutional Model(s)	The decision to develop new institutional models (tiers/pathways/partnership requirement/sponsoring) for Sino-Foreign University partnerships.
43-Finances	A major constraint is the finances, costing, fees and their respective objectives within Sino-Foreign University programs.
44 - Leadership	A major constraint is the lack of experienced, strong and committed leadership within Sino-Foreign Universities to manage the contextual challenges.

Themes that lacked consensus from one aspect analyzed

Insight for a Successful Sino-Foreign University program application

The second practical contribution of this Delphi study is the insight related to the Sino-Foreign university application process to the Ministry of Education. The narratives that formed the theme of communication (**52**) included suggestions of achieving a successful application as based on the participant's experience. Specifically, the narratives suggested that the uniqueness of the program under consideration, as compared to state programs, must be emphasized to reduce the chance of being rejected by the Ministry of Education. Examples of a program's uniqueness include integration with job creation and social development, as well as the various resources, such as laboratories, that have been completed prior to the application. Although the suggestions for a successful application were indirect findings through the ranking of the themes, the narratives as outlined above are relevant given the large number of suspended or rejected program

applications. The importance of communication in the program's applications will, hopefully be applied by prospective foreign partners when preparing their respective applications, and achieve a more efficient review of the applications by the Ministry of Education and result a greater proportion of successfully approved program bids.

Strategic Knowledge for Existing Sino-Foreign Universities

The third practical contribution of this Delphi study is the advice, garnered from the findings of this project, to Sino-Foreign universities to develop societal involvement strategies and/or internet and social media strategies to ensure success in 2030. These results could be applied in combination with the Ministry of Education's 2020 educational agenda by prospective foreign institutions planning to enter Mainland China, yet without the involvement of Mainland China's government bodies as found in Europe's higher education planning (Elena-Perez et al., 2011). In addition, the comparison could be useful for the planning of foreign institutions who are considering entering or expanding their institutional presence in Mainland China. After the planning is complete, foreign universities could apply an internet and social media strategy or a societal involvement strategy as suggested by the findings of this dissertation.

These strategies can be used within planning exercises to assist existing type 3 and 4 partnerships, as has been done with Sino-British College (Peterson, 1982). Considering the foreign partners previous focus on student tuition and numbers, the present internet censoring in Mainland China as well as the unrecognized status of online foreign degrees, these strategies are considered to change the strategic direction of type 3 and 4

partnerships. These strategies are also useful to Sino-British College's nine UK partner universities and their Chinese partner university, The University in Shanghai for Sciences and Technology (Appendix A). It will be encouraging to see these strategies implemented to achieve successful Sino-Foreign Universities. Despite the contributions addressed above, all research has limitations that will be outlined below.

Research limitations

All research has limitations that must be taken into account in assessing its contributions. Here, the key limitations that should be considered are noted.

Consensus

The achievement of consensus had several limitations, one of which was the reduction in consensus for some themes in round 3. All but one theme that had achieved consensus up to round 3 in at least one round became final themes in round 4; theme 26 was the only exception. The second limitation related to consensus was the uneven number of participants per partnership type in round 4, due to participant 5 dropping out after round 3. This left the necessity for 3 participants from type 4 partnerships and 4 participants from type 3 partnerships to achieve consensus, in order to comply with Okoli and Palowski's (2004) consensus requirement. The third limitation was also related to the imbalance in the number of participants per institution within type 3 and 4 partnerships. This was attributed in the analysis as a possible reason for type 3 partnerships having greater consensus with some themes due to 4 of the participants representing anonymous institution 1, the largest number of participants from a single institution. The fourth

limitation was related to the interpretations made when adapting forms of analysis that required 2 parallel rounds with an identical data collection instrument. As this Delphi study involved various tasks and data collection instruments over the four rounds, assumptions needed to be made when comparing the consensus of this dissertation to studies with parallel rounds and identical data collection instruments. The multilingual and indirect nature of communication resulted in the researcher to rely on themselves as the primary tool for data collection and analysis, and did not rely on coding software such as NVivo as done in the literature (Healey & Michael, 2015).

Data Collection Time Requirements

There were three main limitations of this research project with respect to data collection. The first limitation was the challenge in minimizing the time between rounds in order to increase Delphi quality and accuracy when faced with the work schedules of the participants (Waldron, 1971; Woudenberg, 1991). A second limitation was the inclusion of all accepted participants in the pilot and subsequent rounds, which may have exacerbated participant fatigue and increased dropout rates. The decision made in this project differs from the literature, which suggests that a pilot round is optimal when a portion of a large number of expert participants participate in the subsequent rounds in order to reduce participant dropout rates (Zolingen & Klassen, 2003). Given the scarcity of expert participants in this field, the full participation of all available expert participants in the pilot was necessary in order to amend the questions based on their insight. The third limitation was the differing number of responses from participants based on their selected interview medium. A face-to-face interview boasted the greatest amount of

participant responses, with 8 participants choosing this method. Further studies should, therefore, obtain the participation of all of their participants, if possible, in face-to-face interviews to ensure the maximum amount of responses and richest set of data; however, as in this study, this ideal approach may not always be possible due to geographical or time constraints.

Theme Summary

Another limitation of the study was the multiple, and at times opposing, aspects of the themes as described in the theme summaries. The varying aspects of the theme summaries were included in order to represent the participant's responses within the overall themes, which were confirmed by the participants. All participant responses were placed in one of the 70 themes to create a richer and more representative set of themes from the interviews. A disadvantage of using all the participant responses in the themes, however, was the rather broad description of theme summaries from which the participants needed to select and rank in the final rounds of the data collection. This specifically occurred in two of the themes considered: Improved Higher Education Access (10), when ranking whether higher education access would be aided by Sino-Foreign universities or social media platforms; and Government Developments (15), when ranking whether those developments would enhance operations or create difficulties. The limitations of these themes were managed in the case of theme Government Developments (15) by referring the participants to the participant responses; in this case, only one participant's response raised the difficulty in operations. The majority of the responses reflected the aspect of enhancing Sino-Foreign University operations from participants and as such, was the essence of the theme's content. This

limitation may also be why the theme of Improved Higher Education Access (10) did not achieve any single rank, adjacent or type 3 or 4 consensus in terms of importance. Improved Higher Education Access (10) was the only final theme summary that included an "*and/or*" possibility, and when combined with the lack of consensus, this suggests a need for further accuracy when writing theme summaries in the future.

Establishing Trustworthiness

A final limitation of this project is the increasing difficulty of assessing the trustworthiness of a Delphi study after the initial open round of data collection (Hasson & Keeney, 2011; Crisp et al., 1997; Efstathiou et al., 2008). This is due in part to the considerable amount of record-keeping and methodological justifications required in the open-ended phase of a Delphi study in order to achieve conformability, one requirement for trustworthiness. The following rounds that required merely the selection or ranking of the confirmed themes from the participants had relatively little guidance from the literature reviewed as how to establish conformability. Even so, the participants' comments and preferences were noted, and a thorough feedback system allowing the participants to make any adjustments to their selections and ranks was provided throughout the final rounds. These extra actions taken are intended to fill this gap in the literature and to enhance trustworthiness after the opening first round.

Despite the above-noted limitations, this Delphi study was completed with 13 participants who have busy work schedules. The methodological, theoretical, and practical contributions achieved in this Delphi study also make it a relevant and

important piece of academic research. This study presents a substantial investigation conducted over a period of three years. It is my hope that this project will provide insight into successful Sino-Foreign university partnerships over the next 15 years.

References

- Anonymous. (2007, April 7). Soaring Student Fees: Pain without Gain. *The Guardian*. Retrieved April 7, 2011, from <u>http://www.guardian.co.uk/commentisfree/2011/apr/07/soaring-student-fees-editorial</u>
- Anonymous. (2007, Sept 11). UK & US universities in China, Ethiopia & Singapore. Global Higher Ed. Retrieved April 5, 2011, from <u>http://globalhighered.wordpress.com/2007/09/21/uk-university-ventures-in-china-and-singapore/</u>
- Anonymous. (2012, March 7). Further education colleges take lion's share of new student places. Retrieved June 26, 2012, from

http://www.guardian.co.uk/news/datablog/2012/mar/07/further-education-student-places

- Anonymous. (2012, June 10). Association of Universities and Colleges of Canada: About us webpage. Retrieved June 10, 2012, from http://www.aucc.ca/about-us/
- Anonymous. (2013, May). Review of UK transnational education in China 2012.

Retrieved June 5, 2013, from

http://www.qaa.ac.uk/en/Publications/Documents/TNE-China-2012-case-studies.pdf

Anonymous (2015, May 22). Beijing plans \$180 billion in upgrades for China's high-speed networks. Retrieved July 5, 2015, from <u>http://www.chinaeconomicreview.com/beijing-plans-180-billion-upgrades-chinas-high-speed-networks</u>

Abbott, A. (1998). The causal devolution. Sociological Methods and Research, 27 (2), 148–181.

Adler, M., & Ziglio, E. (Eds.). (1996). *Gazing into the oracle: the Delphi method and its application to social policy and public health*. Jessica Kingsley Publishers. Al-Rodhan, N.R.F., & Stoudmann, G. (2006). Geneva Center for Security Policy: Program on the geopolitical implications of globalization and transnational security. *Definitions of* globalization: A comprehensive overview and a proposed definition. Retrieved December 24th 2012, from

http://211.167.103.141:83/1Q2W3E4R5T6Y7U8I9O0P1Z2X3C4V5B/www.sustainableh istory.com/articles/definitions-of-globalization.pdf

- Altschuld, J. W. (1993). Evaluation methods: Principles of needs assessment II. Delphi technique lecture, Department of educational services and research. The Ohio State University.
- Amara, R., & Lipinski, A. J. (1983). Business Planning for an Uncertain Future: Scenarios and Strategies (Vol. 228). New York: Pergamon Press.
- Armstrong, L. (2007). Competing in the Global Higher Education Marketplace: Outsourcing, Twinning, and Franchising. *New Directions for Higher Education*, 140, 131-138.
- Askin, R.G. (1982). Multicollinearity in regression: Review and examples. *Journal of Forecasting*, 1, 281-292.
- Ayoubi, R.M., & Al-Habaibeh, A. (2006). An investigation into international business collaboration in higher education organizations. *International Journal of Education Management*, 20 (5), 380-396.
- Baldwin, G., & James, R. (2000). The market in Australian higher education and the concept of the student as informed customer. *Journal of Higher Education Policy and Management*,22, 139-148.

- Barth, M., Godemann, J., Rieckmann, M., & Stoltenberg, U. (2007). Developing key competencies for sustainable development in higher education. *International Journal of Sustainability in Higher Education*, 8 (4), 416-430.
- Becker, R. F. J. (2009). *International branch campuses*. London: The Observatory on Borderless Higher Education.
- Biggs, J.B., & Watkins, D.A. (1996). The Chinese learner in retrospect. In D. Watkins & J.B.
 Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences*(pp. 269-285). Hong Kong: Comparative Education and Research Centre and Australian
 Council for Educational Research Ltd.
- Blass, E. (2003). The Future university: towards a normative model from an emerging provision of higher education in Britain. *Futures Research Quarterly*, 19 (4), 63–77.
- Blass, E., Jasman, A., & Shelley, S. (2012). Postgraduate research students: You are the future of the academy. *Futures*, 44, 166-173.
- Blass, E., & Woods, P. (2012). Futures of university learning. Futures, 44, 117-118.
- Bodycott, P. (2009). Choosing a higher education study abroad destination: What mainland Chinese parents and students rate as important. *Journal of Research in International Education*, 8, 349-373.
- Bohm, A., Davis, D., Meares, D., & Pearce, D. (2002). Global student mobility 2025: Forecasts of the global demand for international higher education. Canberra, Australia: IDP Education. Retrieved December 15, 2011, from

http://www.idp.com/16aiecpapers/program/thursday/marketing2/Bohm_2025Media_p.pd f Bond S., & Bond J. (1982). A Delphi study of clinical nursing research priorities. *Journal of Advanced Nursing* 7, 565–575.

Bowles, N. (1999). The Delphi technique. Nursing Standard, 13 (45), 32-36.

Boxal, M., & Lambert, P. (2009). Executive Summary of Future HE Workforce, HEFCE, Bristol.

- Branagh, S., & Ratcliffe, J. (2002). Dublin city foresight: An analysis of the future of Dublin. Futures Academy Reports.
- Brew, F.P., & Cairns, D.R. (2004). Styles of managing interpersonal workplace conflict in relation to status and face concern: A study with Anglos and Chinese. *The International Journal of Conflict Management*, 15 (1), 27-56.
- Brink, P. J., & Wood, M. J. (1997). Advanced design in nursing research. Sage Publications.
- British Council. (2004). Vision 2020: Forecasting international student mobility (a UK perspective). Universities UK: British Council and IDP Education Australia.
- Buck, T., Filatotchev, I., Nolan, P., & Wright, P. (2000). Different paths to economic reform in Russia and China: causes and consequences. *Journal of World Business*, 35 (4), 379-400.
- Burayadi, M. (1993). Dualism and universalism: Competing paradigms in planning education? Journal of Planning Education and Research, 12, 223-229.
- Butterworth T., & Bishop V. (1995). Identifying the characteristics of optimum practice: findings from a survey of practice experts in nursing, midwifery and health visiting. *Journal of Advanced Nursing*, 22, 24–32.
- Calderon, A. (2012). Massification continues to transform higher education. *University World News*, (237), Retrieved September 4th 2012, from:

http://www.universityworldnews.com/article.php?story=20120831155341147

- Chaffin, W W., & Talley, W. K. (1980). Individual stability in Delphi studies. *Technological Forecasting and Social Change, 16,* 67-73.
- Chen, R.T.H., Bennett, S., & Maton, K. (2008). The adaptation of Chinese international students to online flexible learning: two case studies. *Distance Education*, 29 (3), 307-323.
- Chermack, J. (2006) Assessing the quality of scenarios in scenario planning. *Futures Research Quarterly*, 22 (4), 23-35.

China business forecast report. (2008) 4th Quarter, 27-36.

China business forecast report. (2010) 1st Quarter, 51-58.

China business forecast report. (2010) 2nd Quarter, 31-32.

Chinese-foreign cooperation in running schools. (2012 July 7th). Retrieved on September 1,

2012, from http://www.crs.jsj.edu.cn/index.php/default/index/sort/1006

Chinese foreign cooperation in running schools, SBC's approval website. (2012 July 7th). Retrieved on September 1, 2012, from

http://www.crs.jsj.edu.cn/index.php/default/approval/detail/110

- Clayton, M.J. (1997). Delphi: A technique to harness expert opinion for critical decision-making tasks in education. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 17, 373–387.
- Coffield, F. & Williamson, W. (1997). *Repositioning higher education*. Buckingham: Oxford University Press.
- Cohn, S. (1991). Paradigm debates in nuclear cost forecasting. *Technological Forecasting and Social Change*, 40 (2), 103-130.

- Cornick, P. (2006). Nitric oxide education survey: Use of a Delphi survey to produce guidelines for training neonatal nurses to work with inhaled nitric oxide. *Journal of Neonatal Nursing*, *12* (2), 62–68.
- Council of Europe. (2002). *Code of Good Practice in the Provision of Transnational Education*, Strasbourg: Council of Europe. Retrieved January 5, 2015, from <u>http://www.coe.int/t/dg4/highereducation/recognition/Code%20of%20good%20practice_EN.asp</u>
- Crisp, J., Pelletier, D., Duffield, C., Adams, A., & Nagy, S. (1997). The Delphi method? *Nursing Research*, 46 (2), 116–118.
- Dajani, J., Sincoff, M., & Talley, W. (1979). Stability and agreement criteria for the termination of Delphi studies. *Technological forecasting and social change*, 13 (1), 83-90.
- Dalkey, N. C. (1969). The *Delphi method: An experimental study of group opinion*. Santa Monica, CA: The Rand Corporation.
- Damast, A. (2008, May 15). Why Western B-schools are leaving? *Businessweek*. Retrieved December 10th 2008, from

http://www.businessweek.com/magazine/content/08_21/b4085056706207.htm

- Day, J., & Bobeva, M. (2004, May). Seeking the truth: The use of Delphi studies for IS research.
 In Reflection on the past,, making sense of today and predicting the future of information systems, 9th Annual UKAIS Conference Proceedings, Annual Conference (pp. 5-7).
- Day, J., & Bobeva, M. (2005). A generic toolkit for the successful management of Delphi studies. *The Electronic Journal of Business Research Methodology*, *3* (2), 103-116.

- Dawes, J. (2001). The impact of mentioning a scale mid-point in administering a customer satisfaction questionnaire via telephone. *Australasian Journal of Market Research*, 9 (1), 11-18.
- Dearlove, J. (1995). *Governance, leadership, and change in universities*. Paris: UNESCO, International Institute for Educational Planning.
- Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). Group techniques for program planning: A guide to nominal group and Delphi processes. Glenview, IL: Scott, Foresman, and Co.

Drucker, P. (1993) Post capitalist society. New York: Harper Business.

- Duffield, C. (1993). The Delphi technique: a comparison of results obtained using two expert panels. *International Journal of Nursing Studies*, *30* (3), 227–237.
- Efstathiou, N., Ameen, J., & Coll, A.M. (2008). Healthcare providers' priorities for health care: A Delphi study in Greece. *European Journal of Oncology Nursing*, *11* (2), 362-371.
- Elena-Perez, S., Saritas, O., Pook, K., & Warden, C. (2011). Ready for the future? Universities' capabilities to strategically manage their intellectual capital. *Foresight*, *13* (2), 31-48.
- Elkin, G., Farnsworth, J., & Templer, A. (2008). Strategy and the internationalization of universities. *International Journal of Education Management*, 22 (3), 239-250.
- Engleberg, I. N. (1983). A modified Delphi study to examine the basis of agreement and disagreement in determining minimum standard competencies for community college forensic coaches (Doctoral dissertation, Boston University School of Education, 1983).
- Engles, T.C.E., & Kennedy, H.P. (2007). Enhancing a Delphi study on family-focused prevention. *Technological Forecasting and Social Change*, 74 (4), 433–451.

- Ennew, C.T., & Yang, F. (2009). Foreign universities in China: a case study. *European Journal* of Education, 44 (1), 21-36.
- Entenmann, R. (1997). Ma Xiangbo and the mind of modern China. *China Review International*, *4* (1), 159-161.
- Erffmeyer, R.C., Erffmeyer, E., & Lane, I.M. (1986). The Delphi technique: An empirical evaluation of the optimal number of rounds. *Group & Organization Management*, 11 (1-2), 120–132.
- Evans, T.D. (2009). Book Review: China's radio & TV universities and the British Open University: A comparative study. *Distance Education*, *30* (3), 447-450.
- Field, P. A., & Morse, J. M. (1985). *Nursing research: The application of qualitative approaches*. Chapman and Hall.
- Fink, A., Kosecoff, J., Chassin, M. R., & Brook, R. H. (1991). *Consensus methods*. RAND Corporation.
- Gabbay, J., & Francis, L. (1988). How much day surgery? Delphic predictions. *British Medical Journal*, 297, 1249–1252.
- Garland, R. (1991). The mid-point on a rating scale: Is it desirable? *Marketing Bulletin*, 2 (1), 66-70.
- Garner, R. (2014, April 2nd). Tuition fee hike blamed as international students at UK universities fall by a quarter. *Independent*. Retrieved September 1 2014, from <u>http://www.independent.co.uk/student/news/tuition-fee-hike-blamed-as-international-</u> students-at-uk-universities-fall-by-a-quarter-9231151.html
- Garrett, R., & Verbik, L. (2003). Transnational higher education, Part 1: The major markets— Hong Kong & Singapore. Retrieved January 2, 2009, from <u>www.obhe.ac.uk</u>

- Georghiou, L., & Harper, J.C. (2008). The higher education sector and its role in research: Status and impact of international future-oriented technology analysis. In Cagnin, C., Keenan, M., Johnston, R., Scapolo, & F., Barre, R. (Eds), *Future-oriented Technology Analysis*. *Strategic Intelligence for an Innovative Economy* (pp. 115-118). Berlin and Heidelberg: Springer.
- Gerrish, K., Lacey, A. (2010). The Research Process in Nursing. John Wiley & Sons.
- Gibson, J.M. (1998). Using the Delphi technique to identify the content and context of nurses' continuing professional development needs. *Journal of Clinical Nursing*, 7 (5), 451–459.
- Glytsos, N.P. (1990). Modelling future higher education-labor market imbalances: A multiscenario approach. *Economics of Education Review*, 9 (1), 1-23.

Godet, M. (1991). Future Studies: A tool-box for problem solving. Paris: Gerpa Futuribles.

- Goenner, F., Pauls, K. (2006). A predictive model of inquiry to enrollment. *Research in Higher Education*, 47 (8), 935-956.
- Goh, B.G. (1999). An evaluation of the accuracy of the multiple regression approach in forecasting sectoral construction demand in Singapore. *Construction, Management & Economics*, 17 (2), 231-232.
- Goldstein, N.A. (1975). *Delphi on the future of the steel and ferro alloy industries: The Delphi techniques and applications*. Reading, MA: Addison Wesley.
- Gordon, T. J. (1992). The methods of futures research. *The Annals of the American Academy of Political and Social Science*, 25-35.
- Gordon, T.J. (1994). AC/UNC millennium project: The Delphi method. Futures Research Methodology, 1-33, retrieved December 12, 2012, from http://www.gerenciamento.ufba.br/Downloads/delphi%20(1).pdf

Goodman, C.M. (1987). The Delphi technique: A critique. *Journal of Advanced Nursing*, 12 (6), 729-734.

Gow, I. (2012, March 13). UK-China Ventures shape education landscape. *China Daily*, retrieved March 25, 2012, from

http://www.chinadaily.com.cn/cndy/2012-03/13/content_14818404.htm

- Green, A. (2012). Continuity, contingency and context: Bringing the historian's cognitive toolkit into university futures and public policy development. *Futures*, *44*, 174-180.
- Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches. Jossey-Bass.
- Habana, P.I. (1993). Building scenarios for education in South-East Asia. Futures, 9, 975-988.
- Hajkowicz, S. A., Cook, H., & Littleboy, A. (2012). Our future world: Global megatrends that will change the way we live. The 2012 Revision.
- Halachmi, A., Ngok, K. (2009). Of sustainability and excellence: Chinese academia at a crossroads. *Public Administration Review*, 69 (1), 13-20.
- Halal, W.E., & Bojes, G. (2005). Evaluation of forecasting methods. *Futures Research Quarterly*, 21 (1), 47-49.
- Han, S.S. (2011, November 21). More foreign grads get to China to boost future career. *People's Daily Online*. Retrieved December 4, 2012, from http://english.peopledaily.com.cn/90778/7651209.html
- Hartley, M. E. (1995). The development of module evaluation: A Delphi approach. *Nurse Education Today*, *15* (4), 267–273.
- Hasson, F., & Keeney, S. (2011). Enhancing rigour in the Delphi technique research. *Technological Forecasting & Social Change*, 78 (9), 1695-1704.

- Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*, *32* (4), 1008-1015.
- Hayhoe, R. (1983). Research notes towards the forging of a Chinese university ethos: Zhendan and Fudan, 1903-1919. *The China Quarterly*, 94, 323-341.
- Healey, N.M. (2008). Is higher education in really 'internationalizing'? *Higher Education*, 55 (3), 333-355.
- Healey, N., & Michael, L. (2015). Towards a New Framework for Analysing Transnational Education. *Higher Education Policy*, 28, 369-391.
- Heberlein, T. A., & Baumgartner, R. (1978). Factors affecting response rates to mailed questionnaires: A quantitative analysis of the published literature. *American Sociological Review*, 43, 447-462.
- Hedberg, J.G., & Ping, L.C. (2004). Charting trends for e-learning in Asian schools. *Distance Education*, 25 (2), 199-213.
- Hill, K., & Fowles, J. (1975). Methodological worth of Delphi forecasting technique. *Technological Forecasting and Social Change*, 7, 179–192.
- Hogarth, R. M. (1978). A note on aggregating opinions. *Organizational Behaviour and Human Performance*, 21 (1), 40-46.

Holloway, I., & Wheeler, S. (1996). Qualitative research for nurses. Oxford: Blackwell Science.

- Holloway, I., & Wheeler, S. (2013). *Qualitative research in nursing and healthcare*. John Wiley & Sons.
- Ho, D. Y. F. (1976). On the concept of face. American Journal of Sociology, 81, 867-884.

Hsu, C. S. (1996). "Face": An ethnographic study of Chinese social behavior. Ann Arbor: UMI.

- Hsu, C. C., & Sandford, B. A. (2007). Minimizing non-response in the Delphi process: How to respond to non-response. *Practical Assessment, Research & Evaluation, 12* (17), 62-78.
- Huang, F. (2003). Transnational higher education: A perspective from China. *Higher Education Research & Development*, 22 (2), 193-203.
- Huang, F. (2007). Internationalization of higher education in the developing and emerging countries: A focus on transnational higher education in Asia. *Journal of Studies in International Education*, 11 (3-4), 421-432.

Hu, H. C. (1944). The Chinese concept of face. American Anthropology, 46, 45-64.

- Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism: A study of cross cultural researchers. *Journal of Cross Cultural Psychology*, 17 (2), 225-248.
- IDP. (2003). *Global student mobility 2025 series: Analysis of global competition and market share*. Australia: IDP Education Australia Limited.

Inayatullah, S. (2012). Global trends and Asia 2060. Futures, 44, 189-191.

- Jaccard, J., & Wan, C.K. (1995). Measurement error in the analysis of interaction effects between continuous predictors using multiple regression: Multiple indicator and structural equation approaches. *Psychological Bulletin*, *117* (2), 348-357.
- Janesick, V. J. (2001). Intuition and creativity: A pas de deux for qualitative researchers. *Qualitative Inquiry*, 7 (5), 531-540.
- Janesick, V. J. (2003). The choreography of qualitative research design: minuets, improvisations, and crystallization. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry, 2nd ed.* Thousand Oaks, CA: Sage, 46-79.
- Jillson, I. (1975). Developing guidelines for the Delphi method. *Technological Forecasting & Social Change*, 7, 221–222.

- Johanneson, J., & Palona, I. (2010). Asian megatrends and management education of overseas Chinese. *International Education Studies*, *3* (1), 58-65.
- Johns, R. (2010). Likert items and scales. Retrieved from: http://www.surveynet.ac.uk/sqb/datacollection/likertfactsheet.pdf
- Jolly, D. (2004). Bartering technology for local resources in exogamic Sino-foreign joint ventures. *R&D Management*, *34* (4), 389-406.
- Jolson, M. A., & Rossow, G. L. (1971). The Delphi process in marketing decision making. *The Journal of Marketing Research*, 8, 443-448.
- Keenan, M., Miles, I. (2004). Technology foresight: An introduction. Foresight Training Workshop. Gebze, Turkey.
- Keil, M., Tiwana, A., & Bush, A. (2002). Reconciling user and project manager perceptions of IT project risk: A Delphi study. *Information Systems Journal*, 12 (2), 103-119.
- Kemp, N. (2004). The global market for higher education in business and management (1):
 Trends and forecasts. *European associate for international education 16th annual conference*, Torino.
- Kennedy, P. H. (2004). Enhancing Delphi research: Methods and results. *Journal of Advanced Nursing*, 45 (5) 504-511.
- Kim, L. (1997). *Imitation to innovation: The dynamic of Korea's technological learning*. Boston MA: Harvard Business School Press.

Kirk, J., Miller M.L. (1986). Reliability and Validity in Qualitative Research. Sage.

Knight, J. (2004). Internationalization Remodeled: Definition, Approaches, and Rationales. *Journal of Studies in International Education*, 8 (1), 5-31.

Knight, J. (2005). Borderless, Offshore, Transnational and Cross-border Education-

Definition and Data Dilemmas. London: Observatory on Borderless Higher Education. London.

- Korn, M. (2014, Dec 11). Enrollment Falls at Colleges, Universities for Third Straight Year. *The Wall Street Journal*. Retrieved January 5, 2015, from http://www.wsj.com/articles/enrollment-falls-at-colleges-universities-for-third-straight-year-1418314949
- KPMG (March 2011). China's 12th five year plan overview. Retrieved October 16, 2012, from http://211.167.103.149:83/1Q2W3E4R5T6Y7U8I9O0P1Z2X3C4V5B/www.kpmg.com/ <u>CN/en/IssuesAndInsights/ArticlesPublications/Publicationseries/5-years-</u> plan/Documents/China-12th-Five-Year-Plan-Overview-201104.pdf
- Krefting, L. (1989). Reintegration into the community after head injury: The results of an ethnographic study. *OTJR: Occupation, Participation and Health*, *9* (2), 67-83.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. American Journal of Occupational Therapy, 45 (3) 214–222.
- Kruus, P. (1983). Utilization of Delphi methods for university planning. *Technological Forecasting and Social Change*, 24, 269-275.
- Ku, Y. H., & Lohr, L. (2003). A case study of Chinese students' attitudes toward their first online learning experience. *Educational Technology Research and Development*, *51* (3), 95-102.
- Kulas, J. T., Stachowski, A. A., & Haynes, B. A. (2008). Middle response functioning in Likertresponses to personality items. *Journal of Business and Psychology*, 22 (3), 251-259.
- Lai, M. (2009). Challenges to the work life of academics: The experience of a renowned university in the Chinese mainland. *Higher Education Quarterly*, *64* (1), 89-111.

- Lang, T. (1995). An overview of four futures methodologies (Delphi, environmental scanning, issues management and emerging issues analysis). *Manoa Journal*, 7, 1-43. Retrieved May 11, 2013, from <u>www.futures.hawaii.edu/j7/LANG.html</u>
- Lapovsky, L. (1999). What you need to know about enrollment management. *New Directions For Higher Education*, *107*, 5-15.
- Lasanowski, V. (2009). *International student mobility: Status report 2009*. London: The Observatory on Borderless Higher Education.
- Levin, H. M. (1987). Education as a public and private good. *Journal of Policy Analysis and Management*, 6, 628-641.
- Lewin, T. (2008, February 10). US universities rush to setup outposts abroad. *The New York Times*. Retrieved April 11, 2008, from

http://www.nytimes.com/2008/02/10/education/10global.html?_r=1&pagewanted=3

Li, J. (2001). Chinese conceptualization of learning. Ethos, 29 (2), 111-137.

- Li, M., & Bray, M. (2007). Cross-border flows of students for higher education: Push-pull factors and motivations of mainland Chinese students in Hong Kong and Macau. *Higher Education*, *53*, 791-818.
- Li, F. L., Morgan, W. J. (2008). Private higher education in China: Access to quality higher education and the acquisition of labour market qualifications by low-income students. *Education, Knowledge & Economy*, 2 (1), 27-37.
- Li, H., Sun, J. (2010). Forecasting business failure in China Using case-based reasoning with hybrid case respresentation. *Journal of Forecasting*, *29*, 486-501.
- Li, Y. A., Whalley, J., Zhang, S., & Zhao, X. (2011). The higher educational transformation of China and its global implications. *The World Economy*, *34* (4), 516-545.

- Liang, B., & Lu, H. (2006). Conducting fieldwork in China: Observations on collecting primary data regarding crime, law, and the criminal justice system. *Journal of Contemporary Criminal Justice*, 22(2), 157-172.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75). SAGE Publications, Incorporated.
- Lindeman, C. (1975). Delphi survey of priorities in clinical nursing research. *Nursing Research*, 24 (6), 434-441.
- Lingenfelter, P. E. (2004). The state and higher education: An essential partnership. *New Directions for Higher Education*, *127*, 45-59.
- Linstone, H. A., & Turoff, M. (Eds.). (1975). *The Delphi method: Techniques and applications* (Vol. 29). Reading, MA: Addison-Wesley.

Liu, K.C. (1960). Early Christian colleges in China. The Journal of Asian Studies, 20 (1), 71-78.

- Liu, X. (2009). Two universities and two eras of Catholicism in China: Fu Jen University and Aurora University, 1903-1937. *Christian Higher Education*, 8, 405-421.
- Loo, R. (2002). The Delphi method: A powerful tool for strategic management. *Policing: An International Journal of Police Strategies & Management*, 25 (4), 762-769.
- Ludwig, B. (1997). Predicting the future: Have you considered using the Delphi methodology? Journal of Extension, 35 (5), 1-4.
- Lutz, J. G. (1967). December 9, 1935: Student nationalism and the China Christian colleges. *The Journal of Asian Studies*, 26 (4), 627-648.
- Ma, Y. (2011, June 8). Falling enrollment numbers panic China's universities. Retrieved December 16, 2011, from

http://www.wantchinatimes.com/newssubclasscnt.aspx?cid=1504&MainCatID=15&id=2 0110608000001

- Ma, J. (2010). Analysis and strategies of the unbalance of the supply and demand in the higher education market of China. *International Education Studies*, *3* (2), 107-111.
- Maringe, F., & Carter, S. (2007). International students' motivations for studying in UK HE: Insights into the choice and decision making of African students. *International Journal* of Educational Management, 21, 459-475.
- Martelli, A. (2007). From business intelligence to scenario building. *Futures Research Quarterly*, 23 (4), 5-22.
- May, K. A. (1991). Interview techniques in qualitative research: Concerns and challenges. In
 Morse, J.M. (Ed.). (1990). *Qualitative nursing research: A contemporary dialogue* (pp. 188-201). Sage Publications.
- Mazzarol, T., & Soutar, G. N. (2002). "Push-pull" factors influencing international student destination choice. *International Journal of Educational Management*, *16* (2), 82-90.
- Mazzarol, T., Soutar, G. N., & Seng, M. S.Y. (2003). The third wave: Future trends in international education. *The International Journal of Education Management*, 17 (3), 90-99.
- McIntyre, C. (2004). Using scenarios and simulations to plan colleges. *Planning for Higher Education*, 33 (1), 18-29.
- McKenna, H. P. (1994). The Delphi technique: A worthwhile approach to nursing? *Journal of Advanced Nursing*, *19* (6), 1221–1225.
- McMahon, M. E. (1992). Higher education in a world market: An historical look at the global context of international study. *Higher Education*, *24*, 465-482.

- Millet, S. M., & Zelman, S. T. (2005). Case study scenario analysis and a logic model of public education in Ohio. *Strategy & Leadership*, *33* (2), 33-40.
- Millet, S. M. (2007). Public education in the new global economy 2006-2016. *Futures Research Quarterly*, 23 (4), 57-81.
- Ministry of Education (1997). Enrollment of regular schools by level and type (1949-1997). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s3485/200505/7590.html

Ministry of Education (2004). Jiaoyu Shewai Jianguan Xinxi Wang. [in Chinese]. Retrieved

December 4, 2011, from

http://www.jsj.edu.cn/index.php/default/index

Ministry of Education (2007), China educational statistical yearbook 2006

[in Chinese]. Beijing: People's Education Press.

Ministry of Education (2010, December 29th). Number of fulltime teachers of schools of all levels & types (1949-2009). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113474.html

Ministry of Education (2010). Number of enrollment of schools of all types and levels providing formal programs (1949-2009). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113477.html

Ministry of Education (2010). Gross enrollment rate of schools (1991-2009). Retrieved

December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113470.html

Ministry of Education (2010, December 29th). Promotion rate of graduates of schools of all levels & types (1990-2009). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113469.html

Ministry of Education (2010, December 29th). Average size of regular institutes of higher education (1994-2009). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113465.html

Ministry of Education (2010, December 29th). Net enrollment ratio of school-age children in primary schools (1965-2009). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113471.html

Ministry of Education (2010, December 29th). Composition of students in senior secondary school (1965-2009). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113473.html

Ministry of Education (2010, December 30th). Number of higher education institutions.

Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4971/index.html

Ministry of Education (2010, December 29th). Number of fulltime teachers of schools of all levels & types. (1949-2009). Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113474.html

Ministry of Education. (2010, December 29th). Number of staff and workers of schools of all levels & types. Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4969/201012/113475.html

Ministry of Education (2010, December 30th). Information on international students. Retrieved December 4, 2011, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4971/201012/113562.html

Ministry of Education (2012). List of regular higher education institutions recruiting international students on the Chinese government scholarships. Retrieved August 29, 2012, from

http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_2812/200906/48831.html

- Ministry of Education (2012). Ministry of Education announces enforcement of Sino-Foreign programmes [in Chinese]. Retrieved August 29, 2012, from http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s5987/201204/133501.html
- Mitchell, V. W. (1991). The Delphi technique: An exposition and application. *Technology Analysis & Strategic Management*, *3* (4), 333-358.
- Mok, K. H. (2003). Globalisation and higher education restructuring in Hong Kong, Taiwan and mainland China. *Higher Education Research & Development*, 22 (2), 117-129.
- Mok, K. H., & Ngok, K. L. (2001). Decentralization and changing higher education governance in China. Paper presented to the Comparative Education Society of Asia Year 2001 Conference, Taipei, Taiwan.
- Morgan, P. J., Lam-McCullough, J., Herold-McIlroy, J., & Tarshis, J. (2007). Simulation performance checklist generation using the Delphi technique. *Canadian Journal of Anesthesia*, 52 (12), 992-997.
- Mu, X. (2011, March 29). Shanghai begins construction of China's first Sino-American university. Xinhua News. Retrieved April 10, 2011, from <u>http://news.xinhuanet.com/english2010/china/2011-03/29/c_13802159.htm</u>
- Mullen, P. M. (2003). Delphi: Myths and reality. *Journal of Health Organization and Management*, 17 (1), 37-52.

- Murphy, M. K., Black, N., Lamping, D. L., McKee, C. M., Sanderson, C. F. B., Askham, J. & Marteau, T. (1998). Consensus development methods and their use in clinical guideline development. *Health Technology Assessment*, 2 (3).
- Naidoo, V. (2007). Declining foreign enrolment at higher education institutions in the United States: A research note. *Journal of Studies in International Education*, *11*, 215-226.
- Naidoo, V. (2009). Transnational higher education: A stock take of current activity. *Journal of Studies in International Education*, *13*, 310-330.
- Nambisan, S., Agarwal, R., & Tanniru, M. (1999). Organisational mechanisms for enhancing user innovation in information technology. *MIS Quarterly*, *23* (8), 365-395.
- National Science Foundation (2012). Science and engineering indicators 2012, global expansion of research and development expenditures. Retrieved on September 6, 2012, from: http://www.nsf.gov/statistics/seind12/c0/c0s2.htm
- Newbold, P., & Bos, T. (1990). *Introductory business forecasting*. USA: South Western Publishing.
- Niederman, F., Brancheau, J. C., & Wetherbe, J.C. (1991). Information systems management issues for the 1990s. *MIS Quarterly*, *15* (4), 475-500.
- Ngok, K. (2008). Massification, bureaucratization and questing for "world-class" status: Higher education in China since the mid-1990s. *International Journal of Educational Management*, 22 (6), 547-564.
- O'Brien, P. W. (1978). The Delphi technique and educational planning. *The Irish Journal of Education*, *12*, (2), 69-93.
- Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: An example, design considerations and applications. *Information & Management*, *42*, 15-29.

- Organisation for Economic Co-operation and Development (OECD) (1983). 1964-1981. In *National accounts, detailed tables*, Vol. II. Paris: OECD.
- Ozturgut, O. (2007). Teaching in the East: An American university in China. *International Journal of Teaching and Learning in Higher Education*, *19* (3), 228-237.
- Parenté, F. J., Anderson, J. K., Myers, P., & O'Brien, T. (1984). An examination of factors contributing to Delphi accuracy. *Journal of Forecasting*, 3 (2), 173-182.

Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.

 Paton, G. (2012, October 3). University rankings: UK risks 'global mediocrity'. *The Telegraph*.
 Retrieved October 8, 2012, from: http://www.telegraph.co.uk/education/universityeducation/9584022/University-rankings-UK-risks-global-mediocrity.html

 Paton, G. Stubbins, R. (2013, Jan 18). Fees backlash leads to sharp decline in student numbers. *The Telegraph*. Retrieved March 6, 2013, from <u>http://www.telegraph.co.uk/education/universityeducation/9811776/Fees-backlash-leads-</u> <u>to-sharp-decline-in-student-numbers.html</u>

- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. (3rd Ed.) Thousand Oaks, Calif.: Sage Publications.
- Paul, D.A. (2005). Higher education in competitive markets: Literature on organizational decline and turnaround. *The Journal of General Education*, *54* (2), 106-138.

People's Daily Online. (2011, November 21st). Sino-foreign educational programs face checkup. Retrieved December 4, 2012, from http://english.peopledaily.com.cn/90882/7650872.html

- Peterson, C. D. (1982). An inquiry into the possible impacts and policy implications of electronic technology development on the Minnesota community college system (Doctoral dissertation, University of Minnesota, 1982).
- Piantanida, M., & Garman, N. B. (1999). The qualitative dissertation: A guide for students and faculty. London: Sage.
- Pill, J. (1971). The Delphi method: Substance, context, a critique and an annotated bibliography. Socio-Economic Planning and Science, 5 (1), 57-71.
- Polit, D. & Beck, C. (2004). *Nursing research: Principles and methods*. Philadelphia: Lippincott, Williams, & Wilkins.
- Polit, D. & Hungler B. (2001). *Essentials of nursing research: Methods, appraisal and utilization*. Philadelphia: Lippincott.
- Powell, C. (2003). The Delphi technique: Myths and realities. *Journal of Advanced Nursing*, *41* (4), 376-382.
- Raaijmakers, Q. A. W., Hoof, A. V., Hart, H. T., Verbogt, T. F. M. A., & Wollebergh, W. A. M. (2000). Adolescents' midpoint response on Likert-type scale items: Neutral or missing values? *International Journal of Public Opinion Research*, 12 (2), 208-216.
- Ratcliffe, J. (2000). *Scenario building: A suitable method for strategic construction industry planning?* Dublin, Ireland: Dublin Institute of Technology.
- Ratcliffe, J. (2002). Scenario planning: Strategic interviews and conversations. *Foresight*, *4* (1), 19-30.
- Ratcliffe, J. (2006). Challenges for corporate foresight: towards strategic prospective through scenario thinking. *Foresight*, 8 (1), 39-54.

- Ratcliffe, J., & Sirr, L. (2003). The Prospective Process Through Scenario Thinking for the Built and Human Environment: a tool for exploring urban futures. *Articles*, 11.
- Rayfield, J., & Croom, B. (2010). Program needs of middle school agricultural education teachers: A Delphi study. *Journal of Agricultural Education*, *51* (4), 131.
- Reid N. (1988). The Delphi technique: Its contribution to the evaluation of professional practice.
 In Ellis, R. (1998). *Professional Competence and Quality Assurance in the Caring Professions*, (pp. 230-262). Croom Helm.
- Rekai, M. (2012). Canadians see a land of opportunity in China. *Macleans*. Retrieved August 17, 2012, from

http://www2.macleans.ca/2012/08/21/canadians-see-a-land-of-opportunity-in-china

- Reynolds, D. C. (1991). Redrawing China's intellectual map: Images of science in nineteenth century China. *Late Imperial China*, *12* (1), 27-61.
- Riger, W. G. (1986). Directions in Delphi developments: Dissertations and their quality. *Technological Forecasting and Social Change*, 29, 195-204.
- Riggs, W. E. (1983). The Delphi technique: An experimental evaluation. *Technological Forecasting and Social Change*, 23 (1), 89-94.
- Roberts, D. (2010, March 25). China: Closing for business? Businessweek. Retrieved April 7, 2011, from

http://www.businessweek.com/magazine/content/10_14/b4172032516519_page_4.htm

 Robinson, N. S., Wei, J., Gong, Y., & Schwalb, M. (n.d.). Higher education and foreign schools in China. *Journal of College and University Law*, *36* (2), 363-398. Retrieved from <u>http://irc.nacubo.org/Pages/JCUL%20Robinson%20et%20al%20Higher%20Ed%20in%2</u> <u>OChina.pdf</u>

- Rowe, G., Wright, G., & Bolger, F. (1991). Delphi: A re-evaluation of research and theory. *Technological Forecasting and Social Change*, *39* (3), 235-251.
- Sackman, S. (1975). *Delphi-critique: Expert opinion, forecasting and group process*. Massachusetts: Lexington Books.
- Sahal, D., & Yee, K. (1975). Delphi: An investigation from a Bayesian viewpoint. *Technological Forecasting and Social Change*, 7, 165-178.
- Samarawickrema, R. G. (2005). Determinants of student readiness for flexible learning: Some preliminary findings. *Distance Education*, *26* (1), 49-66.
- Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science*, 8 (3), 27-37.
- Sato, M. (2005). Education, ethnicity and economics: Higher education reforms in Malaysia 1957-2003. *NUCB Journal of Language, Culture and Communication*, 7 (1), 73-88.
- Schmidt, R. C. (1997). Managing Delphi surveys using non-parametric statistical techniques. *Decision Sciences*, 28 (3), 763-774.
- Schmidt, R. C., Lyytinen, K., Keil, M., & Cule, P. (2001). Identifying software project risks: An international Delphi study. *Journal of Management Information Systems*, *17* (4), 5-36.
- Serebin, J. (2010, December 21). New statistics show the enrollment crunch is coming. Macleans. Retrieved January 21, 2011, from <u>http://www.macleans.ca/education/university/new-statistics-show-the-enrollment-crunch-is-coming/</u>
- Shalev, M. (2007). Limits and alternatives to multiple regression in comparative research. *Comparative Social Research*, 24, 261-308.

- Sharkey, S. B., & Sharples, A. Y. (2001). An approach to consensus building using the Delphi technique: Developing a learning resource in mental health. *Nursing Education Today*, 21, 398-408.
- Sharma, Y. (2013). Beijing wants more in-depth HE links with Europe. University World News, 271. Retrieved November 11, 2014, from

http://www.universityworldnews.com/article.php?story=20130510160844829

- Shepard, K. O. (1981). The future of organization development: Implications for practitioner training and research (Doctoral dissertation, UCLA, 1981).
- Shindler, J. V., & Case, R. E. (1996). Apperception and meaning making in the world of qualitative inquiry: An examination of novice qualitative researchers, Annual AERA Meeting. New York: AERA.
- Skulmoski, G., Hartman, F., & Khahn, J. (2007). The Delphi method for graduate research. Journal of Information Technology Education, 6, 1-21. Retrieved February 25, 2012, from <u>http://jite.org/documents/Vol6/JITEv6p001-021Skulmoski212.pdf</u>
- Slaughter, R. A. (2002). From forecasting and scenarios to social construction: Changing methodological paradigms in future studies. *Foresight*, *4* (3), 26-31.
- Spinosa, C., Bell, C., & Letelier, M. F. (2005). Extending scenario planning into transvaluations. *Futures Research Quarterly*, 21 (1), 5-20.
- Staley, D. (2007). *History and future: Using historical thinking to imagine the future*. Plymouth: Lexington Books.
- Steensma, K. H., Tihanyi, L., Lyes, M. A., & Dhanaraj, C. (2005). The evolving value of foreign partnerships in transitioning economies. *Academy of Management Journal*, 48 (2), 213-235.

- Sternquist, B., Byun, S. E., & Jin, B. (2004). The dimensionality of price perceptions: A crosscultural comparison of Asian consumers. *The International Review of Retail, Distribution and Consumer Research*, 14 (1), 83-100.
- Stewart, D., & Green, B. (2004). *The foresight process in practice*. Vector Aerospace Chair of Irish Business Studies, Memorial University.
- Sun, L. (2010). Enhance academic study in vocational education in China. *International Education Studies*, *3* (3), 141-145.
- Tian, Z. & Chen, T. (2008). A textual research on the first private university in modern China. *Frontiers of Education in China*, *3* (2), 178-191.

The Report on International Distance Education. (2005). Distance Education Report, 9 (5), 3-5.

The University of Sheffield Promotional Material for Sino-British College's Student Recruitment. (2012). Power Point Presentation. Shanghai: Sino-British College. Used as promotional material presented at Four Seasons Hotel, Zhengzhou, Henan, and Sheraton Hotel, Xian, Shaanxi, P.R.C.

- Thompson, L., & Ku, H. Y. (2005). Chinese graduate students' experiences and attitudes toward online learning. *Educational Media International*, *42* (1), 33-47.
- Travis, A. (2011). Visa curbs will cut overseas students by 80,000 says Theresa May. *The Guardian*. Retrieved March 23, 2011, from http://www.guardian.co.uk/education/2011/mar/22/number-foreign-students-to-be-cut

Tsang, K. K. (2012). The use of midpoint on Likert Scale: The implications for educational research. *Hong Kong Teachers Centre Journal*, 11, 121-131. Retrieved February 2013 from <u>http://edb.org.hk/HKTC/download/journal/j11/HKTCJv11_11-B02.pdf</u>

Tse, E. (2010). Is it too late to enter China? Harvard Business Review, 88 (4), 96-101.

- Tu, C. (2001). How Chinese perceive social presence: An examination of interaction in online learning environments. *Education Media International*, 38 (1), 45-60.
- Uhl, N.P. (1975). Consensus and the Delphi process. Paper Presented at the Annual Meeting of the American Educational Research Association, Washington, DC. Retrieved January 10, 2013, from
 <u>http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtS</u>
 earch SearchValue 0=ED104201&ERICExtSearch SearchType 0=no&accno=ED1042

<u>01</u>

- UNESCO Institute for Statistics (n.d.). Total public expenditure on education as a percentage of GDP. Retrieved December 2, 2011, from http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx?ReportId=3560&IF_Language=eng
- Van de Ven, A. H. (1971). An applied experiment test of nominal, Delphi, and interacting decision making processes. (Doctoral dissertation, University of Wisconsin, 1971).Unpublished.
- Van der Heijden, K. (2005). *Scenarios: The art of strategic conversation* (2nd ed.). Chichester: John Wiley & Sons.
- Van Dijk, J. A. (1990). Delphi questionnaires versus individual and group interviews. *Technological Forecasting and Social Change*, *37* (3), 293-304.
- Van Zolingen, S.J., & Klaassen, C.A. (2003). Selection processes in a Delphi study about key qualifications in senior secondary vocational education. *Technological Forecasting and Social Change*, 70 (4), 317–340.

- Verbik, L., & Merkley, C. (2006). The international branch campus—Models and trends. London: Observatory for Borderless Higher Education.
- Verdickas, G. (2011). Failed to get your uni offer? My son looked abroad and hasn't looked back. *The Guardian*. Retrieved October 31, 2012, from <u>http://www.guardian.co.uk/money/2011/aug/20/family-finances-alevels</u>
- Vibert, C. (2004). *Theories of macro organizational behavior: A handbook of ideas and explanations*. ME Sharpe Inc.
- Waldron, J. S. (1971). An investigation into the relationships among conceptual level, time delay of information feedback, and performance in the Delphi process (Doctoral dissertation, ProQuest Information & Learning).
- Walker, A. M., & Selfe, J. (1996). The Delphi method: A useful look for the allied health researcher. *International Journal of Therapy and Rehabilitation*, *3* (12), 677-681.
- Wang, W., & Kang, Z. (2002). Comparison of Zhendan University and St. John University [Chinese]. *Jinan Shixue*, *3*, 487-504.
- Wang, W. (2003). A unique university: A study on Aurora University in Shanghai (1903–1962). Unpublished PhD dissertation, Central China Normal University.
- Wang, Z. G. (2002). Centurial evolution of Jiaotong University's talent-cultivating criteria [in Chinese]. *Journal of Shanghai Jiao Tong University (Social Sciences)*, 3: 4. In Tian, Z. & Chen, T. (2008). A textual research on the first private university in modern China. *Frontiers of Education in China*, 3 (2), 178-191.
- Weatherman, R., & Swenson, K. (1974). Delphi technique. In S. Hencley & J. Yates (Eds), *Futurism in education: methodologies* (pp. 97-114). Berkeley, California: McCutchan.

- Wei, R. (2008) China's radio & TV universities and the British Open University: A comparative study. Nanjing: Yilin Press.
- Whalley, J., & Zhou. W. (2007). Technology upgrading and China's growth strategy to 2020.Centre for International Governance Innovation (CIGI) Working Paper No. 21. Waterloo, Ontario.
- Wiers-Jenssen, J. (2008). Does higher education attained abroad lead to international jobs? Journal of Studies in International Education, 12, 101-132.
- Wild, M. (1997). Contextualizing learning in the World Wide Web: accounting for the impact of culture. *Education and Information Technologies*, 2, 179-192.
- Wilkins, B., & Huisman, J. (2011). Student recruitment at international branch campuses: Can they compete in the global market? *Journal of Studies in International Education*, 15, 299-316.
- Williams, P., & Webb, C. (1994). The Delphi technique: A methodological discussion. *Journal of Advanced Nursing*, 19, 180-186.
- Willis, M. (2001a). The identification, application and use of four distinct levels of Sino-Foreign cooperation in the state higher education sector. *Journal of Marketing for Higher Education*, 11 (1), 73-95.
- Willis, M. (2001b). Strategic alliances between Chinese and foreign universities: Was a staggered form of entry used? *Journal of Marketing for Higher Education*, 11 (3), 65-84.
- Willis, M. (2006a). An investigation into the meaning of the term commitment in Sino- Foreign higher educational alliances: An adventure into the heart and soul of successful alliances. *Journal of Teaching International Business*, 17 (1), 5-31.

- Willis, M. (2006b). Why do Chinese universities seek foreign university partners: An investigation of the motivating factors behind a significant area of alliance activity. *Journal of Marketing for Higher Education*, 16 (1), 115-141.
- Willis, M. (2007). The development and application of a market entry process for foreign universities entering the Chinese higher education market. *Journal of Marketing for Higher Education*, 16 (2), 45-82.
- Willis, M. (2008). Aspects of educational delivery within Sino-Foreign educational alliances: Is this the real key to success? *Journal of Marketing for Higher Education*, *18* (2), 186-215.
- Willis, M. (2010). Reaching out to the West: An assessment of Chinese students' views regarding foreign-delivered university programs in China. *Journal of Teaching International Business*, 21 (1), 53-68.
- Wong, L. (2009). Corporate social responsibility in China: Between the market and the search for a sustainable growth development. *Asian Business & Management*, 8 (2): 129-148.
- Woo, F. J. (2009). China's Christian colleges: Cross-cultural connections, 1900-1950. China Review International, 16 (1), 66-75.
- Worcester, R. M., & Burns, T. R. (1975). A statistical examination of the relative precision of verbal scales. *Journal of the Market Research Society*, 17 (3), 181-197.
- Woudenberg, F. (1991). An evaluation of Delphi. *Technological Forecasting and Social Change*, 40, 131-150.
- Wright, D. (1996). John Fryer and the Shanghai Polytechnic: Making space for science in nineteenth-century China. *The British Journal for the History of Science*, 29 (1), 1-16.
- Wu, S. J. (2003). A comparison of students' costs and employment between *Gongban* and *Minban* colleges. *Economics of Education Research (Peking University)* [in Chinese]. (1)

Retrieved on December 5, 2011, from

http://www.gse.pku.edu.cn/BeidaEER/pdf/030116.pdf.

- Wynekoop, J. L., & Walz, D. B. (2000). Investigating traits of top performing software developers. *Information, Technology & People*, 13 (3), 186-195.
- Yale Law School Lillian Goldman Law Library. (2008). *Treaty of Versailles Part IV, German rights and interests outside Germany*. Retrieved on December 5, 2011, from <u>http://avalon.law.yale.edu/subject_menus/versailles_menu.asp</u>
- Yildiz, S., & Bichelmeyer, B. A. (2003). Exploding electronic forum participation and interaction by efl speakers in two web-based graduate-level courses. *Distance Education*, 24 (2), 175-193.
- Yousuf, M. I. (2007). Using experts' opinions through Delphi technique. Practical assessment, research & evaluation, 12 (4), 1-8. Retrieved on January 25, 2013, from <u>http://pareonline.net/pdf/v12n4.pdf</u>
- Zhang, J. (2008). Response of Chinese higher education and SJTU to Globalization: An overview. In Glion Colloquium, V. I. (2008). The Globalization of Higher Education. *Economica, Paris.* (pp. 119-127).
- Zhang, W., & Yeung, L.H. (2003). Online measurement of academic programme preferences for distance learners in Hong Kong. *Distance Education*, *24* (2), 213-226.
- Ziglio, E. (1996). The Delphi method and its contribution to decision-making. In M. Adler, E.Ziglio (Eds.), *Gazing into the oracle: The Delphi method and its application to social policy and public health*, (pp. 3-33). London: Jessica Kingsley Publisher

Appendix

Appendix A - Sino-British College Associated Northern Consortium of UK

Universities

- Sheffield Hallam University
- Sheffield University
- Leeds University
- Leeds Metropolitan University
- Bradford University
- Manchester Metropolitan University
- Huddersfield University
- Liverpool John Moores University
- Salford University

Appendix B - Delphi study types (Hasson & Keeney, 2011)

- 1. classical
- 2. modified
- 3. decision
- 4. policy
- 5. real time
- 6. e-Delphi
- 7. technological
- 8. online
- 9. argument

10. disaggregative

Appendix C - Career Services Department Websites at Sino-Foreign Universities

• Sino-British College

http://careers.sbc.usst.edu.cn

• University of Nottingham, Ningbo

http://www.nottingham.edu.cn/en/careers/index.aspx

Suzhou Liverpool Xian Jiao-Tong University

http://www.xjtlu.edu.cn/en/student-careers.html

Appendix D- History of Sino-Foreign Universities in Mainland China

Mainland China's Sino-Foreign university history began through an interest in Western knowledge which began in the 17th century (Reynolds, 1991). At this time Western literature was translated into Mandarin, as it was considered to be the source of the West's success (ibid). This translation was largely assisted by missionary groups who introduced a Western academic educational system to replace mainland China's imperial exam system in 1905 (Woo, 2009). This led to Sino-Foreign universities, the first formal universities in mainland China, largely being established by American missionaries (Liu, 1960). Non-missionary Sino-Foreign university movement founders were mainland Chinese educated in Western universities, highlighting the historical link between the West and mainland China's higher education system (Hayhoe, 1983; Wright, 1996).

Over twenty Sino-Foreign universities existed before World War Two (Liu, 1960), yet little agreement exists regarding which was the first private and public university in

mainland China (Tian & Chen, 2008). Some Sino-Foreign universities aimed to represent an ideal state university (Woo, 2009), while others presented themselves solely as Western degrees in mainland China (Wang, 2003). Additionally, some Sino-Foreign universities had strong missionary affiliations and prioritized religious studies; yet their institutional goals varied depending on the missionary groups involved (Liu, 1960; Hayhoe, 1983; Liu, 1960). The variance in missionary priorities led to Sino-Foreign universities focusing to either convert students to Christianity or focus on educating students in a Western curriculum (Liu, 2009; Wang & Kang, 2002).

These different objectives influenced their curriculum, which was taught in a variety of languages besides Mandarin, which in itself created a great deal of controversy (Liu, 2009; Liu, 1960). Initially-offered technical courses were quickly replaced with academic courses which were socially accepted for university level education (Woo, 2009). The disagreements regarding the language of curriculum delivery and the social acceptance of academic rather than technical courses are issues that modern-day Sino-Foreign universities still face.

The objectives of Sino-Foreign universities also influenced their relationship with the Chinese government, which resulted in a variety of procedural requirements (Liu, 2009). According to Hayhoe (1983), Sino-Foreign universities with poor Chinese government relations had their students registered abroad, and Liu (2009) notes that those with good state relationships had students register within mainland China's national records for education. Apart from the majority of funding being driven by student tuition, Sino-

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Foreign universities had additional support from either foreign governments or the church (ibid). Modern day Sino-Foreign universities replicate these various sources of funding from foreign and state governments, and are largely driven by student tuition.

Despite the strength of their government relationships, most Sino-Foreign universities eventually failed due to poor implementation from missionaries and a lack of interest in Western degrees due to the political climate during the World Wars (Reynolds, 1991). During their 40 year existence, Sino-Foreign universities supplemented the inadequate state educational system (Liu, 1960; Hayhoe, 1983) and influenced better foreign relation practices (Tian & Chen, 2008). Modern day Sino-Foreign universities continue to play a role in the progress of mainland China's higher education.

Overall, the contribution of Sino-Foreign universities to develop mainland China's state universities plays a significant part in its history (Wang, 2002; Hayhoe, 1983). They were not only the first form of higher education in mainland China, but their graduates mostly found employment in the state's educational facilities, which laid the foundation of today's university system (Liu, 1960). Sino-Foreign universities have additionally contributed to mainland China's progression of knowledge by having the most advanced educational delivery and curriculum during their time (ibid). For example, Shanghai Polytechnic had Shanghai's only Chinese library until 1901 (Wright, 1996). It is expected that modern-day Sino-Foreign universities will leave a similar mark on the higher education history of mainland China as the original institutes did over a century ago.

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Appendix E- Ethics approval letter

MEMORANDUM



DATE:June 17, 2013

TO:Lee Henderson

COPY:Dr. Janice Thomas (Research Supervisor)

Ms. Alice Tieulie, Acting Secretary, Athabasca University Research Ethics Board

Dr. Simon Nuttgens, Chair, Athabasca University Research Ethics Board

FROM:Dr. Mihail Cocosila, Faculty of Business Research Ethics Review Committee

SUBJECT: Ethics Proposal # FB-13-05H: Envisioning Successful Sino-Foreign University Partnerships and Strategies in 2030

I am pleased to advise that the above-noted project has been awarded **APPROVAL** on ethical grounds. This approval of your application will be reported to the Athabasca University Research Ethics Board (REB) at their next monthly meeting. There are, however, several minor revisions requested to this application prior to filing and reporting to the Athabasca University REB. Please address these revisions and resubmit the application before starting the research.

The approval for the study "as presented" is valid for a period of one year from the date of this memo. If required, an extension must be sought in writing prior to the expiry of the existing approval. A Final Report is to be submitted when the research project is completed. The reporting form can be found online at http://www.athabascau.ca/research/ethics/.

As implementation of the proposal progresses, if you need to make any significant changes or modifications, after consulting with your supervisor and obtaining an e-mail of support for the changes, please forward this information immediately to the Faculty of Business Research Ethics Review Committee for further review.

If you have any questions, after consulting with your supervisor, please do not hesitate to contact me or the AU Research Ethics Administrator at <u>rebsec@athabascau.ca</u>. Best wishes for your timely completion of this very interesting research project.

Mihail Cocosila, PhD Associate Professor

Chair, Research Ethics Review Committee Faculty of Business Athabasca University E-mail: mihailc@athabascau.ca

Revisions required for final approval

- On Page 21, in the answer to C2-1, no mention of Ministry of Education officials was made. Are they to be interviewed too?
- It is not clear how you make sure that the translations from Mandarin to English and English to Mandarin of the interview transcripts are done accurately.
- It is not clear how Stella Han and Jenny Chen are compensated for their involvement in this research project.

Appendix F- Participant invitation letter

Dear Prospective Participant,

My name is Lionel Huntley Henderson and I am a student in the Doctorate of Business Administration program with Athabasca University. I have also been the Head of the Accounting and Finance Division at Sino-British College in Shanghai since 2007. I am contacting you as your position is highly relevant to understanding the future of successful Sino-Foreign university partnerships which is the focus of my Delphi study. This research exercise will contribute to the data needed in completing the final chapters of my dissertation. My dissertation is focused on collecting data from an expert set of participants who will represent the stakeholder groups associated with Sino-Foreign universities. The data will be used to envision successful Sino-Foreign university partnerships in 2030 and also to understand what is needed in order to successfully achieve them.

Would you be interested to participate in this research exercise? At your convenience I need your participation for 3 to 4 rounds which will last between 30 minutes to an hour to understand the future of Sino-Foreign universities through your insight and wisdom by asking you some questions. The responses that you would give me would be compared with the other expert participants' information to find areas of consensus that will build the data collection for the following rounds. The research will also result in establishing a contribution to knowledge which will trigger the need for future Sino-Foreign university research in the areas of joint venture planning and Transnational Higher Education knowledge.

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Your participation will be scheduled around your work schedule to best facilitate you whilst ensuring the correct data is collected from you. Your participation and the resulting data from your responses will be treated confidentially and will be confirmed by yourself. Furthermore your identity, position and organization name will not be named or associated with the data collected from you to ensure full confidentiality in this Delphi study. Your participation is voluntary, and you reserve the right to not answer certain questions or to end the interview at any time. Your honorary participation in this research exercise would be highly appreciated. If you have any further questions please contact me. I look forward in hearing from you.

Regards,

Lionel Huntley Henderson

Student of Athabasca University Centre for Innovative Management Doctorate in Business Administration Lane 135 Xu Jia Hui Road Building 26 Room 1601 Shanghai People's Republic of China 200023 lee.henderson@sbc-usst.edu.cn

Appendix G- Confidentiality Consent Form

Dear Prospective Participant:

I am an Athabasca University student in the Doctorate of Business Administration program. I am conducting a research project to envision successful Sino-Foreign university partnerships and strategies in 2030. The research exercise will bring together participants from the key stakeholder groups which form Sino-Foreign universities in order to gather relevant data to envision their institutional futures in 2030. You have been selected to participate in this research exercise based on your wisdom and expertise in the development of Sino-Foreign universities.

For the project, you will be asked to:

Participate for 3 to 4 rounds with each round lasting between 30 minutes to an hour. The rounds would involve responding to several questions regarding the future of successful Sino-Foreign university partnerships. Your participation will be scheduled around your work schedule to best facilitate you whilst ensuring the correct data is collected from you.

Your participation and the resulting data from your responses will be treated confidentially. All participants' participation will be classified as a generic numbered system of *participant 1*, *participant 2*, *participant 3 etc.* to ensure your identity will not be directly associated with the data collected from you. Furthermore to ensure confidentiality for your organization or department, they will not be named for their

consideration in respect of the research exercise. The data collected from you and other participants will be securely stored and locked and will be kept for at least 5 years. After 5 years the data will be destroyed by deleting all the files of data that will be collected from participants.

Your participation is voluntary, and you reserve the right to not answer certain questions or to end the interview at any time. To inform the academic and transnational higher education communities, the results may be published in professional journals and presented at conferences. If you have any questions now or during the research exercise, please feel free to contact me or the Athabasca University Research Ethics Office at rebsec@athabascau.ca or 780-675-6718.

Your honorary participation in this research exercise would be highly appreciated. Thank you for your interest in this research project.

Sincerely,

Lionel Huntley Henderson Student of Athabasca University Centre for Innovative Management Doctorate in Business Administration Lane 135 Xu Jia Hui Road Building 26 Room 1601 Shanghai People's Republic of China 200023 lee.henderson@sbc-usst.edu.cn

Appendix H- Participation Request Script (Conducted by phone or in person)

Hi; my name is Lee Henderson and I am a student in the Doctorate of Business Administration program with Athabasca University. I have been the Head of the Accounting and Finance Division at Sino-British College since 2007. I am calling you as your position as _____ (person's title) is highly relevant to understanding the future of successful Sino-Foreign universities which is the focus of my research exercise.

This research exercise will contribute to the data needed in completing the final chapters of my dissertation. My dissertation is focused on collecting data from an elite set of participants who will represent the 4 main stakeholder groups associated with Sino-Foreign universities. The data will be used to envision successful Sino-Foreign universities in 2030 and also to understand what is needed in order to successfully achieve them. Would you be interested to participate in this research exercise? At your convenience I need your participation for 3 sessions which will last between 1 to 2 hours to understand the future of Sino-Foreign universities through your insight and wisdom by asking you some questions. The responses that you would give me would be compared with the other elite participants' information to find areas of consensus that will build the data collection for the following rounds. The research will also result in establishing a contribution to knowledge which will trigger the need for future Sino-Foreign university research in the areas of joint venture planning and policy development as well as Transnational Higher Education knowledge.

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Appendix I- Pilot Round Themes

1. In the best possible world, what would you hope for Sino-Foreign University partnerships in 2030?

1 - Lead Global Higher Education - A dense network of global higher education, which Sino-Foreign Universities would lead.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 It is hoped the flow of students will reverse and the foreign partner's western students will come to mainland China to study.
- 3 It is hoped that there will be equal recognition in mainland China for overseas degrees and split degrees. Currently, students are focused more on program quality than on going abroad.
- 4 It is hoped that Sino-Foreign Universities will lead global education. It is hoped that classrooms will be anywhere so students can rotate from campus to campus to experience a global university. This would allow a student to study in Cambodia, China, and Italy through shared module credits of a globally accredited program.
- 5 It is hoped that every university would be an international cooperative university. Teaching and learning behavior will change due to communication trends that facilitate sharing knowledge. Universities should be a new life space, which is different to current university campuses. Globalization makes people cooperate and thus will force more international cooperative universities. Almost all universities should have some degree of international cooperation by 2030.
- 6 It is hoped in 2030 there will be a rather dense network of global higher education with American political and civil traditions and values. China would have a sizable presence in this network.
- 8 It is hoped the mass of online education will reform the academic infrastructure for Sino-Foreign Universities. Online education will transform the whole educational system by 2030. Higher education in general will move towards an increasing amount of bifurcation with the mid-tier provincial and state universities to be delivering largely online courses. The elite universities will provide a very expensive and rich residential experience. Sino-Foreign Universities will also transfer in this way.
- 9 It is hoped that Sino-Foreign Universities can bring China's state universities to the forefront of global higher education. China's state higher education system has no lack of universities, but reform and change are required, as they have their own problems. These problems include, but are not limited to, being overly bureaucratic, focusing on finances rather than students, and the quality of education received. Furthermore, the finances of the state universities are being spent inefficiently. Sino-Foreign Universities can bring a new philosophy to higher education in China and specifically to academic practices in China's state universities. Sino-Foreign Universities have the responsibility to form the future higher education system of China. This can be accomplished by allowing state universities to learn from Sino-Foreign Universities to build and improve their own state programs.
- 10 It is hoped that foreign universities would open their doors for Chinese universities with high technological exchanges. The universities have learned much from the foreign universities, which is part of their science plan.
- 11 It is hoped that majors and degrees in different countries will cooperate further. This cooperation will change based on whether the Gao-Kao system is implemented at the time.
- 13 It is hoped that mainland China and Hong Kong will become a major and attractive center for international study. Currently, America is the most attractive location for international students. The Confucius Institutes, like the British Council, may help promote international students to study in mainland China. It is hoped that more international competition will be launched by mainland China.
- 2 Sino-Foreign University Expansion Sino-Foreign Universities expand in quantity throughout various tiered universities.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

¹ It is hoped the Sino-Foreign University system expands to tier 2 universities in the West, which would allow alliances with tier 2 universities in China for more academically-successful students.

- 3 It is hoped there will be a greater number of Sino-Foreign University programs. Currently, more foreign universities are committed at the program, institutional, research, and teaching levels.
- 4 It is hoped that quite a number of Sino-Foreign Universities will be set up. Chinese universities are expanding and the current quality of state universities is worrying. Chinese students want bachelor's degrees in mainland China, so more foreign universities will be interested in jumping into the market now. It is hoped that Sino-Foreign Universities will grow in second tier cities, with 50 universities to be set up. We can anticipate so many because China's state universities will be going abroad as well. This will result in a tradeoff between China setting up Sino-Foreign Universities abroad and 50 Sino-Foreign Universities to be built domestically. Confucius Institutes are an initial step in expanding Sino-Foreign Universities abroad. There are already some Chinese high schools that are being set up outside mainland China. Laos wants Chinese universities to be set up very soon, as do Cambodia and some African countries. The Middle East and Europe have some interest, and perhaps, eventually, the USA. The tradeoff of setting up institutions will be a function of global education. The next big leap for Chinese trade will be to export services and education, as they want to export more than goods.
- 6 It is hoped in 2030 there will be a rather dense network of global higher education with American political and civil traditions and values. China would have a sizable presence in this network.
- 11 It is hoped that Sino-Foreign Universities will be established in the West, to be built on traditional Chinese culture and values.
- 13 It is hoped that, given China's recent economic performance and demographics, any foreign university would have an international outlook toward a strong partnership in China. It would be in the same league as universities 40 years ago that were looking to have strong relationships with American universities to result in research collaborations. Based on the US experience, the UK academics who went to American universities gained from their experience and financial clout in terms of setting up labs. It is expected the same thing will happen with partnerships in mainland China.

• 3 - Political System Development - Continued reform and developments in mainland China's political system. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 6 It is hoped that a move towards an open market and political culture will result. The society and political culture are still feeling their way towards future developments.
- 10 It is hoped that, given China's recent economic performance and demographics, any foreign university would have an international outlook toward a strong partnership in China. It would be in the same league as universities 40 years ago that were looking to have strong relationships with American universities to result in research collaborations. Based on the US experience, the UK academics who went to American universities gained from their experience and financial clout in terms of setting up labs. It is expected the same thing will happen with partnerships in mainland China.
- 4 Partnership Collaboration A movement towards positive partnership collaboration related to a Sino-Foreign University's goals and development.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards

- 2030?
- 1 It is hoped the Chinese side will have a win-win philosophy given that university partnerships with undergraduate teaching might decrease. The focus might be on post-graduate strategic research alliances. China's state universities will be in a stronger position to transfer knowledge back to the West by that point, which is the opposite of now.
- 2 It is hoped there will be more collaboration with trust in research and intellectual property. Partnership collaborations would ultimately pick the best of the Western and Eastern educational systems and would work towards improving education.
- 7 It is hoped the two partners can clearly focus on education to meet the economic, social, and development challenges within a globalized context. Currently the foreign partner's purpose will have a marketing intention and the Chinese side will try to learn something. In 2030 the world will become more integrated and globalized, and therefore, partners will address the challenges as initially outlined above.

- 12 It is hoped there will be a comprehensive two-way partnership of equals between sister universities covering research, teaching, and commercial relationships.
- 13 It is hoped that international research collaborations with China will happen across all disciplines. Mainland China has experienced double-digit growth in research support, where the West has been experiencing singledigit contraction in research growth and support. The 1,000 Talents Program, which allows people to stay in mainland China for several years, is the beginning of what could be a reciprocal exchange. UK academics will add to the publications of China's state institutions and access state of the art equipment in China.
- 5 Staff and Student Development Sino-Foreign Universities will train and develop more students and local staff with the assistance of a clearer higher education regulatory framework.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 2 It is hoped there will be increased standards in terms of assessment, administration, and teaching.
- 3 It is hoped that more local staff in Sino-Foreign University positions will be developed. It is hoped there will be a clearer higher education regulatory framework that further considers students and education providers. This is imperative as programs are becoming more stringent with expat and human resource policies.
- 8 It is hoped that students receive significant training with the various educational platforms that will be available to them.
- 9 It is hoped that Sino-Foreign Universities will allow their students to become international citizens with international capabilities in order to be involved in the global market. This will be accomplished with a multinational and multicultural staff profile to promote cultural exchanges, freedom, trust, and regulatory compliances. Chinese students need to be educated about more international issues during their university experience.
- 6 Pedagogical Models A variety of new pedagogical models will be present in Sino-Foreign Universities.
 Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards

- 2030?
- 2 It is hoped there will be further commonalities on degree standards for dual diploma programs. Entry standards are problematic given the variance in assessments in A-levels, diploma programs, and high school assessments. Furthermore, first-class honors and degree standards are different in America, China, and the UK. China uses a 4-year undergraduate degree system, but the 4th year is an internship. A solution would be to internationalize the common qualifications.
- 8 It is hoped there will be a heterogeneous partnership relationship with a variety of pedagogical models, rather than one preferred model.
- 9 It is hoped that Sino-Foreign Universities will offer more freedom for elective choices to further develop the students' academic areas of interests. The current higher education system in China makes it difficult for a student to change programs once entered, which stems from the student placement Gao-Kao system. Sino-Foreign Universities can also, hopefully, offer more freedom, like the foreign university systems which are based on accreditation and, specifically, a year credit system. This requires students to achieve sufficient credits to progress to the following year of studies. The Chinese state university system deals with the issue of promotion being almost guaranteed to the following year of studies. Students without sufficient credits must repeat those missing courses in their final year of studies.
- **7 Equal Partnerships -** Equal partnership involvement that uses the strengths and values of both partner universities and their respective resources offered.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- It is hoped they will exist, because there is a real danger that they will become "Sino-sized".
 It is hoped that by 2030, mainland China does not assume a win or lose mentality in terms of resource allocation, particularly with their former imperial past.
- 9 It is hoped that Sino-Foreign Universities will borrow from the strengths of both their foreign and state Chinese university partners to build a new style of university.
- 11 It is hoped that the partnerships in the ideal modern university will be equal. Currently, partnerships are based on an ideal model for a Western university; but in the future, the focus will be on using the common ideas and strengths of both local and foreign partners. The values of Chinese citizens regarding a modern university will be emphasized in future partnerships.
- 13 It is hoped that the international members on the advisories boards of China's state universities will be increasingly involved in their respective universities' social activities.

2. In the worst possible world, what are your greatest fears for Sino-Foreign University and College partnerships in 2030?

• **8 - Tuition Pricing -** Tuition pricing needs review.

Relation to Figure 2: Western University Dependence for Int. Tuition Presence {Econ}

Answering Research Question: What qualities of successful Sino-Foreign university -partnerships will change towards 2030?

- 3 The participant's greatest fear is pricing as a factor for tuition that needs to be properly assessed.
- 9 State Partner Abuse and Domination The state partner will eventually dominate and abuse the western partner's resources.

Relation to Figure 2: State universities' global market value {Env}

Answering Research Question: None

2 The participant's greatest fear is the weaknesses of the Western education system, which, once realized, will cause increased state partner control.

The participant's greatest fear is that if the state partner dominates the partnership, the partnership collaborations will be rendered non-existent.

The participant's greatest fear is any abuse of the Western partners' various resources.

10 - Regulatory Framework Development - The regulatory framework will change unfavorably or will not change.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: None

- 1 The participant's greatest fear is a danger that the regulatory frameworks will tighten so much that the foreigners will be jumped, pushed, or bought out. Furthermore, pathways such as 1+3 and 2+2 will most likely be eliminated, and we should expect at most 1 year abroad in pathways by 2030.
- 3 The participant's greatest fear is a lack of development in the higher education regulatory and legal framework, which will cause quality issues and disengage foreign universities.

• 11 - Purely Foreign or Chinese Partnership Programs - Programs represent one partnership side rather than both institutions.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov} Answering Research Question: None

- 1 The participant's greatest fear is a morphing Chinese institute that teaches in English and German.
- 3 The participant's greatest fear is transplanting foreign programs directly into the Chinese market, which will shrink the Sino-Foreign University market.

• 12 - Market Value - A change in student pathway enrollment due to the changed perception of a western education at a Sino-Foreign University.

Relation to Figure 2: State universities' global market value {Env}/Prospective (SFU) Student Enrollment {Demo} Answering Research Question: None

- 2 The participant's greatest fear is the incorrect assumption of the superiority of Western education.
- 3 The participant's greatest fear is that students will go directly overseas or choose state universities.

3. What pivotal events from the last few years provide good lessons for the future of Sino-Foreign University partnerships in 2030? (Themes)

• 13 - China's Rising Global Position - Mainland China's rising global economic presence and political influence will change Sino-Foreign University partnerships.

Relation to Figure 2: State universities' global market value {Env}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards

2030?

1 This is a result of the age of Western education imperialism coming to an end.

The most pivotal event of all is mainland China's rise and importance in the global economy. Sino-Foreign University partnerships from now on will require foreign universities to think of mainland China's state universities as equal or superior partners.

2 Pivotal events from the last few years can be reflected in the recent trends that mainland China is not accepting all Western advice and is reducing the number of joint ventures as well as tightening up standards. Specifically, mainland China's government is accepting fewer programs and is raising the standards for new programs to regulate and control quality standards in mainland China.

Pivotal events from the last few years include the fact that mainland China has now realized Western ideas are not necessarily correct or positive for the development of the education system and society in mainland China. Mainland China came first in international school competitions, and is now being involved in international school competitions with their best and brightest students, demonstrating the rise of their education system and its global dominance. For example, OECD international math, science, and reading tests had Shanghai coming top in all subjects. In the past decade, Hong Kong has also greatly improved in this competition, from good to great, despite their century under British rule. Mainland China is waking people up and it is showing through with the Ministry of Education as well.

- 6 Pivotal events from the last few years include the political climate of China, which will influence the future of Sino-Foreign Universities. The Chinese education system appears to have a very bright future with Xi Jing Ping's leadership. The highly contingent nature of higher education foreign ventures was exposed with the Bo Xi Lai scandal, which demonstrated the idiosyncratic circumstances of the future of Chinese political leadership. One must be alert to the political dynamics of individual leaders. The inertia of that development is not consolidated enough yet to ensure continuation without the fickle dependency on individual power. Pivotal events from the last few years also include the downturn in the economy.
- 10 Pivotal events from the last few years include the fact that, up to the present, knowledge and innovation have largely come from the West. We have opened the doors for foreign countries, which means that our students can learn much. Furthermore, our teachers and professors will learn how foreigners teach students and will learn their methods and structure to teach the students. Whether knowledge and innovation will still largely come from the West to develop in mainland China will depend on the change in knowledge as we move towards 2030.
- 13 Pivotal events from the last few years include mainland China preparing the 1,000 Talents Program, which is very important along with the government's recent investment in research and development. Having said that, there has not been a pivotal change in carbon reduction and carbon management, which is striking; and the lack of management is serious.

14 - Enhancing Academic Quality - Sino-Foreign Universities will continue to experience enhanced academic quality in terms of teaching standards, student recruitment, and the overall university rank.
 Relation to Figure 2: Western Partner University Rank {Cul}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 Pivotal events from the last few years include the fact that only the very best western universities will attract Chinese students.
- 2 Pivotal events from the last few years include raising teaching standards.
- Pivotal events from the last few years include addressing student and teaching quality, given the financial size of the parent's educational investment.
 Pivotal events from the last few years include the change in focus from student recruitment to program development.
- 4 Quality is needed to survive until 2030, and quality means more than a program. It must not be a secondary campus and should have the same campus faculty members as the home campus. Some programs have been successful, but faculty members are going to be a key point in programs that have been set up to be successful in the future.
- 9 A pivotal event for higher education in China from the last few years is the issuing of two degrees to students. To issue two degrees and run two programs for a single undergraduate student, both partners must learn much from each other in order to offer high academic quality in both degrees as well as the student's overall experience.
- **15 New Sino-Foreign Universities -** The establishment of new Sino-Foreign Universities and their respective research centers suggests future growth in partnerships.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- A pivotal event in Shanghai is the government's desire for Sino-Foreign University partnerships in non-English languages, as demonstrated by the latest Sino-German joint venture.
 Pivotal events from the last few years include New York University's Shanghai campus, which is a foreignstudent-centred model, the first of its kind in mainland China.
- 5 Pivotal events from the last few years include the internationalization agenda that will happen on different levels in 2030. Almost every university should be an international cooperative university by that time.
- 7 Pivotal events from the last few years include foreign universities discussing partnership plans with several state universities in mainland China, yet many failed to make anything materialize. The difference with Duke's program, being the newest Sino-Foreign University, is that their local partner was not located in Kunshan where their campus is located. Their local partner was Wuhan University, from Hubei province. Another example is McMaster University, which failed to set up a university campus in mainland China. The University of Nottingham Ningbo Campus, on the other hand, is a good example of how to make a partnership successful.
- 9 A pivotal event from this year is the entrance of the new American universities, such as Duke and New York University, which suggests a change in attitude by the government, and also suggests a potential market expansion.
- 11 Pivotal events from the last few years include the entrance of New York University in Shanghai, which is in the experimental phase, so exceptional policies and regulations are possible. Later, the government or bureau will decide whether to put the exceptional policies and regulations into other programs.
- 12 Pivotal events from the last few years include the development of global research centers by the University of Nottingham in China, Malaysia, and the UK, and the considerable take-up of commercial links to research consultancy and Knowledge Transfer Partnerships from these centers by major Chinese and UK globally-oriented companies.

Pivotal events from the last few years include the freeing up of the Chinese Ministry of Education moratorium on new Sino-Foreign partnerships. This has resulted in an expansion of links to top-ranked universities in the world, such as major US universities through Sino-Foreign partnerships such as those of New York University and Duke University.

13 A pivotal event from the last few years is the establishment of two independent UK university campuses.

16 - Reducing Profit Programs - The trend to reduce profit-based Sino-Foreign higher educational programs out of the market to be replaced by nonprofit programs of high quality.

Relation to Figure 2: Western University Dependence for Int. Tuition Presence {Econ}

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 Pivotal events from the last few years include the increased pressure to eliminate partnerships which are for private benefit. This will help improve the overall quality of Sino-Foreign University partnerships, but the tightening of the regulatory framework also negatively affects those institutions that are doing a good job.
- 3 Pivotal events from the last few years include the change in focus from profit-based programs to non-profit programs.
- 4 Pivotal events from the last few years include a change in the environment so that only the very serious Sino-Foreign University partnerships will survive. The time is gone for universities to make money in mainland China's higher education market. Young people have many choices of programs available, with thousands of joint venture programs available in China. Foreign universities need to have a different mindset to those of 10 years ago; otherwise, they will fail in the long run.
- 8 Pivotal events from the last few years include a maturing partnership relationship which has moved away from being focused on student recruitment and student tuition streams (Klondike gold rush). Since the 2008 financial recession, partnerships are recalibrating their position on their relationship in mainland China, and we are now in that transition zone.
- 17 Sino-Foreign University Sub-Department Pivotal events include the development of a Sino-Foreign University department and a key interest in policy statements from the Ministry of Education.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 9 A pivotal event from this year is the Ministry of Education's establishment of a new Sino-Foreign University department as a sub-department within the International Cooperation Department. This is a signal that the Ministry of Education is increasingly considering how to support Sino-Foreign Universities and their students through the creation of new policies. Standardizing the amount of support will have a significant impact, as different Sino-Foreign Universities receive different support from their local government.
- 11 Pivotal events from this year include the development of a Sino-Foreign University sub-department within the Ministry of Education.
- 12 Pivotal events from the last few years include the high level of continued interest and involvement of Chinese University leaders in these developments, such as the directive policy statements on these issues from the Chinese Ministry of Education.
- 18 Sino-Foreign University Types The development of several types in Sino-Foreign University partnerships which are key projects a part of the governments mid to long term development strategy.
 Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 5 Pivotal events from the last few years include the development of 3 phases in China's foreign cooperation in higher education: a minor level program, a Sino-Foreign University as a standalone institution, or a college within a university.
- 9 A pivotal event from the last few years is the movement from a satellite campus of an existing university to an independent university with an independent identity. A college imbedded in an existing state university meets many problems given the oversight of the state university. A stand-alone model has more freedom in terms of strategic plans and future design, which are not controlled by the two partner universities. The two universities are simply involved as board members at the senior management level. The stand-alone model allows a Sino-Foreign University to do something new that even the two partner universities have not yet implemented or accomplished. Sino-Foreign Universities must have two strong partner universities in order to develop innovative approaches that have not been done before by traditional universities. An independent university with an identity is important for a Sino-Foreign University to establish, rather than another satellite campus. This is important, as the partnership will face conflicts and problems from the two partners.

11 Pivotal events from the last few years include Sino-Foreign Universities being a key project in the government's mid- and long-term development strategy.

19 - Reflection on Mainland China's Higher Education System - The reflection and review of mainland China's higher education system to develop its system and change the future value of Sino-Foreign Universities.
 Relation to Figure 2: State universities' global market value {Env}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

5 Pivotal events from the last few years include viewpoints on education that will change the value of international cooperatives.

10 Pivotal events from the last few years include the continuing reflection of the higher education system in mainland China, which has been built according to the foreign university system. More should be learnt about the foreign university system to develop mainland China's higher education system.

• 20 - International Student Competition - The increasing competition for international students from China's state universities.

Relation to Figure 2: IB Students {Demo}

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

 Pivotal events from the last few years include mainland China's state universities providing competition for Sino-Foreign Universities through cheaper accommodation, tuition, and free Chinese lessons for international students. Furthermore, China's state universities are competing for foreign and local staff.
 Pivotal events from the last few years include China's state universities now openly competing for international students, particularly those from Africa and the developing world, because a Chinese degree and

international students, particularly those from Africa and the developing world, because a Chinese degree and the ability to speak Mandarin are now very attractive.

- 12 Pivotal events from the last few years include the development of international college partnerships between Sino-British English as a Foreign Language companies and China's state universities to deliver international student recruitment and language training in mainland China for third-country nationals.
 - 21 Limitations Sino-Foreign Universities face limitations related to programs offered, foreign staff, the institute's approval process and student recruitment.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

1 Pivotal events from the last few years include the limitations on business programs in mainland China, as Sino-Foreign Universities cannot exist without business subjects.

Pivotal events from the last few years include a drive towards less foreign staff. Unless Chinese staff are very well trained, this will have major ramifications for quality control. By 2030, our students could be replacing western staffs, which are more expensive. Furthermore, if upcoming programs are established in the west of China, foreigners will not want to go there, so the location of upcoming institutions is imperative.

5 Pivotal events from the last few years include the Sino-Foreign University approval process, as it is difficult to get the license. Even if you do get the license, you will face challenges regarding the recruitment quota set by the government. Furthermore, the independence of the university is controlled by the government, even in the case of a university that has a license. These problems should be solved step by step, resulting in an improved environment.

4. What major decisions with long-term implications are faced at the moment by Sino-Foreign University partnerships?

• 22 - Student Policies - To review the various policies (recruitment, enrollment, Gao-Kao, tuition, employment) for international and domestic students at Sino-Foreign Universities.

Relation to Figure 2: Enrollment Ceiling {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

1 A major decision is to address the excessive competition in all parts of mainland China. Higher fees for Gao-Kao students are also needed.

A major decision is to lift the current limitation on international student employment, as international students are not allowed to work in mainland China unless they have 2 years' work experience. Sino-Foreign Universities need to recruit international students, but the current work limitations make it difficult for international graduates to work in China after they graduate from Sino-Foreign Universities.

- 2 A major decision is to allow mainland Chinese students with international qualification or A-level scores to attend Sino-Foreign Universities. Currently, they are not allowed to attend Sino-Foreign Universities because the government wants to steer them towards completing the Gao-Kao and attending a state university. Furthermore, Shanghai's Gao-Kao enrollment has been dropping.
- 3 A major decision is to standardize student recruitment to combine Gao-Kao students and open market students. Gao-Kao ensures student quality and numbers, but financially, they are difficult to justify. Sino-Foreign Universities can only recruit mainland Chinese nationals who are enrolled in mainland China's senior schools.
- 9 A major decision is to establish a policy for student recruitment to ensure a varied student population from multiple provinces. This would allow those respective multiple provinces to support and fund a single Sino-Foreign university.
- 12 A major decision is whether or not incoming staff and student visa controls into some western countries continue to be strengthened, and what reaction to that action would occure in Mainland China and elsewhere.
- 13 A major decision is to design a reciprocal fee structure. China's state universities plan to have large numbers of students going to international partners, which demands an enormous amount of effort. Ultimately, to achieve their goals, Chinese state universities need to consider a reciprocal fee structure. It would require a large amount of government support and continuous partnerships.
- 23 Closer Government Relationship and Support To establish a closer relationship with the government to achieve their support given Sino-Foreign Universities' position as a key project.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 4 A major decision is to establish a good relationship with the partner institute, the government, and specifically the Ministry of Education, given that students need to be accepted from all over the country and the world.
- 9 A major decision is to find a strong location for new Sino-Foreign Universities in China, which is crucial to their success. A strong location will allow local governments to support their campus and develop policies to support the university. This is imperative given the short-term view of the local government, which yields great control. If a Sino-Foreign University is in a good location, the local government will find ways to support it. Furthermore, on the parents' side, they will try to find a university with a good environment and location, which can offer job placements.
- 11 A major decision by the government is to make Sino-Foreign Universities a key project in the mid- to long-term development strategy, which is the same answer as in the previous question.

• 24 - Develop Mainland China's Higher Education Regulatory Framework - To develop and clarify Mainland China's higher education regulatory framework in terms of policies and legislation.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

1 A major decision is to resolve the debate between the Ministry of Education and the local authorities regarding who has control.

⁵ A major decision is to form one law for the 4 types of universities in mainland China (private, public, international cooperative, and independent college). There is no clear university law.

Universities are part of the government in mainland China, yet they have been separated from the government as of late. The public universities are part of the government, yet the laws have not matured for the other 3 types of universities.

A major decision is for the government to reform the registration process to select a non-profit or for-profit university.

A major decision is to create laws on the governance structure for procedures and responsibilities to develop new universities which currently do not exist.

9 Major decisions for the government include standardizing support from the government for Sino-Foreign University partnerships; giving Sino-Foreign Universities some special policies related to recruitment, applying for new programs, and more freedom to develop programs based on societies' requirements; and branding Sino-Foreign Universities as an additional and official kind of university in mainland China that is not private, is nonprofit, and is of high quality. Branding is a key issue in the public eye.

• 25 - Online Education - To integrate online education and all accessible resources from the World Wide Web within Sino-Foreign Universities.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 6 A major decision is to develop a reliable pipeline to the open information network of the world. Problems with bandwidth or political policing of internet traffic allow even VPN networks to be shut down. The state still has an entrenched technological bureaucracy, which influences the quality of discourse. Lessons have had to be radically adapted or trashed due to issues of information access. This impacts the practical deployment of internet-based knowledge and resources in the course of ordinary instruction as well as research. Sino-Foreign Universities need reliable and unimpeachable access to the world mind and information network. Without the assurance of a principle or law, I cannot fully say that everyone is open for inquiry.
 - 8 A major decision is to develop a broader pedagogical model with the help of online education. The world is at a tipping point in terms of the use of online education with higher education.

A major decision is to develop a new higher education model, as Sino-Foreign Universities and overseas joint ventures have been focused on business and information technology majors due to the students' driving demand. That will change as it has not allowed them to develop broader skills. Interdisciplinary studies are expected to grow due to the interconnected and complicated world in which we now live.

26 - Inappropriate Question - The participant views the question as inappropriate and needing to be refined.
 Relation to Figure 2: None

Answering Research Question: None

7 Long-term decisions should be made at the very beginning.
7 The participant doubts this kind of question can stay in the following rounds. This question may be clarified by explaining who is making the long-term decisions.
If the Sino-Foreign University already exists, we can keep the system operating well. Sino-Foreign Universities will already answer this question based on outside demand.

• 27 - Increasing the Quality of Mainland China's Higher Education System - To maintain the status quo or increase mainland China's higher education system quality.

Relation to Figure 2: State universities' global market value {Env}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

5 A major decision is to keep the current practices of China's state universities, which would be good for the development of Sino-Foreign Universities in the Chinese context. Chinese citizens are not satisfied with the state universities' quality. The policies led by the Chinese government will be the biggest factor.

- 10 A major decision is to improve the quality of education at state universities in mainland China. Universities in mainland China want to improve their ability to do research, to give students a good quality of education, and to improve society as a whole.
- 11 A major decision is to increase the competitive advantage and achieve standards for global certified qualifications in a variety of industries within Sino-Foreign Universities through better partnership cooperation. For example, the current engineer students at USST will receive a certificate upon graduation, giving them a qualified engineer status in Germany.

A major decision was for mainland China to join the Washington agreement. Approximately 70 countries joined this agreement, which seeks to improve the quality of engineering students and professionals. More of mainland China's state universities for engineers will become further recognized globally because of this agreement. This happened this year, so it will change the standard for engineers.

28 - Educate Mainland China's Citizens - To educate mainland China's citizens from a variety of socio-economic backgrounds to develop the local economy.

Relation to Figure 2: Rising Middle Class {Env}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 9 A major decision is for the government to develop the economy through the universities' support to educate citizens in their governing region. Areas of development include life sciences, networks, energy, financial issues and others.
- 10 A major decision is to reform and urbanize migrant workers and their families through the higher education system to help improve and develop their skills.

• 29 - Sino-Foreign University Expansion - Expand the quantity and tiers of universities forming Sino-Foreign University partnerships in Mainland China.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

1 A major decision is to increase the number of Sino-Foreign Universities throughout China. There is an insufficient amount of Western academics willing to relocate to Western China to teach Western degrees.

A major decision is to give all provinces in mainland China a Sino-Foreign University joint venture agreement. Even if foreign staff were reduced to a third of all staff at Sino-Foreign Universities, a reduced foreign staff ratio of one-third of all staff would still create foreign staff problems. Chinese state universities will also need core international staff in the future, so there will be more competition for foreign staff.

- 11 A major decision is our recent application of a Sino-German University between both nations' governments. The cooperation was considered to be the top 8 (number 8) best cooperation in education in Shanghai.
- 12 A major decision is for the Ministry of Education to broaden links across the various strata of universities or to retain the "elite only" status welcome for Sino-Foreign University partnerships.
- 13 A major decision is to decide to take mainland China seriously or not by UK Universities within their strategies. The way to go will be to create offices in China with significant institutions and bigger networks rather than groups of bilateral partnerships. The number of high quality universities is out of proportion to the overall population: there is only a very small number of high class universities for 1.3 billion people (plus Hong Kong and Macau).

• 30 - Review Sino-Foreign University Policies, Procedures and Practices - To review Sino-Foreign University policies, procedures and practices related to taxes, staffing, purpose, visa, and student pathways.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

1 A major decision is to make the terms and conditions for hiring the same as western universities. A lifting of the current limitation on who can be hired based on their number of years of lecturing experience should happen. Foreign universities can hire fresh PhD graduates, but Sino-Foreign Universities cannot.

A major decision is to introduce the social tax scheme and apply it to Sino-Foreign University joint ventures. The social tax scheme is designed to get companies to pay more into the system, and Sino-Foreign Universities are a major employer of foreign staff. The result is that the institute and foreign staff are all hit by this social tax scheme. No one has agreed that it cannot be applied to educational institutions.

2 A major decision is to review the original contracts, agreements and aims for these partnerships which have changed and do not apply now. There is a mismatch, and a review is needed as the educational landscape is changing rapidly in mainland China; therefore, the agreements need to change to meet the educational landscape.

There is a move towards pathway changes in the contracts, and a mismatch, as 2+2 pathways are desired by parents. However, there is also pressure to reduce 2+2 pathways, as the government wants students to study only one year abroad.

- 4 A major decision is to take the time to understand education, immigration, and visa policies. Policies such as allowing a foreign university's own students to be accepted at a Sino-Foreign University are imperative.
- 9 A major decision for the two parent universities is to clarify what their Sino-Foreign University will achieve and also clarify its respective goals. Both sides must agree as to what type of university they will build, including its mission and vision, for any success to be achieved. The university needs to focus on improving the higher education model and standards in mainland China rather than focusing on making money.

5. What major constraints do you experience inside/outside the organization/system of Sino-Foreign University partnerships?

• 31 - External Control - External control by the foreign home campus, China state partner university, and government.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- It is rare, if not impossible, to talk directly to the decision makers at the provincial or national government level. It is all done by the host university partner.
 We are forced to accept interpretations rather than guidelines, and we only have administrative guidance notices.
- 2 The lack of control over facilities provided by our host partner results in compromise often being the best solution.
- 4 When they stop allowing you to do things, this is part of the experimental period, as it is an experiment, to reduce the risk.
- 6 A constraint is the operational discretion by outside forces from the home (foreign) campus. The physical distance extenuates this as there is a sense of a loss of control from the home campus university. The physical distance increases the anxiety of the home governance, and increases their impulse towards micro-managing practices and stymieing or preventing development towards full institutional autonomy. This results in the institute not feeling like a full branch campus, but more like a micro-managed foreign campus.
- 12 External constraints include strengthening visa controls in the west, which makes it more difficult for Chinese students to study abroad.

• 32 - Language and Cultural Understanding - The lack of language and cultural understanding by foreign partners. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 Non-Chinese leadership does not speak to China's state university partners, so they are not sure their arguments are put in the right way.
- 2 Language, cultural differences, and interpreting meaning: it is not always clear what the partner university wants and how the UK and mainland China can meet those needs. The UK side lacks an understanding of the operational differences in mainland China, which is a cultural difference. There is a difficulty in appointing accountability, which is standard in Chinese culture.

The partners' decision-making processes are very different. Furthermore, external stakeholders' needs, wants, and processes are quite different.

We do not have direct access to the Ministry of Education, so we go through our state partner university, which slows down and sometimes complicates the process. Having said that, our state partner university has the contacts to support and push if needed.

- 4 Constraints include the human relationship with the policy maker and how to interpret the policy to know to what extent you can do in the short term, midterm, and long term. Policies come in different phases (e.g. experimental period) and foreign universities have to understand what they mean. Partners must work together on a partial responsibility basis. You must understand the mindset of the policy maker and be prepared to work in a situation that is called experimental. When they say experimental, it means no big risk, particularly when assessing the policy.
- 12 Internal constraints include the lack of knowledge related to the Chinese language at nearly all western university levels outside specialist Chinese language departments.

Internal constraints also include the lack of expertise on overseas university councils working within mainland China.

• **33 - Unclear Institutional Purpose -** A lack of planning regarding what type of Sino-Foreign University the partners and government want to establish.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

5 Both state and foreign partners seem unclear as to why they want to establish a Sino-Foreign University. This has resulted in the 2 partners copying other existing partnerships, due to an unclear position in terms of what kind of university they want.

Constraints include conflicts between state and foreign universities regarding the purpose, position, organization, and finances of the Sino-Foreign University.

A constraint would be not having a good partner. A good partner depends on the position of the university. It depends on what type of Sino-Foreign University the partner is trying to develop. Another constraint is the lack of a sustainable development plan.

- 11 Internal constraints include different understandings of the Sino-Foreign University partnership cooperation. The different understandings will influence all the details and management including the course set-up, teaching, and daily routine management.
- 13 One constraint is the lack of knowledge regarding what strategy is desired by mainland China's government for Sino-Foreign Universities in 2030.

• 34 - Staffing - Difficulties in attracting and retaining qualified staff who can handle mainland China's contextual environment.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 6 Another constraint is staffing behavior issues regarding political sensitivities (freedom of speech issues) that require careful diplomatic attention, yet would require no care back on the home campus. There is little tolerance for a lack of good diplomatic judgment.
- 7 Internal constraints include finding and retaining stable, committed, and qualified staff when you are trying to develop the university as a world-class university. International staffs are less stable as they leave after a short period of time, perhaps within 3 years; yet the university needs their stability. You need excellent staff to lead the quality improvement; otherwise, you can just maintain a level instead of improving a level. Furthermore, staffs are seeking an internationally friendly environment, so it is hard to keep the staff in Kunshan, Suzhou, or Ningbo; yet it is easy to keep them in Shanghai, Beijing, and Guangzhou.
- 9 Getting a multicultural group of staff to work together has its challenges. Getting the foreign staff to accept Chinese students' learning style, which requires independent learning and critical thinking skills to be developed, is also a challenge. The students feel they cannot get enough information from their teacher, who expects learning to take place outside of classroom time.

35 - Regulatory Framework - The lack of a proper regulatory framework, accompanying legislation, and policies creates constraints for Sino-Foreign Universities.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

1 The regulatory framework of the 2003 Chinese foreign cooperation in running higher education institutes has not been developed, resulting in the government deferring to China's Higher Education law. This results in our institution increasingly being treated like a secondary college.

A proper regulatory framework for this sector should be developed as soon as possible.

- 3 Chinese state universities need to apply certain legislative aspects that are not applicable to a Sino-Foreign University joint venture, given the incompatibility of the regulatory framework.
- 7 External constraints include the legislation which is based on China's state university system and conflicts with Sino-Foreign Universities. This sometimes impacts the institution's healthy development.
- 11 External constraints include the fact that most of China's state universities are still run by the government, which influences the policies that are set. This in turn stifles the improvement within the Sino-Foreign University, as they are different to China's state universities. Furthermore, the policies cannot be changed by certain people.

• **36 - Tax Policies -** The tax policies relating to expatriates require review to assist hiring and retaining Sino-Foreign University staff.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 Shanghai's refusal to recognize the tax treaties established with some countries makes hiring and retaining expatriate staff more difficult.
- 9 External constraints also include the tax policies towards foreigners working in mainland China. An example is that the previous year's tax must be paid retroactively, even though foreigners were previously exempt from paying tax in those past years.
- **37 Expectations of Parents and the Public -** The expectations of parents related to the changes in the higher education system and a lack of understanding of the Western education system.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

9 External constraints also include the public view that every degree has the same standard, since all degrees are issued by the government. If universities can get the power to independently issue degrees, the public view will change.

Internal constraints include the differences in culture and expectations. Chinese parents expect a great deal of care and support for their children, while Western culture expects students to be treated like adults and to be free to make their own choices whilst receiving minimal support from the university. Sino-Foreign University partners have to make changes in their practice to blend these cultural differences while educating parents and staff who have different backgrounds and experiences. The mentality of students and parents is that university entrance equates to progression and degree achievement. Furthermore the university needs to change very quickly to meet student requirements.

11 The public school system has changed little, yet the higher education system has experienced great changes. Students and their parents have a different understanding about these changes, which is a short-term constraint. The constraints related to these different understandings will dissolve in the future as universities of the future will be built on the common values of China's citizens.

• 38 - Recruitment and Fee Policies - Recruitment and fee policy agreements are difficult to achieve. Relation to Figure 2: Enroll Ceiling {Gov}/Western University Dependence for Int. Tuition Presence {Econ} Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

3 Constraints include fees, student recruitment policies, and lower recognition for graduates as compared to students studying directly abroad.

- 9 External constraints include the recruitment quota as dictated by the government.
- 10 Constraints are the foreign universities' different tuition rates. We are currently under discussions with some German universities to allow students to only pay a reduced living fee. This is a strategy to make more contact with German universities for future partnerships. We want to discuss a similar arrangement with UK and US universities, but the tuition and living costs are very high, which prevents these arrangements from happening. Having said that, we have had good discussions with Sloan Management College as well as North Dakota. Currently, we are under negotiation for state fees to be applied for our students, which is cheaper than the private universities in America. Having said this, some parents will pay large amounts for the cost of living in the UK.
 - **39 Leadership -** The lack of a right leader due to their lack of vision or due to the current requirements. **Relation to Figure 2:** Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 It should not be insisted that the President is always Chinese. The position should be open to the best candidate.
- 5 A constraint would be a lack of either strong operations or a leadership team, which has a strong impact on Sino-Foreign University partnerships.

A governance structure is critical for successful Sino-Foreign Universities.

13 Constraints also include leadership. The institutions that have developed strong relationships within mainland China have been led by people with a very strong vision. Institutional investment rather than rhetoric by the Vice Chancellors, who are very involved over a long time frame (5-year project to make it work), is imperative.

40 - Program Application Process - The time and bid limitations of applying to new programs or new Sino-Foreign Universities despite market evidence.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 2 The time lag in bids prevents other bids to be created; hence, there is a lack of clarity on the progress of important bids, which holds the following bids back.
- 9 External constraints also include the application process for new programs. The government can refuse applications to set up a new program, even if evidence from marketing survey research is found to support the new program.
- 12 External constraints, until recently, included the moratorium on Sino-Foreign University partnerships.
 - 41 Resources The lack of sufficient financial and administrative resources to be prepared and put in place. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 5 One constraint is a lack of long-term resource preparation from partners.
- 6 There are no constraints in terms of investment and administrative support.
- 8 Financially, universities are a mess, as the level of public funding is not there and the competition for good students is intense. Universities need to spend a lot of money on marketing, and the American state universities have just been gutted. Furthermore, the big private American universities have just had their endowments pulled back.
- 12 External constraints, until very recently, included FOREX controls in mainland China, which hindered the free transmission of foreign currencies both ways.
- 13 Constraints include having resources in place that are huge and difficult to achieve.

42 - Fear - The fear of institutions and their leadership to commit to a Sino-Foreign University joint venture agreement.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov} **Answering Research Question:** What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 8 A lot more institutions are becoming more risk-averse now in terms of making strategic investments and new partnerships. Universities are very conservative and cautious entities. There is more hesitation to jump into the market for 3 to 5 years.
- 12 Internal constraints also include the innate conservatism and fear of the unknown within academic departments and their leadership.

6. If all constraints were removed, and you could direct what is done, what would you do for Sino-Foreign University partnerships?

• **43 - University Tier Strategy -** China's state and foreign universities will represent different tiers of universities compared to the Sino-Foreign Universities that currently exist.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 1 Encourage partnerships with tier 2 universities from China and overseas partners for more universities to benefit.
- 12 Commence to expand the numbers and range of Sino-Foreign University partnerships to encompass the whole of the Chinese and foreign higher education sectors, instead of just certain tiers of universities.

• 44 - Globalization of Higher Education Strategy - A strategy to move Sino-Foreign Universities in line with the higher education globalization trends.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 2 Increase courses and options and make the partnerships two-way (more UK students and Chinese on degree pathways here in China). We need to internationalize British students as well as Chinese students going to the UK. Foreign governments need to provide more grants for students to study abroad. Increase the commonality of courses.
- 8 Once we get through this period, the globalization of Higher Education has to be a high priority.
- 11 Chinese universities must summarize the value of what they should become in the future. If Chinese universities can find their values, the focus will change from Sino-Foreign Universities to building global universities. Finding our value does not mean we need to dominate a partnership, as we still need to have agreements with universities in other countries.
- 45 Alumni and Society Development Strategy To support and develop a Sino-Foreign University's alumni network and the local society where it is located through resource investment.

Relation to Figure 2: Increased salary for Sino-Foreign graduates {Econ}/ Number of scholarships {Cul} Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

Create a strong alumni organization.

Create strong global alumni.

4

Create job opportunities through educational training updates.

Establish a long-term (lifelong) partnership relationship and investment with the alumni and universities. Understand market research beyond the student numbers. The programs will be very selective and must ensure very high quality graduates with all the expected supporting elements.

5 Educate students and parents regarding the Western educational system.

- 7 Provide more for the government, local communities, and industries to allow a Sino-Foreign University to play a more established role in local development. A university's social responsibility is to ensure its research benefits its local economy and helps it to develop and commercialize.
- 13 Form a strategic investment of resources in mainland China.
- **46 Government Policy Development Strategy -** To develop and work with policies in terms of the clarity of the regulatory framework, the relaxation of the student recruitment quota as well as the approval process.

Relation to Figure 2: Enroll Ceiling {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 3 Remove vague legislative guidelines for Sino-Foreign University joint ventures. Remove the endorsement criteria for 2+2 students at the end of their academic studies. It is not helpful for joint venture cooperation, as the government is using the traditional Chinese structure, which is a mismatch with the Sino-Foreign University system. Removing the endorsement criteria would establish more flexibility in the system of government approved universities. Remove international staff from the government's pension program, as it is a tax burden for the institute and is a result of grayness in the current legislation.
- 4 Be able to understand the mindset of the policy maker, which will result in things being done without any problem.
- 6 Publish a set of principles and pledges that provide a public platform in which institutions, nations and leaders abroad can put full confidence for the future planning of Sino-Foreign Universities. This would ensure more foreign investment and interest through further clarity, and would allow for more confidence in mainland China's market to allow more Sino-Foreign Universities to develop. This is imperative towards establishing long-term commitment to and confidence in the development of these projects.
- 9 Develop Sino-Foreign universities faster and easier with the constraints above being removed. Remove the student recruitment quota to allow the institute to recruit students according to what the student market availability will bear, and within a programs design. This would increase the total university student numbers to surpass 10% foreign, 10% graduate, and 80% undergraduate students, and become a university of 15,000 students.

Increase the number of programs that can be applied to per year by a Sino-Foreign University to the Ministry of Education. Currently "old universities", those that are 5 years or older, can request permission to offer no more than 2 or 3 new programs per year. The limitation of 2 to 3 programs per year is set by the Ministry of Education, as they still feel universities in China have too many problems. Not all of these programs will be accepted by the government, and this limitation slows down the development of the university. Resources are wasted to prepare and set up programs that finally cannot be run without the final approval. Wasted resources include hiring staff for these programs; communication expenses to explain to parents why the programs can't run; and constructing laboratories that need to be in place before program applications are sent to the Ministry of Education.

• 47 - Partnership Integration Strategy - A joint approach of integrating both partners' strengths to build a new model of universities.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 5 Integrate the best practices of China and the West, as both sides have weaknesses.
 Establish trust from the sides of both partners and from the board.
 Have a very clear plan regarding what type of university is being developed in order to achieve the future development objectives.
- 8 Focus on building a stronger intellectual and academic model to complement the business model of a partnership. As we build this, it will be a shared learning experience, and will be less about importing Western models and more about jointly developing the intellectual and academic models. The models will be more mature and sophisticated than what began in mainland China during the dot com era. Once we get through this period, the globalization of higher education has to be a high priority.

10 More foreign university cooperation so the foreign university partner will open their doors and discuss further cooperation.

• 48 - Non Western Model Strategy - A movement away from Western academics, institutional models and values in Sino-Foreign Universities.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 8 Move away from the colonization (branch model) and build a truly global model. Asian universities such as those in Hong Kong will not want to replicate Western models anymore. By 2030 what we do now in universities will be seen as distant relics.
- 11 Reflection by the individuals leading Sino-Foreign Universities to bring cultural values back into the institutions by 2030. Chinese people leading Sino-Foreign Universities are losing their traditional cultural perspective.

• **49 - Staff Recruitment Strategy -** Recruiting specialized academic staff member through expected secondments from the foreign academic institution.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 7 Recruit specialized professors to cultivate a research environment for the future generation of students in China.
- 12 Make involvement with Sino-Foreign Universities normative throughout the respective partner university through introduction; promotion through the Human Resource department; and establishment of degree policies which mandate significant periods of overseas secondments and assignments for staff and students to China (and the USA). This will encourage and make the involvement with Sino-Foreign University partnerships mainstream as a routine and expected part of senior academic development for all academic staff. This will also establish top-graded degrees for students.
 - **50 Partner Numbers Strategy -** To mandate the number of partners each foreign and Sino university are permitted to form a Sino-Foreign University.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 1 Mandate foreign universities to only have 1 state partner from China in the future. Mandate state universities from China to only have 1 major Western partner in the future.
- 8 Furthermore, by 2030 we will see some Sino-Foreign University global brands with multiple centers of intellectual development and accompanied high-end staff moving between centers.
- 10 Find a good quality institute to form a partnership with and remove bad cooperative projects, particularly in light of the student's interest. If students have interest in the foreign cooperative program, it will continue. Otherwise, it will be removed.
- 12 Form strong networked partnerships rather than the current bilateral partnership model (one foreign, one state university) for research exchanges.

Expand the number of multi-partner relationships across continents, so a Sino-Foreign University partnership is no longer a one-on-one experience, but one that leads directly to the development of truly global and deep university relationships. Akin to the new multi-partner venture by the Mayor in New York to create the "east coast Berkeley", with Warwick, Singapore, and other leading non US universities in partnerships with US universities.

7. If you could pose three questions to a clairvoyant who can foretell the future, what would you ask regarding Sino-Foreign University partnerships in 2030?

• **51 - Finances -** Understanding the role of finances in Sino-Foreign University partnerships in 2030. **Relation to Figure 2:** Western University Dependence for Int. Tuition Presence {Econ}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards

- 1 Do you think foreign countries will see Sino-Foreign University partnerships as something more than fee income generating institutes?
- 7 Will finances be the main issue when discussing the partnership?
- 13 What will be the number of students in one-to-one exchanges between UK and Chinese partner universities (as finances dictate the number of one to one exchanges)?

52 - Operations and Leadership - Understanding how Sino-Foreign Universities will be operated and led in 2030.
 Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 Will there ever be a foreign president of a Sino-Foreign University?
- 2 How will they be operated?

• **53 - Policies -** Whether any updated policies related to the Gao-Kao or Sino-Foreign Universities will take place before 2030.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

3 Will there be an updated version of the 2003 law for Chinese foreign cooperation in running higher education institutes?

What is the Gao-Kao policy in 2030?

- 9 What policies and attitudes will the high-level government have towards Sino-Foreign Universities in 2030?
- 54 Preparation Understanding the requirements and preparation to meet the 2030 context. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 4 How can foreign partners prepare when both Sino-Foreign Universities and state universities are trying to do their best to survive until 2030?
- 5 What is the capability required to allow a Sino-Foreign University to meet the context found in 2030?
- 55 Institutional Context Understanding the institutional context which Sino-Foreign Universities will exist in during the year 2030.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 2 What agreements (degree programs, research and teaching collaborations, and study pathways) will be in place?
- 5 What is the context in 2030?
- 6 Will they be authentic manifestations of what we now understand to be Western academic institutions of intellectual discourse, inquiry and research?

^{2030?}

- 8 Do we understand the power of information technology to fundamentally transform higher education? Now information technology has the power to change institutions, research, teaching, etc.
- 10 How will the administrative systems of higher education in foreign countries change by 2030?
- 12 How did these interactions (from the positive and negative partnership experiences) assist the commercial and social development of the partner countries and universities, and which were the inspirational activities within Sino-Foreign University partnerships that fostered them?

• 56 - Geographic Location - Envisioning the geographical location of Sino-Foreign Universities in 2030. Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 Do you think that by 2030 there will be more Sino-Foreign Universities in foreign countries than in China?
- 4 How diversified (in terms of distance learning and credit modules) can Sino-Foreign University programs be in 2030?
- 7 Will Sino-Foreign Universities be established in other countries?
- 57 National & Institutional Dominance Envisioning which nation(s) or institution(s) will dominate Sino-Foreign University partnerships in 2030.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards

- 2 Which institutions will the partnerships be with?
- 3 What is the dominant foreign nation for Sino-Foreign University partnerships in 2030?
- 6 Which Western country will quantitatively dominate and qualitatively most define the nature of Sino-Foreign Universities in 2030?
- 12 Which are the leading countries in developing Sino-Foreign University partnerships, and why did this occur?
- 13 How many strong partnerships will exist with UK universities?

• **58 - Equal Partnerships -** Whether partnership equality will exist in 2030. **Relation to Figure 2:** Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 7 Will the two parties be focused on a more equal position when they discuss the future? When Chinese partners are seeking overseas partners, they are looking for very good universities. Chinese partners want to learn more from Western partners who are academically stronger now.
- 11 The participant responded by envisioning a beautiful image that he has in his mind of Sino-Foreign University partnerships and their development which he supports and is confident in happening in the future. The value that modern China places on academic specialists and research gives the participant confidence towards the further development of equal cooperative partnerships with an academic specialism in the future.
- 12 How did the positive and negative experiences occur in developing Sino-Foreign University partnerships?
- **59 Educational Changes -** Understanding the changes in university education that need to be provided by Sino-Foreign Universities in 2030.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards

2030?

- 9 What education do we need to provide for the future of Sino-Foreign Universities in 2030? What is the hottest area of research that will meet the future requirements of society?
- 10 How will education change according to the 5-year plans until 2030?

• **60 - Purpose -** Clarity in understanding the goals and purpose of Sino-Foreign University partnerships in 2030. **Relation to Figure 2:** Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

What is the purpose of Sino-Foreign Universities towards 2030?

- 8 What is the purpose of developing Sino-Foreign University partnerships in 2030? What is the greater set of goals that will be driving partnerships towards 2030?
- 10 What measures do that they want to develop? What are the five-year plans until 2030?
- 61 Sino-Foreign University Quantity Understanding the quantity of Sino-Foreign University partnerships in 2030.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 Do you think there will be more than a handful of stand-alone Sino-Foreign Universities, or will an embedded model be viewed as more beneficial for the state partner for the transfer of knowledge?
- 4 How can foreign partners prepare for the future Sino-Foreign University market, given the huge market potential with a 25% to 50% increase in university graduates and quality enhancements?
- 6 How many Sino-Foreign Universities will exist in 2030?
- 13 How many strong partnerships will exist in 2030?

5

Appendix J- Round 1 Theme Summary

1. In the best possible world what would you hope for Sino-Foreign University & College partnerships in 2030?

- 1- **Policy and Regulation Developments-**Policy developments which are clearer, less ambiguous, and allow for more autonomy for Sino-Foreign University partners.
- 2- **Tax Policy Developments-**Tax policy developments in favor of expatriates and related to the current tax free policies.
- 3- **Student Quota Policy Developments-**Changes in the quota system are desired based on the institutional structure of the Sino-Foreign University partnership.
- 4- **Higher Education System Development-**Sino-Foreign Universities will help lead Higher Education system developments in mainland China.
- 5- **Increasing Academic Quality-**Sino-Foreign Universities' academic quality will increase over time to a world leading level.
- 6- **System Commonalities-**Foreign and Sino partners would have increasing commonalities in various aspects which would allow for more interchange within a group of associated Higher Education institutes.
- 7- Education System Awareness-Sino-Foreign University staff and students should have an awareness of their respective partner's home nation education system.
- 8- Closer Partnership Cooperation-Sino-Foreign University partners work closer together with more cooperation.
- 9- **Best Practice Approach-**Sino-Foreign University partners work closer together to use the best resources and talent from each of their respective institutes.
- 10- **Improved Higher Education Access**-Globally more students will have access to Higher Education through Sino-Foreign Universities and/or social media platforms.
- 11- **Internet & Social Media-**The internet and social media applications will become integrated within future Sino-Foreign Universities given the upcoming generation of students.
- 12- **Integrated Global Partnerships-**Higher Educational institutes of the future will all have integrated global partnerships, thus making Sino-Foreign Universities extinct.
- 13- Cultural and Institutional Exchanges-More student, staff and cultural exchanges between Sino-Foreign Universities will enhance good practice.
- 14- **Society Contributions-**Contributions to and subsequent returns from society will take a more prominent part in future Sino-Foreign University partnerships.

2. What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?

- 15- **Government Developments-**Government developments are enhancing or are increasing the difficulty in operating Sino-Foreign University partnerships.
- 16- Academic Quality Developments-Developing the academic quality of Higher Education programs in mainland China.
- 17- Foreign-Sino Universities-The trend of Chinese state universities or research institutions being located abroad (outside of mainland China).
- 18- **New Sino-Foreign Universities-**The recent approval of several new Sino-Foreign University programs signals a new stage of their institutional involvement and overall presence in mainland China's Higher Education system.
- 19- **Research Centers-**The development of global research centers by foreign universities in China and other nations.
- 20- **Research Emphasis-**Sino-Foreign Universities and the Chinese government are moving towards a research emphasis to develop China's research strength.
- 21- International Student Market Growth & Importance-Students from Africa, developing countries and Western Baby boomers will become increasingly important for Sino-Foreign University recruitment strategies.
- 22- Secondary School Policies-Policies towards A-level and international school programs are moving students to study directly in the West.
- 23- Gao Kao Regulations-Changes in the Gao-Kao regulations provide challenges for future Sino-Foreign University partnerships.
- 24- A Lack of Pivotal Events-There is a lack of pivotal events to provide insight into Sino-Foreign University & College partnerships in 2030.

3. What major decisions with long term implications do the Sino-Foreign University & College partners and the Chinese government currently face?

- 25- **Decentralizing Decision Making-**The decision to give more decision making power to Sino-Foreign Universities from government (s) and the foreign home campus.
- 26- Enhancing Academic Quality-The decision to enhance the academic quality found at Sino-Foreign Universities and to influence academic quality within Higher Education institutes in mainland China.
- 27- Endorsed Partnership Tier (s) and Pathway (s)-The decision for the government to endorse Sino-Foreign University partnerships from non "elite" tiered universities and consider endorsing various pathway programs.
- 28- **Authorized Partnership Numbers-**The decision regarding how many Sino-Foreign University partnerships will be permitted to operate in the future.
- 29- Addressing Competition levels-The change in competition levels between Sino-Foreign Universities and State Universities.
- 30- **Implementing New Academic Model (s)**-The decision to implement and integrate new academic pedagogical models within the current Higher Education system.

- 31- **Developing New Institutional Model (s)**-The decision to develop new institutional models (tiers/pathways/partnership requirement/sponsoring) to Sino-Foreign University partnerships.
- 32- China Based Education Focus-The decision to build partnerships with educational delivery exclusively in mainland China.
- 33- A Lack of New Decisions-A lack of major decisions have occurred given the state planning base found in mainland China.
- 34- Understanding SFU's Future Purpose (s) & Position (s)-The decision to clarify Sino-Foreign Universities' future purpose and position within mainland China's Higher Education system.

4. a) What major constraints do you (have you) experience inside/outside Sino-Foreign University & College partnerships?

- 35- **Inaccessible Educational Authorities**-A major constraint is the lack of contact and communication with the government education authorities.
- 36- **Policies and Legislation-**A major constraint is working within the Higher Education policies and legislation found in mainland China.
- 37- **Provincial Variation-**A major constraint is the variation in legislation and policies per province (or within one region) for Sino-Foreign Universities.
- 38- **Partnership Mismatch-**A major constraint is finding a partner that has the same institutional background and goals for the Sino-Foreign University.
- 39- Administration System(s)-A major constraint within embedded Sino-Foreign University programs is the needed compliance towards the state partner's administrative system.
- 40- **External Monitoring-**A major constraint is the external monitoring from the foreign home campus, partners involved and associated quality assurance agencies.
- 41- China's Context-A major constraint is working within China's greater national (and unique) context.
- 42- Restrictions-Major constraints are the restrictions within mainland China.
- 43- **Finances**-A major constraint is the finances, costing and their respective objectives within Sino-Foreign University programs.
- 44- **Leadership-**A major constraint is the lack of experienced, strong and committed leadership within Sino-Foreign Universities to manage the contextual challenges.
- 45- **Staffing-**A major constraint is finding high quality and culturally sensitive staff with long term interests to support a Sino-Foreign University.
- 46- **Culture-**A major constraint is to manage the foreign and Chinese cultural as well as education system differences (for both staff and students).
- 47- Language-A major constraint is insufficient Chinese or English language preparation to increase student and operational standards.
- 48- Academic Skill Preparation-A major constraint is the needed academic skill preparation for successful Sino-Foreign University graduates.
- 49- **Parent Perceptions-**A major constraint is the perception and expectation of parents towards their children's education at Sino-Foreign Universities.

50- Graduate Opportunities & Benefits-A major constraint is the lack of equal job opportunities and benefits for Sino-Foreign University students compared to state university graduates.

4. b) How are the constraints handled?

- 51- Leadership-Strong leadership of Sino-Foreign Universities can solve the constraints.
- 52- **Communication**-Communication including internal and external meetings (Sino-Foreign University meetings) can solve the constraints.
- 53- **Blending Higher Education Systems-**Blending aspects of Eastern and Western academic and operational practices.
- 54- **Home Campus Compliance & Support-**Compliance to foreign home campus which will be strong and supportive to the Sino-Foreign Universities' development.
- 55- **Staffing Strategies-**Implementing staffing strategies to recruit, develop and maintain high quality staff at Sino-Foreign Universities.
- 56- **Recruitment Strategies-**Using recruitment strategies which can include getting parents or current students involved in a variety of activities.

5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University & College partnerships?

- 57- **Policy Strategy-**New policies to support and improve those that are currently in use.
- 58- **Government Involvement Strategy-**Increasing government involvement in future Sino-Foreign universities will strengthen their programs and output.
- 59- Sino University Involvement & Development Strategy-To increase the amount of involvement, authority and decision making from the state partner in Sino-Foreign Universities.
- 60- **Foreign University Integration Strategy-**The foreign campuses' industry contacts and resources (including staff) should be aligned to work with the Sino-Foreign University.
- 61- **New Partnership Model Strategy-**The focus to develop new models with a unique focus on being original with a variety of attributes that current Higher Education institutes do not practice.
- 62- **Consortium Strategy-**To focus on consortium partnerships and move away from the standard partnership of one foreign and one state university.
- 63- **Internet & Social Media Strategy-**To integrate internet and social media platforms throughout all work aspects in the academic and administrative departments of Sino-Foreign Universities.
- 64- **Operational Standards Strategy-**To initiate an enhanced operational standard that can bridge commonalities with other educational institutions for a variety of exchanges.
- 65- **Marketing Research Strategy-**To initiate a marketing research strategy to capture the changing trends and develop new communication channels to capture a new generation of parents.

- 66- **Student Recruitment Strategy-**To implement a student recruitment strategy to optimize on a Sino-Foreign Universities student capacity and recruit the correct caliber of students.
- 67- Alumni & Societal Involvement Strategy-To implement activities which strengthen societal contributions and the Sino-Foreign Universities alumni network.
- 68- **Curriculum Strategy-**To develop a new and unique curriculum which will help society and may have an increasing amount of non-Western academic practices to investigate a specific area of inquiry.

Appendix K- Round 1 Participant Response Document

1	1In the best possible world, what would you hope for Sino-Foreign University & College partnerships in 2030?					
	Theme 1 – Policy and Regulation Developments					
1	It is hoped that a clear regulatory framework will be developed for Sino-foreign Universities. It is also hoped that the old 2003 law will be revised and separated completely from the greater Chinese old Higher Education law. Blending the 2003 Sino-Foreign University law with the old Chinese law is enacting laws that were never intended and not compatible with Sino-Foreign University joint ventures.					
	The best possible person should be appointed to become the President of the university. More trust is needed so that a Sino-Foreign University can be run by a foreign leader. This has to do with the current regulations regarding Sino-Foreign University Presidents.					
	It is hoped there will be a more fair and transparent decision regarding the decision for Sino- Foreign University tuition fees (by the respective departments who create the tuition policies).					
	It is hoped that foreigners will become far more involved in the development of policies for the future of Sino-Foreign Universities rather than through Chinese intermediates.					
	It is desired to update the out-of-date library criteria, which do not include e-books, but includes English books, which are more expensive and more difficult to bring into China.					
3	The participant hopes for more developed policies for Sino-Foreign University & College joint ventures. Currently, the policies are not sufficiently developed.					
9	Sino-Foreign Universities should have more control over their institution and freedom regarding policies for recruiting staff and students. They should have the freedom to develop the kinds of programs they want to implement instead of having to apply to the central government. Applying to the central government is very time consuming and uses up much of the universities' resources to deal and negotiate with the government to open new programs and recruit more students.					
	The participant hopes there will be no such examination that forces the university to do something they do not want to do (i.e. CET 4/6 that may be cancelled next year).					
_	Theme 2 – Tax Policy Developments					
1	It is hoped that, if Sino-Foreign Universities are to be effectively run, they need continuity and the tax-free benefit should not have to be paid back if you stay in China.					
9	The participant hopes the government will support the university towards the tax issue (tax-free policy) that expatriates in China face, and also support the university financially. The Sino-Foreign Universities should receive the same amount of support from the government as the					

state universities.

Theme 3 - Student Quota Policy Developments

1 It is hoped that embedded institutions will be allowed to have their own open market quota.

9 The participant hopes the quota system will be abolished in the future, which should result in a higher quantity and quality of students. If the quota system is retained, it should be controlled by the central government (Ministry of Education) rather than the provincial authorities.

Theme 4 - Higher Education System Development

1 It is hoped that more joint ventures between second-tier joint venture universities (both foreign and state) will be encouraged, because the whole Higher Education system in China needs to be improved.

6 I would like to see Sino-Foreign Universities be transformative in the development of China as a whole for open social discourse. This is more important than improving the economic prospects of China (which is felt to be the goal of the Chinese decision makers).

I would hope that the influence of the Sino-Foreign cooperation arrangements will have a major impact on the practices on Sino-Universities (State Universities). This would result in a significant change throughout China, starting with the academic community and extending into the culture overall.

- 11 The participant hopes that the government and private owned universities will undergo a huge change in the future that will positively benefit the quality of China's Higher Education system. For this to happen, we need continued developments (about which the participant is confident) in the internationalization and cross-border education in China's future.
- 15 The participant would like to see a range of models develop, not just one model for Sino-Foreign Higher Education collaborations. A range of models will emerge with their own strengths and distinctiveness. In establishing a range of models in China, we can view which ones are most impressive. The most impressive models could be used to assist Chinese universities in their efforts at reform, and we would like to accompany Chinese universities in that process by employing a variety of Higher Educational models.

Theme 5 - Increasing Academic Quality

- 6 A great many of them would be expected to be earning credibility on the world stage of higher education for authentic academic inquiry, unfettered access to the world knowledge bank, and full participation in world subjects (full academic freedom). This would be expected for both the faculty and the students, and is more important than economic advancement in China, which seems to be the key need of the Chinese partners.
- 9 The participant hopes that high-level prizes (research Nobel prizes) will be achieved by researchers at Sino-Foreign Universities.
- 11 The participant hopes for a continuing movement towards higher-quality programs involving higher-ranked universities. There are over 500 colleges (in undergraduate programs) that are involved in international educational partnerships (programs and projects) in China. Most of these programs are not of high quality, but there is now a movement towards higher-quality programs involving the higher-ranked state universities.

The participant hopes that China's universities will be focused on cooperation with partners that have achieved a high level in their respective academic area and are focused on supporting the development of the nation's higher education agenda. In the past, the trend was for state universities to focus on low cost co-operations in areas such as general commerce, but in the future, the focus will be shifted to towards finding partners for specific areas of education. Because the majority of universities are state universities, their goal is not for profit. Based on that, their aim will be to choose a foreign partner based on their academic level and high educational character. This trend can be seen in the following two recent projects in Shanghai: a high-end hotel institute in Lausanne, Switzerland, with East China Normal University; and a famous film (movie) school. The trend in the future will be programs with a very specific, specialization and expertise in a major of study. The trend can also be seen in two other examples, which are supported by the local government: New York University is also cooperating with East China Normal University to provide high-level financial expertise; and the University of Shanghai for Sciences and Technology's newest cooperation with a leading engineering school.

The participant hopes that China's growing attention from the world thanks to its educational reforms will result in a higher level and quality of Sino-Foreign partnerships, and that the number of partnerships will increase in a very short time. From the perspective of both economics and education, China is growing and receiving more outside attention.

15 The participant would like to see the Sino-Foreign Universities strengthen and become more integrated into China's environmental landscape. This would include Sino-Foreign Universities' gaining further status in China for research and key lab status on the local, provincial, and national levels. This includes developing a solid relationship with the Chinese research councils. There would be plenty of research projects, with the focus on China itself. It would also include interacting in a very solid way with Chinese universities for a variety of purposes, including joint research projects and exchanges of best practices.

2	To have more commonalities in operational and administrative procedures.	
3	The participant hopes that the criteria for student enrollment and assessments will become more standardized between partner institutions.	
14	On the model of the Bologna agreement in Europe, there should be the same recognition between Chinese universities and the Bologna universities in Europe: some system of recognition of credit across the system, rather than institution to institution. There would be some way of making student movement very simple. There would also be a move from the current bilateral relationships to systemic relationships in Sino-Foreign University partnerships.	
	There would be a systemic recognition of credit and qualification, resulting in a free movement of students as well as a change in job market movement for students, which would allow more freedom to attain global employment opportunities.	

Theme 7 - Education System Awareness

- 2 To have Sino-Foreign Universities that understand the education system of their institutional partner's country.
- 9 The participant hopes foreigners in China will become more accepting of Chinese culture and will try to understand more about the education model found in China. The pressure from society (parents' requests for CET 4 and 6 examinations) should also be

removed and a focus towards better assessments should take place (IELTS and TOEL).

Theme 8 - Closer Partnership Coordination

- 3 The participant hopes for closer institutional cooperation, which is needed as globalization trends will force the partnerships to become more integrated and standardized.
- 11 The participant hopes that the perspectives of Sino-Foreign Universities will become more aligned between their state and foreign partners. This can happen with a more equal and cooperative pattern of partnerships, which is hoped for in the future. Currently, there are different perspectives of Sino-Foreign Universities from state and foreign partners.
- 12 There is a comprehensive two-way partnership of equals between sister universities, covering research, teaching, and commercial relationships.
- 13 The participant hopes that UK and China partner institutes will publish together.

Theme 9 - Best Practice Approach

- 2 To have Sino-Foreign Universities that foster a best practice approach. This involves common sharing of their resources for the optimal outcome of educational delivery and programs. One side is not superior to the other, and we can learn from both sides.
- 7 Whatever part of the world the partners are from (developed or undeveloped nations), all partners have something special to offer in terms of resources as well as different advantages (resources). If we can put all the resources together to satisfy the 3 functions, we can make the overall function of a successful university possible.
- 8 The partnerships will move away from a satellite campus based on a western model and will become a heterogeneous international partnership which will involve new models.

Theme 10 - Improved Higher Education Access

⁴ The participant hopes the result of social media platforms in Higher Education in 2030 will be in a completely new phase, which will result in all nations receiving a global education solution that everyone can access.

5 There are several different concepts for international cooperation. In the last twenty years, people have been focusing on cross-border education, which means mobilizing students and professors. Globalization is meant to avoid barriers, so we have to localize the institution, and it is a more popular type that will be used to develop institutions in other countries with an international cooperative. We should start to study the globalization of higher education, not just cross-border higher education.

Theme 11 - Internet and Social Media

The participant hopes there will be no boundaries to accessing education worldwide. This will be made possible by the growing social media platforms that will eventually extend into the educational sector, including universities. Partnerships compared to the past and present will become easier to form with the available social media platforms that will be in place. Basic education and universities have to take part by offering at least some their courses on these social media platforms. It will be very hard for institutions to avoid, given the learning society that will develop through online and mobile phone platforms. Note that mobile phones now have voice messaging and various video interfaces, which will provide a greater access to curriculum and learning by 2030. This hope stems from the fact that currently the social media platforms are taking a large part in the language and training centre aspect of education in China. A few months ago, Weibo reached 600 million users with their social media platform. At the same time, New Oriental (Xin Dong Fang), who once employed 50,000 people across China, announced they are facing big challenges because of Weibo's anytime or anywhere learning solutions that are being offered. As a result, New Oriental made a public announcement that they need to reposition their company and integrate social media platforms into their institutional model.

The participant hopes that social media platforms will push a trend towards lifelong learning, which will promote more training and development to help employees provide better output for their employer.

5 There are differences between cross border and globalization in higher education. Internationalization can be done within a country, and you do not need to cross a border. We do need to explore the impact of internalization and the internet further. There will be a greater selection of courses, and students can sit down and read educational resources from other countries and famous universities. If developed, this would be a new model of internationalization of cooperation. We need to think of the Sino-Foreign Universities in this context.

Theme 12 - Integrated Global Partnerships

- 5 Perhaps at that time, we will not need the concept of Sino-Foreign Universities, because almost all universities will have substantial international co-operations, so Sino-Foreign Universities will not exist. All institutes will be international education resources and could cooperate with other universities with those resources.
- 8 The participant hopes for fully integrated global partnerships. These partnerships would include global connections.

Theme 13 – Cultural and Institutional Exchanges

- 9 The participant hopes there will be an international environment that allows students and staff to learn from each other's culture and perceptions on life. There should be a good balance of international and Chinese students in the population.
- 13 The participant hopes that the UK and China will be the number one countries in terms of student and staff exchanges.

Students and staff should be moving both ways to both institutions through a number of exchanges.

Theme 14 – Society Contributions

7 To answer this question, we need to understand why we are creating Sino-Foreign University partnerships. It is important to understand and communicate the function of a university to a society and the world. A modern university has 3 functions, which include teaching and learning, research, and technical support and innovation that will affect the local (regional) economy. From these 3 functions, we hope to put the useful resources of both partners together to make sure the university or college produces the best possible output.

9 The participant hopes universities develop a clean environment with cities in China to help students study. Part of this harmonious society would include donations from society (scholarships) to allow underprivileged yet talented youth to attend university. University students require a clean, pollution-free, and quiet environment for their studies.

2...What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?

	2030?
	Theme 15 – Government Developments
1	A recent pivotal event is the imposition of the social fund, which companies must pay into for their employees. This hits us harder than the companies because we have more foreigners than even the big multi-nationals. Higher Education institutions need to be excluded from the social fund.
2	One pivotal event is a movement towards third-party participants being unable to run programs or recruit students in mainland China. The understanding is that they cannot be a private entity, thus indicating that they must be a Chinese university.
6	The election of Xi Jing Ping as President, and his intentions based on being a reactionary leader or forward looking reformist. In the next 10 years, he will have a huge impact on the development of the Sino-Foreign University cooperative agreements. There is nothing suggestive as a threat to the progress of these ventures.
9	The creation of the Sino-Foreign University sub-department at the Ministry of Education. Previously, without this department, we needed to refer to the Higher Education legislation, which is mismatched to the structure of Sino-Foreign Universities. This led to conflicting opinions on different issues, requiring a focused Sino-Foreign University sub-department to be the only voice to solve these problems.
11	After the free trade zone, the government released a document on deepening Sino-Foreign University-type partnerships. This will encourage more training institutes to open, and thus we can see the trends that more foreign institutes will develop in China.
12	The high-level continued interest and involvement of Chinese University leaders in these developments through, e.g., the directive policy statements on these issues from the Chinese Ministry of Education.
14	The enactment of the 2003 Higher Education legislation.

Theme 16 - Academic Quality Developments

- 3 Another pivotal event is the development of the 2010 Chinese educational reform, which is designed to improve and enhance the Higher Education joint ventures. China's growing position of economic importance on the global market will require more internationalization and more interaction with the bigger institutions globally, which will prompt more education and internationalization of China's current youth to achieve a higher level of talent in the future as leaders. This will result in a greater need for Sino-Foreign University & College partnerships to raise the standard of China to serve the nation's interests.
- 11 A recent pivotal event is the increasing emphasis on quality and values for Chinese universities. In China, the majority of universities are government-owned, so they have been government-oriented. The government wants a higher evaluation as well as management of the Higher Education teaching that will occur in the future. A result of this is that the government wants to work with foreign partners that have the highest quality assurance standards in higher education while improving the qualities of their own educational practices.

Theme 17 - Foreign-Sino Universities A recent pivotal event is the emergence of a foreign Chinese joint venture (Xiamen 1 University), the first one being in Malaysia (a Chinese and a Malaysian university). 11 Now, highly qualified Chinese universities are looking for Western university partners (like Zhejiang University) to set up an institute in a foreign country to internationalize their university, conduct research, and be a centre for cross-cultural relationships. Institutes in foreign countries will be set up from different kinds of perspectives (as already mentioned) and will be different from Sino-Foreign Universities in China. These institutes will not have a focus on profit. Note that we are talking about a totally different partnership, which is fit for the future of education, as it will stand for the true nature of education. The institutes will only represent inquiry and comprehension towards knowledge, academic discourse, and high quality standards. 13 Chinese institutions in the UK through the growth in the UK. German research councils in China and the UK research office in Beijing. This is a potential insight into their being a Chinese Academy of Sciences (satellite campus) office in the UK.

14 The opening up of Chinese universities to overseas partnerships (all ranks/tiers).

Theme 18 – New Sino-Foreign Universities

- 1 A recent pivotal event is the change in the atmosphere of what the Sino-Foreign University cooperative partnerships are supposed to achieve. The letter of the Sino-Foreign University Higher Education cooperative legislation (2003) was to educate Chinese citizens. Now the emphasis is changing as the establishment of Duke and NYU are taking American-driven wishes (campus internationalization to internationalize students from America) and converting that into taking Chinese students. Furthermore, the Shanghai government wants the status of high-end universities and German institutes.
- 5 The Chinese Ministry of Education has approved several new international cooperative universities. The Ministry of Education has opened the door again for new international cooperative programs. This will put the international cooperation into the next hot wave, which should be a repeat of 2003, which had a big boom following the 2003 legislation, but since then had closed the door. Since 2003, many universities have applied to have international cooperative programs, but only a few new universities were approved. The media have argued the impact of international cooperative institutes on traditional Chinese universities. This will be another wave, and people will pay more attention to the impact of Sino-Foreign Universities on the traditional Chinese Higher Education sector.
- 6 The establishment and approval of the 3 major American Sino-Foreign University ventures (Duke, NYU, Kean University), which have all occurred within the last 2 years. They mark a major step forward for the Chinese Government, creating momentum that will be difficult to stop.
- 7 The entrance of NYU into Shanghai is an example of providing an urban university learning environment that can use NYU to help develop Shanghai into a world-class city. NYU will help the next generation in China and USA to work together, develop their respective countries, and help each other out. In conclusion, the output of Sino-Foreign Universities should reflect an ideology that one plus one equals more than two.
- 8 The recent pivotal event includes the technological innovations to establish the mass of online academic programming, which the participant considers to be the single most important variable in this time, and will become integrated in new Sino-Foreign University projects.
- 9 The entrance of Duke and NYU signal that the Ministry of Education wants more Sino-Foreign University programs and the Ministry of Education supports these programs. There is the potential that the government will invite more high-level universities to come into China, as a foreign university can have one project in China. The participant views the potential in a Sino-Foreign University with another foreign university to set up a future Sino-Foreign university in China. This will change the whole definition of Sino-Foreign universities.

- 12 The freeing up of the Chinese Ministry of Education moratorium on new Sino-Foreign partnerships and the resulting expansion of links to world top 10 universities (e.g. major US universities through Sino-Foreign partnerships with NYU and Duke).
- 13 The establishments of the two UK campuses are important steps.

Theme 19 – Research Centres

12 The development of global research centres by the University of Nottingham in China, Malaysia, and UK, and the considerable take-up of commercial links to research consultancy and Knowledge Transfer Partnerships from these centres by major Chinese and UK globally oriented companies.

14 The opening of the UK research council office in Beijing (approx. 2006).

Theme 20 - Research Emphasis

- The pivotal event is that the agenda has changed from teaching-focused to research-led, in order to achieve world rankings. This will result in more graduate programs.
 Another pivotal event is the growing awareness that the imbedded model may be better for knowledge transfer to the host (state) university while the stand-alone Sino-Foreign Universities are not helping their own universities because their mission is to earn a higher ranking by themselves.
- 4 Two recent pivotal events are the 18th congress meeting that was held 2 months ago, and the more recent economic meetings held last weekend. In these meetings, education (with an emphasis on creativity) was ranked as the 4thcurrent priority, as without educational reform, it is very difficult for China to become the number one nation in the world. Thus, this current educational reform is as important as economic reform. China is taking education very seriously in order to improve its research and development output by fostering creativity, critical thinking, and innovation at both the basic and Higher Education levels. Last week there was an article in the *New York Times* that discussed China's reforms to develop innovation and creativity. This was but an example of how the world will look to China as a very serious global partner for research and innovation. Now America's research budget and agenda has to keep up with that of China's. By looking back at China's leaps forward over the past 30 years, it can be expected that they can achieve these goals in research and development by 2030. To summarize, Sino-Foreign University research and development partnerships will become the focus of future partnerships.
- 7 Our institute just signed an agreement with the local government to set up a marine/economy and technology research institute. The local government and central government would like the city area to lead in this field. As the government is seeking this to happen, they are providing us with more human resources and more technological equipment to improve and develop the local economy. Our branch campuses will also provide us with some resources, which can give a parallel development of our Sino-Foreign University alongside the development of society in general.
- 8 Continued urbanization, as urban centres are where the creative and talented energy will have the greatest impact.
- 13 The 1000 Talents Program.

Theme 21 - International Student Market Growth & Importance

8 A further pivotal event is the demographic shift caused by aging populations. Universities have tended to focus on educational models from an age-based perspective, but now universities will need to pay more attention to lifelong learning. Seniors will become a huge market for universities, as baby boomers are the healthiest and wealthiest generation to be going into retirement. Continuous learning will be the dynamic as baby boomers are interested in education for general inquiry about the world and its knowledge. Currently, some of this is

being taken into consideration by North American universities, and online universities are at the front in terms of lifelong learning.

An example of this in relation to Sino-Foreign universities is that many retirees will travel to China with background courses on China's history, culture, etc.

Another recent pivotal event is the emerging middle classes in other countries. Many Western universities used to focus on China and India, but now the focus is on Africa and elsewhere.

12 The development of international college partnerships between Sino-British EFL companies and Chinese universities to deliver international student recruitment and language training in China for third-country nationals.

Theme 22 - Secondary School Policies

- 2 A move towards independent A-level schools that have left the campus of their local partner. Local Chinese students can only be accepted to Sino-Foreign Universities if they have A-levels and a Gao-Kao score. Having only A-level scores is unacceptable from the government's perspective; yet these students are ideal with their western education; yet we cannot take them.
- 13 Sino-Foreign secondary schools (if not mainland China, then HK) are being used as feeders to train students to prepare them in the UK. These programs are currently drivers for Chinese students to go to middle schools that are purely international schools. The rising middle class can support these types of schools and raises the question as to what their future will be.

Theme 23 – Gao-Kao Regulations

- 1 The imposition of business taxes on non-Gao-Kao students should be stopped, because they are registered with the Ministry of Education.
- 3 A recent pivotal event is that this year, the senior year 1 English score is worth much less than the current requirement in the Gao-Kao assessment. This will result in more English training by the time the students reach Sino-Foreign Universities.
- 9 The request by the respective institutes for the Gao-Kao to become the basic and not ultimate standard for university entrance. A university can, in addition to a Gao-Kao score, have its own unique requirements for student entrance.

Theme 24 – A Lack of Pivotal Events

- 1 It is more an issue of the lack of events, as there have been various efforts to start reform, but nothing has seriously come about.
- 15 The lack of events is key rather than any specific event itself.

I would like to see more communication and get clear feedback as to how the Sino-Foreign University experiments are being viewed by authorities (state partner & government) through more feedback and discussions. It can be difficult to achieve clarity on Chinese government policies related to specific matters.

A lack of clear communication. There was a slight reluctance for anyone from the Ministry to get up and say this is the vision. The attitude towards setting up universities in China is that various nationalities of foreign partners have various experiences, and it is hard to discern what the pattern is. When our institute was set up, all the lights were green, but later for other projects, it is difficult to recreate.

3...... What major decisions with long-term implications do the Sino-Foreign University and College partners and the Chinese government currently face?

	Theme 25 – Decentralizing Decision-Making
1	The major decision would be to decentralize the power to local authorities, or have more

1 The major decision would be to decentralize the power to local authorities, or have more involvement from Beijing to get involved in Sino-Foreign Universities.

- 7 We previously depended on the UK's H.R. office, but now we bring our own ideas to work with the H.R. office to solve the issue of finding stable staff. This problem has not yet been solved.
- 11 We can see the government is giving more power to the universities and colleges. An example of this is that many universities are asked to set up their own chapters for their universities before 2015. To set up the laws and "chapters," the government let 3 parties know what their duties and relationships are in order to obey the laws. When universities are given more power, there will be more changes when choosing their foreign partners. So this encourages more of a market economy movement instead of a strictly planned economy for higher education. As a result, this encourages more partners to invest rather than the government.

	Theme 26 – Enhancing Academic Quality
1	The decision that is allowing us to lower Gao Kao scores (in English) which will affect the customer base and require more preparatory work (foundation year) within Sino-Foreign Universities.
	The decision to ban foreign agents and refuse to accept degrees from abroad (not validate degrees). Overall, the decision on how to punish those foreign partners who have abused the system has also dissuaded those who are keen to come with good intentions.
	The decision to make cheating and massive fraud (essay writing/IELTS openly advertising) liable to prosecution. For this to happen, we need education authorities to talk to the proper government authority.
5	The Chinese international exchange commission has developed a commission for Higher Education exchanges. The government will open the door to programs but will pay great attention to their quality.
	Strengthening the accreditation process needs to happen. They have developed an independent accreditation institute to accredit universities working in China. Universities will develop together their own quality standard without the aid of the government in a planned economy. The government will push the association to develop some independent accreditation institution which would allow market forces to take shape instead of a planned economy. The government approval procedure and market approval power will help the international cooperative programs achieve a higher quality standard.
6	For the partners, a major decision will be to continue to have the adequate academic integrity for the basis of their operations. Finances may be a part of the presence in China, which offers the aspect of additional revenue streams for universities. The revenue consideration is not so much a consideration for the universities; it is a self-determining result (losing money results in going home).
	What is at their discretion is the academic value and character of the projects. VPN networks with hidden glitches are artefacts of Chinese practices that technicians naturally chose, which limits access.

Book importing through Beijing is problematic; it requires several months for the books to be received while they are held and inspected. No books have yet been denied, but the continuous practice of inspecting and holding books for several months keeps open the theoretical possibility that censorship could be exercised. Leaving the situation as is in place without a solution keeps the question open as to whether academic freedom is truly present. It is possible that the current curriculum does not test the limits, but future modules and courses may change this.

How to discern in those routine practices the establishment of authentic academic freedom is a question that remains in the participant's mind. Inferring as to how free and supportive our partners are involves an understanding of the details of technological infrastructure. The details are so complex, it becomes impossible to understand if real academic freedom exists (The devil is in the details). The details are technological as well as procedural, and the participant questions whether we truly have academic freedom with the projects.

7 Whether to eliminate the higher education programs that have business incentives over higher education incentives. The Chinese government is seeking good universities to provide education, not business. The Chinese government is paying more attention to the quality assurance system. The main concern from the government is to improve the quality of their

Higher Education programs. The state universities need to focus on improving the students' academic quality. There is no concern about a lack of quantity of Higher Educational institutions. If the respective university wants to survive longer, the university needs to pay more attention to the quality delivered. In the long term, the Chinese government needs to have programs with foreign partners with very good academic reputations for the intent of inquiry and knowledge, and to improve and work together towards the 3 facets of a university instead of business and profits.

- 8 The other huge challenge is quality control in Higher Education, as neither the market or government oversight has been effective in terms of efficiencies and monitoring the quality of outcomes. The Western Higher Education institutes are focused on inputs (attracting students) rather than outputs (successful graduates with skills).
- 9 A major decision is whether the government will try to change all the state universities into international universities. (State University learns from their partnered Sino-Foreign University).
- 15 Another major decision is to compare Sino-Foreign University models to the state models in the reform of Chinese Higher Education. This could result in Sino-Foreign Universities having a broader effect. This will decide what these Sino-Foreign University models will mean for China's overall Higher Education system or whether they will stay as isolated experiments in China.

Theme 27 – Endorsed Partnership Tier(s) and Pathway(s)

- 2 The major decision of the government is to decide the details of the rules and regulations as to how we can operate. This implies what programs will be given a license (tier of university), what pathways can we offer, and what pathways will be eliminated. This also involves the detail of any changes in their degree endorsement regulations and what subjects they would approve. Will they continue to recognize 2+2 and 3+1 pathways for undergraduate degrees?
- 12 Whether or not the Chinese Ministry of Education wishes to broaden links across the various strata of universities or wishes to retain the "elite only" status welcome for Sino-Foreign partnerships.

Theme 28 - Authorized Partnership Numbers

- 1 The decision that foreign universities will only be allowed to have one partner in China. There is a strong hint that this is going to happen.
- 2 A major decision is to increase, decrease, or hold steady the number of Higher Education joint venture programs in China.
- 9 A major decision for the government is to decide how many Sino-Foreign Universities they are going to set up, as it is very hard to set up many Sino-Foreign Universities.

Theme 29 – Addressing Competition Levels

- 1 The decision to place Sino-Foreign Universities in direct competition with other Higher Education institutes in China. This increasing competition will be a challenge for Sino-Foreign Universities, particularly given the large quota of international students that state universities have targeted.
- 2 The other major decision is to address the competition levels for Higher Education programs in China.
- 9 A major decision is that the government needs to decide in what kind of ways the Chinese state universities will learn or change themselves to meet international requirements. A lack of change on the part of state universities gives Sino-Foreign Universities a market advantage.

Theme 30 - Implementing New Academic Models

4 The major decision is for the government to decide how they will integrate traditional and new pedagogical methods to foster creativity and analytical skills in China's future graduates. The major decision for Sino-Foreign University partners is to integrate traditional pedagogical methods with new methods to form better partnerships. Forming a partnership based on future educational delivery will help the Chinese government to endorse and approve a program under discussion.

The major decision for Sino-Foreign University partners is to think of how social media platforms can be integrated into the partnerships.

8 The major decision is to change our current fundamental academic model, which needs to be changed.

The current academic model is very conservative, has resisted change for a long time, and is hopelessly dated.

Any change will come from a policy-level decision as to how we organize, fund, and provide accountability for Higher Education. There has been no change in the Higher Education system in the West since World War II.

Theme 31 - Developing New Institutional Models

- 2 Another major decision is what type of Higher Education joint venture (Sino-Foreign University/imbedded model/lower key project) the government wants to develop.
- 9 A major decision is whether a Sino-Foreign University will be involved in a high-level joint venture cooperation. If so, this will change the definition of Sino-Foreign Universities and the overall Higher Educational environment. Sino-Foreign Universities are now considered to be set up by 2 previously established universities (one purely state, one purely foreign).
- 13 Sino-Foreign Universities are long-term projects with a horizon of 50 years. The major decision would be to move away from the current model of a single UK university invested with one province in China, given the heavy financial burden for both sides. The involvement of publishing houses (Pearson) or banks (Ernst & Young) would lead to a major decision to seek funding.

To avoid a Sino-Foreign university joining another failed UK overseas program, a long-term viewpoint financial backing is required, as the project will not generate money in the short term.

Theme 32 - China-Based Education Focus

- 2 A major decision is to reverse the direction of learning. Will China soon say they have had enough knowledge and learning from the West? Will we reach a balance point at which the West is required to learn from China through Higher Education programs in China?
- 4 The major decision for Sino-Foreign University partners is to consider a global education agenda. This would involve the decision of whether the partnership will be formed inside or outside of China, or whether a location is relevant at all considering the social media platforms.
- 12 Whether or not incoming staff and student visa controls into some western countries continue to be strengthened, and what reaction to that action occurs in mainland China and elsewhere.
- 13 The major decision to have more student exchanges given the ratio imbalance of UK and China students. We have seen a significant investment from Chinese families sending their children to study in the UK. We have not yet seen UK families send their children to China for exchanges, even though China has cheaper living costs.

Theme 33 – A Lack of New Decisions

1 The trouble is that there have not been any major decisions as of late.

7 The 2020 Development Scheme written by the government outlines how Sino-Foreign Universities will develop until then.

11 There are no major changes in the nation's strategy with the Chinese government, so nothing major has changed in the past ten years.

Theme 34 – Understanding Sino-Foreign Universities' Future Purpose(s) & Position(s)

- 8 The biggest challenge is to re-imagine what Higher Education should be about and how it can be funded.
- 14 Whether we move from a pilot stage led by individual institutions to something that is more systemic. There was a joint-communiqué issued by the UK to the Chinese government in 2012 regarding the relationship moving beyond an exchange of students toward an institutional cooperation across the whole range of universities.
- 15 A major decision is to clarify as to what the overall purpose of Sino-Foreign Universities is in China. Will the institutions exist for research and/or teaching, or as small, isolated institutions? Both partners and the Chinese government need to clearly identify why the Sino-Foreign Universities will continue to remain in China.

4...a) What major constraints do you experience/have you experienced inside or outside Sino-Foreign University & College partnerships?

Theme 35 – Inaccessible Education Authorities

- 1 The main internal constraint is that the foreign partner cannot negotiate directly with the central or regional authorities. The negotiating is done by the host universities, and this constraint does not allow us to sit in the meetings with the right people to creatively resolve the problems.
- 3 A major constraint is the lack of direct communication with the educational authorities. This is done by the state partner universities.

Theme 36 - Policies and Legislation

- 3 A major constraint is the lack of proper legislation as Sino-Foreign University & College joint ventures are very new with only a decade of existence. The 2003 foreign cooperative higher education legislation is very broad and lacks guidelines for administrative or implementation procedures. An example is the tuition pricing structure for Sino-Foreign Universities, which is inconsistent even for partnerships in the same region.
- 4 The major constraint is validating the program and degrees being offered.
- 5 The constraints also include policies and regulations from the government.
- 7 During the development stage, you don't know what type of materials/papers to bring for the establishment of the new partnerships.
- 9 Constraints include the lack of degree awarding power, the program application (bidding) process, the campus location approval process, and the student recruitment quota as set by the government. You need to apply for the program and prepare for it (recruit staff, prepare the laboratories and facilities, etc.) before it is accepted. A program can be cancelled or not approved even if the preparation by an institution is all in place.
- 14 Understanding the Higher Education regulatory and legal systems (nationally). An example of this is that, in China, you can be granted an institutional license giving permission to teach, but not a license to graduate students, which is done to see if teaching has gone satisfactorily. In the UK, the institutional licensing that gives permission for both teaching and graduating students is done simultaneously.

Theme 37 - Provincial Variations

³ Another example is that because there is no standard regulation to the legislation, the benefits can be quite different for each Sino-Foreign University. There are different practices and space

as to how you interpret the current regulations. The fundamental problem is that there is no standard. Even in one city, different criteria are set for fees. Theoretically, there shouldn't be any provincial differences as they are all under the Ministry of Education, but in reality, there are.

7 The government support from province to province differs greatly and the policies are set by government.

Theme 38 - Partnership Mismatch

- 7 Constraints change based on the setup stage or development stage. Initially, finding a matched partner is a big challenge, as many are set up being very mismatched with partners that have different levels and backgrounds. Some foreign partners want market share for student recruitment purposes, while others want a market base for research. The first challenge is to find a matched and common purpose for your partnerships.
- 11 A major constraint is the lack of equality in terms of the different tiered universities (both foreign and state) that form current Sino-Foreign University partnerships.

Theme 39 – Administration System(s)

- 1 The administrative part of the host university (which is the least internationalized part of state universities as institutions) needs to be followed in embedded Sino-Foreign University programs.
- 2 The internal constraints include policies, procedures, and administrative systems that are different between partner institutions. Reaching a common understanding is difficult. For example, students have a common fourth year project, but they need to fill out two completely different sets of paperwork for each partner institution. An attempt to achieve a commonly agreed system has been attempted, but neither university will accept each other's paperwork system.

Theme 40 - External Monitoring

- 1 There is far too much quality assurance that is involved. An example of this is that it is not certain why the Chinese quality assurance system needs to be enforced on a foreign institution of world ranking.
- 2 The external constraints include suddenly implementing a change in rules and requirements without notice from the UK and Chinese side. This can be present through academic updates throughout the year despite a handbook of regulations having been produced at the beginning of the year. It can also be present through a partner university changing its grade requirements in the middle of the academic year without consent. These constraints stem from a lack of understanding of the different conditions that we are operating under due to the differences in administration, government, etc.
- 6 Each Sino-Foreign University partnership has a special arrangement and personality. For this participant, the constraint is that the home campus management keeps the Sino-Foreign University project tightly restrained or bounded to the management authority of the home campus. The micro-management of the home campus exerts extraordinary control, which will restrain the institution's development as an authentic university campus. It is disabling the growth prospects of the project. Some Sino-Foreign Universities are different as their focus is to have a global campus for which every campus is the same instead of being considered a special overseas project.

Theme 41 - China's Context

11 The large and rapid growth in Higher Education will be a huge constraint for the foreign partners to change their approach in the market. Cross-border education will make massive

changes in the future. The patterns and growth of Higher Education in China will parallel China's economic growth.

12 Until very recently, the foreign exchange controls in China hindered the free transmission of foreign currencies both ways.

The lack of expertise on overseas university councils upon working with China and its challenges.

14 Accounting conventions used in China and those in the UK are different. It took a while to get our heads around it, but once we did, it was reasonable.

Theme 42 – Restrictions 9 A constraint is the inability to get old books (now unpublished) to add to our library resources. 12 Strengthening visa control in the west. Until recently, the moratorium on Sino-Foreign partnerships.

Theme 43 – Finances

- 1 There is an illogical and inflexible pricing scheme that on the surface is based on costs, yet turns out to be based on the status of the host (state university involved) and their local fees.
- 4 The major constraint is the cost of the program.
- 5 Different levels of government officials will take the international cooperative as a form of marketing or dreaming form of institution, which are viewed as for-profit institutions. Many international cooperative programs are non-profit institutions and lack financial support from the government. Many international institutions are facing the challenge of sustainable development.
- 7 To match with the Chinese government criteria in order to set up sufficiently in terms of financial funding. Usually funding by third parties (donations) is helpful.
- 9 Another constraint is the marketing or recruiting budget, and the lack of student support mechanisms (no student bank loans), which has not yet allowed for the institute to reach its target of a 10% foreign student population.

Furthermore, a related constraint is the limited financial support for only purchasing books for the necessary field of programs delivered.

- 11 A major constraint is the desire for the foreign partner to make profits instead of focusing on the long term development of the academic program.
- 13 Government restrictions on net migration, as institutions alone cannot handle the overseas programs by themselves and they need the support of government funding (with the exception of the Russell group universities). Most UK universities do not have much cash to invest in a major offshore operation, and most cannot do more than one offshore activity.

Theme	44 –	Lead	lersh	in
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- 5 Sino-Foreign Universities can have an unsuitable governance structure and a relatively low capability from their senior management team. It is not easy to find the right leader to run the proper senior management team and Sino-Foreign University, as many are selected but are not familiar with the Chinese context. There is a lack of resources of leadership in Sino-Foreign Universities. This is particularly important at the Sino-Foreign University institution level programs.
- 12 The innate conservatism and fear of the unknown within academic departments and their leadership.
- 13 The lack of a keen Vice-Chancellor and/or leadership and long-term planning. The senior leaders need to manage it well and add substantial financial resources, even with half a dozen strong partner institutions. A strong leader could start an overseas Sino-Foreign University relationship with a Confucius institute.

15 Firstly, more significant issues, rather than constraints, which is not the right word, is more appropriate. What is needed at any overseas university looking to set up in China is buy in from the management of the home university, and buy in from the academics at the level of faculty. You will need senior people (not just the management team) to be committed to the project and make sure it is done in the right level and right way.

Theme 45 - Staffing

- 3 A major constraint is the H.R. arrangement, which is unique, as it involves multiple cultures (representing the staff and students) to manage and support. The result is that the multicultural environment has raised the staff's requirements to a very high level.
- 7 During the development stage, finding well qualified and stable academic staff is the main constraint. Another concern is to maintain the teaching quality that you promised your students. This is an internal challenge regarding teaching material, staffing, and assessments, which can all impact teaching quality. Furthermore, staff lack commitment and come for short periods of time with a dual purpose of China tourism.
- 9 Some internal constraints are difficulties in recruiting high-end expatriate staff, the tax implications that expatriate staff face, and the challenges in finding appropriate education for their children. Their significant others (husbands or wives) also have trouble finding suitable work in China.
- 11 A major constraint is foreign partners that, for a variety of reasons, do not want to make their staff more localized. These foreign partners will either not exist in the future of China's higher education system or will have changed to localize their program.
- 15 Buy in also needs to happen from other parts of the home university and requires year-to-year interest from faculty.

An advantage of getting the buy in from a sufficiently large number of colleagues from across the university is to send out on secondary staff.

The university staffing model is another issue.

Theme 46 – Culture

- 2 The internal constraints include language and cultural differences, which create misunderstandings.
- 3 A major constraint is the difference in philosophies, culture, and evaluation systems of the two partner's academic departments. Because a joint venture relationship involves two different cultures regarding the management of such issues as plagiarism and referencing, there are very different perceptions from each side. Many discussions need to happen to clarify and resolve the differences within a Sino-Foreign University.
- 5 The constraints include culture and society.
- 7 Cultural conflicts between international staff members (representing 50 countries) are other issues. They all bring their different cultures and expectations, and it is difficult to align their views with the direction of the university.
- 8 Another key constraint is culture. It is fine to talk about international cooperation and networks, but if we do not understand the cultural realities and work through our differences, major problems will arise.
- 9 A constraint is the communication between local and international staff where both sides feel a problem is understood, but afterwards, it is found that there was a misunderstanding. The Chinese and Western education systems have different philosophies and practices. The philosophical differences create a big challenge in organizing a harmonious staff that work together effectively.

Theme 47 – Language

- 8 The major constraint was language training. Our university was very active in recruiting students from China and we got ahead of ourselves by attracting a lot of students but had not provided the language training and cultural support needed.
- 12 The lack of knowledge of the Chinese language at nearly all levels of Western universities outside specialist Chinese language departments.
- 13 Another constraint is the lack of Chinese language and culture programs in UK institutions (in China), which restrains intellectual interest.

Theme 48 – Academic Skill Preparation

- 3 A major constraint is that Sino-Foreign Universities cannot take Chinese Nationals who are in A-level or IB programs without the Gao-Kao scores. In terms of the applicants for students' background in the state system, there is a gap in terms of language, learning, and the teaching and learning environment, compared to those who have studied at A-level or IB programs.
- 4 The major constraint is the challenge to integrate traditional and new pedagogical methods whilst graduating high quality students that have all of these skills to attract their future employers.
- 11 A major constraint is to educate the students while assimilating (localizing) the knowledge in the correct way to allow for better jobs and practice. Applying the theory and knowledge into the local economy while experiencing the foreign partners' advanced knowledge is a challenge.

Theme 49 - Parental Perceptions

- 3 A major constraint is the large difference in perceptions of parents regarding the expected contact hours of teaching and the expected cooperation between teachers and students. This is a result of a cultural difference between Western and Chinese parents and is a marketing constraint when recruiting students. We try to educate the parents, but the difference in University systems (East-West) is even more difficult for them to handle and accept than compared to the change and challenges their children will face when studying in a Western University program.
- 5 Parents criticize the system and they don't want the reform to impact their children. Another constraint includes the public media and mini blogs that lack an independent rational analysis of various events. This results in people criticizing according to their understanding and personal experience without fully understanding the issues. Society needs to mature to develop more logical arguments for decision making.
- 9 Another constraint is the Sino-Foreign University brand, as parents are the main decision makers in a child's education in China.

Theme 50 - Graduate Opportunities and Benefits

- 3 A major constraint is the lack of policies developed for Sino-Foreign University graduates. In terms of hiring (H.R.) policies, firms cannot give Sino-Foreign University graduates benefits such as applying for a Shanghai Hukou. This is a benefit that is available for state university graduates only.
- 9 Another constraint is student employment opportunities. State-Owned Enterprises have limited job prospects for Sino-Foreign University graduates based on the requirement of English qualifications (CET 4/6 required) or requirements of Project 211 and 985.

4	b) How are these constraints handled?

Theme 51 – Leadership

1 The constraints are handled by having strong leadership in the Sino-Foreign University, which focuses on being as useful as possible to the host (state) university. Being as useful

as possible will, hopefully, allow more people in the host university to realize the nature of Sino-Foreign Universities, which are not rich (as finances and other resources are quickly absorbed by both partners).

The constraints are also handled by the leadership being able to select the appropriate issues to discuss and debate.

- 5 Strong leadership that can deal and help the institution survive in the struggle between the planned and market economy. The Chinese government has pushed the reformation of the market economy while many sectors, such as education, still have the habits of a planned economy. This creates trouble to run a new university smoothly, so a leader has to find their own way to break through the many challenges which are a result of the dual system. If the university wants to run successfully, they need a strong management team to face the challenges.
- 6 Provide as much mentorship and guidance to the partners here on site. Constantly trying to nurture their greater natural instincts for more autonomy. (Example: a report is prepared after a meeting in a format that reflects the institute is an autonomous independent university.) The participant needs to separate the delegation of responsibility and accountability that lies on the foreign and Chinese side whilst nurturing and encouraging all the participants.
- 12 By senior management pushing through investments in Sino-Foreign partnerships with verve and enthusiasm, thereby by-passing the internal constraints; external constraints have to be endured with patience and understanding of the Chinese/Sino position.

Theme 52 – Communication

- 2 The constraints are handled by trying to find the best fit to the current situation (square peg into a round hole as best you can). Dual degrees, for example, are handled by dual systems and much repetition in slightly different ways to satisfy the partner institution's needs. The constraints are also handled by many meetings and discussions to try and find common areas to work forward with to overcome the constraints.
- 3 The constraints as mentioned above are handled over time with sufficient communication with the relevant individuals to shape up a solution. Internal meetings can help as well.
- 4 The constraints are best handled through communication, which is easier now than ever before in China.

The constraints are best handled by changing the emphasis as to who is communicating. The communication needs to be the governments of each respective partner rather than just the universities concerned. This is particularly important at the beginning of any discussion for new Sino-Foreign Universities. As we move toward the future, we cannot do what we have done before in the Chinese market. Furthermore, the new Chinese administration will be different from all previous administrations, as the government wants to be a world player and become number one in global education.

- 7 To find the correct partner, a lot of communication needs to happen to ensure you have the same dream for establishing a Sino-Foreign University.
- 9 The constraints are handled by having university-level meetings to discuss the staffing issues with the foreign partner university to find a supporting solution.

The program application constraint is solved by explaining clearly to the Ministry of Education the difference in the applied programs with having different content and better quality students. One reason for the rejection of a program last year was that we didn't mention how our program is different from a state university, and we didn't explain how the quality is better. Many state universities have this chalk and talk, no equipment (cheap set-up) type of programs so the view of being cheap resulted in the program being rejected by the Ministry of Education. The government wants so much control over the application of programs because they feel there are too many students and not enough jobs. They only want to approve programs that can develop society and a respectable community while developing local talent to support the community development. How this can happen must be clearly explained in the bid application.

14 They are handled by getting to know each other through many conversations and based on individual trust. This is very time-consuming but is required to gain an understanding of where

each partner is coming from. Once you understand the logic you can understand. Time is needed to get to know each other.

Theme 53 -	Blending	Higher	Education	Systems

- 3 The constraints are handled by thinking creatively and blending aspects of both the Western and Eastern Higher Education systems. An example is that now some Western universities will consider tier 1 Gao-Kao scores in combination with an English language score of IELTS 6.5 to go directly into year 1 of their university program.
- 8 The constraints of culture are handled by not bringing the partner into our cultural milieu and operating in a shared cultural environment.
- 11 The solution to partnerships that do not want to localize their program is to develop and improve their level of cooperation with their state partner. This requires the foreign partners to make changes in actual actions.

Theme 54 - Home Campus Compliance and Support

- 6 Obedience to the authority (home campus).
- 15 Be ambitious on how to handle issues, because behind the individual is a high and successful university. This can include different non-teaching based projects, such as research to get funding from the local city to become immersed into the local community.

Theme 55 - Staffing Strategies

3 To support such a high staffing requirement with a multi-cultural group of staff members, a lot of on-job training and coaching are required in order to have qualified staff even when a staff member's language and cultural awareness is high upon entering a work position at a Sino-Foreign University. Positions such as career services do not exist in China's universities, yet are common in the UK; thus, we need to train staff accordingly.

The constraints are handled by recruiting graduates with overseas experience and degrees while offering a lot of on-job training. This will provide a better start to the administration support provided at a Sino-Foreign University. Furthermore, modern Sino-Foreign Universities and Colleges have a higher ratio of staff members that have overseas experience and overseas degrees compared to staff members in earlier partnerships a decade ago. Hiring these more experienced and internationally aware staff is vital to handling the constraints.

- 7 In terms of staffing, you need to be creative as you are competing with other universities around the world to recruit the right staff. Through professional development schemes established by the university and cultural team building, you can make the individuals merge as a team.
- 9 The challenge is to support the good staff to encourage them to stay for the long term, which needs support from the central government through financial resources for the schooling of expat children and dedicated hospitals for the medical treatment of expatriates. This would be extremely difficult in the West of China.

Encourage staff to use English, which is a long-term development that cannot be solved in the short run.

- 13 From the top management and academics who want to go to China.
- 15 International appointments and the correct staffing model. Having a good institutional location close to big cities, good hospitals, and schools to accommodate families of academics.

Theme 56 - Recruitment Strategies

³ The constraints are handled by trying to involve parents more in school activities such as a scholarship award ceremony. Having the parents involved can help them understand the

foreign Higher Education system. Current parents represent a newer, younger generation, with some even born in the 1970s. Having younger parents of prospective students is a way to handle the constraint of parenting cultural conflicts, as they will have a greater acceptance of Western Higher Educational practices compared to the older generations. Younger parents are more familiar with international ways (more informed through various media and information sources, articles); therefore, the constraint of parenting cultural conflicts will decrease itself each year with a greater number of younger parents (in terms of generations) getting involved.

9 The student recruitment challenge is solved by having incentives, such as current international students returning to their hometowns in the summers as agents to help the recruitment for the upcoming academic year.

5.....If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University and College partnerships?

Theme 57 – Policy Strategy

1 No Taxes

I would implement a quota system for all students in an imbedded university program. This way there would be not be a reliance on the open market, which is four to five times more expensive.

I would institute a policy whereby no foreign partner in a major area or province would be able to set up a second (or any further) branch without consultation with the original institute with which they are partnered in the major area or province.

A sensible policy would be developed to avoid a partner institute competing with its own Sino-Foreign University joint venture. An example is the cheaper cost of engineering degrees taught in English by the state partner where the Sino-Foreign University has a foreign engineering degree which is ten times the price.

13 Students need to be removed from net migration numbers, as the UK Border Agency (UKBA) monitoring system is seen as oppressive by academics. This needs to be reviewed or removed, as the extra layer of bureaucracy puts strain on the system.

Theme 58 – Government Involvement Strategy

- 4 The participant would find open-minded foreign governments and universities to work with China's government and state universities. It will be easier to form a partnership if the state, foreign partner, and respective governments are open-minded to become a real global university, which might happen before 2030. The participant used the German automobile success story in China as an excellent example for Sino-Foreign University partnerships in 2030. The automotive industry was initially occupied by Japanese auto makers. The Germans worked with the Chinese government to make cars in China with foreign import parts while developing Chinese auto part makers and setting timelines to have parts localized. The result is that young people in China think Volkswagen is a Chinese brand because most of the parts are locally produced. The Germans now occupy the market much more than the Japanese. The participant also used United World College (which is waiting for approval to enter China's market) as another example of what to expect for the future of China's educational sector.
- 13 Strong and direct government-to-government cooperation and deeper cooperation for partner educational institutions. This would allow intellectual flow with research being the priority and teaching following strong research. A collaborative approach between institutions would be needed.

Theme 59 - Sino University Involvement and Development Strategy

4 The participant would integrate the state universities' curriculum and modules into the Sino-Foreign University instead of it being dominated by the Western curriculum. This is a result of China's developments as a nation. The participant would confirm an amount of credits (from a standard 120 credits undergraduate degree program) that can be from the foreign partner's curriculum/program, and how many credits can be from the state partner. Note that accepting

credits from both foreign and state partner universities is essential for the future context of Sino-Foreign Universities in 2030.

6 The participant would create a fully functioning autonomous university that seeks to operate in every way as a fully functioning western institution of higher learning and as a fully participating institute in the world academic community. The participant would push greater involvement of the Chinese side of university operations. This would result in pushing more legitimacy from the Chinese side rather than the West side, to establish a transformative staff to establish true home roots in the Chinese community proper. If this does not occur, they will become expat rather than integrated new Chinese communities of Higher Education. This cannot be done within the present constraints tying it back to the home campus and subordinating the Chinese side to the foreign side.

The participant will seek the full enfranchisement of the Chinese partner.

- 11 As government-owned universities (which make up the majority of China's universities), their focus needs to be on helping the nation's universities and citizens develop rather than focusing on using the taxpayers' money to allow students to go abroad and develop through foreign education.
- 12 Commence to expand the number and range of Sino-Foreign partnerships to encompass the whole of the Sino and foreign Higher Education sectors.

Theme 60 – Foreign University Integration Strategy

- 3 The participant would align all the industry resources and contacts to be directed to the joint venture. British Universities have more experience in working with industry and Sino-Foreign Universities have been based largely on teaching. Aligning the industry resources to be accessed by Sino-Foreign Universities will make a joint partner university become more like an independent stand-alone university and deepen its societal impact and value.
- 12 Consequently make involvement with them normative throughout the University through the Introduction of promotion, HR and degree policies which mandate significant periods of overseas secondments/assignments for staff/for students including or mainly to China (and USA) to mainstream and encourage involvement with Sino-Foreign partnerships as a routine and expected part of senior academic development for all academic staff, and top-graded degrees for students.

Theme 61 - New Partnership Model Strategy

- 8 In summary, new pedagogical and intellectual models are changing as we look at partnerships. This is about the way we look and teach the world. In essence, we need a global academic agenda. The development of the idea that a global academic agenda is needed is not yet imbedded, and it will take a generation to put it in place.
- 9 The currently focused research-led university would be known for its uniqueness in comparison to other Chinese universities. The key strategic plan would be to create a unique university that is not the same as other universities and does not copy the programs and focus of other universities. In summary, they would lead the direction of Chinese universities.
- 13 Top 5 Chinese universities would be interested in a UK campus or research centre(s). Alternatively, there would be a continued need for Western Higher Education and UK culture and education in China.
- 14 The partners would ideally be existing as multi-faceted (not just teaching or research) which is the opposite of present-day institutional trends.

Theme 62 - Consortium Strategy

1 I would implement a consortium of no more than 3 foreign partner universities.

12 Expand the numbers of multi-partner relationships across continents, so a Sino-Foreign partnership is no longer a one-on-one experience, but which leads directly to the development of a truly global and deep university relationships, akin to the new multi-partner venture by the

Mayor in New York to create the "east coast Berkeley", with Warwick, Singapore and other leading non-US universities in partnerships with US universities.

13 Use consortium universities to significantly involve China.

Theme 63 – Internet and Social Media Strategy

- 4 The participant would integrate all aspects, as mentioned in the questions above, which include, but are not limited to, social media (online and mobile learning) and research and development to make the information clear for approval.
- 5 The senior management team needs to pay more attention to the potential impact of trends such as the future internet generation of students. These trends will greatly change education in terms of how it is delivered, re-thought, re-shaped, and re-defined.
- Technology platforms, cloud-based environment and global platforms.
 We live in a world with a lot of proprietary technology platforms, where a Google-like open platform can be pursued for Higher Education in the future.

Theme 64 - Operational Standards Strategy

- 2 To have a Sino-Foreign University that can assimilate with other institutes through common global standards in terms of student entry and graduation qualifications and administrative systems.
- 5 The correct applications must be in place to meet quality assurance standards, students' knowledge to solve problems, and develop an operational system to improve efficiencies in knowledge work and knowledge organizations.

Theme 65 - Marketing Research Strategy

- 3 The participant would foster and develop new channels to communicate and market Sino-Foreign Universities to a new, younger generation of well educated, international and knowledgeable parents.
- 4 The participant would conduct sufficient market research to best prepare for the program.
- 8 With a limited budget, which all universities face, I would invest more in international linkages and connections, and less on the residential experience on the home front. It warrants a larger percentage of the Higher Education budget and it is time for some evidence-based research on what is working and what is not. We have 30 years of solid experience and it is time for folks to review what is happening.

Theme 66 – Student Recruitment Strategy

- 2 Currently we have international students entering with different scores, which causes recruitment and enrollment problems.
- 3 The participant would recruit students from IB and A-level programs, as they are better suited for Sino-Foreign Universities. If possible, a pipeline can be built up (even without going overseas) and Sino-Foreign Universities can plan with prospective families from a very early stage (middle school) to gain a seat at an elite Western University through a Sino-Foreign University.

The participant would combine Gao-Kao scores with A-level students (which is currently not allowed) to target more suitable students. This is better for students to make their plan of study to make it suitable for themselves.

9 Without the constraints the participant would ensure that the university will fulfill its target and strategic plan very quickly. This involves setting a target of 15,000 students on campus with 10% being postgraduate students, 10% being foreign students that would be altogether supported by 1,000 staff.

Theme 67 - Alumni and Societal Involvement Strategy 3 The participant would integrate the industry network of alumni to help place our graduates with secure jobs. 5 A network should be used to support service to the academic community. An institution needs to be part of society, including the knowledge economy and the social economy. Ensure that the universities target, vision and goals (the direction and focus is imperative) are 7 followed from all sides of the university. Purposes that could be interesting for a small group, but not for the greater good of the institute, need to be removed, and only those that align with the institute's goals should continue. The teaching and research need a clear and focused direction to work together. A strong and correct feedback circle towards society needs to be established. This would result in more society involvement, with society giving resources to the university, and finally, the university returns resources to society in a variety of forms and outputs. 15 Again, there are no major constraints that are preventing anything from happening. You need patience if you want the university campus to develop well, which cannot happen overnight (development and growth of a university from nothing to full campus). The time taken to build

a university is long, so one must be going into the project for the long haul and be extremely patient while providing all the commitment. An example is to ensure endorsement for graduates to obtain jobs (number given by government when registering). This will better the institution's community profile.

Theme 68 - Curriculum Strategy

- 8 In terms of curriculum, it has been about the Western experience and Western knowledge. In the last five years, we have been seeing with some universities new, non-western ways to think about various areas of inquiry. This is something that is happening in Hong Kong Universities.
- 9 This involves very strong leadership to focus on a new set of knowledge for the future university students' generations such as finance, new energy, life sciences, pollution management, networking intelligence. This uniqueness in majors is required to solve the problems that society and humanity will face in the future.
- 13 More collaborative research in China, given the archaeological findings in China, as the nation leads the world for exploration of new animals, and fossils that have not yet been tapped.

Appendix L- Round 2 Email Instructions

Dear Participant,

The 2 documents attached are:

- **Master Response List**-All participant's responses have been compiled and grouped per themes within the 5 questions asked in round 1. <u>Your responses</u> (anonymous participant number placed here) have been highlighted in yellow.
- **Theme Summary-**A summary and brief description of each theme found from the round 1 data collection. <u>The themes where your responses have been placed have been highlighted in yellow.</u>

You need to:

- Review the **Theme Summary** document.
- Read your responses (<u>anonymous participant number placed here</u>) in the **Master Response List** and validate whether your responses do fit into the theme as per the **Theme Summary** document. If you feel your responses do not fit the allocated theme you have the liberty to move your responses to another theme (per question). Furthermore you have the liberty to amend your responses if needed.
- You may add additional comments for any of the 68 themes if desired.
- Please let me know if you have any questions and I look forward in receiving your email upon completion.

Appendix M- Round 3 Theme Summary Document (Confirmed Theme Summaries

of Round 2)

1. In the best possible world what would you hope for Sino-Foreign University & College partnerships in 2030?

- **14-Society Contributions-**Contributions to and subsequent returns from society will take a more prominent part in future Sino-Foreign University partnerships.
- **13-Cultural and Institutional Exchanges-**More student, staff and cultural exchanges between Sino-Foreign Universities will enhance good practice.
- **11-Internet & Social Media-**The internet and social media applications will become integrated within future Sino-Foreign Universities given the upcoming generation of students.
- **10-Improved Higher Education Access-**Globally more students will have access to Higher Education through Sino-Foreign Universities and/or social media platforms which will increase institutional competition levels.
- **12-Integrated Global Partnerships-**Higher Educational institutes of the future will all have integrated global partnerships, thus potentially limiting Sino-Foreign Universities' expansion efforts or making them extinct.
- **9-Best Practice Approach-**Sino-Foreign University partners work closer together to use the best resources and talent from each of their respective institutes.
- **7-Education System Awareness-**Staff and students from the partner institutions and from the Sino-Foreign University should have an awareness of their respective partner's home nation education system.
- **6-System Commonalities-**Foreign and Sino partners would have increasing commonalities in various aspects which would allow for more interchange within a group of associated Higher Education institutes.
- **3-Student Quota Policy Developments-**Changes in the quota system are desired based on the institutional structure of the Sino-Foreign University partnership.
- **2-Tax Policy Developments-**Tax policy developments in favor of expatriates and related to the current tax free policies.
- **8-Closer Partnership Cooperation-**Sino-Foreign University partners work closer together with more cooperation.
- **1-Policy and Regulation Developments-**Policy developments which are clearer, less ambiguous, and allow for more autonomy for Sino-Foreign University partners.
- **4-Higher Education System Development-**Sino-Foreign Universities will help lead Higher Education system developments in mainland China.
- **5-Increasing Academic Quality-**Sino-Foreign Universities' academic quality will increase over time to a world leading level.

2. What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?

- **24-A Lack of Pivotal Events-**There is a lack of pivotal events and stakeholder commitment to provide insight into Sino-Foreign University & College partnerships in 2030.
- **19-Research Centers-**The development of global research centers by foreign universities in China and other nations.
- **22-Secondary School Policies-**Policies towards A-level and international school programs may result in their programs becoming localized and are moving students to study directly in the West.
- **21-International Student Market Growth & Importance-**Whether students from Africa, developing countries and Western Baby boomers will become increasingly important for Sino-Foreign University recruitment strategies.
- **17-Foreign-Sino Universities-**The trend of Chinese state universities or research institutions being located abroad (outside of mainland China).
- **16-Academic Quality Developments-**Developing the academic quality of mainland China's Higher Education programs through standards set by Sino-Foreign Universities.
- **23-Gao Kao Regulations-**Changes in the Gao-Kao regulations provide challenges for future Sino-Foreign University partnerships.
- **20-Research Emphasis-**Sino-Foreign Universities and the Chinese government are moving towards a research emphasis to develop China's research strength.
- **15-Government Developments-**Government developments are enhancing operations or are increasing the difficulty in operations.
- **18-New Sino-Foreign Universities-**The recent approval of several new Sino-Foreign University programs signals a new stage of their institutional involvement and overall presence in mainland China's Higher Education system.

3. What major decisions with long term implications do the Sino-Foreign University & College partners and the Chinese government currently face?

- **25-Decentralizing Decision Making-**The decision to give more decision making power to Sino-Foreign Universities from the government while moving away from the restrictions of a planned economy.
- 27-Endorsed Partnership Tier (s) and Pathway (s)-The decision for the government to endorse Sino-Foreign University partnerships from non-"elite" tiered universities and consider endorsing various pathway programs.
- **33-A Lack of New Decisions-**A lack of major decisions have occurred given the state planning base found in mainland China.
- **31-Developing New Institutional Model (s)-**The decision to develop new institutional models (tiers/pathways/partnership requirement/sponsoring) to Sino-Foreign University partnerships.
- **30-Implementing New Academic Model (s)-**The decision to implement and integrate new academic pedagogical models within the current Higher Education system.
- **29-Addressing Competition levels-**The change in competition levels between Sino-Foreign Universities and State Universities.
- **28-Authorized Partnership Numbers-**The decision regarding how many Sino-Foreign University partnerships will be permitted to operate in the future.
- **34-Understanding SFU's Future Purpose (s) & Position (s)-**The decision to clarify Sino-Foreign Universities' future purpose and position within mainland China's Higher Education system.
- **32-China Based Education Focus-**The decision to build partnerships with educational delivery exclusively in mainland China.
- **26-Enhancing Academic Quality-**The decision to enhance the academic quality found at Sino-Foreign Universities and to influence academic quality within Higher Education institutes in mainland China.
- **70-Cooperative Decision Making-**The decision for the home campus of the foreign university to actively work together with the Sino-Foreign University to solve problems of the overseas operation.

4. a) What major constraints do you (have you) experience inside/outside Sino-Foreign University & College partnerships?

- 42-Restrictions-Major constraints are the restrictions within China.
- **39-Administration System(s)-**A major constraint within embedded Sino-Foreign University programs is the needed compliance towards the state partner's administrative system.
- **38-Partnership Mismatch-**A major constraint is finding a partner that has the same institutional background and goals for the Sino-Foreign University.
- **37-Provincial Variation-**A major constraint is the variation in legislation and policies per province (or within one region) for Sino-Foreign Universities.
- **35-Inaccessible Educational Authorities**-A major constraint is the lack of contact and communication with the government education authorities.
- **50-Graduate Opportunities & Benefits-**A major constraint is the lack of equal job opportunities, scheduled internships and benefits for Sino-Foreign University students compared to state university graduates.
- **49-Parent Perceptions-**A major constraint is the perception and expectation of parents towards their children's education at Sino-Foreign Universities.
- **48-Academic Skill Preparation-**A major constraint is the needed academic skill preparation for successful Sino-Foreign University graduates.
- **41-China's Context-**A major constraint is working within China's greater national (and unique) context.
- **47-Language-**A major constraint is insufficient Chinese or English language preparation to increase student and operational standards.
- **44-Leadership-**A major constraint is the lack of experienced, strong and committed leadership within Sino-Foreign Universities to manage the contextual challenges.
- **40-External Monitoring-**A major constraint is the external monitoring from the foreign home campus, partners involved, associated quality assurance agencies and a needed review of who should be monitoring quality.
- **46-Culture-**A major constraint is to manage the foreign and Chinese cultural and education system differences (for both staff and students).
- **45-Staffing-**A major constraint is finding and developing high quality and culturally sensitive staff with long term interests to support the Sino-Foreign University.
- **43-Finances-**A major constraint is the finances, costing, fees and their respective objectives within Sino-Foreign University programs.
- **36-Policies and Legislation-**A major constraint is working within the Higher Education policies and legislation found in mainland China.

4. b) How are the constraints handled?

- **56-Recruitment Strategies-**Using recruitment strategies which can include getting parents or current students involved in a variety of activities.
- **54-Home Campus Compliance & Support-**Compliance to foreign home campus which will be strong and supportive to the Sino-Foreign Universities' development.

- **55-Staffing Strategies-**Implementing staffing strategies to recruit, develop and maintain high quality staff at Sino-Foreign Universities.
- **53-Blending Higher Education Systems-**Blending aspects of Eastern and Western academic and operational practices.
- **51-Leadership-**Strong leadership of Sino-Foreign Universities can solve the constraints.
- **52-Communication-**Communication including internal and external meetings (Sino-Foreign University meetings) can solve the constraints.

5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University & College partnerships?

- **67-Alumni Strategy-**To implement long term alumni activities such as job creation through the Sino-Foreign Universities alumni network.
- **64-Operational Standards Strategy-**To initiate an enhanced operational standard that can bridge commonalities with other educational institutions for a variety of exchanges.
- **60-Foreign University Integration Strategy-**The foreign campuses' industry contacts and resources (including staff) should be aligned to work with the Sino-Foreign University.
- **57-Policy Strategy-**New transparent policies related to net migration and Sino-Foreign Universities are needed to support and improve those that are currently in use.
- **69-Societal Involvement Strategy-**The strategy to actively work and contribute to the local society where a Sino-Foreign University is located with a long term focus for long term returns of various kinds.
- **68-Higher Education Research and Teaching (Pedagogical) Strategy-**To develop a new and unique curriculum which will help society and may have an increasing amount of non-Western academic practices to investigate a specific area of inquiry.
- **66-Student Recruitment Strategy-**To implement a student recruitment strategy to optimize on a Sino-Foreign Universities student capacity and recruit the correct caliber of students.
- **63-Internet & Social Media Strategy-**To integrate internet and social media platforms throughout all work aspects in the academic and administrative departments of Sino-Foreign Universities.
- **58-Government Involvement Strategy-**Increasing government involvement and their respective financial support in future Sino-Foreign universities will strengthen their institutional programs and output.
- **65-Marketing Research Strategy-**To initiate a marketing research strategy in light of the student quota system to capture the changing trends and develop new communication channels to capture a new generation of parents.
- **62-Consortium Strategy-**To focus on consortium partnerships and move away from the standard partnership of one foreign and one state university.

- **61-New Partnership Model Strategy-**The focus to develop new models with a unique focus on being original with a variety of attributes current Higher Education institutes do not practice.
- **59-Sino University Involvement & Development Strategy-**To increase the amount of involvement, authority and decision making from the state partner in Sino-Foreign Universities.

Appendix N- Round 2 Confirmed Participant Responses

1. In the best possible world, what would you hope for Sino-Foreign University partnerships in 2030?

Theme 1 - Policy and Regulation Developments - Policy developments which are clearer, less ambiguous, and allow for more autonomy for Sino-Foreign University partners.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

I It is hoped that a clear regulatory framework will be developed for Sino-foreign Universities. It is also hoped that the old 2003 law will be revised and separated from the greater Chinese old Higher Education law. Blending the 2003 Sino-Foreign University law with the old Chinese law is enacting laws that were never intended and not compatible with Sino-Foreign University joint ventures.

The best possible person should be appointed to become the President of the university. More trust is needed so that a Sino-Foreign University can be run by a foreign leader. This has to do with the current regulations regarding Sino-Foreign University Presidents.

It is hoped there would be a more fair and transparent decision regarding the decision for Sino-Foreign University tuition fees (by the respective departments from different universities who create the tuition policies).

It is hoped that foreigners will be far more involved in the development of policies for the future of Sino-Foreign Universities rather than through Chinese intermediates.

It is desired to update the out-of-date library criteria, which do not include e-books, but includes English books, which are more expensive and more difficult to bring into China.

Policy developments are needed regarding academic misconduct such as plagiarism and cheating.

- 3 The participant hopes for developed policies for Sino-Foreign University and College joint ventures. Currently, the policies are not sufficiently developed.
- 9 Sino-Foreign Universities should have more control over their institution and freedom regarding policies for recruiting staff and students. They should have the freedom to develop the kinds of programs they want to implement instead of having to apply to the central government. Applying to the central government is very time consuming and uses many of the universities' resources to deal and negotiate with the government to open new programs and recruit more students.

The participant hopes there will be no such examination that forces the university to do something they do not want to do (i.e. CET 4/6 that may be cancelled next year).

- 15 Policies require clarity, so there is a sense of a roadmap as to where Sino-Foreign Universities are going, and to clarify their purpose within mainland China's Higher Education system.
- Theme 2 Tax Policy Developments Tax policy developments in favor of expatriates and related to the current tax-free policies.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 It is hoped that if Sino-Foreign Universities are to be effectively run, they need continuity and the tax-free benefit should not have to be paid back if you stay in China beyond 3 years.
- 5 Sino-Foreign Universities are non-profit institutions/enterprises rather than universities. Herein lies the problem, as both profit and non-profit institutions have to discuss regularly with the tax bureau. Addressing tax constraints will require reformation from either the central or local government or both. Hopefully, the government will separate profit and non-profit institutions and, hopefully, non-profit institutions can be treated as public institutions.
- 9 The participant hopes the government will support the university towards the tax issue (tax-free policy) that is faced for expatriates in China and also support the university financially. The Sino-Foreign Universities should receive the same amount of support from the government as the state universities.

- Theme 3 Student Quota Policy Developments Changes in the quota system are desired based on the institutional structure of the Sino-Foreign University partnership.
 - Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 It is hoped that embedded institutions are allowed to have their own open market quota.
- 5 It is hoped that there will be developments in terms of the student quota policies, as the current policies are a constraint. We always need approval from the Ministry of Education.
- 9 The participant hopes the quota system will be abolished in the future which should result in a higher quantity and quality of students. If the quota system is retained it should be controlled by the central government (Ministry of Education) rather than the provincial authorities.
- Theme 4 Higher Education System Development Sino-Foreign Universities will help lead Higher Education system developments in mainland China.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 It is hoped that more joint ventures between second-tier joint venture universities (both foreign and state) will be encouraged because the whole Higher Education system in China needs to be improved.
- 6 I would like to see Sino-Foreign Universities be transformative in the development of China as a whole for open social discourse. This is more important than improving the economic prospects of China (which is felt to be the goal of the Chinese decision makers).

I would hope that the influence of the Sino-Foreign cooperation arrangements will have a major impact on the practices on Sino-Universities (State Universities). This would result in a significant change throughout China, starting with the academic community and extending into the culture overall.

- 11 The participant will hope for the government and private-owned universities to undergo a massive change in the future, which will positively benefit the quality of China's Higher Education system. For this to happen, we need continued developments (about which the participant is confident) in the internationalization and cross-border education in China's future.
- 15 The participant would like to see a range of models develop, not just one model for Sino-Foreign Higher Education collaborations. A range of models will emerge with their own strengths and distinctiveness. In establishing a range of models in China, we can view which ones are most impressive. The most impressive models could be used to assist Chinese universities in their efforts at reform, and we would like to accompany Chinese universities in that process by improving a variety of Higher Educational models.
- Theme 5 Increasing Academic Quality Sino-Foreign Universities' academic quality will increase over time to a world leading level.

Relation to Figure 2: Western Partner University Rank {Cul}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 The emphasis on increasing academic quality is a result of moving from a teaching- to a research-focused institute.
- 6 A great many of them that would be expected to be earning credibility on the world stage of higher education for authentic academic inquiry, unfettered access to the world knowledge bank, and full participation on world subjects (full academic freedom). This would be expected for both the faculty and the students, and is more important than the economic advancement in China, which seems to be the key need to the Chinese partners.
- 9 The participant hopes that high-level prizes (research Nobel prizes) will be achieved by researchers at Sino-Foreign Universities.
- 11 The participant hopes for a continuing movement towards higher-quality programs involving higher-ranked universities. There are over 500 colleges (in undergraduate programs) that are involved in international educational partnerships (programs and projects) in China. Most of these programs are not of high quality, but there is now a movement towards higher-quality programs involving the higher-ranked state universities.

The participant hopes that the future trend of China's universities will be focused on cooperation with partners that have a high level in their respective academic area and are focused on supporting the development of the nation's higher education agenda. In the past, the trend was for state universities to focus on low cost cooperations in areas such as general commerce; but in the future, the focus will be shifted to towards finding partners for specific areas of education. Because the majority of universities are state universities, their goal is not for profit. Based on that, their aim will be to choose a foreign partner based on their academic level and high educational character. This trend can be seen in two recent projects in Shanghai: a high-end hotel institute in Lausanne, Switzerland, with East China Normal University; and a famous film (movie) school. The trend in the future will be to have programs with a very specific specialization and expertise in a major of study. The trend can also be seen in two other examples, which are supported by the local government: New York University is also cooperating with East China Normal University to provide high-level financial expertise; and the University of Shanghai for Sciences and Technology's newest cooperation with a world leading engineering school. The participant hopes that China's growing attention from the world, thanks to its educational reforms, will result in a higher level and quality of Sino-Foreign partnerships, and that the number of partnerships will increase in a very short time. From the perspective of both economics and education, China is growing and getting more outside attention.

15 The participant would like to see the Sino-Foreign Universities strengthen and become more integrated into China's environmental landscape. This would include Sino-Foreign Universities' gaining further status in China for research and key lab status on the local, provincial, and national levels. This includes having a solid relationship with the Chinese research councils. There would be plenty of research projects with a focus on China itself. It would also include interacting in a very solid way with Chinese universities for a variety of purposes, including joint research projects and exchanges of best practices.

• Theme 6 - System Commonalities - Foreign and Sino partners would have increasing commonalities in various aspects, which would allow for more interchange within a group of associated Higher Education institutes.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 2 To have more commonalities in operational and administrative procedures.
- 3 The participant hopes that the criteria for student enrollment and assessments will become more standardized between partner institutions.
- 14 On the model of the Bologna agreement in Europe, there should be the same recognition between Chinese universities and the Bologna universities in Europe: some system of recognition of credit across the system, rather than institution to institution. here would be some way of making student movement very simple. There would be a move from the current bilateral relationships to systemic relationships in Sino-Foreign University partnerships.

There would be a systemic recognition of credit and qualification, resulting in a free movement of students as well as a change in job market movement for students, which would allow more freedom to attain global employment opportunities.

• Theme 7 - Education System Awareness - Staff and students from the partner institutions and from the Sino-Foreign University should have an awareness of their respective partner's home nation education system.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards

2030?

- 1 The staff and students of our host partner (state) university need to increase their awareness of the British Higher Education system.
- 2 To have Sino-Foreign Universities that understand the education system of their institutional partner's country.
- 9 The participant hopes foreigners in China will become more accepting of Chinese culture and will try to understand more about the education model found in China.

The pressure from society (parents' requests for CET 4 and 6 examinations) should also be removed, and a focus towards better assessments should take place (IELTS and TOEL).

- Theme 8 Closer Partnership Cooperation Sino-Foreign University partners work closer together with more cooperation.
 - **Relation to Figure 2:** Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 3 The participant hopes for closer institutional cooperation, which is needed as globalization trends will force the partnerships to become more integrated and standardized.
- 11 The participant hopes that the perspectives of Sino-Foreign Universities will become more aligned between their state and foreign partners. This can happen with a more equal and cooperative pattern of partnerships, which is hoped for in the future. Currently, there are different perspectives of Sino-Foreign Universities from state and foreign partners.
- 12 There is a comprehensive two-way partnership of equals between sister universities covering research, teaching, and commercial relationships.
- 13 The participant would hope that UK and China partner institutes are publishing together.
 - Theme 9 Best Practice Approach Sino-Foreign University partners work closer together to use the best resources and talent from each of their respective institutes.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 2030
- 2 To have Sino-Foreign Universities that foster a best practice approach. This involves common sharing of their resources for the optimal outcome of educational delivery and programs. One side is not superior to the other, and we can learn from both sides.
- 7 Whatever part of the world the partners are from (developed or undeveloped nations), all partners have something special to offer in terms of resources as well as different advantages (resources). If we can put all the resources together to satisfy the 3 functions, we can make the overall function of a successful university possible.
- 8 The partnerships will move away from a satellite campus based on a western model and will become a heterogeneous international partnership that will involve new models.
- Theme 10 Improved Higher Education Access Globally, more students will have access to Higher Education through Sino-Foreign Universities and/or social media platforms, which will increase institutional competition levels.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 4 The participant hopes the result of social media platforms in Higher Education in 2030 will be in a completely new phase, which will result in all nations receiving a global education solution that everyone can access.
- 5 There are several different concepts of international cooperation. Over the last twenty years, people have been focusing on cross-border education, which means mobilizing students and professors. Globalization is meant to avoid barriers, so we have to localize the institution, and it is a more popular type that will be used to develop institutions in other countries with an international cooperative. We should start to study the globalization of higher education, not just cross-border higher education. The result will be a narrowed difference between Sino universities, Sino-Foreign Universities, and overall international education, if Higher Education continues to take progressive strides forward. This ultimately depends on the reformation of Chinese society and the Higher Education sector in China.

Theme 11 - Internet and Social Media - The internet and social media applications will become integrated within future Sino-Foreign Universities, given the upcoming generation of students.
 Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

4 The participant hopes there will be no boundaries to accessing education worldwide, which will be made possible by the growing social media platforms that will eventually extend into the educational sector, including universities. Partnerships compared to the past and present will become easier to form with the available social media platforms that will be in place. Basic education and universities have to take part by offering at least some of their courses on these social media platforms. It will be very hard for institutions to avoid this, given the learning society that will develop through online and mobile phone platforms. Note that mobile phones now have voice messaging and various video interfaces, which will provide a greater access to curriculum and learning by 2030. This hope stems from the fact that currently the social media platforms are playing a large part in the language and training center aspect of education in China. A few months ago, Weibo reached 600 million users with its social media platform. At the same time, New Oriental (Xin Dong Fang), who once employed 50,000 staff across China, announced they are facing big challenges because of Weibo's anytime or anywhere learning solutions that are being offered. As a result, New Oriental made a public announcement that they need to reposition their company and integrate social media platforms into their institutional model. The participant hopes that social media platforms will push a trend towards lifelong learning, which will

The participant hopes that social media platforms will push a trend towards lifelong learning, which will promote more training and development for employees to provide better output for their employers.

5 There are differences between cross-border and globalization in higher education. Internationalization can be done within a country, and you do not need to cross a border. We do need to explore the impact of internalization and the internet further. There will be more selection of courses, and students can sit down and read educational resources of other countries and famous universities. If developed, this would be a new model of internationalization of cooperation. We need to think of the Sino-Foreign Universities in this context.

Theme 12 - Integrated Global Partnerships - Higher Educational institutes of the future will all have integrated global partnerships, thus potentially limiting Sino-Foreign Universities' expansion efforts or making them extinct.
 Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

- Answering Research Question: None
- Sino-Foreign Universities have the potential to be absorbed into the English language faculty or structures of their state partner universities, depending on what will happen in the next 15 years. This would result in a limited number of Sino-Foreign University expansions.
- 5 Perhaps at that time we do not need the concept of Sino-Foreign Universities because almost all universities will have substantial international co-operations, Sino-Foreign Universities will not exist. All institutes will be international education resources and can cooperate with other universities with those resources. This will ultimately depend on the reformation of Chinese society and the Higher Education sector.
- 8 The participant hopes for fully integrated global partnerships. These partnerships would include global connections.
- Theme 13 Cultural and Institutional Exchanges More student, staff and cultural exchanges between Sino-Foreign Universities will enhance good practice.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 9 The participant hopes there will be an international environment that allows students and staff to learn from each other's cultures and perceptions on life. There should be a good balance in population of international and Chinese students.
- 13 The participant hopes that the UK and China will be the number one countries in terms of student and staff exchanges.

Students and staff should be moving both ways to both institutions through a number of exchanges.

Theme 14 - Society Contributions - Contributions to and subsequent returns from society will take a more prominent part in future Sino-Foreign University partnerships. Relation to Figure 2: Number of scholarships {Cul}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 7 To answer this question, we need to understand why we are creating Sino-Foreign University partnerships. It is important to answer and understand the function of a university for a society and the world. A modern university has 3 functions: teaching and learning, research, and technical support and innovation to impact the local (regional) economy. From these 3 functions, we hope to put the useful resources of both partners together to make certain the university or college has the best possible output.
- 9 The participant hopes universities develop a clean environment with cities in China to help students study. Part of the hope for a harmonious society is donations from society (scholarships) to allow underprivileged yet talented youth to attend university.

University students require a clean, pollution-free, and quiet environment for their studies.

2. What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?

 Theme 15 - Government Developments - Government developments are enhancing operations or are increasing the difficulty in operations.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 A recent pivotal event is the imposition of the social fund, which is designed to make companies pay into for their employees. This hits us harder than the companies because we have more foreigners than even the big multi-nationals. Higher Education institutions need to be excluded from the social fund, and should be provided higher quality and benefits than what is currently provided.
- 2 One pivotal event is a movement towards third-party participants being unable to run programs or recruit students in mainland China. The understanding is that they cannot be a private entity, thus indicating they must be a Chinese university.
- 6 The election of Xi Jing Ping as President and his intentions based on being a reactionary leader or forward looking reformist. In the next 10 years, he will have a huge impact on the development of the Sino-Foreign University cooperative agreements. There is nothing suggestive as a threat to the progress of these ventures.
- 9 The creation of the Sino-Foreign University sub-department at the Ministry of Education. Previously, without this department, we needed to refer to the Higher Education legislation, which is mismatched to the structure of Sino-Foreign Universities. This led to conflicting opinions on different issues, requiring a focused Sino-Foreign University sub-department to be the only voice to solve these problems.
- 11 After the free trade zone, the government released a document on deepening Sino-Foreign University type partnerships. This will encourage more training institutes to open, and thus we can see the trend that more foreign institutes will develop in China.
- 12 The high-level continued interest and involvement of Chinese University leaders in these developments through, e.g., the directive policy statements on these issues from the Chinese Ministry of Education.
- 14 The enactment of the 2003 Higher Education legislation.
- 15 The change in leadership of the country (Xi Jing Ping) is reassuring. There should be positive governmental developments for Sino-Foreign Universities under his leadership.

• Theme 16 - Academic Quality Developments - Developing the academic quality of mainland China's Higher Education programs through standards set by Sino-Foreign Universities.

Relation to Figure 2: State universities' global market value {Env}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

3 Another pivotal event is the development of the 2010 Chinese educational reform, which is designed to improve and enhance the Higher Education joint ventures. China's growing position of economic importance on the global market will require more internationalization and more interaction with the bigger institutions globally, which will prompt more education and internationalization of China's current youth to achieve a higher level of talent in the future as leaders. This will result in a greater need for Sino-Foreign University and College partnerships to raise the standards of China to serve the nation's interests.

- 5 Although not a recent event, the reason for Chinese cooperatives (Sino-Foreign Universities) to exist is believed by the participant to be an effort to develop mainland China's Higher Education system.
- 7 China and its Higher Education system have changed rapidly over the past decade, experiencing a huge increase in the quantity of educational institutions available for students. Now, quality is the focus, and Sino-Foreign Universities are working towards, and are paying great attention to, quality developments to prepare for the future.
- 11 A recent pivotal event is the increasing emphasis of Chinese universities on quality and values. In China, the majority of universities are government-owned, so they have been government-oriented. The government wants a higher evaluation as well as management of the Higher Education teaching that will occur in the future. A result of this is that the government wants to work with foreign partners with the highest quality assurance standards in higher education, while improving the qualities of their own educational practices.
- Theme 17 Foreign-Sino Universities The trend of Chinese state universities or research institutions being located abroad (outside of mainland China).

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 A recent pivotal event is the emergence of a foreign Chinese joint venture (Xiamen University), the first one being in Malaysia (a Chinese and a Malaysian university).
- 11 Highly qualified Chinese universities are looking for Western university partners (like Zhejiang University) to set up an institute in a foreign country to internationalize their university, conduct research, and be a center for cross-cultural relationships. Setting up institutes in foreign countries involves different kinds of perspectives (as mentioned above) and will be different from Sino-Foreign Universities in China. These institutes will not have a focus on profit. Note that we are talking about a totally different partnership, which is fit for the future of education as it will stand for the true nature of education. The institutes will only represent inquiry and comprehension towards knowledge, academic discourse, and high-quality standards.
- 13 Chinese institutions in the UK thanks to the growth in the UK. German research councils in China and the UK research office in Beijing. This is a potential insight into their being a Chinese Academy of Sciences (satellite campus) office in the UK.
- 14 The opening up of Chinese universities to overseas partnerships (all ranks/tiers).
 - Theme 18 New Sino-Foreign Universities The recent approval of several new Sino-Foreign University programs signals a new stage of their institutional involvement and overall presence in mainland China's Higher Education system.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 A recent pivotal event is the change in the atmosphere of what the Sino-Foreign University cooperative partnerships are supposed to achieve. The intent of the Sino-Foreign University Higher Education cooperative legislation (2003) was to educate Chinese citizens. Now the emphasis is changing as the establishment of Duke and NYU are taking American-driven wishes (campus internationalization to internationalize students from America) and converting that into taking Chinese students. This results in a student body of 49% American students and 51% Chinese students. In summary, there are different missions based on the 2003 Higher Education cooperative legislation.
- 5 The Chinese Ministry of Education has approved several new international cooperative universities. The Ministry of Education has opened the door again for the new international cooperative programs. This will put the international cooperation into the next hot wave, which should be a repeat of 2003, which had a big boom following the 2003 legislation, but since then had closed the door. Since 2003, many universities have applied for international cooperative programs, but a few new universities have been approved. The media has argued for the impact of international cooperative institutes on traditional Chinese universities. This will be another wave, and people will pay more attention to the impact of Sino-Foreign Universities towards the traditional Chinese Higher Education sector.

- 6 The establishment and approval of the 3 major American Sino-Foreign University ventures (Duke, NYU, Kean University), which have all occurred within the last 2 years. They mark a major step forward for the Chinese Government, which will create a momentum that will be difficult to stop.
- 7 The entrance of NYU into Shanghai is an example of providing an urban university learning environment that can use NYU to help develop Shanghai and merge it with the world. NYU will help the next generation in China and USA to work together, develop their respective countries, and help each other out. In conclusion, the output of Sino-Foreign Universities should reflect an ideology that one plus one equals more than two.
- 8 A recent pivotal event is the technological innovation to establish the mass of online academic programming, which the participant considers to be the single most important variable in this time, and will become integrated in new Sino-Foreign University projects.
- 9 The entrance of Duke and NYU signal that the Ministry of Education wants more Sino-Foreign University programs, and that the Ministry of Education supports these programs. There is the possibility that the government will invite more high-level universities to come into China, as a foreign university can have one project in China. (The participant views the potential in a Sino-Foreign University with another foreign university to set up a future Sino-Foreign university in China. This will change the whole definition of Sino-Foreign universities.)
- 12 The freeing up of the Chinese Ministry of Education moratorium on new Sino-Foreign partnerships and the resulting expansion of links to world top 10 universities (e.g. major US universities through Sino-Foreign partnerships with NYU and Duke).
- 13 The establishments of the two UK campuses are important steps.

• Theme 19 - Research Centres - The development of global research centers by foreign universities in China and other nations.

Relation to Figure 2: Dependence of mainland China on Western Technology {Tech}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 The development of global research centres by the University of Nottingham in China, Malaysia, and UK, and the considerable take-up of commercial links to research consultancy and Knowledge Transfer Partnerships from these centres by major Chinese and UK globally-oriented companies.
- 13 The opening of the UK research council office in Beijing (approx. 2006).

• Theme 20 - Research Emphasis - Sino-Foreign Universities and the Chinese government are moving towards a research emphasis to develop China's research strength.

Relation to Figure 2: Dependence of mainland China on Western Technology {Tech}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

1 The pivotal event is that the agenda has changed from teaching-focused to research-led in order to earn world rankings. This will result in more graduate programs.

Another pivotal event is the growing awareness that the imbedded model may be better for knowledge transfer to the host (state) university, while the stand alone Sino-Foreign Universities are not helping their own universities because their mission is to achieve a higher ranking by themselves as Chinese legal entities.

⁴ Some recent pivotal events are the 18th congress meeting that was held 2 months ago, as well as the more recent economic meetings held last weekend. At these meetings, education (with an emphasis on creativity) was ranked as their 4th current priority, as they know that without educational reform, it is very difficult for China to become the number one nation in the world. Thus, this current educational reform is as important as their economic reform. China is taking education very seriously to improve its research and development output by first fostering creativity, critical thinking, and innovation at both basic and Higher Education levels.

Last week there was an article in the *New York Times* that discussed China's reforms to develop innovation and creativity. This was but an example of how the world will look to China as a very serious global partner for research and innovation. Now America's research budget and agenda has to keep up with that of China's. By looking back to China's leaps forward over the past 30 years, it can be expected they can achieve these goals in research and development by 2030. To summarize, Sino-Foreign University research and development partnerships will become the focus of future partnerships.

- 7 Our institute just signed an agreement with the local government to set up a marine/economy and technology research institute. The local government and central government would like the city area to be leading in this field. As the government is seeking this to happen, they are providing us with more human resources and more technological equipment to improve and develop the local economy. Our branch campuses will also provide us with some resources that can promote a parallel development of our Sino-Foreign University alongside the development of society as a whole.
- 8 Continued urbanization, as urban centres are where the creative and talented energy will have the greatest impact.
- 13 The 1000 Talents Program.
- Theme 21 International Student Market Growth and Importance Whether students from Africa, developing countries, and Western Baby Boomers will become increasingly important for Sino-Foreign University recruitment strategies.

Relation to Figure 2: IB Students {Demo}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- International students will become less important to Sino-Foreign Universities. African students, for example, will be offered free accommodation and low tuition fees as part of a greater national agenda as well as the newly introduced international student targets set by state schools. Many state universities in China are now acceptable for African and other international students. British and Sino-Foreign Universities will not be able to compete with state universities based on cost figures.
- 5 Chinese parents are not satisfied with the academic quality found in Sino-universities (state universities). This is the main driving force for creating Sino-Foreign Universities, to cater to the Chinese mainland student population and reform mainland China's Higher Education system. The increasing growth of international students at Sino-Foreign Universities is simply a product of the institutions existing, as not many universities worldwide (non-native English speaking countries) can deliver courses in English properly.
- 8 A further pivotal event is the demographic shift with aging populations that will have an impact. Universities have tended to focus on educational models from an age-based perspective, but now universities will need to pay more attention to lifelong learning. Seniors will become a huge market for universities, as baby boomers are the healthiest and wealthiest generation to be going into retirement. Continuous learning will be the dynamic as baby boomers are interested in education for general inquiry about the world and its knowledge. Currently, some of this is being taken into consideration by North American universities, and online universities are at the front in terms of lifelong learning.

An example of this in relation to Sino-Foreign universities is that many retirees will travel to China with background courses on China's history, culture, etc.

Another recent pivotal event is the emerging middle class in other countries. Many Western universities used to focus on China and India, but now the focus is on Africa and elsewhere.

- 12 The development of international college partnerships between Sino-British EFL companies and Chinese universities to deliver international student recruitment and language training in China for third-country nationals.
- Theme 22 Secondary School Policies Policies towards A-level and international school programs may result in their programs becoming localized and are moving students to study directly in the West.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 The delivery of A-level type programs will become localized. An example is Fudan using a separate spinoff company to absorb A-level programs in China.
- 2 A move towards independent A-level schools that have left the campus of their local partner.

Local Chinese students can only be accepted to Sino-Foreign Universities if they have A-levels and a Gao Kao score. Having only A-level scores is unacceptable from the government's perspective; yet these students are ideal with their western education; yet we cannot take them.

- 13 Sino-Foreign secondary schools (if not mainland China, then HK) are being used as feeders to train students to prepare them in the UK. These programs are currently drivers for Chinese students to go to middle schools that are purely international schools. The rising middle class can support these types of schools and raises the question as to what their future will be.
- Theme 23 Gao Kao Regulations Changes in the Gao Kao regulations provide challenges for future Sino-Foreign University partnerships.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 The imposition of business taxes on non-Gao Kao quota students should be stopped, because they are registered with the Ministry of Education.
- 2 Gao Kao changes, which place less emphasis on English scores, reflect the change in climate by which mainland China is interested in protecting and preserving its local education and culture. This also reflects less interest in support and developments from the West.
- 3 A recent pivotal event is that this year's senior year 1 English score is worth much less than the current requirement in the Gao Kao assessment. This will result in more English training by the time they reach Sino-Foreign Universities.
- 7 The Gao Kao as a main or key mechanism to select qualified students recently has been changed dramatically. Universities will have more power to select their own students for their own reasons.
- 9 The request by the respective institute for the Gao Kao to become the basic and not ultimate standard for university entrance. A university can, in addition to a Gao Kao score, have its own unique requirements for student entrance.
- Theme 24 A Lack of Pivotal Events There is a lack of pivotal events and stakeholder commitment to provide insight into Sino-Foreign University and College partnerships in 2030.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 It is more an issue of the lack of events, as there have been various efforts to start reform, but nothing has seriously come about. There have been too many opinion papers and not enough actual commitment from all stakeholders.
- 15 The lack of events is key rather than any specific event itself.

I would like to see more communication and receive clear feedback as to how the Sino-Foreign University experiments are being viewed by authorities (state partner and government) through more feedback and discussions. It can be difficult to achieve clarity on Chinese government policies related to specific matters. A lack of clear communication. There was a slight reluctance for anyone from the Ministry to get up and say that this is the vision. The attitude towards setting up universities in China is that various nationalities of foreign partners have various experiences, and it is hard to discern what the pattern is. When our institute was set up, all the lights were green, but later, for other projects, it is difficult to recreate.

3. What major decisions with long-term implications do the Sino-Foreign University and College partners and the Chinese government currently face?

• Theme 25 - Decentralizing Decision Making - The decision of the government to give more decision-making power to Sino-Foreign Universities while moving away from the restrictions of a planned economy.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

1 The major decisions would be to decentralize the power to local authorities or for Beijing to be more involved in Sino-Foreign Universities. The debate is to devolve degree approval to the local-level authorities.

- 5 The major decision would be to give a Sino-Foreign University the power to be removed from provincial and university level restrictions (planned economy) and be allowed to exist within a market environment or market economy in mainland China.
- 7 We previously depended on the UK's H.R. office, but now we bring our own ideas to work with the H.R. office to solve the issue of finding stable staff. This problem has not yet been solved.

We can see that the government is giving more power to the universities and colleges. An example of this is that many universities have been asked to set up their own chapters for their universities before 2015. To set up the laws and "chapters," the government let 3 parties know what their duties and relationships are in order to obey the laws. When universities are given more powers there will be more changes when choosing their foreign partners. So this encourages more of a market economy movement instead of a strictly planned economy for higher education. As a result, this encourages more partners to invest, rather than the government.

 Theme 26 - Enhancing Academic Quality - The decision to enhance the academic quality found at Sino-Foreign Universities and to influence academic quality within Higher Education institutes in mainland China.
 Relation to Figure 2: State universities' global market value {Env}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

1 The decision that is allowing lower Gao Kao scores (in English), which will affect the customer base and require more preparatory work (foundation year) within Sino-Foreign Universities.

The decision to ban foreign agents and refuse to accept degrees from abroad (not validate degrees). Overall, the decision on how to punish those foreign partners who have abused the system has also dissuaded those who are keen to come with good intentions.

The decision to make cheating and massive fraud (essay writing/IELTS openly advertising) liable to prosecution. For this to happen, we need education authorities to talk to the proper government authority. Sino-Foreign University Joint Ventures carry far too great a burden to deal with these issues of quality.

- 5 The Chinese international exchange commission has developed a commission for Higher Education exchanges. The government will open the door to programs, but will pay great attention to their quality. Strengthening the accreditation process needs to happen. They have developed an independent accreditation institute to accredit universities working in China. Universities will develop their own quality standard together, without the aid of the government in a planned economy. The government will push the association to develop some independent accreditation institution, which would allow market forces to take shape instead of a planned economy. The government approval procedure and market approval power will help the international cooperative programs achieve a higher quality standard. Enhancing academic quality ultimately must come from
- 6 For the partners, a major decision will be to continue to have the adequate academic integrity for the basis of their operations. Finances may be a part of the presence in China, which offers the aspect of additional revenue streams for universities. The revenue consideration is not so much a consideration for the universities as a self-determining result (losing money results in going home).

What is at their discretion is the academic value and character of the projects.

the Sino-Foreign University rather than the government.

VPN networks with hidden glitches are artefacts of Chinese practices that technicians naturally chose, which limits access.

Book importing through Beijing is problematic; it takes several months for the books to be received while they are held and inspected. No books have yet been denied, but the continuous practice of inspecting and holding books for several months keeps open the theoretical possibility that censorship could be exercised. Leaving the situation as is in place without a solution keeps the question open as to whether academic freedom is truly present. It is possible that the current curriculum does not test the limits, but future modules and courses may change this.

How to discern in those routine practices the establishment of authentic academic freedom is a question that remains in the participant's mind. Inferring as to how free and supportive our partners are involves an understanding of the details of technological infrastructure. The details are so complex it becomes impossible to understand if real academic freedom exists (The devil is in the details). The details are technological as well as procedural, and the participant questions whether we truly have academic freedom with the projects.

7 A government constraint is to decide whether to eliminate the higher education programs that place business incentives over higher education incentives. The Chinese government is seeking good universities to provide education, not business. The Chinese government is paying more attention to the quality assurance system. The main concern of the government is to improve the quality of their Higher Education programs. The state

universities need to focus on improving the students' academic quality. There is no concern about a lack of quantity of Higher Educational institutions. If the respective university wants to survive longer, the university needs to pay more attention to the quality delivered. In the long term, the Chinese government needs to have programs with foreign partners with very good academic reputations for the intent of inquiry and knowledge, and to improve and work together towards the 3 facets of a university, instead of business and profits.

- 8 The other huge challenge is quality control in Higher Education, as neither the market or government oversight has been effective in terms of efficiencies and monitoring the quality of outcomes. The Western Higher Education institutes are focused on inputs (attracting students) rather than outputs (successful graduates with skills).
- 9 A major decision is whether the government will try to change all the state universities into international universities (State University learns from their partnered Sino-Foreign University).
- 14 As we move towards 2030, the Sino-Foreign University expansion in mainland China will require a major focus on quality, which will need to start within the next few years. We need the appropriate assessment of quality. The decisions regarding quality need to be focused on academic needs rather than bureaucratic needs. An example of this is that book-to-student ratios as indicators of quality are no longer sufficient in the current context.
- 15 Another major decision is to compare Sino-Foreign University models against the state models in the reform of Chinese Higher Education. This could result in Sino-Foreign Universities having a broader effect. This will decide what these Sino-Foreign University models will mean for China's overall Higher Education system or whether they will stay as isolated experiments in China.
- Theme 27 Endorsed Partnership Tier(s) and Pathway(s) The decision for the government to endorse Sino-Foreign University partnerships from non-"elite" tiered universities and consider endorsing various pathway programs.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 2 The major decision of the government is to decide the details of the rules and regulations as to how we can operate. This implies which programs will be given a license (tier of university), what pathways can we offer, and what pathways will be eliminated. This also involves the detail of any changes in their degree endorsement regulations and what subjects they would approve. Will they continue to recognize 2+2 and 3+1 pathways for undergraduate degrees?
- 12 Whether or not the Chinese Ministry of Education wishes to broaden links across the various strata of universities or wishes to retain the "elite only" status welcome for Sino-Foreign partnerships.
- Theme 28 Authorized Partnership Numbers The decision regarding how many Sino-Foreign University partnerships will be permitted to operate in the future.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What Sino-Foreign university partnership and strategy will be successful in mainland China's Higher Education context of 2030?

- 1 The decision that foreign universities will only be allowed to have one partner in China. There is a strong hint that this is going to happen.
- 2 A major decision is to increase, decrease, or hold steady the number of Higher Education joint venture programs in China.
- 9 A major decision for the government is to decide how many Sino-Foreign Universities they are going to set up as it is very hard to set up many Sino-Foreign Universities.

• Theme 29 - Addressing Competition Levels - The change in competition levels between Sino-Foreign Universities and State Universities.

Relation to Figure 2: State universities' global market value {Env}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 1 The decision to place Sino-Foreign Universities in direct competition with other Higher Education institutes in China. This increasing competition will be a challenge for Sino-Foreign Universities particularly, given the large quota of international students that state universities have targeted. Competition is not only inter competition but also intra competition (competing with one's own Sino-Foreign University Joint Venture state partner in programs being offered both in English at different pricing structures).
- 2 The other major decision is to address the competition levels for Higher Education programs in China.
- 9 A major decision is that the government needs to decide in what kind of ways the Chinese state universities will learn or change themselves to meet international requirements. A lack of change by state universities gives Sino-Foreign Universities a market advantage.
- Theme 30 Implementing New Academic Models The decision to implement and integrate new academic pedagogical models within the current Higher Education system.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

4 The major decision is for the government to decide how they will integrate traditional and new pedagogical methods to foster creativity and analytical skills in China's future graduates.

The major decision for Sino-Foreign University partners is to integrate traditional pedagogical methods with new methods to form better partnerships. Forming a partnership based on future educational delivery will help the Chinese government to endorse and approve a program under discussion.

The major decision for Sino-Foreign University partners is to think of how social media platforms can be integrated into the partnerships.

- 5 The major decision relates to university quality and their position within the market. It is important to let Sino-Foreign Universities become independent institutes, to run in the market and not have to follow state control.
- 8 The major decision is to change our current fundamental academic model, which needs to be changed. The current academic model is very conservative. It has resisted change for a long time and is hopelessly dated. Any change will come from a policy-level decision as to how we organize, fund, and provide accountability for Higher Education. There has been little change in the Higher Education system in the West since World War II.
 - Theme 31 Developing New Institutional Models The decision to develop new institutional models (tiers/pathways/partnership requirement/sponsoring) to Sino-Foreign University partnerships.
 Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 2 Another major decision is what type of Higher Education joint venture (Sino-Foreign University/imbedded model/lower key project) the government wants to develop.
- 9 A major decision is whether a Sino-Foreign University will be involved in a high-level joint venture cooperation. If so, this will change the definition of Sino-Foreign Universities and the overall Higher Education environment. Sino-Foreign Universities are now considered to be set up by 2 previously established universities (one purely state, one purely foreign).
- 13 Sino-Foreign Universities are long-term projects with a horizon of 50 years. The major decision would be to move away from the currently used model of a single UK university which is invested with one province in China, given the heavy financial burden for both sides. The involvement of publishing houses (Pearson) or banks (Ernst & Young) would be a major factor in the decision to seek funding.

To avoid a Sino-Foreign university joining another failed UK overseas program, a long-term viewpoint and financial backing are required, as the project will not generate money in the short term.

• Theme 32 - China-Based Education Focus - The decision to build partnerships with educational delivery exclusively in mainland China.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 2 A major decision is to reverse the direction of learning. Will China soon say it has had enough knowledge and learning from the West? Will we reach a balance point at which the West is required to learn from China through Higher Education programs in China?
- 4 The major decision for Sino-Foreign University partners is to consider a global education agenda. This would involve the decision of whether the partnership will be formed inside or outside of China, or whether a location is relevant at all, considering the social media platforms.
- 7 In the initial stage of our institution's development, we brought British Education to mainland China. Now we bring British Education with a changed curriculum to support China's needs (mainland Chinese student needs), as well as those of international students who are studying in China. This is very different from the standard set of curriculum that is offered in Britain.
- 12 Whether or not incoming staff and student visa controls into some western countries continue to be strengthened, and what reaction to that action occurs in mainland China and elsewhere.
- 13 The major decision to have more student exchanges, given the ratio imbalance of UK and Chinese students. We have seen a significant investment from Chinese families to send their children to study in the UK. We have not yet seen the UK families send their children to China for exchanges, even though China has cheaper living costs.

• Theme 33 - A Lack of New Decisions - A lack of major decisions has occurred, given the state planning base found in mainland China.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 The trouble is that there have not been any major decisions as of late to create a clear and transparent regulatory framework, which is lacking.
- 7 The 2020 Development Scheme, written by the government, outlines how Sino-Foreign Universities will develop until then.
- 11 The laws within mainland China have not changed over the past ten years. An increasing number of policies have been made and applied to the Higher Education sector to accommodate its growth. The main direction of the laws and strategy of the Chinese government is the same.
- Theme 34 Understanding Sino-Foreign Universities' Future Purpose(s) and Position(s) The decision to clarify Sino-Foreign Universities' future purpose and position within mainland China's Higher Education system. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- 1 There is a lack of clarity from the Chinese authorities regarding what Sino-Foreign universities are for. It is confusing, as there is currently a research mission; yet, they are still focusing on large numbers of undergraduates, which are difficult to support in a research-based institution.
- 5 A Sino-Foreign University needs to understand its purpose in order to compete in the future. The future may bring a lower comparative competitive advantage for Sino-Foreign Universities. In summary, if they cannot find their purpose and position, they will not exist in the future.
- 8 The biggest challenge is to re-imagine what Higher Education should be about and how it can be funded.
- 14 Whether we move from a pilot stage led by individual institutions to something that is more systemic. There was a joint-communiqué issued by the UK to the Chinese government in 2012 regarding the relationship moving beyond an exchange of students toward an institutional cooperation across the whole range of universities.
- 15 A major decision is to clarify the overall purpose of Sino-Foreign Universities in China. Will the institutions exist for research or teaching, or as small, isolated institutions? Both partners and the Chinese government need to clearly identify why the Sino-Foreign Universities will continue to remain in China.

Theme 70 - Cooperative Decision Making - The decision for the home campus of the foreign university to actively work together with the Sino-Foreign University to solve problems of the overseas operation.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What qualities of successful Sino-Foreign university partnerships will change towards 2030?

- We previously depended on the UK's H.R. office, but now we bring our own ideas to work with the H.R. office to solve the issue of finding stable staff. This problem has not yet been solved.
- 11 We can see that the government is giving more power to the universities and colleges. An example of this is that many universities were asked to set up their own chapters for their universities before 2015. To set up the laws and "chapters," the government let 3 parties know what their duties and relationships are in order to obey the laws. When universities are given more powers, there will be more changes when choosing their foreign partners. So this encourages more of a market economy movement instead of a strictly planned economy for higher education. As a result, this encourages more partners to invest, rather than the government.

4. a) What major constraints do you experience/have you experienced inside or outside Sino-Foreign University and College partnerships?

• Theme 35 - Inaccessible Education Authorities - A major constraint is the lack of contact and communication with the government education authorities.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 The main internal constraint is that the foreign partner cannot negotiate directly with the central or regional authorities. The negotiating is done by the host universities, and this constraint does not allow us to sit in the meetings with the right people to creatively resolve the problems. The responsibility lies with local authorities rather than the foreign leaders. There is a lack of contact and communication with non-Chinese with the government.
- 3 A major constraint is the lack of direct communication with the educational authorities. This is done by the state partner universities.
- Theme 36 Policies and Legislation A major constraint is working within the Higher Education policies and legislation found in mainland China.

Relation to Figure 2: Potential Contribution to Figure 2

- 1 A major constraint is the old Higher Education law, which is not suitable for Sino-Foreign University cooperatives.
- 3 A major constraint is the lack of proper legislation as Sino-Foreign University and College joint ventures are very new, with only a decade of existence. The 2003 foreign cooperative higher education legislation is very broad and lacks guidelines for administrative or implementation procedures. An example is the tuition pricing structure for Sino-Foreign Universities, which is inconsistent even for partnerships in the same region.
- 4 The major constraint is validating the program and degrees being offered.
- 5 The constraints also include policies and regulations from the government.
- 7 During the development stage, you don't know what type of materials/papers to bring to establish the new partnerships. There is no guidance or absolute lists given by the government to prepare various documents for program bids or other institutional developments.
- 9 Constraints include the lack of degree-awarding power, the program application (bidding) process, the campus location approval process, and the student recruitment quota as set by the government. You need to apply for the program and prepare for it (recruit staff, prepare the laboratories and facilities, etc.) before it is accepted. A program can be cancelled or not approved, even if the preparation is all in place by an institution.
- 14 Understanding the Higher Education regulatory and legal systems (nationally). An example of this is that, in China, you can be granted an institutional license giving permission to teach, but not a license to graduate students which is done to see if teaching has gone satisfactorily. In the UK, the institutional licensing that gives permission for both teaching and graduating students is done simultaneously.

٠	Theme 37 - Provincial Variation - A major constraint is the variation in legislation and policies per province (or
	within one region) for Sino-Foreign Universities.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 3 Another example is that, because there is no standard regulation to the legislation, the benefits can be quite different for each Sino-Foreign University. There are different practices and space as to how you interpret the current regulations. The fundamental problem is that there is no standard. Even in one city, different criteria are set for fees. Theoretically, there shouldn't be any provincial differences, as they are all under the Ministry of Education, but in reality, there are.
- 7 The government support from province to province differs greatly, and the policies are set by government. Education as a whole in mainland China is more of a provincial issue. The policies to financially support Sino-Foreign Universities differ greatly per province.
- Theme 38 Partnership Mismatch A major constraint is finding a partner that has the same institutional background and goals for the Sino-Foreign University.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 7 Constraints change based on the setup stage or development stage. Initially finding a matched partner is a big challenge, as many are set up being very mismatched with partners that have different levels and backgrounds. Some foreign partners want market share for student recruitment purposes, while others want a market base for research. The first challenge is to find a matched and common purpose for your partnerships.
- 11 A major constraint is the lack of equality in terms of the different tiered universities (both foreign and state) that form current Sino-Foreign University partnerships.

Theme 39 - Administration System(s) - A major constraint within embedded Sino-Foreign University programs is the needed compliance towards the state partner's administrative system.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 The administration part of the host university (which is the least internationalized part of state universities as institutions) needs to be followed in embedded Sino-Foreign University programs. Sino-Foreign laws were designed to establish new standards; thus, enhanced administrative standards should be possible, but have not yet happened.
- 2 The internal constraints include policies, procedures, and administrative systems that are different between partner institutions. Reaching a common understanding is difficult. For example, students have a common fourth-year project, but they need to fill out two completely different sets of paperwork for each partner institution. An attempt to achieve a commonly-agreed system has been attempted, but neither university will accept each other's paperwork system.
- Theme 40 External Monitoring Major constraints are the external monitoring from the foreign home campus, partners involved, associated quality assurance agencies, and a needed review of who should be monitoring quality.
 Relation to Figure 2: Potential Contribution to Figure 2

- 1 There is far too much quality assurance that is involved. An example is that it is not certain why the Chinese quality assurance system needs to be enforced on a foreign institution of world ranking. For example, our institute has to comply annually with 7 different quality bodies' authorities between the West and China.
- 2 The external constraints include suddenly implementing a change in rules and requirements without notice from the UK and Chinese side. This can be present through academic updates throughout the year, despite a handbook of regulations being produced at the beginning of the year. It can also be present through a partner university changing its grade requirements in the middle of the academic year without consent. These constraints stem

from a lack of understanding of the different conditions that we are operating under, due to the differences in administration, government, etc. Specifically, the issue is a difference in timelines. Our host (state) university partner wants information that our foreign partner university does not have at the time the information is requested.

- 6 Each Sino-Foreign University partnership has a special arrangement and personality. For this participant, the constraint is the home campus management, which keeps the Sino-Foreign University project tightly restrained or bound to the management authority of the home campus. The micro-management of the home campus has extraordinary control, which will restrain the institution's development as an authentic university campus. It is disabling the growth prospects of the project. Some Sino-Foreign Universities are different, as their focus is to have a global campus of which every campus is the same, instead of being considered a special overseas project.
- 14 In terms of instilling academic quality, a review is needed regarding who is best to oversee the quality of an institution. Furthermore, there is confusion between internal and external monitoring and where responsibilities lie.

Theme 41 - China's Context - A major constraint is working within China's greater national (and unique) context. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 11 The rapid growth in Higher Education will be a major constraint for the foreign partners to change their approach in the market. Cross-border education will make huge changes in the future. The patterns and growth of Higher Education in China will parallel China's economic growth.
- 12 Until very recently, the foreign exchange controls in China, hindering the free transmission of foreign currencies both ways.

The lack of expertise on overseas university councils about working with China and its challenges.

14 Accounting conventions used in China and those in the UK are different. It took a while to get our heads around it, but once we did, it was reasonable.

• Theme 42 - Restrictions - Major constraints are the restrictions within China. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 9 A constraint is the inability to get old books (now unpublished) to add to our library resources.
- Strengthening visa control in the West.Until recently, the moratorium on Sino-Foreign partnerships.
- Theme 43 Finances A major constraint is the finances, cost, fees, and their respective objectives within Sino-Foreign University programs.

Relation to Figure 2: Western University Dependence for Int. Tuition Presence {Econ}

- 1 There is an illogical and inflexible pricing scheme that, on the surface, is based on costs, yet turns out to be based on the status of the host (state university involved) and their local fees.
- 4 The major constraint is the cost of the program.
- 5 Different levels of government officials will take the international cooperative as a form of marketing or dreaming form of institution, which are viewed as for-profit institutions. Many international cooperative programs are non-profit institutions and lack financial support from the government. Many international institutions are facing the challenge of sustainable development.
- 7 An external constraint is to meet the Chinese government criteria in order to set up sufficiently in terms of financial funding. Usually, funding by third parties (donations) is helpful.
- 9 Another constraint is the marketing or recruiting budget, and the lack of student support mechanisms (no student bank loans), which has not yet allowed the institute to reach its target of a 10% foreign student population. A related constraint is the limited financial support for only purchasing books for the necessary field of programs delivered.

- 11 A major constraint is the desire of the foreign partner to make profits instead of focusing on the long-term development of the academic program.
- 13 Government restrictions on net migration, as institutions alone cannot handle the overseas programs by themselves, and they need the support of government funding (with the exception of the Russell group universities). Most UK universities do not have much cash to invest in a major offshore operation, and most cannot do more than one offshore activity.
- Theme 44 Leadership A major constraint is the lack of experienced, strong, and committed leadership within Sino-Foreign Universities to manage the contextual challenges.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 5 Sino-Foreign Universities can have an unsuitable governance structure and a relatively low capability of their senior management team. It is not easy to find the right leader to run the proper senior management team and Sino-Foreign University, as many are selected but are not familiar with the Chinese context. There is a lack of resources of leadership in Sino-Foreign Universities. This is particularly important at the Sino-Foreign University institution level programs.
- 12 The innate conservatism and fear of the unknown within academic departments and their leadership.
- 13 The lack of a keen Vice-Chancellor and/or leadership and long-term planning. The senior leaders need to manage it well and add financial substantial resources, even with half a dozen strong partner institutions. A strong leader could start an overseas Sino-Foreign University relationship with a Confucius institute.
- 15 Firstly, more significant issues, rather than constraints which is not the right word, is more appropriate. What is needed at any overseas university looking to set up in China is buy in from the management of the home university, and buy in from the academics at the level of faculty. You will need senior people (not just the management team) to be committed to the project and make sure it is done in the right level and right way. The key point is that, before a Sino-Foreign University begins, a university needs to make sure it has the commitment and proper planning from their staff members.
- Theme 45 Staffing A major constraint is finding and developing high quality and culturally sensitive staff with long-term interests to support the Sino-Foreign University.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- A major constraint is that we have to deal with individuals who are just entering academia and then develop them.
- 3 A major constraint is the H.R. arrangement, which is unique as it involves multiple cultures (representing the staff and students) to manage and support. The result is that the multicultural environment has raised the staff's requirements to a very high level.
- 7 During the development stage, finding well qualified and stable academic staff is the main constraint. A constraint is to maintain the teaching quality that you promised your students. This is an internal challenge resulting from teaching material, staffing, and assessments, which can all impact teaching quality. Furthermore, staff lack commitment and come for short periods of time with a dual purpose of China tourism.
- 9 An internal constraint relates to difficulties in recruiting high-end expatriate staff, the tax implications that expatriate staff face, and the challenges in finding appropriate education for their children. Their significant others (husbands or wives) also have trouble finding suitable work in China.
- 11 A major constraint is foreign partners that, for a variety of reasons, do not want to make their staff more localized. These foreign partners will either not exist in the future of China's higher education system, or will have changed to localize their program.
- 15 The participant does not feel there are constraints. A successful collaboration will be the result of buy in over time. Buy in also needs to happen from other parts of the home university, and requires year-to-year interest from faculty.

An advantage of getting the buy in from a sufficiently large number of colleagues from across the university is to send out on secondary staff.

The university staffing model is another issue.

• Theme 46 - Culture - A major constraint is to manage the foreign and Chinese cultural and education system differences (for both staff and students).

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 2 The internal constraints include language and cultural differences, which create misunderstandings.
- 3 A major constraint is the difference in philosophies, culture, and evaluation systems of the two partners' academic departments. Because a joint venture relationship involves two different cultures regarding the management of such issues as plagiarism and referencing, there are very different perceptions from each side. Many discussions need to happen to clarify and resolve the differences within a Sino-Foreign University.
- 5 The constraints include culture and society. The conflicts of culture are always present but can easily be handled.
- 7 Cultural conflicts between international staff members (representing 50 countries) are other issues. They all bring their different cultures and expectations, and it is difficult to align their views with the direction of the university. Specifically, finding quality international staff that can be made to follow the standards set by the Sino-Foreign University institution is a challenge.
- 8 Another key constraint is culture. It is fine to talk about international cooperation and networks, but if we do not understand the cultural realities and work through our differences, major problems will arise.
- 9 A constraint is the communication between local and international staff, where both sides feel a problem is understood, but afterwards, it is found there was a misunderstanding. The Chinese and Western education systems have different philosophies and practices. The philosophical differences create a big challenge in facilitating a harmonious staff that work together effectively.
- Theme 47 Language A major constraint is insufficient Chinese or English language preparation to increase student and operational standards.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 2 Translation in official documents can be read very differently by Western and Chinese stakeholders. A sentence can be read in very different, almost opposite directions.
- 8 The major constraint was language training. Our university was very active in recruiting students from China, and we got ahead of ourselves by attracting a lot of students, but we had not provided the language training and cultural support needed.
- 12 The lack of knowledge of the Chinese language at nearly all levels of Western universities outside specialist Chinese language departments.
- 13 Another constraint is the lack of Chinese language and culture programs done by UK institutions (in China), which restrains intellectual interest.
 - Theme 48 Academic Skill Preparation A major constraint is the needed academic skill preparation for successful Sino-Foreign University graduates.

Relation to Figure 2: Potential Contribution to Figure 2

- 3 A major constraint is that Sino-Foreign Universities cannot take Chinese Nationals who are in A-level or IB programs without the Gao-Kao scores. In terms of the applicants for students' background in the state system, there is a gap in terms of language, learning, and the teaching and learning environment, compared to those who have studied at A-level or IB programs.
- 4 The major constraint was language training. Our university was very active in recruiting students from China, and we got ahead of ourselves by attracting a lot of students, but we had not provided the language training and cultural support needed.
- 11 The major constraint is the challenge to integrate traditional and new pedagogical methods whilst graduating high-quality students that have all of these skills to attract future employers.

• Theme 49 - Parent Perceptions - A major constraint is the perception and expectation of parents towards their children's education at Sino-Foreign Universities.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 3 A major constraint is the large difference in perception of parents regarding the expected contact hours of teaching and the expected cooperation between teachers and students. This is a result of a cultural difference between Western and Chinese parents, and is a marketing constraint when recruiting students. We try to educate the parents, but the difference in University systems (East-West) is even more difficult for them to handle and accept, compared to the change and challenges their children will face when studying in a Western University program.
- 5 Parents criticize the system, and they don't want the reformation to impact their children.
- Another constraint includes the public media and mini-blogs that lack an independent and rational analysis of various events. This results in people criticizing according to their understanding and personal experience without fully understanding the issues. Society needs to mature to develop more logical arguments for decision making.
- 9 Another constraint is the Sino-Foreign University brand, as parents are the main decision-makers about a child's education in China.
- Theme 50 Graduate Opportunities and Benefits A major constraint is the lack of equal job opportunities, scheduled internships and benefits for Sino-Foreign University students compared to state university graduates. Relation to Figure 2: Increased salary for Sino-Foreign graduates {Econ}

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 1 A major constraint is the disadvantage that our students face. Chinese state nationals in their final semester of their undergraduate degree are at internships guaranteeing jobs. Sino-Foreign University students have the most rigorous assessments in their academic undergraduate studies at that time (in their final semester of their undergraduate degrees), and have far less time, if any, to look for jobs.
- 3 A major constraint is the lack of policies developed for Sino-Foreign University graduates. In terms of hiring (H.R.) policies, firms cannot give Sino-Foreign University graduates benefits such as applying for a Shanghai Hukou. The lack of equal benefits for Sino-Foreign University students compared to those overseas returnees, who study directly overseas instead of studying in the Sino-Foreign cooperative university/college. An example is that our 4+0 students cannot apply for a Shanghai Hukou, although they have a UK degree. This is a restriction from the perspective of the H.R. and household registration bureau.
- 9 Another constraint includes student employment opportunities. State Owned Enterprises have limited job prospects for Sino-Foreign University graduates based on the requirement of English qualifications (CET 4/6 required) or requirements of Project 211 and 985.

4. b) How are the constraints handled?

• Theme 51 - Leadership - Strong leadership of Sino-Foreign Universities can solve the constraints. Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

1 The constraints are handled with strong leadership in the Sino-Foreign University, which focuses on being as useful as possible to the host (state) university. Being as useful as possible will, hopefully, allow more people in the host university to realize the nature of Sino-British Universities, which are not rich (as finances and other resources are quickly absorbed by both partners).

The constraints are also handled by the leaders being able to select the appropriate issues to discuss and debate. This requires strong leaders who are sympathetic with the partner's needs. This will result in a leadership style that talks to each other rather than past each other.

- 2 Strong leadership is needed to drive through the important points that must be upheld, such as academic standards, for example. The important points must be upheld by the leadership so they are not lost in issues of communication, culture, or language.
- 5 Strong leadership that can deal and help the institution survive in the struggle between the planned and market economy. The Chinese government has pushed the reformation of the market economy, while many sectors,

such as education, still have the habits of a planned economy. This creates trouble running a new university smoothly, so a leader has to find their own way to break through the many challenges that are results of the dual system. If the university wants to run successfully, it needs a strong management team to face the challenges.

- 6 Provide as much mentorship and guidance to the partners here on site. Constantly try to nurture their greater natural instincts for more autonomy. For example, a report is prepared after a meeting in a format that reflects the institute is an autonomous independent university. The participant needs to separate the delegation of responsibility and accountability that lies on the foreign and Chinese side whilst nurturing and encouraging all the participants.
- 12 By senior management pushing through investments in Sino-Foreign partnerships with verve and enthusiasm, thereby by-passing the internal constraints; external constraints have to be endured with patience and understanding of the Chinese/Sino Position.
- 13 From the top management and academics who want to go to China.
- Theme 52 Communication Communication, including internal and external meetings (Sino-Foreign University meetings), can solve the constraints.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

2 The constraints are handled by trying to find the best fit to the current situation (square peg into a round hole as best you can). Dual degrees, for example, are handled by dual systems and a lot of repetition in slightly different ways to satisfy the partner institution's needs.

The constraints are also handled through many meetings and discussions to try and find common areas to work forward with to overcome the constraints.

- 3 The constraints, as mentioned above, are handled over time with sufficient communication with the relevant individuals to devise a solution. Internal meetings can help as well.
- 4 The constraints are best handled through communication, which is easier now than ever before in China. The constraints are best handled by changing the emphasis as to who is communicating. The communication needs to be the governments of each respective partner rather than just the universities concerned. This is particularly important at the beginning of any discussion for new Sino-Foreign Universities. As we move to the future, we cannot do what we have done before in the Chinese market. Furthermore, the new Chinese administration will be different from all previous administrations, as the government wants to be a world player and become number one in global education.

5 Any type of conflict requires communication.

- 7 To find the correct partner, much communication needs to happen to ensure you have the same dream for establishing a Sino-Foreign University.
- 9 The constraints are handled by having university-level meetings to discuss the staffing issues with the foreign partner university to find a supporting solution.

The program application constraint is solved by explaining clearly to the Ministry of Education the difference in the applied programs' different content and better quality students. One reason for the rejection of a program last year was that we did not mention how our program is different from a state university, and we did not explain how the quality is better. Many state universities have this chalk and talk, no equipment (cheap set-up) type of programs, so the viewpoint of being cheap resulted in the program being rejected by the Ministry of Education. The government wants so much control over the application of programs because they feel there are too many students and not enough jobs. They only want to approve programs that can develop society and a respectable community while developing local talent to support the community development. How this can happen must be clearly explained in the bid application.

- 14 They are handled by getting to know each other through many conversations, and based on individual trust. This is very time-consuming but is required to gain an understanding of where each partner is coming from. Once you understand the logic, you can understand. Time is needed to get to know each other.
- Theme 53 Blending Higher Education Systems Blending aspects of Eastern and Western academic and operational practices.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

- 3 The constraints are handled by thinking creatively and blending aspects of both the Western and Eastern Higher Education systems. An example is that now some Western universities will consider tier 1 Gao Kao scores in combination with an English language score of IELTS 6.5 to go directly into year 1 of their university program.
- 5 It is very important for new universities to use their high qualities and blend the best practices together of Sino (state) and foreign universities.
- 8 The constraints of culture are handled by not bringing the partner into our cultural milieu and operating in a shared cultural environment.
- 11 The solution to partnerships that do not want to localize their program is to develop and improve their level of cooperation with their state partner. This requires the foreign partners to make changes in actual actions.

• Theme 54 - Home Campus Compliance and Support - Compliance to foreign home campus which will be strong and supportive to the Sino-Foreign Universities' development.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

- 6 Obedience to the authority (home campus).
- 15 Be ambitious on how to handle issues, because behind the individual is a high and successful university. This can include different non-teaching based projects, such as research to get funding from the local city to become immersed into the local community. An example of this is the marine research centre that we are trying to develop to help the local economy within the city where our Sino-Foreign University is located.

• Theme 55 - Staffing Strategies - Implementing staffing strategies to recruit, develop and maintain high quality staff at Sino-Foreign Universities.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What are the qualities of a successful Sino-Foreign university partnership in 2013?

3 To support such a high staffing requirement with a multi-cultural group of staff members, a lot of on-job training and coaching is required in order to have qualified staff, even when a staff member's language and cultural awareness are high upon entering a work position at a Sino-Foreign University. Positions such as career services do not exist in China's universities, yet are common in the UK; thus, we need to train staff accordingly.

The constraints are handled by recruiting graduates with overseas experience and degrees while offering a lot of on-job training This will provide a better start to the administration support provided at a Sino-Foreign University. Furthermore, modern Sino-Foreign Universities and Colleges have a higher ratio of staff with overseas experience and overseas degrees, compared to staff members in earlier partnerships a decade ago. Hiring these more experienced and internationally aware staff is vital to handling the constraints.

- 7 In terms of staffing, you need to be creative, as you are competing with other universities around the world to recruit the right staff. Through professional development schemes established by the university and cultural team building, you can make the individuals merge as a team.
- 9 The challenge is to support the good staff to encourage them to stay for the long term, which requires support from the central government through financial resources for the schooling of expat children and dedicated hospitals for the medical treatment of expatriates. This would be extremely difficult in the West of China. Encourage staff to use English, which is a long-term development that cannot be solved in the short run.

13 From the top management and academics who want to go to China.

15 International appointments and the correct staffing model.

Having a good institutional location close to big cities, good hospitals, and schools to accommodate families of academics.

• Theme 56 - Recruitment Strategies - Using recruitment strategies, which can include getting parents or current students involved in a variety of activities.

Relation to Figure 2: (SFU) Student Enrollment {Demo}

- 3 The constraints are handled by trying to involve parents more in school activities such as a scholarship award ceremony. Having the parents involved can help them understand the foreign Higher Education system. Current parents represent a newer, younger generation, with some even born in the 1970s. Having younger parents of prospective students is a way to handle the constraint of parenting cultural conflicts, as they will have a greater acceptance of Western Higher Educational practices as compared to the older generations. Younger parents are more familiar with international ways (more informed through various media and information sources, articles); therefore, the constraint of parenting cultural conflicts will decrease itself each year with a greater number of younger parents (in terms of generations) getting involved.
- 9 The student recruitment challenge can be solved with incentives, such as current international students returning to their hometowns in the summer as agents to help the recruitment for the upcoming academic year.

5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University and College partnerships?

• Theme 57 - Policy Strategy - New transparent policies related to net migration and Sino-Foreign Universities are needed to support and improve those that are currently in use.

Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

1 No Taxes.

I would implement a quota system for all students in an imbedded university program. This way there would not be a reliance on the open market, which is four to five times more expensive.

I would institute a policy whereby no foreign partner in a major area or province would be able to set up a second (or any further) branch without consultation with the original institute with which they are partnered in the major area or province.

A sensible policy would be developed to avoid a partner institute competing with their own Sino-Foreign University joint venture. An example is the cheaper cost of engineering degrees taught in English by the state partner when the Sino-Foreign University has a foreign engineering degree which is ten times the price. I would develop a clear, visible, and transparent regulatory framework.

- 13 Students need to be removed from net migration numbers, as the UK Border Agency (UKBA) monitoring system is seen as oppressive by academics. The policies need to be reviewed or removed, as the extra layer of bureaucracy puts strain on the system. Specifically, government policies to remove government constraints (net migration of students in higher education) are the issue. It is a problem in the UK and has the potential to develop in other nations, given security and the movement of international students.
 - Theme 58 Government Involvement Strategy Increasing government involvement and their respective financial support in future Sino-Foreign universities will strengthen their institutional programs and output.
 Relation to Figure 2: Potential Contribution to Figure 2

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- I
 The participant would like to see strategic developments to focus on achieving more government financial
 - support, and actual interest and involvement in Sino-Foreign University partnerships.
- 4 The participant would find open-minded foreign governments and universities to work with China's government and state universities. It will be easier to form a partnership if the state, foreign partner, and respective governments are open-minded to become a real global university, which might happen before 2030. The participant used the German automobile success story in China as an excellent example for Sino-Foreign University partnerships in 2030. The automotive industry was initially occupied by Japanese auto makers. The Germans worked with the Chinese government to make cars in China with foreign import parts while developing Chinese auto part makers and setting timelines to have parts localized. The result is that young people in China think Volkswagen is a Chinese brand because most of the parts are locally produced. The Germans now occupy the market much more than the Japanese.

The participant also used United World College (which is waiting for approval to enter China's market) as another example of what to expect for the future of China's educational sector.

- 13 Strong and direct government-to-government cooperation and deeper cooperation for partner educational institutions. This would allow intellectual flow with research being the priority and teaching following strong research. A collaborative approach between institutions would be needed.
- Theme 59 Sino University Involvement and Development Strategy To increase the amount of involvement, authority and decision making from the state partner in Sino-Foreign Universities.
 Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- ⁴ The participant would integrate the state universities' curriculum and modules into the Sino-Foreign University, instead of it being dominated by the Western curriculum. This is a result of China's developments as a nation. The participant would confirm an amount of credits (from a standard 120 credit undergraduate degree program) that can be from the foreign partner's curriculum/program, and how many credits can be from the state partner. Note that accepting credits from both foreign and state partner universities is essential for the future context of Sino-Foreign Universities in 2030.
- 6 The participant would create a fully-functioning autonomous university that seeks to operate in every way as a fully-functioning western institution of higher learning and as a fully participating institute in the world academic community. The participant would push greater involvement of the Chinese side of university operations. This would result in pushing more legitimacy from the Chinese side rather than the Western side to create a transformative staff to establish true home roots in the Chinese community proper. If this does not occur, they will become expat rather than integrated new Chinese communities of Higher Education. This cannot be done within the present constraints tying it back to the home campus and subordinating the Chinese side to the foreign side.

The participant will seek the full enfranchisement of the Chinese partner.

- 11 As government-owned universities (which make up the majority of China's universities), the focus needs to be on helping the nation's universities and citizens develop rather than focusing on using the taxpayers' money to allow students to go abroad and develop through foreign education.
- 12 Commence expanding the number and range of Sino-Foreign partnerships to encompass the whole of the Sino and foreign Higher Education sectors.
- Theme 60 Foreign University Integration Strategy The foreign campuses' industry contacts and resources (including staff) should be aligned to work with the Sino-Foreign University.

Relation to Figure 2: Western Partner University Global Presence Desire {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 3 The participant would align all the industry resources and contacts to be directed to the joint venture. British Universities have more experience in working with industry, and Sino-Foreign Universities have been based largely on teaching. Aligning the industry resources to be accessed by Sino-Foreign Universities will make a joint partner university become more like an independent stand-alone university and deepen its societal impact and value.
- 12 Consequently make involvement with them normative throughout the University through the Introduction of promotion, HR and degree policies that mandate significant periods of overseas secondments/assignments for staff/for students including or mainly to China (and USA) to mainstream and encourage involvement with Sino-Foreign partnerships as a routine and expected part of senior academic development for all academic staff, and top-graded degrees for students.

Theme 61 - New Partnership Model Strategy - The focus to develop new models with a unique focus on being original with a variety of attributes current Higher Education institutes do not practice.
 Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 8 In summary, new pedagogical and intellectual models are changing as we look at partnerships. This is about the way we look and teach the world.
 In essence, we need a global academic agenda. The development of the idea that a global academic agenda is needed is not yet imbedded, and it will take a generation to put it in place.
- 9 The currently-focused research-led university would be known for its uniqueness in comparison to other Chinese universities. The key strategic plan would be to create a unique university that is not the same as other universities and does not copy the programs and focus of other universities. In summary, they would lead the direction of Chinese universities.
- 13 Top 5 universities from China would be interested in a UK campus or research centre(s). Alternatively, there would be a continued need for Western Higher Education and UK culture and education in China.
- 14 The partners would ideally exist as multi-faceted (not just teaching or research), which is the opposite of current institutional trends.
- Theme 62 Consortium Strategy To focus on consortium partnerships and move away from the standard partnership of one foreign and one state university.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 1 I would implement a consortium of no more than 3, if not 2, foreign partner universities.
- 12 Expand the numbers of multi-partner relationships across continents, so a Sino-Foreign partnership is no longer a one-on-one experience, but is one that leads directly to the development of a truly global and deep university relationship, akin to the new multi-partner venture by the Mayor in New York to create the "east coast Berkeley", with Warwick, Singapore, and other leading non-US universities in partnership with US universities.
- 13 Use consortium universities to significantly involve China.
- 14 A move towards more than 1 state university from China and more than 1 foreign university from the UK provides more adventures and possibilities for future Sino-Foreign University institutions and partnerships.

Theme 63 - Internet and Social Media Strategy - To integrate internet and social media platforms throughout all work aspects in the academic and administrative departments of Sino-Foreign Universities.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 4 The participant would integrate all aspects, as mentioned in the questions above, which include, but are not limited to, social media (online and mobile learning) and research and development to make the information clear for approval.
- 5 The senior management team needs to pay more attention to the potential impact of trends such as the future internet generation of students. These trends will greatly change education in terms of how it is delivered, re-thought, re-shaped, and re-defined.
- 8 Technology platforms, cloud-based environment, and global platforms.
 We live in a world with a lot of proprietary technology platforms, where a Google-like open platform can be pursued for Higher Education in the future.

• Theme 64 - Operational Standards Strategy - To initiate an enhanced operational standard that can bridge commonalities with other educational institutions for a variety of exchanges.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

2 To have a Sino-Foreign University that can assimilate with other institutes through common global standards in terms of student entry and graduation qualifications and administrative systems.

- 5 The correct applications must be in place to meet quality assurance standards, increase students' knowledge to solve problems, and develop an operational system to improve efficiencies in knowledge work and knowledge organizations.
- Theme 65 Marketing Research Strategy To initiate a marketing research strategy in light of the student quota system to capture the changing trends and develop new communication channels to capture a new generation of parents.

Relation to Figure 2: Enroll Ceiling {Gov}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 1 The participant feels that the influence of the student quota system would restrain the need for marketing research. Other strategies would need to be considered.
- 3 The participant would foster and develop new channels to communicate and market Sino-Foreign Universities to a new, younger generation of well-educated, international and knowledgeable parents.
- 4 The participant would conduct sufficient market research to best prepare for the program.
- 8 With a limited budget that all universities face, I would invest more in international linkages and connections and less on the residential experience on the home front. It warrants a larger percentage of the Higher Education budget and it is time for some evidence-based research on what is working and what is not. We have 30 years of solid experience and it is time for folks to review what is happening.

• Theme 66 - Student Recruitment Strategy - To implement a student recruitment strategy to optimize on a Sino-Foreign Universities student capacity and recruit the correct caliber of students.

Relation to Figure 2: (SFU) Student Enrollment {Demo}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 2 Currently, we have international students entering with different scores, which causes recruitment and enrollment problems. This needs to be solved through some form of standardization process.
- 3 The participant would recruit students from IB and A-level programs, as they are better suited for Sino-Foreign Universities. If possible, a pipeline can be built up (even without going overseas) and Sino-Foreign Universities can plan with prospective families from a very early stage (middle school) to gain a seat at an elite Western University through a Sino-Foreign University.

The participant would combine Gao-Kao scores to A-level students (which is currently not allowed) to target more suitable students. This is better for students to make their plan of study suitable for themselves.

9 Without the constraints, the participant would ensure that the university will fulfill its target and strategic plan very quickly. This involves setting a target of 15,000 students on campus, with 10% being postgraduate students, 10% being foreign students, who would be altogether supported by 1,000 staff.

• Theme 67 - Alumni Strategy - To implement long-term alumni activities such as job creation through the Sino-Foreign Universities alumni network.

Relation to Figure 2: Increased salary for Sino-Foreign graduates {Econ}

Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 3 The participant would integrate the industry network of alumni to help place our graduates in secure jobs.
- 5 The participant states that long-term alumni need to be developed and are legally part of a university.
- 7 Ensure that the universities' target, vision, and goals (the direction and focus are imperative) are followed from all sides of the university. Purposes that could be interesting for a small group, but not for the greater good of the institute, need to be removed, and only those that align with the institutes' goals should continue. The teaching and research need a clear and focused direction to work together. A strong and correct feedback circle towards society needs to be established. This would result in more society involvement, with society giving resources to the university, and finally the university returns resources to society in a variety of forms and outputs.

15

Again, there are no major constraints that are preventing anything from happening. You need patience if you want the university campus to develop well, which cannot happen overnight (development and growth of a university from nothing to full campus). The time taken to build a university is long, so one must be going into the project for the long haul and be extremely patient while providing all the commitment. An example is to ensure endorsement for graduates to obtain jobs (number given by government when registering). This will better the institution's community profile.

• Theme 68 - Higher Education Research and Teaching (Pedagogical) Strategy - To develop a new and unique curriculum which will help society and may have an increasing amount of non-Western academic practices to investigate a specific area of inquiry.

Relation to Figure 2: Western University SFU Partner (Type and Model) {Gov} Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

- 8 In terms of curriculum, it has been about the Western experience and Western knowledge. In the last five years we have been seeing with some universities new, non-western ways to think about various areas of inquiry. This is something that is happening in Hong Kong Universities.
- 9 This involves very strong leadership to focus on a new set of knowledge for the future university students' generations, such as finance, new energy, life sciences, pollution management, and networking intelligence. This uniqueness in majors is required to solve the problems that society and humanity will face in the future.
- 13 More collaborative research in China, given the paleontology findings in China, as the nation leads the world in the exploration of new animals and fossils that have not yet been tapped.
- Theme 69 Societal Involvement Strategy The strategy to actively work and contribute to the local society where a Sino-Foreign University is located, with a long-term focus for long-term returns of various kinds.

• Relation to Figure 2: Increased salary for Sino-Foreign graduates {Econ}/ Number of scholarships {Cul} Answering Research Question: What strategy would support the qualities of successful Sino-Foreign university partnerships in 2030?

5 A network should be used to support service to the academic community. An institution needs to be part of society, including the knowledge economy and the social economy.

7 Ensure that the universities' target, vision, and goals (the direction and focus are imperative) are followed from all sides of the university. Purposes that could be interesting for a small group, but not for the greater good of the institute, need to be removed, and only those that align with the institutes' goals should continue. The teaching and research need a clear and focused direction to work together. A strong and correct feedback circle towards society needs to be established. This would result in more society involvement, with society giving resources to the university, and finally, the university returns resources to society in a variety of forms and outputs.

15 Again, there are no major constraints that are preventing anything from happening. You need patience if you want the university campus to develop well, which cannot happen overnight (development and growth of a university from nothing to full campus). The time taken to build a university is long, so one must be going into the project for the long haul and be extremely patient while providing all the commitment. An example is to ensure endorsement for graduates to obtain jobs (number given by government when registering). This will better the institution's community profile.

Appendix O- Chinese Translation of Theme Summaries

2030年中外大学合作关系的成功愿景和策略

1. 你希望2030年中外大学与学院合作关系达到怎样的程度?

1- 政策和法规开发-开发清晰、歧义更少,并且允许实现更大中外大学合作关系自主性的政策。

2- 税务政策的开发-开发有关外派人员及与当前免税政策相关的税务政策。

3- 学生限额政策的开发-希望根据中外大学合作关系的制度结构改变定额系统。

4-开发高等教育系统-中外合作大学有助于带领中国大陆的高等教育系统的发展。

5- 增加学术质量-中外合作大学的学术质量将会增加到一个世界级的水平。

6-系统共同点-外国和中国合伙人将增加各个方面的共同点,这将实现相关高等教育机构内部的更多交流。

7-教育系统的认知-中外合作大学的员工和学生应该了解他们各自合伙人的国家教育系统。

8- 合伙企业合作更紧密-中外大学合伙人与更多企业具有紧密的合作关系。

9- 最佳实践方法-中外大学合伙人更加容易使用他们各个机构的最佳资源和人才。

10-提高接受高等教育的机会-全球越来越多的学生都会通过中外大学和/或社会媒体平台接受高等教育。

11-因特网及社会媒体-在未来向下一代学生提供教育机会的中外合作大学中将会集成因特网和社会媒体。

12-集成全球合作关系-未来的高等教育机构将会拥有集成的全球合作关系,因此中外大学的形式 会消失。

13- 文化和制度交流-中外大学之间越来越多的学生、员工和文件交流将会增强良好的时间行为。

14- 社会贡献-社会贡献及后续收入将是未来中外大学合作关系中的更显著部分

2030年中外大学合作关系的成功愿景和策略

2. 最近洞察2030年中外大学和学院合作关系的关键事件是什么?

15- 政府发展-政府发展会增加中外大学的运营,或者会增加经营中外大学合作关系的难度。

16- 学术质量的发展-提高中国大陆高等教育项目的学术质量。

17-中外大学-中国国立大学或研究机构设于国外的趋势(中国大陆以外)。

18-新中外大学-最近批准的几个新中外大学项目显示出中国大陆高等教育系统的新阶段以及教育制度的新阶段。

19-研究中心-通过中国和其他国家的国外大学发展全球研究中心。

20-研究重点-中外大学和中国政府将研究重点转移到开发中国的研究力量。

21- 国际学生市场的增长和重要性-非洲、发展中国家和西部贫穷国家的学生将成为中外大学招生政策的重点。

22- 中等学校的政策-面向高级和国际学校项目的政策将转移到直接在西部接受教育的学生。

23- 高考规则-高考规则的变化给未来中外大学合作伙伴提供了挑战。

24- 缺少重要事件-缺少洞察2030年中外大学和学院合作伙伴的重要事件。

3. 长期暗示中外大学和学院合作伙伴及中国政府当前面临问题的主要决策是什么?

25-分散决策权-政府决定向中外大学和国外主校提供更多决策权。

26- 增加学术质量-决定增加中外大学的学术质量,并且改变中国大陆高等教育机构的学术质量。

27- 认可合作关系等级和方式-政府决定认可非"精英"级大学的中外大学合作关系,并且考虑认可 各种合作方式。

28- 授权的合伙企业数量-有关未来许可多少中外大学合作企业数量的决策。

29- 说明竞争水平-改变中外大学和国内大学之间的竞争水平。

30-执行新的学术模式-决定在当前高等教育系统中执行和集成新的学术教育模式。

31- 开发新的教育模式-决定开发中外大学合作的新制度模式(分级/方法/合作关系的要求/发起)。

32- 基于中国的教育焦点-决定在中国大陆建立独一无二的教育传递合作关系。

33- 缺少新决策-缺少说明中国大陆的计划基础的主要决策。

34- 了解中外大学的未来目的和位置-决定阐明未来中外大学在当前高等教育系统中的目的和位置。

2030年中外大学合作关系的成功愿景和策略

4. a)你(你曾经)在中外大学和学院合作关系内部/外部遇到的主要限制条件是什么? 35- 很难接近教育机构-主要限制条件是缺少与政府教育机构的联系和沟通。

36- 政策和法规-主要限制条件是中国大陆的高等教育政策和法规。

37-省级变化-主要限制条件是各省(或一个区域内)的中外大学法规及政策的变化。

38- 合作关系不协调-主要限制条件是合伙人对于中外大学而言具有相同的机构背景和目标。

39- 管理系统-植入式中外大学项目的主要限制条件是需要服从公立合伙人的管理系统。

40-外部监控-主要限制条件是国外主校、质量保证机构涉及的相关合伙人的外部监控。

41-中国的环境-主要限制条件是中国的大民族(和独特)环境。

42-限制条件-主要限制条件是中国大陆的限制条件。

43-财政-主要问题是中外大学计划中的财务、成本及他们的相关目标。

44-领导-主要限制条件是中外大学缺少经验和知识丰富的管理环境挑战性的领导。

45-员工-主要限制条件是需要找到长期支持中外大学的教育和文件水平高的员工。

46- 文化-主要限制条件是管理(所有员工和学生的)外国和中国文化以及教育系统的差异。

47-语言-主要限制条件是准备的中文或英文水平不足,无法增加学生和运作标准。

48-准备学术技能-主要限制条件是需要准备中外大学成功毕业需要的学士技能。

49- 父母认知-主要限制条件是父母对他们的孩子在中外大学中的教育的看法和期望。

50- 毕业生的机会和利益-主要限制条件是与国立大学毕业生相比,中外大学的学生缺少同等的工作机会和利益。

4. b)如何解决这些限制问题?

51-领导-中外大学的强大领导者可解决这个限制问题。

52-沟通-包含内部和外部会议的沟通(中外大学会议)可解决这个限制问题。

53-协调高等教育系统-协调东方和西方学士和运作实践行为的各个方面。

54- 符合主校的模式及获得主校的支持-遵照外国主校的模式,这将强化和支持中外大学的发展。

55-员工政策-实行员工政策,招募、开发和保留中外大学中的高水平员工。

56-招生政策-使用在各种活动中涉及到父母或当前学生的招生政策。

2030年中外大学合作关系的成功愿景和策略

5. 如果解决了问题4中的限制条件,并且你可以直接这样做,那么你会为中外大学和学院的合作 关系做些什么呢?

57- 政策-支持和改善当前使用政策的新政策。

58-政府参与政策-增加政府在未来中外大学中的参与度将增强他们的计划和输出结果。

59-中国大学参与和开发策略-增加国内合伙人在中外大学中的参与度、授权和决策权。

60- 国外大学的综合策略-国外大学的行业联系和资源(包括员工)应该与中外大学的工作匹配。

61-新合作模式的策略-当前高等教育的焦点不会放在开发新模式的焦点以及具有各种属性的原始 独特焦点。

62- 联合策略-把焦点转移到联合合作方式,不使用一家国外大学和一家国内大学的标准合作方式。

63- 因特网和社会媒体策略-在中外大学的学术和管理部门的各个方面集成因特网和社会媒体平台。

64- 运作标准策略-开始执行一个强化的运作标准,它能够与其他教育机构建立共同性,实现多样 化交流。

65- 营销研究策略-开始实行一项营销研究策略,抓住变化趋势,开发新通信通道,吸引新一代的 父母。

66-招生策略-实行招生策略,最佳化中外大学的学生能力,招聘高等水平的学生。

67- 校友和社会参与策略-开展增加社会贡献和中外大学校友网络的活动。

68- 课程策略-开发有助于社会发展的独特新课程,它可以增添加调查指定研究领域的非西部学术 机构的数量。

Appendix P- Round 2 Reasons for Theme Summary Amendments

Note: The number on the left hand side represents the corresponding theme number.

- 7-To more accurately reflect participant 1's added response in round 2 and participant 2 and 9s' original response of round 1 that greater awareness is needed beyond the staff and students at Sino-Foreign Universities.
- **10-**To emphasize the greater competitive advantage that Sino-Foreign Universities will have by serving a greater student population beyond 2 nations.
- 12-To reflect the responses of participant 1's added response in round 2 and participant 5's original response of round 1 that potential, rather than an absolute limitation of expansion efforts and institutional extinction of Sino-Foreign Universities, will occur.
- **15-**To grammatically clarify the potential for positive enhancements in operations or the potential for negative difficulties in operations.
- 16-To accurately reflect the responses of participant 3 and 11 in round 1 and the added response of participant 5 in round 2 that mainland China's state universities and college programs will have quality developments by the standards of Sino-Foreign Universities.
- 21-To raise the potential for, rather than the absolute importance of international students. This was imperative to amend upon review to accurately reflect the conflicting participant's responses. Participant 5 added a response in round 2 suggesting that international students are an offset of, rather than the main focus of Sino-Foreign Universities. Alternatively participants 1's added response in round 2

and participant 8 and 12's original response in round 1 viewed international students to be an important theme for Sino-Foreign Universities' future.

- 22-To reflect participant 1's added response in round 2 that programs may become localized through being absorbed by state universities.
- **24-**To accurately reflect the original response of participant 1 in round 1 that overall stakeholder commitment was lacking which caused a lack of action and pivotal events.
- **25-**To accurately reflect participant 5's added response in round 2 regarding Sino-Foreign Universities existing in a free market economy in mainland China and the removal from theme 25 as it is already implied in the theme summary.
- **40**-To accurately reflect participant 14's added response in round 2 regarding the lack of clarity and lack of agreement as to which stakeholder group should hold the responsibility and accountability in quality auditing assurance standards of Sino-Foreign Universities.
- **43-**To more accurately reflect all of the participants' original responses within theme 43 in round 1 that tuition fees are the backbone to finance Sino-Foreign Universities.
- **45-**To more accurately reflect participant 7 and 11's original response in round 1 and participant 1's added response in round 2 that staff development is a needed yet challenging constraint.
- **50-**To more accurately reflect participant 1's added response in round 2 that scheduled internships which final year undergraduate students from state universities receive places Sino-Foreign University students who do not have final year scheduled internships at a job search disadvantage.

- 57-To more accurately reflect participant 1's original response in round 1 regarding policies and the regulatory framework requiring transparency and to more accurately reflect participant 13's original response in round 1 of the needed removal of international students to be removed and separated from a government's migration regulations and policies. To more accurately reflect participant 1 and 13's original round 1 responses regarding the need of the policies to support Sino-Foreign University institutions and their respective partnerships comments.
- **58-**To more accurately reflect participant 1's added response in round 2 that specified government involvement to be representative by their financial support of Sino-Foreign Universities and to more accurately reflect participant 13's original response in round 1 that institutions need to work with the government.
- **65-**To more accurately reflect participant 1's added response in round 2 related to the updated and changing student quota policies and system.
- **61-**The removal was for stylistic reasons.
- **68**-To create a new name based on participant 8 and 13's separate requests for the theme which participant 9, who also had a response within theme 68, agreed with.

Appendix Q- Round 3 Instructions

Please see the attached **theme summary** and **participant response** document to assist your completion of round 3. You are labeled as participant **X** in the **participant response** document which has your confirmed responses of round 2.

Below are the steps to complete round 3:

- 1. Review the 70 themes from the **theme summary** document.
- **2.** Select (not rank) 15 themes that you view as most important towards successful Sino-Foreign Universities' in 2030.

Note: Success is defined by the researcher as a Sino-Foreign University partnership that can withstand the forces found in mainland China's contextual environment. Success is furthermore defined as a partnership maintaining operational stability in terms of student enrollment, facilities, academic quality, etc.

Note: Themes can be selected as most important in the years prior to 2030 to contribute to successful Sino-Foreign Universities in 2030.

- **3.** Review the **participant response** document for the participants' responses corresponding to the 15 themes you have selected.
- **4.** Confirm the themes as being most important after reviewing the participant's responses by recording their theme number in the response box below.
- **5.** Repeat steps 1 to 4 until you have selected and confirmed 15 themes that you view as most important towards successful Sino-Foreign Universities' in 2030.

Participant X Selected Themes

Appendix R- Round 3 result confirmation via email

Dear Participant,

You have selected (not ranked) the themes below as being the most important themes for successful Sino-Foreign Universities' in 2030.

1. In the best possible world what would you hope for Sino-Foreign University & College partnerships in 2030?

• Add any theme summaries that the participant selected.

2. What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?

• Add any theme summaries that the participant selected.

3. What major decisions with long term implications do the Sino-Foreign University & College partners and the Chinese government currently face?

• Add any theme summaries that the participant selected.

4. a) What major constraints do you (have you) experience inside/outside Sino-Foreign University & College partnerships?

• Add any theme summaries that the participant selected.

4. b) How are the constraints handled?

• Add any theme summaries that the participant selected.

5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University & College partnerships?

• Add any theme summaries that the participant selected.

Completion of Round 3

You may review the combined participant response file as previously sent to review all participants' comments for any of the 70 themes. After your review you may email me to remove, replace or add any of the 15 selected themes if needed. You will be given two weeks from the time of this email to reply to me regarding any needed changes. A non-response from yourself will indicate your initial list of selected themes (as above) is confirmed by yourself.

Commencement of Round 4

Round 4 will involve ranking the themes with the highest frequency of selection in Round 3. As per previous rounds I will fully accommodate your schedule to best facilitate your participation. Please let me know if you have any questions and thank you for your continued participation in my Delphi exercise.

Appendix S- Round 4 Instructions

Round 4 Instructions

The 4 files are attached to assist your completion of round 4:

- **Round 4 Questionnaire**-A questionnaire to rank the 22 themes which had the highest frequency of selection from round 3. You must rank the themes based on their importance and likelihood of occurrence towards successful Sino-Foreign Universities in 2030.
- **Round 4-Theme Frequencies-** The frequencies of the 22 themes from round 3 that will be ranked in round 4.
- **Round 3 Participant Responses-** A list of the themes you selected (up to 15) which you viewed as the most important towards successful Sino-Foreign University's in 2030.
- **Round 2 Participant Responses-**The participant's confirmed responses from round 2 which formed the 22 themes that had the highest frequency of selection in round 3. You are labeled as participant 1.

Below are the 3 steps to complete round 4:

- **1.** Read the following documents:
 - Round 4-Questionnaire
 - Round 4-Theme Frequencies
 - Participant 1-Round 3-Summary Responses
 - Round 2-Participant Responses document
- **2.** Rank the 22 themes based on their:
 - **Importance** towards successful Sino-Foreign Universities in 2030.
 - **Likelihood** of existence by 2030.

Note: Success is defined by the researcher as a Sino-Foreign University partnership that can withstand the forces found in mainland China's contextual environment. Success is furthermore defined as a partnership maintaining operational stability in terms of student enrollment, facilities, academic quality, etc.

3. Review steps 1 and 2 until you have ranked all 22 themes.

Appendix T- Round 4 result confirmation via email

Completion of Round 4 (Final Round)-Thank You!

Dear Participant,

The following files are attached to this email:

- **Round 4 Questionnaire-** The questionnaire that you ranked containing the 22 themes which had the highest frequency of selection from round 3. You have ranked the themes based on their importance and likelihood of occurrence towards successful Sino-Foreign Universities in 2030.
- **Round 3-Theme Frequencies-** The 22 themes that had the highest frequency of selection from round 3.
- **Round 3 Participant Responses-**A list of the themes you selected (up to 15) which you viewed as the most important towards successful Sino-Foreign University's in 2030.
- **Round 2 Participant Responses-**The participants' confirmed responses from round 2 which formed the 22 themes that had the highest frequency of selection in round 3. You are labeled as participant (<u>anonymous participant number placed here</u>).

You may review the files above in light of your rankings of the 22 themes. After your review you may email me to change any of your rankings if needed. You will be given two weeks from the time of this email to reply to me regarding any needed changes in the rankings. A non-response from yourself will indicate your initial rankings of the 22 themes (as per the **Round 4 Questionnaire** attachment) are confirmed by yourself.

Please let me know if you have any questions and thank you for your participation in my Delphi exercise. Your time spent and dedication to this research endeavor has been greatly appreciated. I will be sending you the final results and findings once my dissertation is complete. I will also update you regarding any further research that I will conduct related to Sino-Foreign Universities.

Have a great summer!

Lee H.

Participant	Reselection Rate	Abandoned Themes	New Themes
1	13/15 (87%) (1, 5, 17, 20, 24, 28, 33, 34, 36, 43, 45, 51, and 58)	20 (2, 3, 4, 7, 12, 15, 18, 21, 22, 23, 25, 26, 29, 35, 39, 40, 50, 57, 62 and 65)	2 (46 and 59)
2	9/15 (60%) (7, 15, 22, 31, 32, 46, 51, 52, and 64)	10 (6, 9, 23, 27, 28, 29, 39, 40, 47, and 66)	6 (8, 10, 45, 53, 69, and 70
3	4/15 (27%) (1, 23, 36, and 53)	17 (6, 8, 16, 35, 37, 45, 46, 48, 49, 50, 52, 55, 56, 60, 65, 66, and 67)	11 (4, 5, 13, 17, 18, 29, 34, 39, 40, 57, and 64)
4	5/13 (38%) (10, 20, 43, 52, and 63)	8 (11, 30, 32, 36, 48, 58, 59, and 65)	10 (1, 2, 14, 23, 31, 40, 49, 51, 56, and 67)
5	6/15 (40%) (26, 43, 44, 51, 52, and 53)	18 (2, 3, 10, 11, 12, 16, 18, 21, 25, 30, 34, 36, 46, 49, 63, 64, 67, and 69)	9 (4, 14, 15, 20, 28, 31, 41, 58, and 60)
6	8/9 (89%) (4, 5, 15, 18, 26, 40, 51, 59)	1 (54)	7 (16, 30, 44, 45, 46, 52, and 55)
7	5/15 (33%) (16, 43, 45, 52, and 69)	14 (9, 14, 18, 20, 23, 26, 32, 33, 36, 37, 38, 46, 55, and 70)	10 (1, 5, 8, 21, 34, 40, 44, 56, 63, and 67)
8	7/15 (47%) (12, 46, 47, 53, 61, 63, and 68)	8 (9, 18, 20, 21, 26, 30, 34, and 65)	8 (1, 10, 11, 19, 39, 41, 45, and 69)
9	10/15 (67%) (1, 2, 3, 18, 23, 36, 42, 46, 52, and 68)	17 (5, 7, 13, 14, 15, 26, 28, 29, 31, 43, 45, 49, 50, 55, 56, 61, and 66)	5 (4, 21, 25, 30, and 62)
11	3/8 (38%) (4, 59, and 70)	12 (5, 8, 15, 16, 17, 33, 38, 41, 43, 45, 48, and 53)	5 (1, 7, 29, 31, and 40)
12	3/15 (20%) (21, 44, and 62)	12 (8, 15, 18, 19, 27, 32, 41, 42, 47, 51, 59, and 60)	12 (1, 4, 5, 6, 9, 13, 16, 20 36, 43, 50, and 70)
13	7/15 (47%) (8, 13, 31, 44, 47, 51, and 61)	10 (17, 18, 20, 22, 32, 43, 57, 58, 62, and 68)	8 (3, 5, 16, 19, 26, 45, 46, and 63)
14	4/12 (33%) (6, 34, 52, and 62)	8 (15, 17, 19, 26, 36, 40, 41, and 61)	9 (7, 9, 18, 20, 25, 43, 64, 67, and 69)
15	7/12 (58%) (1, 4, 15, 34, 45, 54, and 55)	5 (5, 24, 26, 44, and 69)	8 (6, 8, 9, 10, 20, 30, 38, and 47)

Appendix U- Round 3 Participant Stability

Participant	Stability Rate	Themes with Rd2 and Rd3
1	8/9 (89%) (1, 20, 34, 36, 43, 45, 46, and 51 as most important and 5 as important)	8 (1, 5, 20, 34, 36, 43, 45, 51
2	8/10 (80%) (8, 10, 15, 46, 51, 52, 53, and 69 as most important and 31 and 45 as important)	5 (15, 31, 46, 51, 52)
3	4/8 (50%) (1, 34, 36, and 53 as most important and 4, 5, 18 and 40 as important)	3 (1, 36, and 53)
4	3/9 (33%) (1, 20, and 63 as most important and 10, 31, 40, 51, and 52 as important and 43 as not important)	5 (10, 20, 43, 52, 63)
6	8/11 (73%) (4, 15, 16, 18, 40, 44, 51, and 52 as most important and 5, 45, and 46 as important)	6 (4, 5, 15, 18, 40, and 51)
7	11/12 (92%) (5, 8, 16, 34, 40, 43, 44, 45, 52, 63, and 69 as most important and 1 as important)	5 (16, 43, 45, 52, 69)
8	4/7 (57%) (45, 46, 53, and 69 as most important, 10 and 63 as important, and 1 as trivial)	3 (46, 53, 63)
9	2/6 (33%) (1 and 52 as most important, 4, 36 and 46 as important, and 18 as unimportant)	5 (1, 18, 36, 46, and 52)
11	2/4 (50%) (1 and 31 as most important, 4 and 40 as important)	1 (4)
12	1/8 (13%) (36 as most important, 1, 5, 16, 20, 43, and 44 as important, and 4 as unimportant)	1 (44)
13	7/9 (78%) (8, 16, 44, 45, 46, 51, and 63 as most important and 5 and 31 as important)	4 (8, 31, 44, 51)
14	5/6 (83%) (18, 20, 34, 52, and 69 as most important and 43 as important)	2 (34 and 52)
15	4/8 (50%) (1, 15, 34, and 45 as most important, 8 and 20 as important, and 4 and 10 as not important)	5 (1, 4, 15, 34, 45)

Appendix V- Round 4 Participant Stability

Appendix W- Round 4 Questionnaire

Round 4 Questionnaire

Step 1: Read the ranking guide below and accompanying round 4 documents.

Importance (Ranking Guide)		Likelihood (Ranking Guide)	
1.	Most Important	1.	Most certain by 2030
2.	Important	2.	Likely by 2030
3.	Unimportant (Low importance)	3.	Unlikely by 2030
4.	Trivial	4.	Almost impossible by 2030

Step 2: Rank the 22 themes based on their:

- Importance towards successful Sino-Foreign Universities in 2030.
- **Likelihood** of existence by 2030.

1. In the best possible world, what would you hope for Sino-Foreign University and College partnerships in 2030?	Importance	Likelihood
1 - Policy and Regulation Developments - Policy developments that are clearer, less ambiguous, and allow for more autonomy for Sino- Foreign University partners.		
4 - Higher Education System Development - Sino-Foreign Universities will help lead Higher Education system developments in mainland China.		
5 - Increasing Academic Quality - Sino-Foreign Universities' academic quality will increase over time to a world leading level.		
8 - Closer Partnership Cooperation - Sino-Foreign University partners work closer together with more cooperation.		
10 - Improved Higher Education Access - Globally, more students will have access to Higher Education through Sino-Foreign Universities and/or social media platforms, which will increase institutional competition levels.		

insight into Sino-Foreign University and College partnerships in 2030?	Importance	Likelihood
15 - Government Developments - Government developments are enhancing operations or are increasing the difficulty in operations.		
16 - Academic Quality Developments - Developing the academic quality of mainland China's Higher Education programs through standards set by Sino-Foreign Universities.		
18 - New Sino-Foreign Universities - The recent approval of several new Sino-Foreign University programs signals a new stage of their institutional involvement and overall presence in mainland China's Higher Education system.		
20 - Research Emphasis - Sino- Foreign Universities and the Chinese government are moving towards a research emphasis to develop China's research strength.		
 What major decisions with long-term implications do the Sino-Foreign University and College partners and the 		
Chinese government currently face?	Importance	Likelihood
31 - Developing New Institutional Model(s) - The decision to develop new institutional models (tiers/pathways/partnership requirement/sponsoring) to Sino- Foreign University partnerships.		
34 - Understanding SFU's Future Purpose(s) and Position(s) - The decision to clarify Sino-Foreign Universities' future purpose and position within mainland China's Higher Education system.		

experience/have you experienced inside or outside Sino-Foreign University and College partnerships?	Importance	Likelihood
36 - Policies and Legislation - A major constraint is working within the Higher Education policies and legislation found in mainland China.		
40 - External Monitoring - A major constraint is the external monitoring from the foreign home campus, partners involved, associated quality		

assurance agencies and a needed review of who should be monitoring quality.

43 - Finances - A major constraint is the finances, cost, fees, and their respective objectives within Sino-Foreign University programs.

44 - Leadership - A major constraint is the lack of experienced, strong, and committed leadership within Sino-Foreign Universities to manage the contextual challenges.

45 - Staffing - A major constraint is finding and developing high-quality and culturally-sensitive staff with longterm interests to support the Sino-Foreign University.

46 - Culture - A major constraint is to manage the foreign and Chinese cultural and education system differences (for both staff and students).

4. b) How are the constraints handled?	Importance	Likelihood
51 - Leadership - Strong leadership of Sino-Foreign Universities can solve the constraints.		
52 - Communication - Communication, including internal and external meetings (Sino-Foreign University meetings), can solve the constraints.		
53 - Blending Higher Education Systems - Blending aspects of Eastern and Western academic and operational practices.		
5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino- Foreign University and College partnerships?	Importance	Likelihood
63 - Internet and Social Media Strategy - To integrate internet and social media platforms throughout all work aspects in the academic and administrative departments of Sino- Foreign Universities.		
69 - Societal Involvement Strategy - The strategy to actively work and contribute to the local society where a Sino-Foreign University is located with a long-term focus for long-term returns of various kinds.		

Appendix X- Round 3 Theme Frequencies of Selection Rates in Round 3 as given to the participants for review in round 4.

1. In the best possible world what would you hope for Sino-Foreign University & College partnerships in 2030?

Theme selection frequency-9/14-(65%)

• **1-Policy and Regulation Developments-**Policy developments which are clearer, less ambiguous, and allow for more autonomy for Sino-Foreign University partners.

Theme selection frequency-7/14-(50%)

• **4-Higher Education System Development-**Sino-Foreign Universities will help lead Higher Education system developments in Mainland China.

Theme selection frequency-6/14-(43%)

• **5-Increasing Academic Quality-**Sino-Foreign Universities' academic quality will increase over time to a world leading level.

Theme selection frequency-4/14-(29%)

- **8-Closer Partnership Cooperation-**Sino-Foreign University partners work closer together with more cooperation.
- **10-Improved Higher Education Access-**Globally more students will have access to Higher Education through Sino-Foreign Universities and/or social media platforms which will increase institutional competition levels.

2. What recent pivotal events provide insight into Sino-Foreign University & College partnerships in 2030?

Theme selection frequency-6/14-(43%)

• **20-Research Emphasis-**Sino-Foreign Universities and the Chinese government are moving towards a research emphasis to develop China's research strength.

Theme selection frequency-4/14-(29%)

- **15-Government Developments-**Government developments are enhancing operations or are increasing the difficulty in operations.
- **16-Academic Quality Developments-**Developing the academic quality of Mainland China's Higher Education programs through standards set by Sino-Foreign Universities.
- **18-New Sino-Foreign Universities-**The recent approval of several new Sino-Foreign University programs signals a new stage of their institutional involvement and overall presence in Mainland China's Higher Education system.

3. What major decisions with long term implications do the Sino-Foreign University & College partners and the Chinese government currently face?

Theme selection frequency-5/14-(36%)

- **31-Developing New Institutional Model (s)-**The decision to develop new institutional models (tiers/pathways/partnership requirement/sponsoring) to Sino-Foreign University partnerships.
- **34-Understanding SFU's Future Purpose (s) & Position (s)-**The decision to clarify Sino-Foreign Universities' future purpose and position within Mainland China's Higher Education system.

4. a) What major constraints do you (have you) experience inside/outside Sino-Foreign University & College partnerships?

Theme selection frequency-7/14-(50%)

• **45-Staffing-**A major constraint is finding and developing high quality and culturally sensitive staff with long term interests to support the Sino-Foreign University.

Theme selection frequency-6/14-(43%)

- **43-Finances-**A major constraint is the finances, costing, fees and their respective objectives within Sino-Foreign University programs.
- **46-Culture-**A major constraint is to manage the foreign and Chinese cultural and education system differences (for both staff and students).

Theme selection frequency-5/14-(36%)

- **40-External Monitoring-**A major constraint is the external monitoring from the foreign home campus, partners involved, associated quality assurance agencies and a needed review of who should be monitoring quality.
- **44-Leadership-**A major constraint is the lack of experienced, strong and committed leadership within Sino-Foreign Universities to manage the contextual challenges.

Theme selection frequency-4/14-(29%)

• **36-Policies and Legislation-**A major constraint is working within the Higher Education policies and legislation found in Mainland China.

4. b) How are the constraints handled?

Theme selection frequency-7/14-(50%)

• **52-Communication-**Communication including internal and external meetings (Sino-Foreign University meetings) can solve the constraints.

Theme selection frequency-6/14-(43%)

• **51-Leadership-**Strong leadership of Sino-Foreign Universities can solve the constraints.

Theme selection frequency-4/14-(29%)

• **53-Blending Higher Education Systems-**Blending aspects of Eastern and Western academic and operational practices.

5. If the constraints named in question 4 were removed, and you could direct what is done, what would you do for Sino-Foreign University & College partnerships?

Theme selection frequency-4/14-(29%)

- **63-Internet & Social Media Strategy-**To integrate internet and social media platforms throughout all work aspects in the academic and administrative departments of Sino-Foreign Universities.
- **69-Societal Involvement Strategy-**The strategy to actively work and contribute to the local society where a Sino-Foreign University is located with a long term focus for long term returns of various kinds.