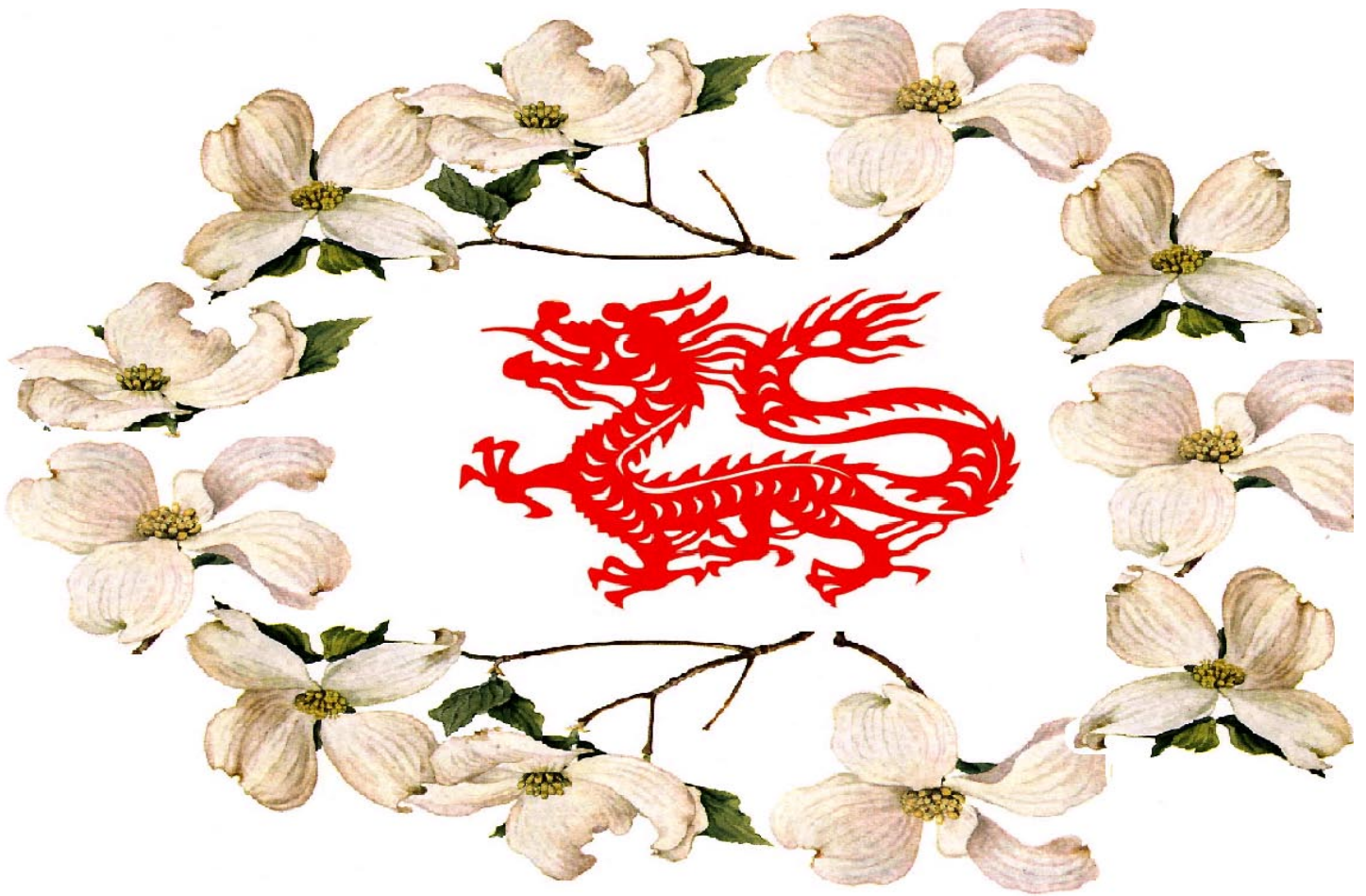


The Dragon and The Dogwood:

A Way Forward

for the University of North Carolina and China



A Report for the UNC Board of Governors

September 2012

Forward:

In March, 2012, UNC President Tom Ross and eight members of the UNC Board of Governors traveled to China to meet with Chinese education and government leaders, and North Carolina business leaders and UNC alumni living in China, to gain insight into whether and how the University might meaningfully increase its engagement with the world's most populous nation.¹

The delegation discovered that China is a country that deeply appreciates the unique value of U.S. higher education, and is strongly supportive of developing collaborative partnerships with U.S. universities. They returned convinced that UNC needed a thoughtful strategy to guide its work with China. They asked that we explore and report on cost-effective, high-leverage approaches that would increase connections between UNC and China: through increased UNC student and faculty research, study and programming there; through creative use of technology to boost virtual communication and learning; and through expanded efforts to recruit Chinese students to study on our campuses.

This report takes a close look at how UNC is currently engaging with China, and at how UNC as a system and as a collection of individual campuses with different missions might become more effective in connecting to China going forward. In addition, the report examines the role that universities in the Republic of China, or Taiwan, a region that is closely tied to the mainland, through language, culture and deep business connections, might play in hosting UNC students interested in study of Chinese language and culture.



A strategy for working with China is only one part of a *larger approach to globalization* that campuses and UNC General Administration have been considering and must continue to develop. But with limited resources and time, it is important to focus on a few places first. Some specific approaches and

strategies suggested here will only be successful in China; most will have value in informing our approaches across the world.

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Preface: Why Does China Matter to North Carolina and to UNC?

"The relationship between our country and the ancient civilization of China may well determine the course of world politics and economics in the 21st century. It is in our interest to be actively engaged in understanding the possibilities which lie ahead." Peter Hans, Chair, UNC Board of Governors

North Carolina and China

China is the most populous nation in the world, with 1.35 billion citizens, about 19% of the world's population.² In the past decade, the country, politically socialist but economically market-oriented, has grown from the world's sixth-largest economy to the second- largest,³ with most projections showing it will officially surpass the economy of the United States within 20 years and some economists suggesting that may have unofficially already happened.⁴ China's explosive growth has created new wealth and new interest by its people in international investment, consumer goods and education,⁵ all fueled by demand from what has been called "the fastest-growing middle class in history."⁶

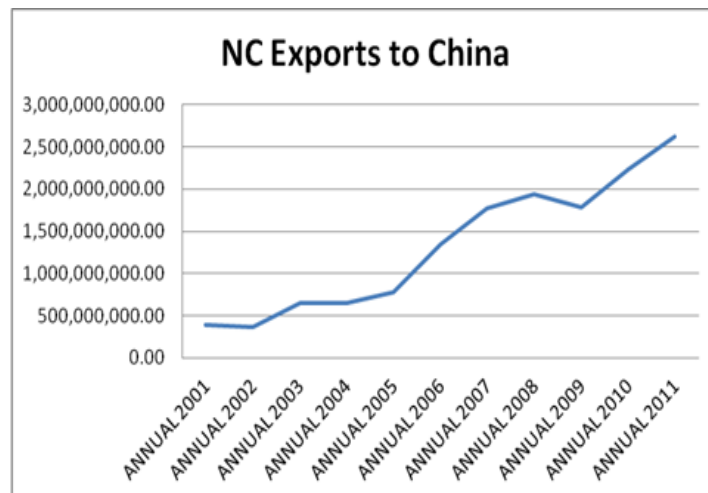
In North Carolina, China's economic importance has never been greater. In the 1990's and 2000's, North Carolina manufacturing companies went through a wrenching transition as low-priced goods from China and other developing countries forced them to either adapt business practices or go out of business. According to the Economic Policy Institute, North Carolina lost more than 110,000 jobs between 2001 and 2011 because of China's manufacturing advantage.⁷ Today, North Carolina consumers have come to depend on Chinese goods – last year we imported \$9.3 billion in goods and services from China.⁸

But as China's wealth grows, North Carolina's opportunity in China grows too, as China seeks to meet growing infrastructure and consumer needs and adds an additional 13 million citizens – more than the entire population of North Carolina -- each year. In the next few years, according to David Mohler, Senior Vice President and Chief Technology Officer at Duke Energy, China has plans to pave tens of thousands of miles of roads; the number of cars owned will move from 85 million to 200 million by 2020; the country faces huge water quality challenges; electricity needs, which doubled between 2006 and 2010, will triple again by 2035.⁹ It is a nation that is actively adopting technology: according to Tom Doctoroff in his new book What Chinese Want,¹⁰ China has 800 million mobile phone subscribers; 500 million Internet users and 250 million microbloggers and is the world's largest consumer of luxury goods. Inexorably, notes UNC Board of Governors member Paul Fulton, China's economy is "moving from export-driven to consumption-driven."

Appreciating the potential of increased interaction between the North Carolina and China doesn't mean agreeing with China's policies on human rights or the role of government. As NC Senator Pete Brunstetter wrote in his constituent newsletter after returning from a trip to China in November, 2011: "Although there are still many questions that I have about our relationship with China, I came away impressed that the economies of China and North Carolina are intertwined. There are great opportunities for North Carolina businesses in China. China's success economically can mean more jobs and opportunities for North Carolinians, and vice versa."

The continued development of China means opportunity for those that can feed that consumer appetite, and North Carolina companies are already benefiting. According to the North Carolina Department of Commerce¹¹:

- Exports from North Carolina to China have more than quintupled (up 567% between 2001-2011; see chart below) in the past decade. That makes China our second-largest trading partner, behind only Canada.
- In 2011, 64 North Carolina-based companies had offices in China.
- The state exported \$2.6 billion in goods and services to China in 2011 – up \$389.8 million (a jump of 17% over 2010, compared to an 8% growth rate for exports to all countries).¹²



Chinese investors are increasingly looking to North Carolina as a productive place to make money. Since 1987, the North Carolina Department of Commerce notes that Asian companies have invested \$4.5 billion in North Carolina, creating 21,000 jobs by setting up corporate branch plants and international headquarters.¹³ The largest Chinese-owned company in the US, Lenovo, has its US headquarters in Morrisville. Ming Yang Wind Power is employing people doing offshore wind turbine research at NC State's Centennial Campus. In all 17 China-based companies have offices and employees in North Carolina.¹⁴ China's growing "investor class" has been putting up capital for North Carolina-based real estate and infrastructure projects, through programs like the US "Immigrant Investor Program" and others.¹⁵ Non-Chinese firms in the state look to employ recent Chinese graduates, particularly in technical fields.¹⁶

Taiwan represents a smaller, but still sizable, portion of the foreign direct investment (FDI) made in North Carolina, and contributes substantially to our export economy. North Carolina exported \$267 million worth of goods and services¹⁷ to Taiwan in 2011, and exports were up 20% in the first quarter of 2012.¹⁸ We buy a lot from Taiwan too: \$732 million in goods and services in 2011.

The University of North Carolina, China and Taiwan

The report of the UNC Tomorrow Commission¹⁹ calls on the UNC system to take steps to ensure that its students, faculty and staff become "globally ready" – with the knowledge, attitudes and skills that prepare them to compete, cooperate and succeed in a global economy.



The report challenges each campus, as well as UNC General Administration, to develop a broad approach to preparing students to engage with the world, something that has already begun. Ron Strauss, executive vice provost and chief international officer at UNC-CH, explains the logic this way: “In globalizing UNC, we will help prepare the state of North Carolina and our students for participation in the global economy and the world stage.”²⁰

For students, faculty and staff at UNC, basic knowledge of China – whether it comes from travel to China or exposure to Chinese students and faculty on our campuses -- is an increasingly essential element of our “global readiness.” Increased knowledge and understanding, in turn, makes more students better able to work in jobs and create companies working with China or exporting to the exploding consumer market there, or just more likely to bring a broader perspective to solving problems here at home. Deeper engagement with China makes more faculty, whether in consumer economics, materials science, textile engineering, agriculture, food safety, logistics, geology, education, social science, political science, philosophy or even human rights better prepared to work with Chinese partners to solve or resolve some of the world’s biggest problems.

Whether one looks at China as a producer, a consumer, a cultural force, a geopolitical power, a potential ally or a competitor, global-facing states, students and workers significantly increase their chances of success if they have a deeper knowledge of the country, its culture and its people. As former UNC Board of Governors chair Hannah Gage puts it, “the scale of what is happening in China is stunning; to ignore the opportunity that exists for our students would be a failure to recognize the changing world.”

The question for the University, then, is not *whether* to look for ways to enhance and grow our connectivity to China, but rather *where* and *how* to move forward. It’s time for the North Carolina dogwood to make a place in its branches for the Chinese dragon, and to find a place to grow new branches in China. This report examines what role UNC should play in that effort.

Executive Summary: UNC and China

In the 21st century, it appears likely that the United States and China will be the world's two biggest superpowers – politically, militarily and economically.

China and its people are taking active steps to learn about the west in general and the United States in particular – our language, culture and economy – so that they can understand how to work with and compete with western nations.

By contrast, most people in the United States and in North Carolina know little about China, the world's number two economy, North Carolina's number two destination for exports and our number one source of imported goods.

As UNC seeks to carry out its mission of fostering and supporting “globally ready” students and faculty, we must look for ways to provide more students with opportunities to learn about China: By doing study and research there; by taking courses focused on Chinese and China; and by cultivating meaningful interactions with Chinese students and faculty at UNC.

Many of our UNC campuses are taking active steps to increase engagement in China through joint programs, exchanges, research partnerships and other relationships.

But we can do more to provide more of our students more opportunities to graduate with useful knowledge and understanding of China and to encourage more of our faculty to strengthen connections in this important country.

There are four strategies UNC should pursue to accomplish this goal:

1. BUILD A STRONGER PIPELINE: *We should widen the pipeline of interest by UNC students and faculty in China* – Interest in China is growing on our campuses, but six campuses still offer no Chinese and most offer only a limited number of Chinese language, history or politics classes. With little opportunity to study about China and a shorter history of interest and expertise on campuses, 49.4% of our students studying abroad go to western Europe, while just 3.6% go to China. We need to look for ways to help drive and respond to the demand of North Carolinians and UNC students interested in learning more about China, through Chinese language courses, virtual courses with Chinese campuses and other China-focused courses. And we need to help student and faculty overcome their perception that study in China is expensive and hard: with ample numbers of English courses and some financial assistance, Chinese mainland universities and supportive Taiwanese universities are increasingly attractive options for UNC students.

Pipeline Recommendations:¹

- 1a. Work with partners to increase knowledge of China and Chinese language in NC communities, community colleges and public schools.
- 1b. Offer more Chinese language instruction at all UNC campuses, using a collaborative model and increase Chinese language licensure for teachers.

¹ For a fuller description of these recommendations, see Chapters 1-4.

- 1c. Explore developing a course, available throughout the system, focused on modern Chinese culture and history.
- 1d. Increase emphasis on study abroad in China.
- 1e. Explore creating a “UNC in China” academic program in China to attract UNC students.

2. STRENGTHEN PARTNERSHIPS: *We should strengthen the partnerships between UNC and our Chinese partners* – UNC campuses have identified 87 “official” relationships with Chinese partners, mostly universities, with 42 of those more active and better developed, bringing together faculty, colleges or campuses with Chinese counterparts who share their interests or missions. With limited resources, we must intensify our most active partnerships, with the goal of increasing numbers of courses, joint research, student and faculty exchange.

Partnership Recommendations:

- 2a. Encourage campuses to intentionally develop deeper relationships with 1-2 key Chinese partners.
- 2b. Strengthen UNC-Fudan office and its regional activity.
- 2c. Develop a systemwide Taiwanese partner.

3. BUILD MEANINGFUL PROGRAMS: *We should increase the amount of real programming between UNC and China* – Out of stronger partnerships, we need to grow actual programs that deepen the knowledge and understanding of our students and faculty. Faculty can and should play a key role in developing these programs: 353 UNC faculty members have written papers with a Chinese or Taiwanese co-authors; REACH NC has identified 123 joint research projects between UNC faculty, China and Taiwan. Seeds planted through shared programs sprout and grow in many directions: faculty sharing interests in scholarship or research may decide to teach virtual courses together or build joint programs; students taking courses in Chinese history at UNC may want to travel to China to study; student exchange programs that bring Chinese students to UNC get UNC students about study in China; UNC students returning from study in China more actively engage Chinese students studying at UNC; Chinese graduates stay in North Carolina to work or create companies or return home and start doing business with North Carolina companies.

Program Recommendations:

- 3a. Invest in faculty study and research development in China to seed the future; work aggressively to build concrete new programs and projects over the next year.
- 3b. Continue support for campus development of virtual courses with China using the model developed by ECU.
- 3c. Convene annual meeting of Shanghai-area businesses, nonprofits and government agencies with North Carolina ties.
- 3d. Seek grants to UNC schools to provide technical assistance to Chinese partners in education administration and other areas.

4. RECRUIT, RELATE TO AND RETAIN PEOPLE: *We should recruit more Chinese students to UNC, and increase their connectedness to native-born students at UNC and to the state* – Campuses reported a total of 1981 Chinese students enrolled at UNC in the 2011-2012 academic year. These students diversify our classrooms, provide additional tuition revenue and strengthen the state’s economy with both their spending as students --Chinese students on UNC campuses pump an estimated \$35 million a year into the state’s economy -- and their contributions upon graduation -- they are disproportionately

likely to major in the STEM disciplines in their studies here,²¹ and, if they stay, are more likely to start companies than native- born students. Some campuses have shown good success in increasing international student enrollment in general and Chinese student enrollment specifically. UNC should launch new intensive efforts to recruit and retain strong Chinese students.

People Recommendations:

- 4a. Increase StudyNorthCarolina.us visibility and effectiveness in promoting North Carolina as a higher education destination as part of a larger strategy to enhance recruitment of Chinese students.
- 4b. Deepen relationships with Chinese high schools.
- 4c. Better connect US and Chinese students on UNC campuses for mutual benefit.
- 4d. Develop internships for Chinese and other international students to increase retention of strong innovative international students upon graduation.

To support and follow up on these efforts, in February, 2013, UNC General Administration should convene a day-long workshop designed to highlight progress and best practices in responding to recommendations in this report.

The reasoning behind the recommendations and additional details are spelled out in the report that follows. Some of the recommendations will involve new focus and attention; others will involve new resources. UNC General Administration should work closely with campuses to coordinate a focused effort to achieve the goals.

If we are able to broaden our pipeline to China, deepen our partnerships by creating and nurturing meaningful programs between UNC and our Chinese partners, and welcome more Chinese students to UNC, our students will have a greater chance of graduating “globally ready”; they will be more marketable in the global economy; UNC faculty will benefit from new scholarship resources and colleagues in discovery; our state’s companies and government agencies will have allies and employees who can help them improve access to this critical market and the new perspective and possibilities it offers; and our state’s innovation community will have a greater supply of entrepreneurs to create new products, companies and jobs for the future. If we pass on this opportunity, we dramatically decrease our ability to learn from, buy and sell from, and problem solve with 20% of the world’s population. It’s time to get started.

Introduction: Going for Guanxi

"It is the obligation of colleges and universities to prepare people for a globalized world, including developing the ability to compete economically, to operate effectively in other cultures and settings, to use knowledge to improve their own lives and their communities, to better comprehend the realities of the contemporary world so that they can better meet their responsibilities as citizens."

American Council on Education Blue Ribbon Panel on Global Engagement, 2011

"UNC should promote increased partnerships between its own campuses and international universities and enhance the global awareness of its faculty and students."

Report of the UNC Tomorrow Commission, 2007

When you tell your Chinese associate that guanxi is an archaic custom, it is like HIM telling YOU that checking references and analyzing financial reports are silly wastes of time.

Guanxi for the Busy American, Andrew Hupert, 2012



There's an old joke about the different roles a chicken and a pig have in the traditional breakfast meal. A chicken is "involved" in breakfast; for a pig, it's a real "commitment."

The University of North Carolina and its constituent campuses are currently *involved* at a variety of levels in China, but are *committed* at widely varying levels. Following a trip to Asia in March, members of the UNC Board of Governors asked that the system office examine which UNC entities are involved in China and Taiwan, where they are involved and how, and to propose ideas about how we might move toward a deeper commitment – so that our students and faculty better understand the history, culture and strategic importance of China, and are better positioned to use that knowledge in their scholarship, their worklife, and in service to the state.

In order to assess where we are and where we might go, it is important to look at four different elements critical to success in China (or in building any international partnership): pipeline; partnerships; programming and people.

- There must be faculty and students interested in learning about, visiting and studying in the country, a rich *pipeline* of people.
- There must be organizations and institutions in that country that we know and trust that can help us be successful in our study and research, working in *partnership* with us.
- We need to establish meaningful *programming*, both on our UNC campuses and at our partner institutions, to ensure that student learning is meaningful and faculty research and scholarship is productive.

- And we need to actively recruit more *people* – strong Chinese students and faculty -- to study and teach at UNC institutions, to integrate those people into the mainstream of our campuses and to encourage the best and brightest among them to stay in our state, develop new ideas and create new companies.

As we develop these efforts in China, we should keep in mind the importance of what the Chinese call *guanxi*, or reciprocal benefit: we should develop strategies that work for both UNC and our Chinese partners, that result in both more sending and receiving of students *and* faculty, courses *and* programs, focusing on building long-term, sustainable, win-win partnerships.



In each of these four areas, UNC and its campuses have begun to make substantial progress in their engagement with China. Now we have the opportunity to move from increasing levels of involvement to a deeper, more intentional level of commitment.



I. Building a Stronger Pipeline Between UNC and China

"We honor what lies within the sphere of our knowledge, but do not realize how dependent we are on what lies beyond it." Zhuangzi, 369-268 BCE

*"Our kids, if they're going to compete in the world, can't do it by reading in a textbook one year... about the systems in China. You have to know the Chinese, you have to know their culture, their language, their idiosyncrasies, their geography—you have to invest in understanding who your competitor is going to be, and in a sense, in a global way, who your friends are going to be."*²² Rick Glazier, NC Representative

Why Do This?

For the past two decades, Chinese government leaders have emphasized the critical importance of learning English language and western culture and business practices. In their mind, this knowledge and understanding is essential to both their business and political success as China moves onto the world stage. Xiao Yan, national public relations director of *Wall Street English*, a well-known English training institute in China, puts it bluntly: "The entire Chinese society attaches high importance to English study as it plays a vital role for a person who plans to pursue further education and seek a better career. There is no doubt that people who have a good command of English are more competitive than their peers and can win more developing opportunities."

The efforts of Chinese people, strongly encouraged by the government, to learn English have been remarkable: English language proficiency is required to succeed on the Chinese equivalent of the US SAT, the *gaokao*, and is tested again at every level of higher education in China.²³ An estimated 300 million Chinese, roughly the population of the United States, speak English. By 2015 all state workers under 40 will be required to learn 1,000 English phrases. Chinese study western culture and business practice both at home and in the US and other western countries at high rates. Former British Prime Minister Gordon Brown has predicted that the number of Chinese speaking English would exceed the number of English speakers in the rest of the world by 2025.²⁴ And, according to the Institute for International Education, last year 46%, or 157,000, of all Chinese students studying abroad, were studying in the US. By contrast about 14,000 US students studied in China, 1/11th the number of Chinese in the US.²⁵ At those levels, which country is more likely to know the other better?

It could be argued that this knowledge gap is irrelevant to the US. English is, after all, widely regarded as the universal language of business, and for now international conferences, symposia and even many negotiations are either conducted in English or translated into English. But learning a country's language, history and culture provides other advantages that are indispensable in politics and business. It's what one writer in the *Christian Science Monitor* has called a "knowledge deficit," one that "carries more weight in the long-term bilateral relationships between China and the United States than the ballooning US trade deficit with China."²⁶ If we want our students to understand the people of China, how they think about problems and opportunities, as well as how 20% of the world's population, living in the world's future largest economy, view the world and make decisions, we need more students and faculty studying Chinese language and culture: the more UNC students studying Chinese language and culture, the wider the "pipeline" between the two countries and the more "globally ready" UNC will be.

Current State of the UNC-China Pipeline

Chinese Language Courses

A survey of UNC campuses in May 2012 found that the level of interest in and participation in Chinese language courses on UNC campuses varies widely between campuses. Overall about 1% of UNC undergraduates take Chinese, but the number of students enrolled on campuses varies widely, from 9.9% at the NC School of Science and Mathematics and 2.9% at UNC-CH to six campuses that offer no courses in Chinese language.

Institution	Number of Courses Offered	Faculty	Number of Students Taking Chinese Language Courses (2011-2012)	Percent of Undergraduate Students Enrolled in Chinese Courses	Interested in Expanding/Starting Chinese Program
ASU	13	4	217	1.40%	Yes
ECSU	0	0	0	0	Yes
ECU	0	0	0	0	Yes
FSU	4	1	56	1.10%	Yes
NCA&T	0	0	0	0	Yes
NCCU	1	1	0	0	Yes
NCSSM	2	1	67	9.90%	Yes
NCSU	7	3	282	1.10%	Yes
UNCA	2	1	61	1.60%	Yes
UNC-CH	14	9	546	2.90%	Maybe
UNCC	8	4	145	0.73%	Yes
UNCG	6	1	250 (approximate)	1.70%	Yes
UNCP	6	1	44	0.70%	Yes
UNCSA	0	0	0	0	Yes
UNCW	2	1	60	0.51%	Interested in UNC-system consortium program
WCU	0	0	0	0	Yes
WSSU	0	0	0	0	Yes
Total	65	27	1,728	1%	

11 UNC campuses currently offer Chinese language instruction, and, according to the survey, every campus that does not would be interested in offering it if it could find the resources. One campus (UNC-CH) offers a major in Chinese language while five campuses (ASU, FSU, NCSU, UNC-CH, and UNC-C) offer minors in Chinese language. Most campuses report great interest in Chinese language instruction with virtually the only barrier to growth being finding funding to hire qualified faculty.

Chinese Culture Courses

In addition to the 65 Chinese language courses being taught, campuses identify another 62 courses pertaining to Chinese and Taiwanese culture and history (not including faculty-led study abroad programs), some on campuses that do not offer Chinese language classes. The number of course offerings shows that UNC faculty and students have a strong baseline of interest in China.

Study Abroad

The impact of study of Chinese language and culture on the “pipeline” is clear: the more Chinese language and culture classes available on a campus, the more students want to travel to China. China travel in turn fuels demand for more language and culture courses when students return. Four of the five top schools for Chinese language study are also in the top five of campuses sending students to China and Taiwan.

If one logical destination of this pipeline of students is study in China, there are clearly “leaks”: The number of UNC students who actually study in China remains low, with the majority of those studying there coming from just four schools (UNC-CH, NCSU, ASU and UNCC). The majority of students who do study in China or Taiwan go on relatively short-term programs, electing to spend a summer or Spring Break in Asia rather than a semester-long or year-long experience.

Institution	Number of Study Abroad Programs to China and Taiwan (2011-2012)	Number of Students Studying Abroad in China and Taiwan (2011-2012)
ASU	6	52
ECU	2	5
ECSU	0	0
FSU	4	5
NCA&T	2	4
NCCU	1	4
NCSU	14	109
UNCA		6
UNC-CH	13	139
UNCC	4	49
UNCG	5	12
UNCP	2	0
UNCW	22	18
WCU	1	1
WSSU	0	0
Total	76	404

Analysis

A July 2012 report from the Center for Internationalization and Global Engagement of the American Council on Education shows that high percentages of US universities are putting more emphasis on expanding the “pipeline” of students interested in international study: 93% of doctoral institutions, 84% of master’s institutions and 78% of baccalaureate institutions report accelerating activities between 2008 and 2011, with changes in behavior ranging from incorporating international principles into the curriculum to increasing the number of international courses in the curriculum to increasing emphasis on study abroad generally.²⁷

UNC is part of this national trend as well, with campuses responding to calls for more “global readiness” by UNC leaders and the state’s employers, as well as increased demand by students.

Building a wider pipeline to China and Chinese studies will require both general and specific action in a number of areas.

Language, culture and economics study:

Demand for courses on China and Chinese language are likely to increase in the future, as increased numbers of students and faculty express interest in studying about China in the future. National pollster John Zogby has labeled the 18-29-year-old generation “first globals,” and has described them as “the most outward-looking generation...in American history.”²⁸ And for younger students that global interest is increasingly turning to China. Nationally, according to the American Council on the Teaching of Foreign Languages, the number of K-12 students taking Chinese language across the US has roughly tripled in recent years.²⁹ In North Carolina’s K-12 system, the numbers are going up even faster, increasing tenfold – from 323 in 2005-2006 to 3,376 by 2009-2010. In addition, new Chinese “Saturday schools” are enrolling students interested in taking intensive Chinese outside of the regular classroom, with nearly 1000 enrollees in the Triangle alone.³⁰

The increase is not a flood – there are still eight times as many students in North Carolina public schools taking Latin as Chinese,³¹ in part because of a shortage of certified teachers. NC State’s School of Education, with support from NC State Confucius Institute, is playing a key role in addressing that deficit, with a new Chinese licensure program through NC TEACH. More certified Chinese language teachers will mean more availability of courses in more K-12 classrooms. As the new students that have taken Chinese in K-12 move into our universities, demand for Chinese language and culture classes, as well as study abroad opportunities in China, will likely increase.

Number of North Carolina K-12 students enrolled in Chinese classes:

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Elementary Chinese	125	685	837	1,551	1,696
Middle School Chinese	38	193	859	562	712
High School Chinese I	98	247	418	336	503
High School Chinese II	9	82	143	163	249
High School Chinese III	20	24	47	50	97
High School Chinese IV	15	18	29	13	89
High School Chinese V	18	16	19	33	30
Total	323	1,265	2,352	2,708	3,376

Source: NCDPI <http://www.ncpublicschools.org/fbs/resources/data/>

A good part of the demand bubble making its way through public schools is facilitated by the work of UNC-based entities. Close to 3,000 of the students studying Chinese in North Carolina public schools at the end of the 2011-2012 school year were in “Confucius Classrooms,” a program managed by the Center for International Understanding, a program of UNC General Administration, which manages a program that has brought in 24 guest teachers in school districts across the state, and helped manage the North Carolina Department of Public Instruction’s exchange and sister school relationship with

Jiangsu. Since 2007, NC State's Confucius Institute has connected 107,177 people in North Carolina to language and culture courses, programs, courses and events at NC State, community colleges and other venues throughout the Triangle region. And World View, a program of UNC-Chapel Hill, has been building interest in international study and integration of international elements into the curriculum of North Carolina public, private and charter schools and community colleges since 1998.

The outreach function is important to get students ready for the future. Matt Friedrich, director of K-12 Education Programs at the Center for International Understanding, puts it bluntly: "Studies have shown that language learning is more effective when it begins at a young age...students who enter the workforce speaking both English and Chinese have very bright career prospects. The demand for North Carolina graduates who can communicate in Chinese and collaborate with their Chinese counterparts is already high, and indications are that demand will continue to raise in the years to come." For Anna Lamm, NC State's China Program Director, NC State, that knowledge of history and culture is important for North Carolinians of all ages, and "Mandarin Language is the language of the future" for international businesses and many others.

In addition, increased interest in China and international relationships more broadly is growing in North Carolina. The Center for International Understanding's "heat map" (<http://ciu.northcarolina.edu/>) details the international connectedness of each county in North Carolina, including international students, languages spoken, employees of foreign-owned companies, exports and dozens of other indicators.

UNC campuses have an opportunity to build off of this growing interest on and off campuses by adding new courses in the future, with particular emphasis on classes focusing on China. But the challenge to campuses is finding the right balance between proactive and reactive as campuses build new courses and new curricular offerings to strengthen "global readiness."

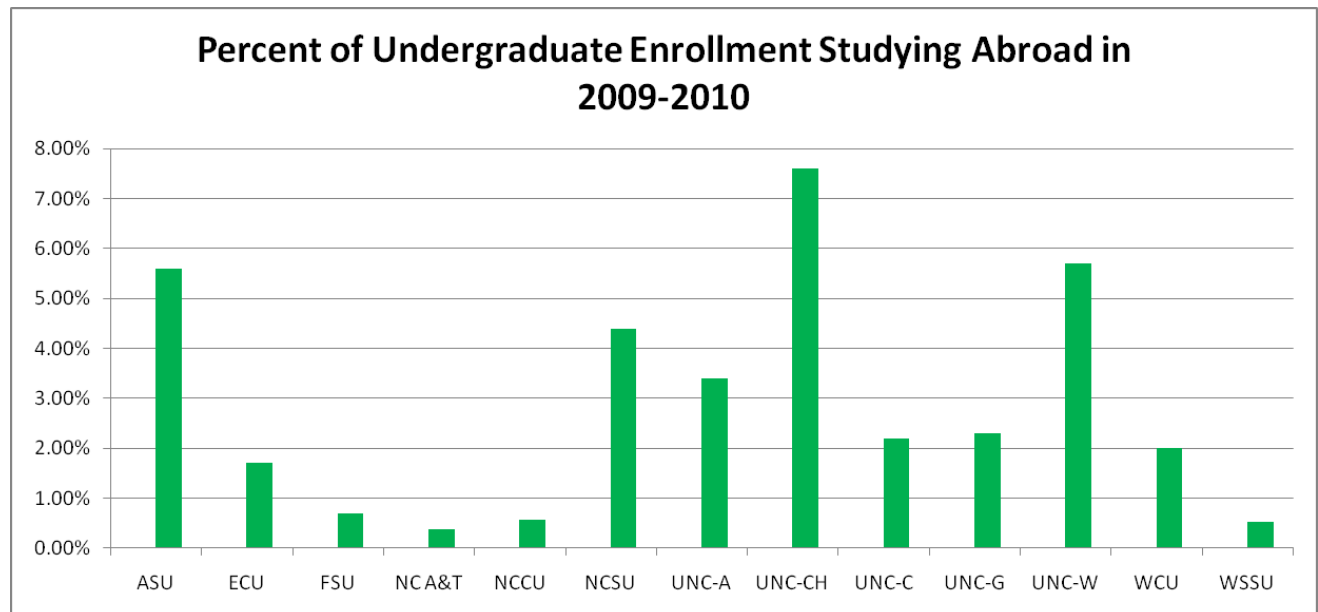
With regard to Chinese language, campuses already are sensing the demand, but don't have the financial cushion they need to take the chance of low initial enrollment; they need to find outside financial resources to manage the risk while programs build up strength.

To increase the number and availability of courses in Chinese culture and history, a strategy might be for campuses to consider requiring such courses. At UNC-Chapel Hill, for example, every student is required to complete at least one course "Beyond the North Atlantic" prior to graduation. Study in international settings satisfies a separate requirement for an "experiential education" course. Any decision to add a "required course" on a campus, of course, will depend on the degree to which campus leaders believe that knowledge of China or the world is a critical element of "literacy" going forward. Another approach could be for the system office to encourage faculty to develop a course in "China Studies" that multiple campuses could offer to interested students or use as part of their graduation requirement.

Study Abroad:

Getting more UNC students to study in China is in part a "study abroad" challenge – only a small percentage of UNC students study abroad anywhere.

Our campuses have widely varying numbers of students studying abroad in any given year, ranging from less than 1% at NCATSU, NCCU and WSSU³² to more than 5% at ASU, UNC-CH and UNCW.



Increasing the number of students interested in considering study abroad *anywhere* is important in its own right. In a 2010 New York Times interview, Quinton Primo, CEO of Capri Capital Partners was asked his best advice to young Americans. He was blunt: “Leave the country. Get out of here.” When young people come back from international travel, they bring a new seriousness and perspective: “You have a much broader understanding of the world’s cultures, and you will have a much clearer idea of how the world perceives our culture. There is nothing more important. I don’t care where you went to business school. I don’t care if your grades were good or bad. You have to leave the country.”³³

But getting students to take that step requires overcoming some important concerns:

- *Fear of the unknown*: this can be somewhat alleviated as more people study in any given location and report back on their experience.
- *Concern that study abroad delays graduation*: a series of recent studies³⁴ in California, Georgia, Minnesota and Texas show higher graduation rates for those who study abroad compared to students with comparable majors, GPA’s and other factors who did not travel.
- *Concern that study abroad only “works” for higher income students*: a recent study by the University of California San Diego, which showed students of comparable family income levels graduated at higher rates if they studied abroad³⁵. If creative strategies and funding sources can be developed to help make study abroad more affordable, a wide variety of students could benefit.

One approach campuses might consider would be exposing students early on to the possibility of study abroad at some point during their careers and cultivating that initial exposure through a general

education course that provides students with exposure to a global perspective. As President Ross notes: “So many of our students don’t think about studying internationally right now. Maybe their parents didn’t do it. Maybe they don’t think they could afford it. Maybe they think it doesn’t matter to them. If we could just plant that possibility in their heads when they first arrive on our campuses, more of them would find a way to do it. Some would travel internationally; others would seek out courses that help them graduate more ‘globally educated’; those who find a way to do it will be better prepared for the world they will be graduating into.”

Study Abroad in China:

Translating growing interest in international courses or study abroad to study in China will require additional efforts.

The reality is that studying abroad in China or Taiwan can be a tough sell to students – some of whom have never been outside of the country before – who want to study in a different culture, but not *too* different of a culture.

According to Denise DiPuccio, Assistant Provost for International Programs at UNC-W, China or Taiwan are outside of even adventurous students’ comfort zones: “You’ll have someone come into the office wanting to go somewhere funky and they’ll choose New Zealand over Australia because New Zealand is a little funkier, but they still speak English and there’s not a lot of culture shock. To get someone to say, ‘I want to go to China,’ you need someone willing to go somewhere funky, but also willing to immerse themselves in a new language and a new culture.”

Among those expressing interest in traveling abroad, student’s comfort zone is clear: Western Europe. A recent analysis by the UNC Exchange Program (UNCEP) of travel through UNCEP or the International Student Exchange Program (ISEP) found that 49.4% of UNC students went to a country in Western Europe; just 3.6% went to China.

UNC is hardly alone in facing this challenge. Nationally, the top four countries for study abroad are in Western Europe. And while President Obama has called for the US to band together to send more students to study in China through his “100,000 Strong” initiative, and US government agencies offer some assistance to campuses and students, but while there has been some response, the number of students studying in China has been low: In 2011, only 13,910 studied in China (5.1% of all students studying abroad)³⁶; just 850 went to Taiwan.³⁷

Increasing the numbers of students studying in China will take some concerted work. Chinese universities’ fall semester ends after the UNC spring semester begins, effectively taking the fall semester off the table for all but full-year study abroad students. Other factors further complicate matters: Western European languages are more familiar to students; courses taught in English have traditionally been more available on some European campuses; campus-to-campus programs are better established; and in many cases study abroad advisors know more about programs available in western Europe. As UNC Board of Governors members Ann Maxwell notes, we “have to help make this more attractive to our folks wanting or needing to go to China.”

Many of the perceived challenges are in fact not as big as imagined. Chinese universities have begun putting a high priority on increasing international student enrollment and are investing to overcome barriers.³⁸ At Fudan University, for example, where UNC General Administration has a systemwide exchange agreement, there are 102 open courses taught in English (with several others taught in conjunction with foreign universities),³⁹ and other universities in China, taking advantage of Chinese government programs encouraging them to attract more international students (the government's goal is 500,000 international students studying in China by 2020, a 70% increase over current levels), are offering more courses in English.⁴⁰ Nanjing Normal University, in neighboring Jiangsu province, provides widely recognized quality courses in learning Chinese as a second language.

Students studying in Taiwanese universities report that those schools and the surrounding communities are comfortably "western" in orientation. The universities in the "FICHET" alliance (with which UNC signed a systemwide exchange agreement in March 2012) typically offer significant numbers of courses in English and scholarships (in part in efforts to address shortages of domestic students⁴¹). Taiwan could serve as an alternative destination for "China-minded" UNC students, or as a "gateway" to the mainland for UNC students.⁴²

Overcoming the lack of enthusiasm students may have for study in China may need to start earlier, with early exposure by International Offices to the idea of language study, cultural study or foreign travel, and by promoting China travel earlier in the study abroad process.

That doesn't mean it can't be done. In the past few years, UNC Charlotte has shown impressive growth in the number of students studying in China. According to Assistant Provost for International Programs Joel Gallegos, the key is understanding and encouraging both faculty and students to look at a wide variety of possibilities. Formal exchange programs that send students or faculty to China for a semester or a year are one option, he says, but UNCC "sees more and more student interest in short-term opportunities." That means working closely with faculty to develop short-term faculty-led programs in language, culture and business as well as in fields like mathematics education and urban design. "It is our hope," he says, "that many of our short-term program participants return to participate in semester long study programs."

The payoff for students is also internal, say leaders at the University of South Florida, which has doubled its number of students studying abroad in the past two years through a series of efforts, including student outreach programs, peer recruitment, outreach to alumni for support and pursuit of competitive scholarships. USF System President Judy Genshaft notes, "It gives them a career advantage to have that basic understanding of the world. Businesses will tell you. Adds provost Ralph Wilcox, "In order for our students to compete in a global marketplace, we owe it to them to provide a global experience."⁴³ Allan Goodman, President and CEO of the Institute for International Education, notes: "The international skills (study abroad) students gain are crucial to their ability to succeed in global careers and work together across borders to address important world issues. It is important that we as educators work to try to ensure that all students have the opportunity to study abroad."⁴⁴

Recommendations:

Over time, demand by UNC students to study in China and about China will increase. If UNC wants to encourage that study to grow more quickly, there are several logical steps to consider:

Build the pipeline across the state:

1a. Encourage the Center for International Understanding, NC State's Confucius Institute and UNC-Chapel Hill's World View to work with campuses and other partners to introduce Chinese language and culture classes and curricular elements to more K-12 students, community college students, business leaders and other citizens. *Lead:* Center for International Understanding, NCSU Confucius Institute, UNC-CH, World View.

Broaden the pipeline in UNC:

1b. Increase knowledge of Chinese language by working with the UNC Language Assembly to develop a plan and find funding to support Chinese language teaching on all campuses, and more Chinese language instruction on campuses where the language is currently taught. Look for opportunities to graduate more credentialed Chinese language teachers to work in NC public schools and universities. *Lead:* UNC Language Assembly, NCSU Confucius Institute.

1c. Explore development of a course available systemwide on Chinese history and culture. *Lead:* UNC Faculty.

Unclog the pipes:

1d. Develop new strategies to encourage more UNC students to consider studying abroad at some point during their studies, with particular emphasis on China. Strategies could include short student-friendly videos, increased "bully pulpit" attention to study abroad by chancellors and other university leaders, granting of substantial levels of academic credit for study abroad, fundraising or grantseeking specifically to support study abroad, as well as broader efforts to encourage on-campus interactions between Chinese and American students (see also Chapter 4). *Lead:* Leslie Boney, UNCGA communications.

1e. Explore creating a strong "UNC in China" academic program at Fudan University for UNC students, possibly in collaboration with another US university or system. *Lead:* Leslie Boney, Senior Fudan Fellow.

Result:

UNC students throughout the system will have the opportunity to graduate with a deeper understanding of Chinese language and China.

2. Strengthen Partnerships

"If you think in terms of a year, plant a seed; if in terms of ten years, plant trees; if in terms of 100 years, teach the people." Confucius 551-479 BC



"From the experience of Appalachian in dealing with China for 16 years, the foundation for a strong, mutually beneficial relationship with the people of China is guanxi, earned trust and respect. Earning guanxi takes time, but it is time well invested." Ken Peacock, Chancellor, Appalachian State

Why do this?

As the demand by UNC students and faculty to do study and research in China and Taiwan increases, UNC schools must develop dependable, high-quality institutional partners that offer safe, significant opportunities. Success will require identifying and growing trusted allies who know UNC and who are known by UNC.

On a campus level, a partnership with another institution with complementary programs and mission can dramatically diversify the ability of the UNC campus to deliver on its program offerings. On a system level, strategic partners can assist some campuses in achieving the critical mass necessary to justify some low-enrollment efforts and can assist other campuses in diversifying their offerings.

UNC international offices know that developing good partners, on a campus level or a system level, takes time, experience, a willingness to take chances, an openness to change when a project or program isn't working, and a commitment to be patient in developing the relationship: planting and nurturing a seed takes time. The long-term payoff will be rich, deep partnerships that develop in ways we can't anticipate at the beginning.

Current state of UNC-China partnerships:

Over the past twenty years, UNC campuses have developed a number of agreements, or memoranda of understanding, with Chinese and Taiwanese partners, ranging from one-on-one arrangements with universities, to alliances with multi-university consortia, to alliances with China-based companies or high schools. The pace of activity in China among campuses has significantly increased over the past decade, resulting in large numbers of young relationships with tremendous potential.

In 2004, under the leadership of then-President Molly Broad, UNC signed a system-wide agreement with Fudan, a top-ranking comprehensive university based in Shanghai, with the intent of establishing a base of operations in China on the campus. The MOU, built off of a long-standing relationship between Fudan and Appalachian State, was renewed in 2010 for one year under President Erskine Bowles and again in 2011 for three years under President Tom Ross.

As part of that agreement, UNC schools have used the platform of Fudan to launch a variety of efforts – Appalachian State has strengthened its long-standing Holland Fellows program; UNCW has brought in Fudan faculty to start up its Mandarin program; UNC-CH's journalism school further developed its

collaborative work with Fudan; the UNC Exchange Program has signed a student exchange agreement with Fudan.

Since the beginning of the agreement, the UNC system has operated an office on campus staffed by a “Fudan Fellow,” jointly supported by UNC General Administration and Appalachian State. The Fudan Fellow, a recent graduate of ASU, for one to two years, works part-time for the UNC system and part-time for Appalachian State supporting relationship with Fudan while taking classes at Fudan. For the past eight years, the Fellow has regularly advised visiting delegations from UNC campuses on Chinese language and cultural issues, has helped arrange appointments and logistics, and has made some efforts to strengthen programming between Fudan and the UNC system.



In Taiwan, a new systemwide relationship offers other possibilities, particularly for UNC students seeking to study in a Chinese setting. In March, 2012, UNC President Tom Ross signed an agreement with FICHET (the Foundation for Higher Education in Taiwan), a consortium of 114 (as of June 2012)⁴⁵ Taiwanese universities interested in establishing relationships with international partners. This agreement commits UNC to working with FICHET to identify new partnerships between the system and FICHET members, and provides a vehicle for further development of campus-to-campus relationships.

Analysis:

Campus relationships:

Over the past few years, UNC and its campuses have built platforms for valuable, productive relationships with Chinese and Taiwanese partner campuses, but have not uniformly optimized them.

One of the campuses that has been working in China the longest is Appalachian State. While their deepest relationship is with Fudan University, with whom they have been exchanging faculty and students for over 16 years, they also have partnerships with seven other universities, three companies, and has just launched programs with 11 high schools. Much like university to university partnerships on other campuses, Appalachian’s also focus on exchanging students and faculty and research projects. Appalachian’s partnerships with Chinese companies are newer – started in the last five years – and provide opportunities for both Appalachian students and the Chinese companies’ staff to be exposed to the other’s culture. The students are placed in internships with the Chinese companies while the Chinese staff live in Boone for a short amount of time – typically three months – and share their skills with the campus while benefiting from an English language immersion experience. The high school partnerships have all been started in the past year, so their success has yet to be determined, but Appalachian’s willingness to try new things in China has been rewarded in the past.

What all of Appalachian’s partnerships have in common is that they are mutually beneficial. Jesse Lutabingwa, Associate Vice Chancellor for International Education and Development, says the start of any partnership should be a campus asking what it’s missing, then looking for partnerships that will fill these goals, not looking first looking for a partner and then determining what need they can fill. “In our

partnerships our needs will not be the same. It is important that both institutions articulate their needs,” Lutabingwa says. “These kinds of partnerships are like marriages. Like any relationship you will experience difficulties; the way you get through it is through communication.”

And as with relationships, not every one is the right fit; campuses need to find partners that complement their strengths. For example, NC State’s most active Chinese partners are technology schools and involve exchange programs and a 3+1 Masters program. UNC-Chapel Hill’s most active relationships tend to be with comparable disciplines at Chinese universities; a new planned dual degree program will connect Tsinghua University and Kenan-Flagler Business School and another consortium connects urban and regional planning and management at UNC-CH with Peking University. Chinese campuses are extremely rankings conscious: since the majority of UNC campuses don’t appear in “Top 200” global rankings, they need to take the time to carefully explain how regional rankings work and where individual departments rank, then find partners that value those areas of expertise.

Currently, the reality is that campuses are not actively pursuing all their Chinese partnerships with equal energy. In a survey conducted in May, campuses reported 87 partnerships with Chinese universities, but the deepest relationships were indicated in responses to a survey UNC conducted in February. In those responses, campuses identified 42 partners with whom they were “most actively”²² working, with the largest number of these in the Shanghai city/Jiangsu, Beijing city and Taiwan.

Most Active Partnerships with China and Taiwan



These partnerships matter in a myriad of ways, one of which is study abroad. Just as sending students to China can be difficult because of an intimidation factor – new language, new culture, 12 hour time difference, and different semester start times, just to name a few – a way to make it more appealing is to send students on established programs with a group of other international students in order to ease the transition. These programs can be supported by partner institutions in China or campuses can look to international study abroad programs with a critical mass of students already in place.

²² UNCGA did not define the term “most active” – different campuses viewed this question differently; thus “activity” levels are not all equal.

If UNC wants significantly more students to gain experience in China and a deeper understanding of Chinese it needs to establish a small number of “safe” places for students to go, places where there is a deep and long-term relationship built on trust, clear understanding of safety and academic expectations.

System relationships:

On a system level, the relationship with Fudan University in Shanghai provides one such platform, and has a number of elements important for campuses to consider in their partnerships:

- *Trust:* The relationship has been built over a long period of time;
- *Capacity:* Fudan has deep experience in collaborating with international partners, and a well-developed “foreign affairs office”;
- *Quality:* While Fudan is a campus, not a system, it is a “comprehensive university,” with a wide variety of programs and courses that match the breadth of the UNC system campuses;
- *Familiarity:* Shanghai is arguably the most “western” of Chinese mainland cities; many of Fudan’s courses are taught in English, both during the regular school year and over the summer.

But perhaps the biggest argument for continued investment in Shanghai is the possibilities it offers due to its location. UNC’s exchange relationship with Fudan can easily be expanded to include other university partners with additional programs, including Tongji University in Shanghai (President Pei Gang is a 1991 biochemistry graduate of UNC-CH and UNCC already has strong partnerships with the school in architecture), which has many technical program offerings. The NC Department of Commerce has its China offices in Shanghai, along with several US companies, formal alumni chapters for NC State and UNC-Chapel Hill and alumni of other UNC schools.

In neighboring Jiangsu province, there are additional possibilities to build on. An hour west of Shanghai, inside the RTP-counterpart Suzhou Industrial Park, Suzhou University and a number of Chinese and international universities, including NC State’s French business school partner, SKEMA, have students and offices in the “Dushu Lake Education District.” Duke University’s new business school campus, scheduled to open in Fall 2013, is in nearby Kunshan.⁴⁶ The Center for International Understanding works with Jiangsu system leaders to help North Carolina K-12 schools form partnerships throughout Jiangsu province, and Nanjing Normal University is the sponsor of NC State’s Confucius Institute and the home of one of the top three centers in China for learning Chinese as a second language.

Over the past eight years, UNC General Administration has not taken advantage of the full potential of the relationship with Fudan to assist campuses looking for activity in China, to bring Fudan students and faculty to UNC campuses, to do joint conferences or research or to develop meaningful programming. The failure is in part the result of lack of staffing and budget at UNC General Administration and in part due to the nature of staffing at Fudan: it is unrealistic to expect newly-minted college graduates with limited Chinese skills to fully develop the system’s administrative and academic relationship with age-sensitive senior Chinese university officials.



As we further develop relationships in Shanghai, we should remain attentive to new possibilities in Beijing. As the country’s seat of political power and a location for several UNC school’s existing relationships, it offers huge future development potential as resources and opportunities become available for training programs, conferences, teacher training and student recruitment.

Connecting to Taiwan:

The agreement between UNC and FICHET in Taiwan opens up the potential for dialogue with the system campuses and FICHET members about campus-to-campus collaborations. On a system level, developing a deeper relationship with 1-2 schools within FICHET could provide UNC system schools with a valuable platform for activity and learning in Taiwan as well. Advantages include Taiwan's tradition of excellent instruction for English-speakers seeking to learn Chinese; the government's energetic interest in deeper engagement with both US universities and, increasingly, with their Chinese counterparts; the island's slightly more "western" orientation that might be more familiar to UNC students; and the better alignment of semesters with UNC's schedule.⁴⁷

Recommendations:

Deepen 1-1 partnerships:

2a. Encourage each UNC campus to prioritize development over the next year of 1-2 key Chinese partnerships. UNC General Administration should seek to raise a competitive fund to facilitate campus partnership development. *Lead:* UNC chief international officers working with senior campus leadership, Leslie Boney, Cathy Hanby-Sikora

Deepen UNC System Office relationships:

2b. Recommit to Fudan University as UNC General Administration's Chinese university base of operations.⁴⁸ Take steps to strengthen the office, including bringing in senior faculty member to increase ability to deepen the partnership with Fudan, UNC system alumni and NC-connected businesses and agencies based in the Shanghai region, and strengthen K-12, business and university partnerships in neighboring Jiangsu province. Explore "shared services" as appropriate with other NC entities with operations in Shanghai. Consider broadening UNC Exchange Programs to include Tongji and Suzhou universities in addition to Fudan. *Lead:* Leslie Boney, Senior Fudan Fellow, C.K. Kwai

2c. Begin partnership development with at least one Taiwanese university on a system level to assist UNC campuses that lack capacity in Taiwan. *Lead:* Leslie Boney, C.K. Kwai

Result:

UNCGA and campuses will achieve a "critical mass" of familiarity with Chinese partner institutions to begin to incrementally build significant programming; UNCGA will also develop a go-to system partner in Taiwan.

3. Build Meaningful Programs

Do the difficult things while they are easy and do the great things while they are small. A journey of a thousand miles must begin with a single step.” Lao Tzu, c. 400 BC



Why do this?

UNC-China partnerships on paper are only a means to an end; not an end in themselves. As UNC schools work to deepen understanding and connectedness with China, partnerships need to be built out through meaningful programming, one small step at a time. The programming can take multiple forms, from summer to short course to school year study, student exchange programs to joint research projects, papers or degree programs.

Programming makes partnerships real and builds on itself, as faculty teaching virtual courses together find shared research interests, virtual courses lead to student travel to China, or student travel results in greater connections between UNC students and Chinese students studying at UNC.

Current state of UNC-China programs:

Most activity between UNC and Chinese partners is either campus-driven on an administration level or faculty-driven. UNC General Administration also supports a limited number of program activities.

Campus-driven programs

Several campuses have developed significant programming with Chinese partners. A few in particular illustrate the range of potential activity and how programming develops over time.

The longest-lasting UNC system programmatic effort, and arguably the deepest, is between Appalachian State and Fudan University in Shanghai. Since 1996, ASU has been operating a business exchange program, pairing Walker School of Business students and faculty with students and faculty at Fudan's School of Management and School of Economics for an eight-month program of cross-cultural research and exchange.

Since 2006, NC State has been developing its relationship with Zhejiang University in Hangzhou, beginning with a 3+1 degree program and expanding to include summer research at NC State by Zhejiang undergraduates, and academic exchanges across a variety of disciplines. Since 2007, NC State's Confucius Institute has worked with Nanjing Normal University in Nanjing, using funding from The Office of Chinese Language Council International (Hanban), a government-supported nonprofit, to promote greater understanding of Chinese language and culture across North Carolina by offering Chinese language classes and encouraging economic development opportunities for local businesses.

Since 2009, the Center for International Understanding has helped the NC Department of Public Instruction manage its relationship with education leaders in the Jiangsu province in NC, assisting students, faculty and administrators in educational programs between Jiangsu and North Carolina public schools. CIU also manages the “Confucius Classroom” grant program, in which Hanban sponsors Chinese guest teachers in North Carolina public school classrooms to teach Chinese language and culture to NC students.

Faculty-driven

UNC faculty have a wide variety of relationships with their Chinese and Taiwanese partners, often independent of formal campus-based relationships. Analysis of data from UNC campus international offices and REACH NC (<http://reachnc.org>) makes clear that this activity is bringing about meaningful communication and collaboration: 353 different faculty members have coauthored papers with Chinese or Taiwanese coauthors.

Number of Faculty Who Have Written Papers with a Chinese or Taiwanese Coauthor

Institution	Chinese	Taiwanese
ASU	11	6
ECU	29	12
ECSU	0	0
FSU	8	2
NCA&T	5	1
NCCU	5	0
NCSU	38	9
UNCA	0	0
UNC-CH	134	27
UNCC	19	5
UNCG	21	9
UNCP	4	0
UNCSA	0	0
UNCW	6	4
WCU	1	1
WSSU	0	0
Total	277	76

Source: REACHNC.org

Among faculty members who coauthored with Chinese authors, 40% (112) wrote in health related fields and 16% (44) wrote in business/economics. Similarly, of the faculty members who coauthored with Taiwanese authors, 38% (29) wrote in health-related fields and 20% (15) wrote in business/economics. UNC-CH faculty members coauthor with Chinese and Taiwanese colleagues much more than any other campus; the vast majority of these UNC-CH faculty members are in the School of Medicine, School of Pharmacy, School of Nursing, and School of Global Public Health, contributing to high health-related field numbers.

UNC faculty are also participating in sponsored research with their Chinese and Taiwanese counterparts. REACHNC identified 123 sponsored research projects between UNC faculty and Chinese or Taiwanese colleagues.

UNC Sponsored Research Projects with China and Taiwan

Institution	Grants Related to China	Grants Related to Taiwan
ASU	1	3
ECSU	0	0
ECU	9	2
NCA&T	1	0
NCCU	0	0
NCSU	20	3
UNCA	1	0
UNC-CH	59	9
UNCC	4	2
UNCG	3	4
UNCSA	0	0
UNCP	0	0
UNCW	2	0
WCU	0	0
WSSU	0	0
Total	100	23

Source: REACHNC.org

Of the projects relating to China, 40% are health-related including 38 of UNC-CH's 59 (64%) projects. Interestingly, the vast majority of the Taiwanese sponsored research is liberal arts-based. Only two projects were in health related fields and only one was in a business related field.

Over the past five years, the percentage of schools providing funding for faculty to travel to international conferences and to support international research has declined, but many schools view it as an investment in advancing both their international goals and improving scholarship and research.⁴⁹ Faculty-led research and other academic collaboration has the potential to develop into broader-based programming. For example, UNC-CH's partnership with Tsinghua University on what has become the Center for Logistics ("China's MIT") began with an introduction by NC State professor Shu Cherng Fang of UNC-CH's Noel Greis and Tsinghua's Linning Cai. Greis and Cai began discussing their mutual interest in logistics and together have grown the Center for Logistics and Enterprise Development, which provides research and technical assistance to a variety of companies seeking to solve logistical challenges in China. In March, the two schools announced a new "Global Supply Chain Leadership Program" – a dual degree program for executives in Business and Engineering.

UNC General Administration- supported activities

The first UNC System-supported activity developed as a result of an agreement with Fudan University in 2004, which grew out of the root planted by ASU in its relationship with Fudan. Since then, the agreement has been used to provide UNC with a "home base" in China where the Fudan Fellow can assist campuses with travel, logistics and appointments. This relationship, in turn, has led to some campus-based relationships. For example, since 2007, UNCW has hosted one Chinese language instructor from Fudan each year, with the two institutions sharing costs, which has enabled UNCW to offer Chinese language and culture instruction to roughly 60 students a year.

In November 2011, the UNC system signed an official student “exchange” partnership with Fudan, which enables students from any UNC institution to attend Fudan, and Fudan students to attend UNC, without having to pay additional tuition.



Since 2010, UNC and ECU have been working together to expand ECU’s highly-successful Global Partners in Education program in China, offering competitive yearly grants for UNC campuses interested in teaching joint courses with existing partners (so far ASU, FSU, NCATSU, UNC-CH and UNCP have received support and NC School of Science and Math has received technical assistance). The program enables students at faculty at UNC and Chinese partner institutions to take courses together virtually

(typically at 8 am in the US and 8 pm in China), using technology to listen to lectures, have virtual discussions on key topics and write papers. UNC schools participating in the program get to collaborate on a tangible project with an existing Chinese partner institution; their students get to meet students from China, understand their perspective and learn how to do long-distance collaborative projects, all valuable “global readiness” skills. ECU surveys of this approach over time suggest that students emerge with a greater appetite for international study. In the meantime, the technology approach offers an affordable way to provide larger numbers of students with a “global experience.”

Virtual International Courses Offered on Campuses

Institution	Virtual Int'l Courses Offered 2011-2012	Students	Countries	Disciplines	Project to Offer in 2012-2013
ASU	4	25	Not reported	Not reported	3
ECSU	Not reported	Not reported	Not reported	Not reported	Not reported
ECU	26	880	27 countries, including China	9 departments	30
FSU	2	20	China	Education	2
NCA&T	2	40	China		3
NCCU	0	0	N/A	N/A	N/A
NCSU	2	Not reported	Taiwan and others	Political Science, Sustainability	Not reported
UNCA	0	0	N/A	N/A	N/A
UNC-CH	Not reported	Not reported	Not reported	Not reported	Not reported
UNCC	Not reported	Not reported	Not reported	Not reported	Not reported
UNCG	3-5 courses	Not reported	15 countries	Not reported	No data
UNCP	Not reported	Not reported	Not reported	Not reported	Not reported
UNCW	0	0	N/A	N/A	N/A
UNCSA	0	0	N/A	N/A	N/A
WSSU	0	0	N/A	N/A	N/A
WCU	0	0	N/A	N/A	N/A

Other campuses are holding similar courses using similar technologies. At UNCG, for example, various faculty use virtual teaching technologies and methods to teach courses ranging from business to psychology to human rights. Bryan Business School professor Vas Taras runs the “International Student Collaboration Project” which brings together 1000 students from 23 universities in 20 countries using email, Dropbox and Facebook groups to work collaboratively on assignments. The experience gives students first-hand experience in international collaboration, but he notes: “We also hope it will lead to inter-institutional partnerships, professional enrichment and research collaboration among the instructors involved in the project.”⁵⁰

At the North Carolina School of Science and Mathematics, a new program to be launched this fall will connect NCSSM students learning Chinese history to a faculty member at Beijing Royal School via distance learning technology; students from Beijing Royal School will learn U.S. History from an NCSSM faculty member. Both sides will take advantage of expertise in the other country without having to bear the expense of sending students there. Out of tiny seeds a great tree can grow

Analysis:

Campus driven – Campuses with the most successful programming in China are conducting activities that draw off of their strengths and are imbedded in their missions: Appalachian State’s commitment to internationalization, for example, combined with the strength of their business school, makes the Holland Fellows program a natural fit. And over time the opportunities created by the program have grown: ASU now hosts visiting employees from Chinese companies that host ASU summer interns, which in turn lead to sponsored research opportunities for ASU faculty. ASU’s library does librarian exchange with Fudan. ASU communication faculty do semester-in-residence teaching at Fudan’s School of Journalism. And the travel to China by various faculty has helped ASU to identify a second strategic partner, Beijing International Studies University.

As UNC General Administration seeks to strengthen its overall relationship with Fudan and other strategic partners, campus-driven programming, including student exchange, will be a key component. But UNCGA may be able to play a supportive role. In February, UNCC associate professor Jianping Fan was selected through a competitive process to work jointly for UNCC and UNCGA as he tries to set up a new “3+2” computer science program (3 years toward a bachelor’s degree in China followed by 2 years to complete a master’s at UNCC) computer science degree with Fudan and other Chinese partners. This part of Dr. Fan’s work, beginning in August 2012, will benefit Chinese students and institutions and UNCC, but also UNC as a whole.

Faculty-driven – Faculty are typically more comfortable collaborating across institutional or international lines than are institutions, and the number of shared scholarly papers and research projects UNC faculty are undertaking with Chinese and Taiwanese colleagues is evidence that campuses seeking deeper programmatic involvement might build off these partnerships, particularly in key fields like health and business in China and in the liberal arts with Taiwanese partners.

This approach will be easier at the larger schools. UNC-CH faculty members make up 45.6% of those authoring papers with Chinese or Taiwanese co-authors. Faculty members at five schools (UNC-CH, NCSU, ECU, UNCG and UNCC) make up 86% of those co-authoring articles. Not surprisingly, collaborative research projects between UNC and China and Taiwan are most likely to take place on a research-intensive campus. UNC-CH faculty conduct more than half of those projects; between UNC-CH and NCSU faculty together make up 71% of the total projects.

GA supported – While the bulk of the programmatic collaboration between UNC and China should and must be conducted on a campus level, UNC General Administration has an opportunity to assist in several ways, particularly when it comes to smaller schools.

Many smaller schools don't have the time or resources to develop full-fledged programs for students studying in China. UNC General Administration should explore ways to expand system-sponsored exchange beyond Fudan to other schools in the Shanghai/Jiangsu province region, and explore creating a formal UNC in China program based out of Fudan. UNC General Administration might play a role in seeking funding to support creative proposals by faculty who are interested in collaboration but cannot find resources to support travel or relationship building. And UNC General Administration should continue to help campuses strengthen new partnerships by encouraging more virtual class exchange as a first step toward renewed activity.

Building off of the experience brought by Dr. Fan as a Senior Fudan Fellow over the next year, UNC General Administration also has the opportunity to explore the value of bringing together Shanghai-based people working for North Carolina companies in the public and nonprofit sector, government agencies and alumni from across the system to determine if there are useful synergies that might help campuses develop China-based internships or broaden connections, as well as helping NC businesses connect with UNC campuses and alumni.

Some Chinese K-12 systems and universities have expressed interest in working with UNC to get research or technical assistance in areas such as administration, pedagogy and creative inquiry. As China continues to expand its university capacity over the next decade and seeks to achieve its five-year plan goal of becoming a "creative economy," UNC General Administration may also be able to play a consolidating or convening role for campuses seeking to provide these services to Chinese partners.

Obviously, the distinctions above between "campus-driven," "faculty-driven" and "GA-supported" activities are somewhat arbitrary, and this makes a larger point. Some activities that are currently "campus-driven" grew out of faculty connections. New virtual classes on some campuses are growing out of ECU's work, and some will link faculty in new ways, leading to new research projects or to new campus-driven programming. UNC General Administration's relationship with Fudan grew out of ASU's prior relationship. UNCC's new master's program will grow in part with support from UNC General Administration.

The point is that in a cooperative system of universities, meaningful programming in one area by one campus may lead to additional programming and partnerships on a different level by a different campus, creating a virtual cycle of activity that builds on itself.

Recommendations:*Faculty-driven:*

3a. Encourage campuses to reprioritize strategic funding for international study and research. UNC General Administration should develop a competitive fund for faculty initiatives in China to deepen connections, with the goal of jumpstarting mutually beneficial programming. Each campus should set a goal to identify and build out at least one tangible “product” in the next year, whether a joint class, joint program, scholarly paper or research project over the next year, driving off of a key program or interest of the campus. *Lead:* Campus leadership, Leslie Boney, Cathy Hanby-Sikora.

General Administration-driven

3b. UNCGA should continue to support development of virtual courses by campuses with their Chinese partners, using the ECU model. *Lead:* Leslie Boney, Elmer Poe.

3c. UNCGA should host an annual meeting in Shanghai of North Carolina-based entities in the Shanghai region, including UNC alumni and North Carolina-based business and government entities to encourage networking and discuss possible joint initiatives. *Lead:* Fudan Senior Fellow.

3d. UNCGA should coordinate efforts by campuses to identify K-12 and/or university-based opportunities to do research or provide technical assistance in teacher education, education administration or improved pedagogy. *Lead:* Schools of Education, Leslie Boney, Bonnie Derr.

Result:

More campuses will have more vibrant research and programmatic relationships with Chinese partners

4. Bring In More People

"Make happy those who are near, and those who are far will come."

Chinese Proverb, author unknown

"A man who waits for roast duck to fly into his mouth must wait a very, very long time."

Confucius



Increasing UNC's "global readiness" in general, and "China readiness" in particular, requires three different kinds of activities: *sending out*: finding ways to send more students, faculty and staff abroad to see and learn and bring back new perspectives; *connecting academically*: developing curriculum and programs that enable people on campus to learn; and *recruiting*: reaching out to and attracting more students and faculty to come to campus to teach and learn.

Deeper student and faculty involvement by UNC in China creates greater awareness of the educational opportunities available at UNC for Chinese

Increased numbers of Chinese students on UNC academics, exposes more native-born students to perspectives, and provides additional tuition

International students also enrich the state: last \$304 million (UNC's international students spent that total).⁵¹ And after graduation many stay, new, entrepreneurial talent pool that state

draw on, creating new businesses at more than twice the rate than native-born citizens.⁵²



students. campuses enriches foreign culture and revenue. year they spent \$159 million of creating a rich, businesses can

Over the past decade, no country has shown greater increases in the number of students it sends abroad than China.⁵³ As UNC looks to deepen connections in China, we need to look for new ways to attract and retain students from there.

Current state:

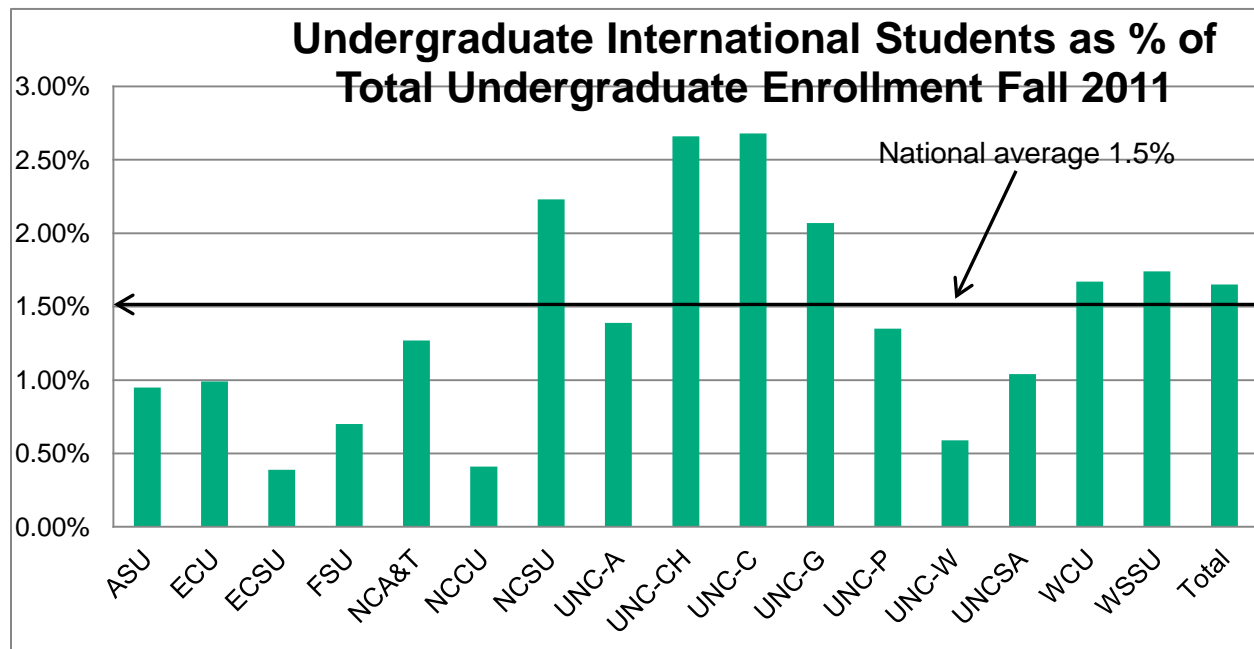
The first way to look at increasing enrollment of Chinese students at UNC is to look at overall international student enrollment.

The number of international students enrolled on UNC campuses has increased at 14 of 17 UNC campuses over the past decade: undergraduate enrollment of international students is up nearly 85%, with graduate enrollment up 48%. This outstrips UNC's overall enrollment growth during that period: from 2001-2011 overall undergraduate enrollment grew by 29% while graduate enrollment increased 33%.

Undergraduate International Students at UNC

Institution	UG International Students 2001	Percent of Total UG Enrollment	UG International Students 2006	Percent of Total UG Enrollment	UG International Students 2011	Percent of Total UG Enrollment	Percent Change
ASU	44	0.35%	64	0.48%	147	0.95%	234.09%
ECU	74	0.48%	79	0.43%	214	0.99%	189.19%
ECSU	8	0.40%	0	0%	11	0.39%	37.50%
FSU	20	0.49%	14	0.26%	36	0.70%	80%
NCA&T	55	0.75%	43	0.44%	117	1.27%	112.73%
NCCU	57	1.35%	31	0.47%	26	0.41%	-54.39%
NCSU	318	1.42%	283	1.19%	561	2.23%	76.42%
UNCA	40	1.23%	43	1.19%	53	1.39%	32.50%
UNC-CH	163	1.03%	211	1.23%	491	2.66%	201.23%
UNCC	383	2.53%	364	2.14%	544	2.68%	42.04%
UNCG	121	1.16%	158	1.21%	309	2.07%	155.37%
UNCP	15	0.43%	59	1.14%	74	1.35%	393.33%
UNCW	69	0.69%	26	0.24%	71	0.59%	2.90%
UNC-SA	13	1.84%	4	0.55%	8	1.04%	-38.46%
WCU	183	3.23%	36	0.50%	127	1.67%	-30.60%
WSSU	1	0.03%	11	0.21%	99	1.74%	9800%
Total	1564	1.15%	1426	0.89%	2888	1.65%	84.65%

Source: UNC General Administration

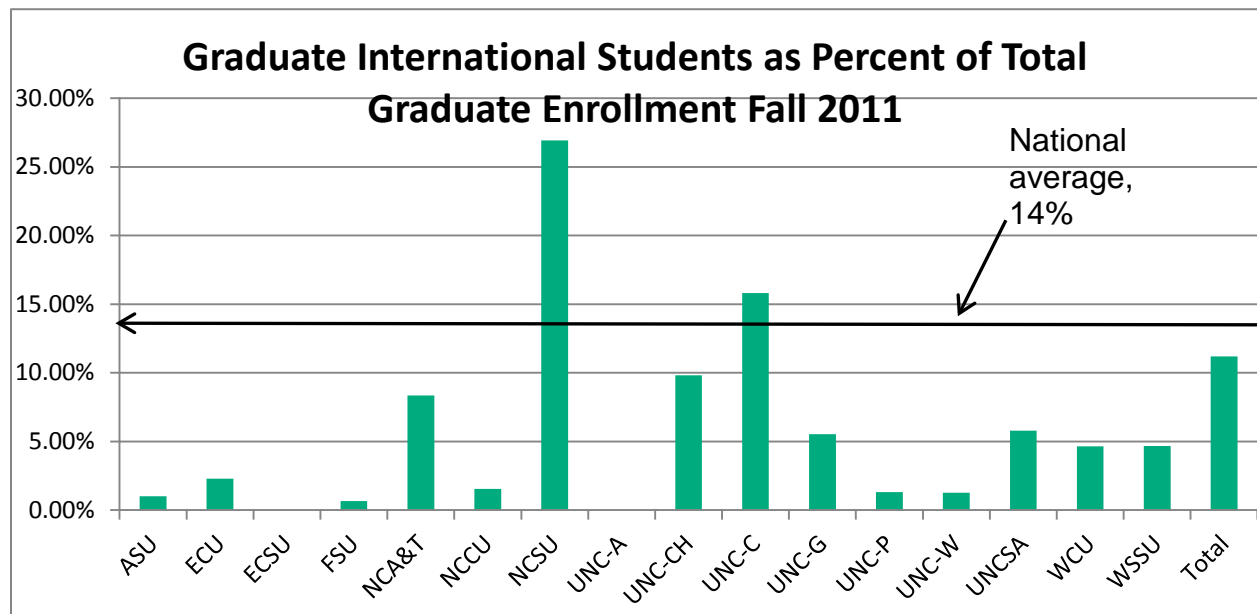


Over the past ten years thirteen campuses have increased their number of international undergraduate students. Of those thirteen, seven campuses (ASU, ECU, NCA&T, UNC-CH, UNCG, UNCP, and WSSU), have more than doubled their number of international undergraduate students. UNCC and UNC-CH have the highest overall percentages; in total seven of our campuses are above the national average of 1.5% undergraduate international enrollment.⁵⁴

Graduate International Students at UNC

Institution	Graduate International Students 2001	Percent of Total Graduate Enrollment	Graduate International Students 2006	Percent of Total Graduate Enrollment	Graduate International Students 2011	Percent of Total Graduate Enrollment	Percent Change
ASU	5	0.42%	2	0.12%	19	1.01%	280%
ECU	116	2.94%	107	1.86%	133	2.29%	14.66%
ECSU	0	0%	1	1.64%	0	0%	0%
FSU	1	0.11%	14	1.55%	5	0.65%	400%
NCA&T	125	12.65%	86	6.09%	140	8.36%	12%
NCCU	21	1.38%	25	1.21%	30	1.54%	43%
NCSU	1504	21.90%	1608	21.73%	2582	26.92%	71.68%
UNCA	1	2.78%	0	0%	0	0%	-100%
UNC-CH	1002	10.38%	1033	9.75%	1053	9.83%	5.09%
UNCC	374	11.79%	580	12.93%	789	15.80%	111%
UNCG	171	5.16%	203	5.28%	206	5.52%	20.47%
UNCP	4	94.00%	11	1.64%	10	1.32%	150%
UNCW	17	2.03%	13	1.14%	15	1.26%	-11.76%
UNCSA	13	16.05%	15	12.71%	7	5.79%	-46.15%
WCU	82	6.84%	23	1.34%	80	4.64%	-2.44%
WSSU	0	0%	5	1.56%	22	4.67%	n/a
Total	3436	10.04%	3726	8.83%	5091	11.19%	48.17%

Source: UNC General Administration



Similarly, over the last ten years, ten campuses have increased their number of international graduate students. Of these ten, four campuses (ASU, FSU, UNCC, and UNCP) more than doubled their number of international graduate students. In Fall 2011 NCSU had the highest percentage of international graduate students, followed by UNCC and UNC-CH. Only NCSU and UNCC were above the national percentage of international graduate students. There is substantial room for growth in this area among most of our campuses, not just in China, but with bright students from multiple countries.⁵⁵

When we look at Chinese students specifically in the context of all UNC international students the picture changes slightly.

Chinese Students at UNC

Institution	Chinese UG Students 2011-2012	Chinese UG Students as Percent of International UG Students 2011-2012	Chinese Graduate Students 2011-2012	Chinese Graduate Students as Percent of International Graduate Students 2011-2012	Percent Change of Chinese Students 2007-2008 to 2011-2012
ASU	2	1.40%	3	15.80%	200%
ECU	6	2.80%	31	23.30%	2.80%
ECSU	2	0.07%	0	0%	Not reported
FSU	17	47.20%	0	0%	183.30%
NCA&T	0	0%	28	20%	Not Reported
NCCU	0	0%	0	0%	0.00%
NCSU	67	11.90%	753	29.2%	95.20%
UNC-A	5	9.40%	0	0%	Not Reported
UNC-CH	156	31.80%	311	29.5%	69.20%
UNC-C	85	15.60%	369	46.80%	71.30%
UNC-G	38	12.30%	54	26.2%	124.40%
UNC-P	38	51.40%	6	60%	300%
UNC-W	4	5.60%	0	0%	-0.50%
UNCSA	2	15.40%	0	0%	Not Reported
WCU	3	2.40%	1	1.30%	Not Reported
WSSU	0	0%	0	0%	0%

Source:<http://northcarolina.edu>

Enrollment of Chinese students increased at every reporting campus except NCCU, UNCW, and WSSU from 2001-2011, with most campuses showing high percentage increases, matching the national trend.

The highest percentage of Chinese undergraduates are at UNCP, FSU, and UNC-CH while the highest percentage of Chinese graduate students are at UNCC, UNC-CH, and NCSU.⁵⁶

Chinese students enrolled at our universities are not the only way that UNC students and faculty gain exposure to Chinese people, perspective and culture. Most of our campuses report Chinese and Taiwanese faculty teaching there. At UNC-Chapel Hill, the campus is showing that those numbers can change if a university makes intentional efforts. As part of the campus globalization initiative, the College of Arts and Sciences has hired 101 tenure track faculty members over the past five years – 47% of new hires – with “global expertise,” as well as 56 fixed-term lecturers. Of 1236 scholars from abroad – postdoctoral students and faculty members -- 395, or 32%, are from China.

Ron Strauss, executive vice provost and chief internationalization officer at UNC-CH, explains: “We are already a global institution...yet, an expansion and strengthening of this globalization is essential if we intend to remain a major university in the future.”⁵⁷

Analysis:

Increasing the number of international students on our campuses increases the chances that students and faculty grow to be more globally-skilled, as they work with people from other cultures on papers and projects and get to know each other.

For China specifically, there are additional benefits of efforts to increase enrollment:

- Increasing Chinese student enrollment increases the percentage of North Carolina students and faculty who personally know people from this critically-important country.
- International students spend money on school, food, lodging, gifts and travel within North Carolina. Because their spending is a transfer from outside of the US to inside the U.S., the U.S. Department of Commerce considers consumption of higher education an “export”: a rough calculation based on the methodology used by the Institute for International Education would suggest that Chinese students at UNC spent about \$35 million in the state last year.⁵⁸
- Once they graduate, Chinese students having a good experience may return, in which case they may be interested in maintaining their ties to the state. As Deborah Weissman, distinguished professor of law at UNC-CH notes: “They are investing in us, and we are investing in them, and the outcome can be enriching for the economy and cultural fabric, but not if there is no way for them to stay.”
- Even if graduates return home, if we provide them a good education and experience, they will know and appreciate what the state has to offer, whether as a place to live, work or start a company, as a place to travel and vacation or as a place to do business with if they return home.

Student recruitment in China will be harder for some UNC schools than others. As noted in Chapter 2, Chinese students and their parents are extremely “rankings” conscious. Universities with strong regional rankings will need to spend extra time explaining those rankings; others will need to market the strength of particular colleges or departments to students.

Marketing:

China ranks number one by a wide margin over any other country in the number of university students it sends to the US. Last year, China sent 157,558 students to the US⁵⁹ In the last year alone, Chinese student enrollment in the US has jumped by 23%, and Chinese students accounted for 92% of the increase in international students in the US.⁶⁰

Over the next five years, projections suggest that the total *number* of high school students in China will decline, but experts predict Chinese *demand* for international higher education will continue to grow: by 2020, the Chinese government is seeking to have 40% of 18-22 year olds enrolled in higher education, up from 26.5% in 2010.⁶¹ While some of this demand will be met by increasing domestic education capacity, there are significant concerns about the quality of new Chinese universities, and skyrocketing growth of both the number of middle and upper class families in China means more families will be looking for top quality universities. That means potential short and long-term opportunities for UNC to increase enrollment of Chinese students.

Some UNC schools are already successfully increasing the number of Chinese students on campus. Since 2007, four UNC campuses (ASU, FSU, UNCG, and UNCP) have doubled their number of Chinese students. At least 20% of four campuses’ (FSU, NCA&T, UNC-CH, and UNCP) international undergraduate student population is Chinese, and at least 20% of six campuses’ (ECU, NCSU, UNC-CH, UNCC, UNCG, and UNCP) international graduate student population is Chinese.

UNC campuses seeing high growth of Chinese students attribute much of their success to effort. At UNCP, where Chinese make up about 50% of international undergraduate students and 60% of international graduate students, Sarah Brackin, Director of International programs at UNCP mentions four important strategies, which are mirrored by many of the other campuses showing growth:

- *Build Relationships*: Asian cultures place much more emphasis on personal interaction. UNCP seeks to develop strong relationships with a smaller number of Chinese partners over time.
- *Face time*: It is close to impossible to meaningfully recruit Chinese students if you stay in North Carolina – travel will be involved. UNCP employs a staff member who serves as an “Asian Coordinator.”
- *Help with language*: UNCP supports an ESL program – necessary for many students whose English is not good enough to attend a US university otherwise. Some schools such as NC State and UNCC offer “Intensive English” programs for conditional admission for such students; successful students gain full admission.
- *Student service*: UNCP focuses on student services in order to distinguish themselves from and be competitive with other universities with higher name recognition.

At UNC-Chapel Hill, the campus has launched a series of efforts, including the new “Admissions Ambassadors Abroad” program, designed to call upon alumni and students studying abroad to make presentations at top high schools about the university and is looking for ways to further internationalize the campus by continuing to enroll as many international students as permitted under UNC’s “out-of-state” student cap and through programs that bring in shorter-term “visiting global students.”

On a system level, UNC is working to increase “brand awareness” of the state through its new student recruitment portal, <http://www.studynorthcarolina.us>, a joint project between UNC and the U.S. Commercial Service. In China and many other countries, general awareness of the state of North Carolina is highly limited – students and parents may be aware of Michael Jordan, or may have heard of Research Triangle Park, but are unlikely to know about the impressive range of higher education offerings available in the state. The studynorthcarolina.us portal is being led by UNC, but is envisioned as a partnership with both private universities and community colleges interested in working together to increase awareness of the state.

Welcoming:

Word of mouth is critical when recruiting students to campus – students talk to prospective students; current student’s families talk to prospective student’s families. Routinely in our survey, campuses reported that their recruitment was aided when Chinese students returned to China and spoke to others about their time at their respective UNC schools.

While this provides an initial hurdle to overcome – you need a critical mass of alumni in order for meaningful word of mouth recruitment to occur – once this number is reached this informal recruitment is invaluable. This also provides an incentive for campus admissions officers to stay in touch with alumni residing in China or Taiwan – in a recent ACE survey, only 9% of universities nationally had international alumni offices.⁶²

But word of mouth will only be positive if student experiences in our schools are positive. Unfortunately, a recent study out of the City University of New York found that, in US universities, among international students in general, and east Asians in particular, many have difficulty integrating themselves into US university life: 38% report not having a single American friend.⁶³ The study found that in general, Southern universities were slightly more welcoming to international students than those in other parts of the country: with some additional intentional efforts, UNC might establish a competitive advantage in this area.

NC State has made concerted efforts to understand what works best to make international students and faculty feel “at home” in their new home, and, according to China Program Director Anna Lamm, “the first few weeks and even the first semester” is a critical time. NCSU has created a series of orientations that bring together international students and faculty with Americans and community members from their home country during the first few weeks of the school year, under the belief that early relationships at universities often are the strongest. For Chinese students, whose English reading and writing skills are typically stronger than their speaking skills, written instructions about events help get them there. Once at the events, NC State’s goal is to ensure that “they can feel a sense of community.”

At UNC-Chapel Hill, a new Living and Learning Community brings together international students and interested American students, and special visa services help both international students studying at UNC-Chapel Hill and UNC-CH students seeking to study abroad.

UNCG’s services to international students continue throughout their time on campus, from making sure they are aware of basics like housing, transfer credit and getting around Greensboro before they arrive, ensuring that their English is classroom-ready and that they are connected to campus life. Chinese students in particular are supported by the Chinese Students Association (CSA), which Penelope Pynes, Associate Provost for International Programs, describes as “very active and in most cases...[gets] our new Chinese international students connected with CSA leaders prior to their arrival.”

In all five UNC campuses, ASU, NCSU, UNCA, UNC-CH and UNCG, report active Chinese student clubs or associations, with another three reporting broader geographical clubs to support Asian students on campus.

Finally, Chinese faculty can play a role in welcoming Chinese students. Not all schools track the original nationality of faculty, but the 11 schools providing hard figures or estimates report more than 200 Chinese-born faculty on their campuses.⁶⁴

Retaining:

Work by UNC to connect Chinese students to the community and the state can pay off in other ways. Each year since 2004, US employers have exhausted the supply of “H-1B” visas,⁶⁵ created to help companies meet their demand for “highly-skilled” workers using foreign citizens living in the US (the fees from the program go into workforce training programs for US workers), this year reaching the limit of 65,000 on June 11.⁶⁶ Employers need people with strong math and science skills and, despite continued efforts, the US is not producing enough native-born students to meet the demand. One in

five workers in STEM-related (science, technology, engineering and math) fields is foreign born, with 63% of those foreigners coming from Asia.⁶⁷

International students majoring in STEM disciplines represent a key part of the workforce solution for employers. International students studying in the US obtain about 20% of the undergraduate degrees in these fields, with even higher percentages in graduate schools. A recent study found that out of 1500 patents gained at the top 10 patent-producing universities, more than three quarters had at least one foreign inventor.⁶⁸

UNC schools are beginning to assist employers in meeting their STEM workforce demands by connecting students to the Optional Practical Training (OPT) program, which enables workers in designated fields to work for US employers for up to 17 months, during which many of these “best and brightest” students can grow roots and consider long-term employment or starting their own companies. UNCG’s International Student and Scholar Services (ISSS) provides a broad range of assistance for Chinese and other international students to learn more about the range of options available to top students to remain in the United States after graduation.

Additional intentional efforts to reach out to and assist the “best and brightest” international students could provide North Carolina with a competitive advantage, strengthening the STEM workforce for existing companies and increasing the number of new companies started by highly-entrepreneurial graduates. There is some evidence that international students find North Carolina a good place to live and will want to stay here if it is possible: a 2010 study UNC General Administration found that 2, 5 and 10 years after graduation, international students were more likely to be living and working in North Carolina than out-of-state students.

Recommendations:

Recruiting Chinese students to UNC:

4a. Explore strategies to increase Chinese student enrollment on interested campuses, with special attention to best practices in recruitment and screening. Develop and implement strategies to increase StudyNorthCarolina.us's⁶⁹ visibility and effectiveness as a web portal promoting higher education in North Carolina and other countries with fast-growing, high quality student populations,⁷⁰ among undergraduates and undergraduates, considering, among other things, adding sample "short courses" featuring UNC faculty members to give students and parents a better idea of the quality of UNC education. *Lead:* Bonnie Derr, Jim Gehlhar, Tom Martineau.

4b. Explore opportunities to deepen relationships with Chinese high schools, building off of the work of the Center for International Understanding, NC School of Science and Math, and high schools related to existing UNC Chinese university partners, as a base for increasing system visibility and Chinese student recruitment. *Lead:* Leslie Boney, Tom Martineau, CIU, NCSSM.

Welcoming Chinese students to UNC:

4c. Develop best practice strategies for international students generally, and Chinese students specifically, to help integrate them into campus life, and connect to NC-born students and the surrounding international community. *Lead:* University Council on International Programs.

Recruiting:

4d. Work on a campus level with area employers to develop summer internships for promising international students, particularly those from China, at NC companies, to increase Chinese knowledge of North Carolina. North Carolina's governor and business community should annually reach out to top Chinese graduate students in NC schools to encourage them to stay in North Carolina following graduation.⁷¹ *Lead:* UNC Career Placement offices, Governor's Office, NC Department of Commerce.

Result:

The variety and strengths of all UNC campuses will be better known in China, resulting in greater enrollment of high-quality Chinese students at UNC. Native-born students will know more about their Chinese classmates. Chinese students will graduate with a positive perception of North Carolina. The dragon and the dogwood may find a new way forward together.



ENDNOTES

Preface Notes:

¹ No state funds were expended for the China trip. Board of Governors members paid for their own airfare. Travel within China was supported by NC State's Confucius Institute, Nanjing Normal University, Hanban, a Chinese government-sponsored nonprofit and travelers' personal funds.

² http://en.wikipedia.org/wiki/List_of_countries_by_population

³ http://money.cnn.com/news/economy/world_economies_gdp/

⁴ http://www.oregonlive.com/opinion/index.ssf/2012/03/worlds_largest_economy_has_chi.html. Note GDP is computed in the aggregate; on a per capita basis, US output still far outstrips that of China.

⁵ In a May 2012 report, the OECD estimated that by 2020, Chinese students will make up 29% of all college graduates aged 25-34 in the world. See <http://www.oecd.org/dataoecd/62/53/50495363.pdf>. India will have an additional 12% of the world's graduates, with the US having 11% and Russia 7%. Currently China has 18% of those graduates, the US 14%, with India and Russia each having 11%.

⁶ See <http://www.nytimes.com/2012/01/29/magazine/come-on-china-buy-our-stuff.html?pagewanted=all> and <http://www.andrewleunginternationalconsultants.com/files/mckinsey-quarterly---the-value-of-chinas-emerging-middle-class.pdf> for example.

⁷ <http://www.epi.org/publication/bp345-china-growing-trade-deficit-cost/>. According to EPI, 76.9% of job losses due to the trade deficit were in manufacturing, accounting for more than half of the nation's manufacturing job losses between 2001 and 2011.

⁸ The Census Bureau discourages using state export and import data to calculate "trade balances" at the state level because export origin of movement may not always imply production origin and import destination may not always reflect where the goods are consumed or used.

⁹ David Mohler remarks to Global Leaders to China Program, October 6, 2011.

¹⁰ What Chinese Want, by Tom Doctoroff, Palgrave-McMillan Press, June 2012.

¹¹ Data from NC Department of Commerce Labor and Economic Analysis Division. See <http://www.nccommerce.com/Portals/0/Research/Industry%20Reports/2011%20NC%20Annual%20Trade%20Report.pdf>.

¹² Fastest-growing NC exports to China between 2010-2011 were in machinery (up 56% to \$425 million) and food products (up 230% to \$190 million). NC ranks 13th among US states in exports to China.

¹³ Remarks by NCDOC Secretary Keith Crisco at North Carolina Investment Seminar, January 18, 2011.

¹⁴ Data from NC Department of Commerce, Labor and Economic Analysis Division, supplied July 25, 2012.

¹⁵ See, for example, <http://www.starnewsonline.com/article/20120408/ARTICLES/120409744>

¹⁶ Through H1B, Optional Practical Training provisions and other visa categories.

¹⁷ http://en.wikipedia.org/wiki/List_of_countries_by_population

¹⁸ Data extracted from Wisetrade by NC Department of Commerce June 8, 2012.

¹⁹ The complete report of the UNC Tomorrow Commission is available at http://www.northcarolina.edu/nctomorrow/UNCT_Final_Report.pdf. See especially pp. 2, 13-16.

Chapter 1 Notes:

²⁰ Remarks to Duke-UNC China Leadership Summit, March 2012.

²¹ The percentages of majors in each country are illustrative of the different focus. Among Chinese university students studying in China, 42% study science or technology; among US students studying in the US, just 14% do. <http://www.businessworld.in/web/guest/storypage?CategoryID=0&articleId=446849&version=1.3&journalArticleId=448647>

²² NC Global Schools Network, July 2012 newsletter.

²³ An estimated 9.5 million Chinese take the gaokao each year before deciding whether to study in China or outside the country. Another 250,000 or so students skip the gaokao with the intent of seeking admission directly to international universities, which do not require that they take the test. Many others become interested in international study if they are not assigned to their top choice Chinese university following the gaokao.

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- ²⁴ See <http://www.guardian.co.uk/politics/2008/jan/17/gordonbrown.labour>
- ²⁵ <http://www.iie.org/en/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-Country>
- ²⁶ <http://www.csmonitor.com/Commentary/Opinion/2008/0501/p09s02-coop.html>
- ^{27,27} "Mapping Internationalization of US Campuses: 2012 edition" published June 27, 2012. See report at <http://www.acenet.edu/go/mapping/>
- ²⁸ <http://www.wfs.org/Jan-Feb%2009/zogbyreview.htm>
- ²⁹ http://blogs.edweek.org/edweek/curriculum/2011/03/study_of_foreign_language_cree.html

While the number of students taking Mandarin nationally is up 195% during this period, to 60,000, that is still less than a third of the number taking Latin, 1/60th the amount taking French and less than 1/100th of those taking Spanish (6.25 million).

- ³⁰ Remarks by NC Department of Commerce Secretary Keith Crisco to North Carolina Investment Seminar, January 18, 2011.
- ³¹ Statistics for the 2010-2011 school year from NCDPI. See <http://apps.schools.nc.gov/pls/apex/f?p=1:51:0::NO::>
- ³² ECSU has not provided us with specific data on this question, but is likely in this category as well.
- ³³ "Get a Diploma, But Then Get a Passport," New York Times, August 1, 2010.
- ³⁴ Summary at: <http://www.insidehighered.com/news/2012/07/10/new-studies-link-study-abroad-time-graduation>
- ³⁵ See this report: http://icenter.ucsd.edu/files/icenter/0809EAP_OAPcombined.pdf
- ³⁶ Overall China's international student population has increased dramatically over time. According to the BBC, in the early 1950's the total international student population was 20 – all from eastern Europe. See <http://www.bbc.co.uk/news/mobile/business-12671198>.
- ³⁷ Source Institute for International Education "Open Doors" report. See <http://www.iie.org/en/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2011/2011-11-14-Open-Doors-Fall-Survey-Study-Abroad>
- ³⁸ See for example: http://chronicle.com/article/China-Puts-Out-the-Welcome-Mat/133543/?cid=gn&utm_source=gn&utm_medium=en
- ³⁹ Figures collected by C.K. Kwai, UNC Exchange Programs, July 31, 2012.
- ⁴⁰ So far high quality English courses are mostly offered only at top-tier universities, mostly located in metropolitan areas. See again <http://chronicle.com/article/China-Puts-Out-the-Welcome-Mat/133543/>
- ⁴¹ See <http://www.universityworldnews.com/article.php?story=20120705185153219>

Chapter 2 Notes:

- ⁴² <http://www.goinglobal.com/articles/1091/>
- ⁴³ From "Students abroad burnish University of South Florida degree," Tampa Bay Times, July 21, 2012.
- ⁴⁴ Quoted in "Open Doors 2011," Institute for International Education, released November, 2011.
- ⁴⁵ Over the long term the exact number of members of FICHET may decline. Taiwan currently has the highest density of universities per capita, and government leaders are encouraging consolidation. See <http://www.universityworldnews.com/article.php?story=20120705185153219>
- ⁴⁶ As of August 23, 2012, the Chinese government has given preliminary approval to the Duke-Kunshan campus to open during the 2013-2014 academic year, offering two graduate degree programs.
- ⁴⁷ An additional option might be found in Singapore, where 78% of the population is Chinese and English is widely spoken. UNC-CH has relationships with the National University of Singapore.
- ⁴⁸ The recommitment to Fudan should not exclude system "presence" in other places. For example, UNC might pursue a Beijing location or other locations to pursue partnership work with secondary school systems; there might be value in pursuing office space in the Dushu Lake Higher Education Town in Suzhou to facilitate system business internships.

Chapter 3 Notes:

- ⁴⁹ See the American Council on Education's report, "Mapping Internationalization at U.S. Campuses 2012" at http://www.acenet.edu/AM/Template.cfm?Section=Programs_and_Services&ContentID=42525. The report finds that whereas in 2006, 56% of US universities provided funding for travel to international conferences by faculty, by

2011 the percentage had declined to 48%. Similarly, in 2006, 39% of universities provided support for international research; in 2011 only 31% did.

⁵⁰ Correspondence with Penelope Pynes, UNCG Associate Provost of International Programs, 2011.

Chapter 4 Notes:

⁵¹ Open Doors Fact Sheet North Carolina 2011, *Institute of International Education*.

⁵² "Immigrant Entrepreneurs and Small Business Owners," by Robert Fairley, May 2012. See <http://www.sba.gov/sites/default/files/rs396tot.pdf>. The study, based on US Census Current Population Survey 2010, also finds that immigrant entrepreneurs begin with higher levels of startup capital than their native-born counterparts. Further, since 1996 the rates of immigrant-founded startups has increased by 50% since 1996, while the startup rate of native-born businesses has declined by 10%. Separately, Vivek Wadhwa, in his 2007 paper, "America's New Immigrant Entrepreneurs," (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=990152), found that 52% of tech startup companies founded between 1995 and 2005 had at least one immigrant founder, with the largest number of those companies started by Indians or Chinese. The percentage of tech companies started by immigrants is lower in RTP, he found, but still significantly higher than the region's immigrant population. Finally, a study by the Partnership for a New American New Economy released in August 2012 (<http://www.renewoureconomy.org/index.php?q=open-for-business>) finds that while immigrants account for 12.9% of the American population, they start 28% of new companies, including 25% or more in seven of the eight sectors predicted by the US government to be "fastest-growing" over the next decade.

⁵³ See "Drivers of Mobility of Chinese and Indian Students," by Rahul Choudaha, International Higher Education, June 2012, at http://www.bc.edu/content/dam/files/research_sites/cihe/pdf/IHEpdfs/ihe62.pdf#page=26.

⁵⁴ There are different ways to describe and "count" student study abroad. For example, UNC-CH reports that among undergraduates who graduated in 2010, 31%, or 1358 students, studied abroad as part of their education, ranking them 37th among doctoral institutions. We could not find comparable figures for all UNC institutions, and thus report the "snapshot" data.

⁵⁵ The US continues to lead in international student recruitment though its market share is slipping due to aggressive efforts by many countries to attract international students. Most recently, Canada has announced plans to double the number of international students at its universities in the next decade. See http://chronicle.com/article/Canadian-Report-Calls-for/133647/?utm_source=dlvr.it&utm_medium=tumblr

⁵⁶ In contrast to Chinese students, Taiwanese student enrollment at UNC schools at both the graduate and undergraduate level, consistent with national trends, is declining, with only NCSU showing an increase since 2007. UNCG, UNCW and UNCC have the highest percentage of Taiwanese undergraduates, with UNCG, UNC-CH and NCSU having the highest percentage of Taiwanese graduate students. Nationally applications for Taiwanese graduate students to US universities were down 2% in the 2011-2012 academic year. See <http://www.insidehighered.com/news/2012/08/23/offers-admission-international-grad-students-are-9>

⁵⁷ Remarks to the Duke-UNC China Leadership Summit, March 2012.

⁵⁸ In total, according to IIE, international students spent \$158.6 million at UNC institutions last year. Chinese students make up 21.9% of the UNC total student population.

⁵⁹ North Carolina's numbers mirror the nation: China sends the largest percentage of students to our state. Taiwan ranks 5th nationally in the number of students it sends to the US; 6th in North Carolina. See <http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-US-State/2011>

⁶⁰ Institute of International Education. (2011). "Top 25 Places of Origin of International Students, 2009/10-2010/11." *Open Doors Report on International Educational Exchange*. Retrieved from <http://www.iie.org/opendoors>. Among graduate school students in 2011-2012, applicants from China saw the greatest percentage increase, up 20%, part of an overall 9% increase in international graduate school applications. Among other countries, the Middle East was up 17%; Brazil up 13%; Africa up 1%; India and South Korea unchanged; Taiwan down 2%. See <http://www.insidehighered.com/news/2012/08/23/offers-admission-international-grad-students-are-9>

⁶¹ Source: China National Outline on Education, 2010. Translated by Yenbo Wu, San Francisco State University. Presented at AIEA Conference, February 21, 2012.

⁶² Surprisingly, when campuses were asked how many of their graduates currently resided in China, all but UNC-CH and NCSU reported they were unable to determine that information, suggesting shortcomings in campus development and alumni databases that should be addressed.

⁶³ Source: China National Outline on Education, 2010. Translated by Yenbo Wu, San Francisco State University. Presented at AIEA Conference, February 21, 2012.

⁶⁴ From our survey of campuses, we had responses to the question about Chinese faculty members from ASU, ECU, ECSU, FSU, NCCU, NCSU, UNCA, UNCC, UNCP, UNCG, WSSU, and WCU. Of these, NCSU had the largest number, with 71, followed by ECU, which estimated having 60 Chinese faculty members. Schools did not count “visiting scholars,” who represent another potential “welcoming” resource for entering Chinese students.

⁶⁵ In June, 2012 more than 100 university leaders from across the country, including Chancellor Dubois at UNCC, Chancellor Thorp at UNC-CH and Chancellor Woodson at NC State, signed a letter calling for an easier path to residential status for foreign students. New York City Mayor Michael Bloomberg has described the effect of setting the H1B at this level as “national suicide,” and claims that “the American dream cannot survive if we tell the dreamers to go elsewhere.” See <http://www.bloomberg.com/news/2011-09-28/rejecting-skilled-workers-national-suicide-bloomberg-says.html>

⁶⁶ See <http://redbus2us.com/h1b-visa-2013-cap-count-updates-by-uscis/>

⁶⁷ See http://www.washingtonpost.com/business/on-small-business/asian-arrival-how-stem-demand-led-to-a-massive-shift-in-immigration/2012/06/21/gJQAaShLtV_story.html

⁶⁸ “Universities Leaders Pen Immigration Letter,” by Lewis Kendall, *Raleigh News and Observer*, June 26, 2012.

⁶⁹ Historically, efforts to establish online marketing efforts in China have faced resistance. The recent success of websites such as chasedream.com (with a current readership of about 220,000 members) and interest in free online courses such as Coursera suggest that there may be new opportunity.

⁷⁰ Chinese students made up 92% of the net growth of international students last year. India’s international student population did not grow as fast last year (it ranks second in the total number of students enrolled in the US, with 103,895, or 14.4% of the US international student population), but demographics suggest potential significant growth for India in the future. According to Rahul Choudaha (University World News Global Edition June 24, 2012), the number of Indians seeking to go to college is expected to increase by 5 million between 2010 and 2015. Over the past year, there was also impressive growth in US enrollment of students from Saudi Arabia (+6,894); South Korea (+1,198); Vietnam (+1,776) and Iran (+895).

⁷¹ North Carolina Governor Bev Perdue held separate receptions for Indian and Chinese graduate students in the fall of 2010 and 2011.

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