

CHAPTER 10

Response of Chinese Higher Education and SJTU to Globalization: An Overview

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INTRODUCTION

Globalization means more competition and that a nation's investment, production and innovation are not limited by its borders. Internationalization, according to Levin (2001), is one set of behaviour influenced by globalization processes. These processes are not only political and economic, but also social and cultural, and also include education. Internationalization has become the basic measure for universities on a global level. Universities have been affected greatly by globalization and have seen vast cultural, economic and technological transformations at all levels.

In order to face the challenges and demands of globalization, Chinese higher education institutions (HEIs) have been expanding and strengthening international academic exchange and cooperation, increasing the number of students going abroad as well as the number of foreign students studying in China, encouraging their faculty to constantly improve themselves and to develop research collaboration.

OVERVIEW OF CHINESE HIGHER EDUCATION

The history of Chinese modern higher education could be ascended to the late-19th century. With the arrival of gunboats in the war, Chinese intellectuals discovered the numerous Western advances in science and technology. One of their attempts of learning from Western advances was the building of

universities and colleges. Many foreign groups such as French Jesuit missionaries and American Protestants also created a number of higher education institutions (HEIs) in China before 1949. After the foundation of People's Republic of China, in the early 1950s all HEIs were brought under government leadership and the whole higher education system was restructured in the form of the Soviet model. Consequently, every HEI became a specialized institution, and research was separated from higher education. From 1967 to 1976, China's Cultural Revolution greatly devastated higher education, and most HEIs stopped admitting students during that time. From the late 1970s, with the implementation of reform and the opening-up policy, Chinese higher education underwent a series of reforms and began to make new strides.

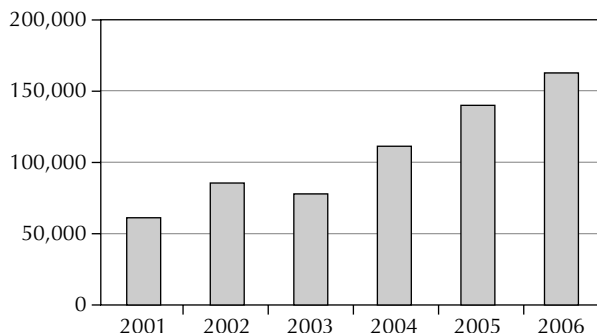
Nowadays, there are more than 1,800 universities and colleges in China — about 38% of them can award bachelor degrees. In 2006, the total numbers of undergraduate admissions and postgraduate admissions were 5,500,000 and 400,000 respectively. And the total number of students enrolled in various Chinese higher education institutions reached 25 million, becoming the largest higher education system in the world (Ministry of Education of China, 2007).

It has come to our notice that private higher education has developed rapidly in recent years. Approximately 1.5 million students enrolled in 278 private higher education institutions in 2006, about 6% of the national total (Ministry of Education of China, 2007). Almost all of the private HEIs are focused on undergraduate education, most of them awarding only undergraduate certificates, without the power of awarding bachelor degrees.

PROFILE OF OVERSEAS STUDENTS IN CHINA

Statistics of overseas students can give an intuitive impression of the situation of Chinese international education. Figure 1 shows that the number of overseas students enrolled within Chinese HEIs has increased steadily since 2003. The annual growth rate was 21% on average during the period 2001-2006. In 2006, China received 162,000 oversea students from 184 countries, which is the highest number since 1949, and more than 8,000 students obtained Chinese government scholarships (China Scholarship Council, 2007). However, considering the huge gross amount, the proportion of overseas students is still very low (less than 1%).

A majority of overseas students studying within China are from Asia, approximately three-quarters in 2006. Among 184 countries, South Korea makes up the largest proportion (35%), followed by Japan (11%), USA (7%), Vietnam (4%) and Indonesia (3%). Chinese universities and colleges are still less attractive than those of most developed countries since only one third of overseas students are degree-seeking students. In addition, overseas students

Figure 1: Total Number of Overseas Students Enrolled in HEIs 2001-2006

enrolled in Chinese-related subjects are very high, including Chinese Language (60%) and Chinese Traditional Medicine (4%). By contrast, the percentage of overseas students enrolled in all S&T subjects is only 4% (China Scholarship Council, 2007).

INTERNATIONAL COLLABORATIVE PROGRAMMES

China is opening its doors to foreign higher education providers at a time when competition and markets are being expanded domestically. Presently there are five major international collaborative models, including (i) independent campuses in China set up by overseas universities; (ii) joint institutes or schools; (iii) dual degree programmes; (iv) joint programmes or projects; and (v) overseas campuses set up by Chinese universities. These five models are actively impacting Chinese higher education through the availability of high-quality education resources and through the development of international collaborations.

Model I: Independent Campuses (in China) of Overseas Universities

This model mainly introduces the ideas, teaching methods and evaluation systems of world-class universities to China. The most typical example of this model is the University of Nottingham-Ningbo, which is sponsored by the City of Ningbo and run by the University of Nottingham with cooperation from Zhejiang Wanli College. It opened as the first Sino-Foreign university in China with approval from the Chinese Ministry of Education in 2004. All degree programmes are conducted entirely in English with the same teaching and evaluation standards as in the Nottingham University in the UK. In addition, every student has the opportunity to study at Nottingham UK for a short period in the summer. In 2006, the Xi'an Jiaotong-Liverpool University at

Suzhou was founded, starting up with the subjects of science, engineering and management, and using English as the teaching language. It is a form of cooperation between two prestigious partners, Xi'an Jiaotong University in China and the University of Liverpool in the UK.

Model II: Joint Institutes

Until now, there has been only one example of this model, the Joint Institute of Shanghai Jiao Tong University, China and University of Michigan, USA. The Joint Institute was founded in 2006, which created a unique organizational linkage between a US and a Chinese university by providing a joint governance structure to manage and direct degree-granting programmes offered by both universities to students from both nations. The joint board of directors is made up of people from two universities, five each. The relationship between SJTU and U-M began in 1997, mainly through the exchange of engineering education. In 2001, the Chinese Ministry of Education approved an agreement by the U-M College of Engineering and SJTU that made U-M the first non-Chinese academic institution approved to offer graduate engineering degrees to students in China. U-M has conferred more than 50 degrees to SJTU students since that time. The creating of the Joint Institute formalized the degree-granting process and expanded the programmes to include undergraduate and graduate degrees.

Model III: Dual Degree Programmes

This model is characterized by awarding students both Chinese and foreign degrees. The earliest dual degree programme, an MBA programme, was established in 1987 by Tianjin University of Finance & Economics and Oklahoma University. By the end of June 2004, there were 164 dual degree programmes, involving 54,000 students (Ministry of Education of China, 2005). These programmes mostly focus on professional fields such as MBA. As a result, these programmes are particularly attractive for students who want to gain useful experience for attaining top-level management job positions in China. The scope of international dual degree programmes in China is still narrow, and they usually require very expensive tuition fees, so that development of such programmes is controlled primarily by market demand.

Model IV: Joint Programmes and Projects

This is the most popular model of international cooperation in Chinese HEIs. The joint programmes enable students to study at foreign partner universities for one or two semesters. Students' credits were recognized by their universities of origin. For instance, SJTU has more than 50 joint programmes and projects with universities from USA, Canada, England, France, Germany, the Nether-

lands, Singapore, South Korea and Australia, etc. And more than 1,500 students have already benefited at SJTU from such schemes, including both Chinese and foreign students.

Model V: Overseas Campuses Set up by Chinese Universities

This is a rather new model in China. Opening overseas campuses requires economic strength. Consequently, Chinese universities seldom actualize this model. As a pioneer, SJTU set up a graduate School in Singapore in 2002, in collaboration with Nanyang Technology University. The school has already granted 250 MBA degrees in total.

Implementation of these five models can be expected to help expand international cooperation, foster talent and aid universities in global development. Cooperation programmes in particular can be used to promote university brand. The students do not need to pay the high fees normally required to go abroad to study, and they can take advantage of world-class university educational resources, learn English, and strengthen international communications. In many cases, students can also obtain degrees from foreign universities. Compared to students in Chinese universities, such students have a lot more opportunities to develop and obtain employment domestically and abroad. Through these models, Chinese universities can improve their own level of international cooperation and increase their impact on the world.

NATIONAL INITIATIVES

Laws and Regulations

After China joined the WTO, foreign universities and international companies began to directly invest in the running of schools. However, according to the WTO convention, foreign institutions are not allowed to run schools independently in China. The Chinese government issued policy documents based on protecting Chinese education and culture that were designed to moderate the external opening of the education field. On 19 February 2003, the Chinese government adopted “Regulations of the People’s Republic of China on Chinese-Foreign Cooperation in Running Schools”. The regulation applies to the activities of the cooperation between foreign educational institutions and Chinese educational institutions within China, and it clearly prescribed steps and requirements for setting up, organizing, managing and supervising teaching in cooperatively run schools (Ministry of Education, 2003). Chinese overseas cooperation has obtained good results since the implementation of the regulations. By 2004, the Chinese government had approved nearly 800 programmes designed to conduct collaborations between Chinese HEIs and their foreign partners. Among them, about 270 were degree programmes

involving about 100 universities and colleges (Zhou, 2006). At present about 1,400 foreign higher education institutions have been approved by various education authorities in China to operate in the country (Altbach, 2006).

The '985 Project'

At the 100th anniversary of Peking University (in May 1998), the President of China declared that China should have several world-class universities, which resulted in the "985 Project". The main goal of the project is to help China's top universities improve international competitiveness, and finally become world-class universities. The total funding for the 34 universities was 28.3 billion RMB for a period of three years, of which 15.0 billion RMB was from the central government. For Phase II of the "985 Project", 33.0 billion RMB has been allocated to 38 universities for the period of 2004-2007. Nine universities received the largest amount of support from the governments in the "985 Project". They are Tsinghua University, Peking University, Shanghai Jiao Tong University, Fudan University, Zhejiang University, Nanjing University, Xi'an Jiao Tong University, University of Science and Technology of China, and Harbin Institute of Technology. In terms of the performance as percentages of all Chinese HEIs, these top nine universities account for 44% of the State Key Labs, 42% of articles indexed in SCIE and SSCI of Thomson Scientific, 42% of the academicians of Chinese Academy of Sciences and Chinese Academy of Engineering, 20% of the research income and 20% of enrolled doctoral students (Liu, 2007).

Projects to Attract Overseas Scholars

Another major national strategy in responding to globalization is to launch special initiatives and projects to attract overseas scholars. For example, the "Changjiang Scholar Incentive Program", initiated by Chinese Ministry of Education and funded by Jia Cheng LI, a very successful Chinese entrepreneur. In order to attract world famous scholars, the "Changjiang Scholar Incentive Program" provides significant amount of research funding to selected scholars, and gives them a special bonus besides their normal salaries. From 1998 to 2006, more than 1,200 professors have been appointed, including 309 adjunct professors working abroad (*People's Daily Abroad Edition*, 2007). Other initiatives of such kind are "The Fund for Returnees to Launch S&T Researches", "Program for Training Talents toward the 21st century", "The Chunhui Program", "Program of Academic Short-return for Scholars and Research Overseas", etc. (See: http://www.moe.edu.cn/english/international_2.htm).

Projects to Prepare for the Future: Sending Students Abroad

Sending students abroad is also an important part of international education cooperation and communication. From 1987 to 2005 China sent 930,000 stu-

dents abroad to study in over 100 countries, and 25% of them have come back to China. In 2005, 89% of students going abroad did so at their own expense, while 7% were supported by Chinese public funding (Zhou, 2006). In 2006 the China Scholarship Council set up a project called “Building National key Universities through Sending Graduate Students Abroad” in collaboration with 49 key universities including Shanghai Jiao Tong University. According to this plan, between 2007 and 2011, the government will send 5,000 masters and Ph.D. students abroad every year and cover the tuition and living expenses of these students (China Scholarship Council, 2006). Students funded by this plan are being asked to promise to return on completion of their studies.

RESPONSE OF SJTU

Profile of SJTU

Shanghai Jiao Tong University (SJTU), founded in 1896, is one of the oldest universities in China. It is regularly ranked in the top seven by various ranking organizations in China. SJTU is strong in engineering, medicine and management fields, and many of the academic programmes are ranked as the national top three. It has 2,800 faculty members including 22 academics from the Chinese Academy of Sciences and Chinese Academy of Engineering. The total enrollments in SJTU are about 40,000, including 20,000 undergraduate students and 13,000 graduate students. There are currently about 2,000 foreign students studying at the university, including about 500 in undergraduate programmes and 100 in graduate programmes.

Located in one of the major international metropolitan areas, SJTU has been actively involved in international exchange and cooperation. It has established cooperative relationships with more than 100 universities abroad. As mentioned in earlier sections, it has conducted unique models of international collaboration such as the Joint Institute with University of Michigan, and overseas graduate schools.

SJTU Strategies

With its long-term goal of becoming a world-class university, SJTU is making special efforts in improving the quality of faculty, research and graduate education. Internationalization has become one of its main strategies for the next few years. Major practices and measures include:

In areas of education: establishing the Joint Institute with the University of Michigan, setting up more dual degree programmes and other degree programmes with leading international universities, increasing study abroad programmes and international internships, expanding bilingual teaching, starting

English-only programmes, launching summer schools and other short period programmes for students coming from international partner universities, etc.

In areas of research: conducting partnerships for each school with at least one international partner, building joint research centres with leading international universities and research institutes, setting up satellite research laboratories with major international corporations, participating in major international science projects, joint research projects and publications, etc.

In areas of faculty and management: recruiting deans and professors from leading international universities, increasing the percentage of faculty members with doctoral degrees from leading international universities, sending young scholars to leading international universities and research institutes, increasing short visits by and collaboration with world-class professors, International training of management staff, etc.

FINAL REMARKS

To face the challenges of globalization, both Chinese governments and top Chinese universities including the SJTU, have been paying special attention and taking special measures. Major progress has been made in areas of education and research. More has to be done in the future.

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