

**Progresses and Paradoxes: New
Developments in China's Higher Education**

Dr YANG Rui
Graduate School of Education, University of Western Australia,
Telephone: 0061 – 8 – 9380 2384, Fax: 0061 – 8 – 9380 1052
E-mail: ryang@ecel.uwa.edu.au

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Introduction

One of the great changes witnessed by the recent two decades is the increasingly important position of China internationally as a socio-economic and geopolitical force. This is based on two facts: that the Chinese government has shifted from its isolationist, politics-oriented policies to open door, economic-oriented policies; and the continuous annual GDP increase of about 9% for nearly 20 years. This change has been accompanied by major reforms in higher education (Agelasto & Adamson, 1998, p. 1), which are ascribed a key-supporting role in the drive to modernize the nation. With the recent accession to the WTO and the exponential use of the Internet, China is accelerating its integration with the rest of the world. Chinese higher education is gaining stronger links with international community (Yang, 2002a). It is no longer immune from international forces, and thus has to confront new challenges.

One challenge is to reconcile the local and the global (Yang, 2000; Mok 2001a). Despite the fact that every country has its own conditions that form its responses to global forces, it is clear that the globalisation discourse is having sweeping impacts on many aspects of the contemporary life worldwide. In practice, economic rationalism and managerialism have significantly influenced the thought and philosophy of governance around the globe (Mok & Chan, 2002, p. 28). The increasing interdependence and connectedness of nation-states have made the state as a declining autonomous decision-making body (Mok, 2001b). The role of the nation states, therefore, has had a fundamental change from a "provider of welfare benefits" to "builder of market" role (Sbragia, 2000). Introducing market principles and practices to manage the public sector have inevitably transformed societies into "audit society" (Power, 1997), or "performative society" (Ball, 2000), turning the traditional welfare states into "competitive states" (Cerny, 1996), or "evaluative state" which attaches importance to effectiveness, efficiency and economy in public sector management (Henkel, 1998; Kogan & Hanney, 2000).

It is against such a global policy context that higher education has become a tool for achieving an integrated global system along market lines (Ball, 1998). The change in governance ideology in higher education has altered the ways in which universities are managed (Slaughter & Leslie, 1997; Braun & Merrien, 1999). Higher education today is becoming more sensitive to changing social and market needs. However, unlike in the era of welfare states, universities around the globe are experiencing pressure from governments to demonstrate maximum output from the financial input they receive (Mok & Chan, 2002, p. 244). Although the policy of decentralisation

and devolution has been adopted widely, and universities are supposedly given more managerial autonomy, the government's role in the control of education has actually been strengthened instead of being weakened.

This is also the case in China (Bray & Borevskaya, 2001), where the whole society is in transition. While making impressive progresses in many aspects, China, like many other transformative societies, is full of tensions caused by turbulent social changes. The following parts of this chapter aim at illustrating how the governance of higher education has been significantly affected by 'the economic ideology of education', while the role of governments, particularly the central state, as a regulator and overall service coordinator has been strengthened rather than weakened under the policy of decentralisation.

This chapter reports some of the latest developments in China's higher education. It is based upon findings from two research projects. One was conducted at Guangzhou in 1998, and the other is still ongoing since 1999 various regions within China including Peking and Tsinghua Universities in Beijing, Fudan University in Shanghai, Wuhan University in Hubei, Xinjiang University in Urumqi, and Qingdao Ocean University in Shangdong. These studies used intensive interviews as the main means of collecting data. The specific questions were chiefly prods to elicit information on new developments in China's higher education, with special focus on challenges and tensions, and were often supplemented with follow-up questions.

In selecting respondents for these studies, a purposive sampling method was adopted to identify the interviewees, who are knowledgeable and able to provide sufficient information to answer the research questions. The selected interviewees in the studies were professors, senior administrators, university presidents or vice presidents, and occasionally some students as well. As senior administrators in Chinese universities all spring from academia, one major issue was which disciplines should be included. Knowledge disciplines can be categorised into the pure (theoretical) and the applied (practical). Becher (1989) summarises two basic kinds of classification. He suggests four disciplinary cultures (see Table 1). The selection of respondents in these studies was based on using these four fields, while criteria used for balanced representation were nationality, age, sex, rank, and the nature of their work unit.

Table 1: Becher's Classification of Disciplinary Cultures

	Pure (Theoretical)	Applied (Practical)
Hard	Science (e.g. Physics)	Technologies (e.g. Mechanical Engineering)
Soft	Humanities (e.g. History) pure social sciences (e.g. Anthropology)	Applied social sciences (e.g. Education)

Semi-structured interviews were designed to let participants express their views freely, using their own terms and perspectives. Specifically focused questions on institutions and individuals helped elicit respondents' views of issues and agendas in the context of their institutional and personal speciality. There were 25 interviewees in the 1998 Guangzhou project, and 64 interviewees from the 6 selected universities in the on-going second project. Most of the interviews were conducted in Chinese. The author felt being able to interview in Chinese was beneficial, as, after all, language is a tool for constructing reality (Spradley, 1979, p. 17).

This study is also based on longstanding personal working experience at a Chinese university, and on some primary as well as secondary Chinese language sources of information about the current situation in China.

Opportunities Lost in the Massification of Higher Education

The scale of Chinese higher education expanded rapidly in the past decade or so, with gross enrolment ratio of 3.4%, 7.2%, 8.3%, 9.1%, 9.8%, 10.5%, 11% respectively in 1990, 1995, 1996, 1997, 1998, 1999 and 2000 (National Centre for Education Development Research, 2001, p. 11). In 2000, a total of 3768000 first year students studied in tertiary education, with 2206000 in regular higher education institutions. Since 1999, China increased first-year enrolments by 48%, from 1.08 to 1.53 million students (Postiglione & Jiang, 1999). The major aim of this expansion was to stimulate the economy, as the central government thought Chinese parents were more than willing to spend what was, for many, a considerable amount, for their child's higher education. The expansion continued to reach 2.6 million in 2001, 14.14% over the number of 2000 (*China Education Daily*, 27 November 2001). The goal set in the *Action Plan to Vitalise Education in the 21st Century* issued by the Ministry of Education in 1999 to achieve a gross enrolment ratio of 11% was overachieved (Ministry of Education, 1999, p. 4). With this increase rate, China will be well ahead of the target goal to achieve a gross enrolment ratio of 15% by 2010 (Ji, 2000, p. 148).

The overall picture of higher education development is not all rosy, however. Among the societal effects of the fast expansion, social justice issues stand out. The ongoing dramatic social transformation is bringing about changes in all aspects of the Chinese society, and has produced social weakeners --- the groups located at the bottom of social resource distribution with the lowest living standards, who are especially vulnerable to new policy pitfalls. In higher education sector, social weakeners are obviously losing their opportunities.

Massive Higher Education Expansion within the Ninth Five-Year Plan and Beyond

Within the Ninth Five-Year Plan (1996-2000), China's intake of students in higher education grew substantially. There was a considerable increase of university student number in every 100000 population. The increase rates of higher education enrolment in 1999 and 2000 were substantially higher than the average 8.5% within the past 24 years since China adopted its open and reform policy. In 2000, students totalled 9097000 in China's 1041 regular and 772 adult higher education institutions, 2.4 times more than the total number in 1990. The average annual increase rate within the period of 1990-2000 reached 9%. Other aspects of higher education also developed considerably within the Ninth Five-Year Plan period. Postgraduate students in 2000, for example, totalled 301000, 3.2 times more than that in 1990 (National Centre for Education Development Research, 2001, pp. 10-11).

Table 2: Higher Education Growth in the Ninth Five-Year Plan (1996-2000) in China with Comparison to 1990 and 1995

Year	1990	1995	1996	1997	1998	1999	2000
Higher education gross enrolment ratio	3.4	7.2	8.3	9.1	9.8	10.5	11
Postgraduate students (thousands)	93	145.4	162.3	176.4	198.9	233.5	301.2
Adult education students (thousands)	1666.4	2570.1	2655.7	2724.2	2822.2	3054.9	3536.4
Numbers of higher education student in every 100 thousand population	326	457	470	482	504	594	723

Source: National Centre for Education Development Research, 2001, p. 11.

Table 3: Development of Full-Time Higher Education during the Ninth Five-Year Plan (1996-2000) in China with Comparison to 1990 and 1995

Year	1990	1995	1996	1997	1998	1999	2000
Numbers of higher education institutions	1075	1054	1032	1020	1022	1071	1041
Average student numbers of each higher education institution	1919	2758	2927	3112	3335	3815	5289
Staff number (thousands)	1004.5	1040.6	1035.8	1031.5	1029.6	1065.1	1112.8
Teacher-student ratio at regular higher education institutions	-	9.83	10.36	10.87	11.62	13.37	16.3

Note: - means statistics unavailable.

Source: National Centre for Education Development Research, 2001, p. 12.

Quantitative growth continued in 2001. More than 1500 degree and associate degree programs were newly launched. In order to further drive economic development, the Chinese central government lifted the longstanding restrictions on marital status (required to be single) and age (below 25 years of age) of student examinees. In 2001, 4.5 million candidates sat for university entrance, and 16265 of them were over 25, among them many were married. With such an increase rate, the national government has recently readjusted its state planning, and is determined to increase gross higher education enrolment ratio to 15% by 2005, with a total of 16 million students in higher education (<http://news.eastday.com/epublish/gb/paper148/20010811/class014800014/hw246>, consulted on 16 March 2002).

The expansion of higher education scale has greatly relaxed the longstanding gap between social demand and higher education supply. Many Chinese people, especially those in affluent areas such as major cities and coastal areas, benefit much from such a rigid growth in higher education. In Beijing, for example, the municipal education commission declared in 2001 to raise higher education administration rate to 70% of senior secondary school graduates (*China Education Daily*, 24 March 2001). According to *Wenhui Daily* (16 August 2001), higher education enrolment in Shanghai has reached 38.8% of the 18-22 ages cohort, 372000 students are currently studying in either regular or adult higher education institutions in Shanghai, and 232 of every 10000 Shanghai population have received tertiary education. In Jiangsu Province, student population in higher education reached 480000 with a gross enrolment ratio of 15% by the first half of 2001, and was over 700000 later in the year with an intake of around 220000 new students. At the current annual growth of 10%, Jiangsu is expected to have over one million university students by 2010 (<http://www.unn.cn/GB/channel2200/2204/200108/14/93371.html>, consulted on 16 March 2002), and thus will become China's first province to start the transition from elite to mass higher education (Trow, 1973).

The decision to substantially increase university student enrolment was made by the Chinese national government with multiple purposes. One major aim has been to stimulate the economy (Yang, 2002a, p. 63). By so doing, the central government hopes to push Chinese parents to withdraw their huge amount of savings from banks, and spend the money on their child's higher education. At the same time, it is anticipated that the expansion leads to large-scale construction work in higher education institutions, which further drives domestic consumption, and thus, promotes economic growth.

Another reason for the expansion, also initiated mainly by the central government, is to maintain social stability by delaying employment for some population. In 1999, for example, 60-

70% graduates from general senior secondary schools went to universities and colleges. Concurrently, some went to adult education, military and *minban* (non-government run) institutions to further their studies, and some continued their study by the very China-specific self-learning examination system (Liu & Zhen, 1999). Gradually, the situation that a large number of senior secondary school graduates go to various institutions to receive their tertiary education has begun to take shape. The tension caused by thousands of senior secondary school graduates competing for a very limited number of places in universities has been lessened.

Enrolled Students from Poor Families

China is now in transition. The transformation of its social structure has brought fast changes to social stratification (Bray & Borevskaya, 2001). This has thrown a spotlight into social weakeners who, as special social groups, have remained in the dark corner of the Chinese society for some time. One fundamental feature of such groups is poverty (Townsend, 1979). Although much contested in terms of its definition, social weakener is definitely an issue that should not be underestimated. According to a study conducted by the Chinese Academy of Social Sciences, the population of social weakeners totalled over 80 million, 7% of China's overall population (Jiang, 1996, p. 9).

The issue of university students as social weakeners started in 1997 when Chinese universities began to charge students tuition and accommodation fees. This was against the background of striking imbalance between economic developments in different regions. According to the statistics collected by Jiangxi Provincial Education Commission, 10.5% of the total student population within 32 higher education institutions in the province were from poor families, of which 5% families totally lost their capacity to support their children (Yu, 1996). Similarly, statistics from Helongjiang Province show that 11.8% of the students on 27 campuses in the province were from poor families, and 4.9% student population were from families in absolute poverty (Zhang & Luan, 1998). Such students occupied 10% of the total national university student population. In teacher training institutions, their proportion is often much larger. This is because the Chinese government has subsidised those who choose to become teachers. Such support, however, is greatly offset as Chinese universities face increasing financial difficulties and are required to raise their funds (Ji, 2000, p. 150).

From an economic perspective, university students are still consumers relying heavily on their families. It is increasingly so internationally, and is especially the case in China. As China's transformation from the planned to a market economy, the laid-offs from the previous state-

owned enterprises and some people from remote areas are much disadvantaged. By the late 1990s, when student fees were considered relatively low, a student needed at least 10000-10500 *yuan* annually for a 10-month academic year. Such an amount was already astronomical to many families. According to a survey in Shandong Povince, only 8.01% students' families could cope the whole amount on their own, 22.43% could only manage half of the amount, and 43.68% could afford less than one third, and 10.2% students felt absolutely helpless with the amount (Liu & Jia, 1998).

Chinese parents are well known for being hard savers for their child's education (Lee, 1996), and the hardships they experience are often unimaginable for many of those living in affluent industrialised nations. However, as many families are in absolute poverty, they have no way to save money and it is hard for them to borrow. In such cases, assistance from universities, although vital, cannot suffice, as the following stories illustrate:

One male student at Zhongshan University in Guangzhou was once a leader of the student union at the University. After his father died, his mother remarried. He and his younger brother relied on their grandfather's earnings from selling bean curd. Their grandfather was in his 80s, and could not really work much. Therefore this student could have little financial support from his family. During mealtime at the University, he often stayed in his dormitory lying in the bed and pretending to be asleep. Another female student was also at Zhongshan University. She had very elderly and mentally deranged parents. The whole family means of livelihood was her elder brother's labour work in the city during slack season in farming. She either made an excuse of stomachaches or hid herself in toilet when her classmates went to meals. She had one meal a day, which was normally some rice or a bun only. Both students relied nearly exclusively on the financial assistance from the University, which was less than 70 *yuan* (about 9 US dollars) a month. Such stories, however, sound familiar to many Chinese people nowadays (see, for example, Wu, 2002).

One student respondent made the following comments:

"I can feel a widening gap between the rich and the poor now. Some of my fellow students call cabs to go to down town, but I have to walk 3-4 kilometres in order to save 0.5 *yuan* (about 7 US cents) (bus fare). My classmates ring their families and friends (in other parts of China) for hours, but I often hesitate whether to make local calls, which costs 0.22 *yuan* per unit. Because I am hard up, I can't have many things that I want, such as music CDs, favourite books, and even stationaries" (Field Interview in Qingdao, December 2001).

Without sufficient financial support, these students' life is under threat. According to a survey in Hubei Province in 1995, 40% students had to limit their expense below 150 *yuan* monthly, and 10% less than 100 *yuan* (Yu, 1996), while a university student would normally spend nearly 200 *yuan* monthly at that time (Li, 1997).

The straitened circumstances hardly fail to exert strong impacts on such students' spiritual and social life. While many of these students face their economic difficulties courageously, some are often under great mental pressure. The Chinese governments at various levels and higher education institutions have worked together to have some policies on stage. Yet, within a globalised context of competition culture, corporate managerialism, efficiency and accountability in higher education worldwide (Mok & Chan, 2002), 'efficiency' has been given the highest priority in China (Xie, 2001, p. 221). University students from poor families will continue to be a knotty issue well into the coming years.

Opportunities for Receiving Higher Education in Less Developed Regions

Globalisation never meant global equality. The real purpose of the contemporary global economy is to conserve the wealth of the rich, to protect privilege, and to maintain the advantages of the G-7 over the rest of the world (Yang, 2002b). Indeed, in effect it makes the rich richer, guarantees the perpetuation of privilege, and maintains the caprices of the moneyed, over the very survival of those without it. Gaps between rich and poor, the haves and the have-nots, the overdeveloped and underdeveloped regions, have grown exponentially. For example, the income gap between the fifth of the world's people living in the richest countries and the fifth in the poorest was 74 to 1 in 1997, up from 60 to 1 in 1990 and 30 to 1 in 1960 (UNDP, 1999, p. 31).

Inequality has also been rising within many countries since the early 1980s. Europe and Japan, China and India are all splitting into a minority of winners and a majority of losers. In China, disparities are widening between the thriving export-oriented coastal zones and the provinces, especially those in the interior (World Bank, 1997): the human poverty index is just under 20% in coastal provinces, but more than 50% in inland Guizhou (UNDP, 1999, p. 3). There is great variation across provinces according to available human, financial and material resources. In 1995-1996, while local education expenditure in China's eight western provinces was 3.37% of GDP on average, it was 1.98% in the costal region. The average per capita education expenditure from 1988 to 1996 was 67.59 *yuan* in the inland, and 210.02 *yuan* in major cities (Yuan, 2001, pp. 199-200).

China's illiterate population is huge. According to the National Statistical Bureau, by 1994, 22.5% of the 430 million rural people were either real or functional illiterates. The percentages of those with primary (years 7-12), junior secondary (years 13-15) and senior secondary (16-18) education were respectively 38.67%, 31.43% and 6.81%. In other words, over 60% rural population had an education lower than six years primary education, concentrating especially in the impoverished areas largely in the far west (Zhang, 1998, pp. 47-49). Under such a scenario, it is not surprising that higher education development is poor quantitatively and qualitatively in China's less developed areas. By the end of the 1950s, there had been no higher education institutions in Qinhai Province, Ningxia and Tibet Autonomous Regions.

Despite recent spectacular economic development (Lin, 1995), 6.7% of Chinese population now still live in poverty. They can be found in most parts of the country covering 25 of China's 31 provinces, concentrating more in far west, where agricultural economy still dominates. In Guizhou, for example, agricultural products occupy 30.1% of its GDP, and 35.7% of the population live in poverty. Similarly, Qinghai's agriculture weights 23.6% of its GDP (Zhang, 1998, pp. 5-6). The average per capita annual income in poor areas was 1000 *yuan* (about 123 US dollars) in the mid-1990s. It was only 248 *yuan* in one county in Guizhou. While the county's financial income was 6280000 *yuan*, its budget reached 48490000 (Zhang, 1998, pp. 92-93). Within such underdeveloped regional economies, the best possible local investments on education are often not good enough.

University fee policy, then, does not favour those living in remote areas with little money. As higher education is getting more and more expensive, the gap of higher education opportunities between the poor and the developed areas is rapidly widening. Rising tuition fees have substantially increased the difficulties of poorer families in sending their children to universities. A recent survey shows that many Shanghai parents are budgeting well over an annual amount of 10000 *yuan* for their child university education based on the current expenditure (<http://www.jyb.com.cn/gb/2001/03/28/2y/jryw/1.htm>, consulted on 16 March 2002). Such amount is incredibly astronomical to many families in China's vast less developed areas. Even for those already enrolled, it is extremely difficult to finish their university education. In 2001, 43100 of the total 230000 (18.6%) students came from families with less than 400 *yuan* monthly income per head, 29900 students (12.5%) came from families with less than 280 *yuan* monthly income per head (*China Education Daily* 28 March 2001).

The widening regional gap most affects impoverished areas, which are often minority regions too. For instance, by the end of 2000, the number of students studying in higher education institutions in Tibet was 5400, whereas in 2001, 38.8% of the 18-22 ages cohort went to

universities in Shanghai, and 70% senior secondary school graduates went directly to universities in Beijing. Regional imbalance becomes even more serious as market economy further settles in China. Nonetheless, social justice issues are not the first priority of the current strategy for higher education development. Such a policy orientation seems to be justified in a context that central governments devolve authority to lower levels in the hierarchy. In China, this is partly a response to calls for flexibility that was absent in the old system, but is also a mechanism for 'passing the buck'. When the central authority finds itself acutely short of resources, it decides to hand responsibility to other tiers and new actors, especially individual institutions and local governments (Bray & Borevskaya, 2001).

To make the situation in poorer areas worse, China is still practicing a discriminative university student admission policy, which gives preferences to students from major cities. Calls for a change have never been louder (*China Education Daily*, 9 March 2002, p. 4). Recently students all over China complained that universities in Beijing imposed unfair admission policies in 2001. Top institutions such as Peking and Tsinghua Universities adopt a quota system and admission requirements that favour local students. Tsinghua University, for example, has enrolled 324 students from Beijing; yet the quota for Shandong Province is only 80. Quotas for other provinces range from 3 to 105. Besides, students in Beijing only need to have a minimum entrance examination score of 454 in the art stream and 488 in the science stream to be eligible for admission into elite institutions, whereas the scores required from those in Shandong province are 580 and 607. Such a quota system has existed in China for many years. It was originally designed to ensure that the best students in under developed areas could have a chance to attend key institutions and enjoy the same quality of education. Nowadays, as academic qualifications become more important in China's job market, this discriminative admission policy further widens the gap of receiving higher education in different regions. A distribution of quotas will be tough between the central and local governments, especially when the Chinese government has begun to decentralise (*South China Morning Post*, 8 August 2001).

Scholarly Advancement within a Marginalised Range

Ancient China contributed significantly to the development of world science and technology. Today's China, however, lags far behind industrialized countries. The reason lies in the international knowledge system --- the people and institutions that create the knowledge edge, and the structures that communicate knowledge (Altbach, 1998, p. 193). The worldwide scientific communications system is centralized and dominated by the research-producing nations. The

most recent innovations in scientific communications, databases, and information networks are also located in the industrialized nations, especially in the United States.

On the other side of the fence, China is a science and technology giant among developing countries with relatively well-developed basic scientific and technological infrastructures including scientific laboratories, universities, a network of scientific journals, and large numbers of scientists and researchers. China has, particularly recently, promulgated ambitious scientific plans, and has taken scientific development seriously (Li, 1996). By focusing on extending its scientific base, supporting scientific research and higher education, and ensuring that the best scientific personnel do not leave the country, China's scientific research has been sustained at a reasonable level (Thulstrup, 1992; Zhong, 1998).

To date, China remains marginalised in the world scholarship. The overall picture of China's research strength in the international knowledge system is mixed, a "giant periphery" as Altbach (1998, pp. 189-197) has referred to. While China is catching up rapidly with the world cutting edge in some academic fields with an increasing number of internationally active scholars, its scholarship is still largely unrecognised, and far from integrated with the world mainstream.

Government-Initiated Projects

To catch up with and surpass the world's advanced levels has long been the fundamental themes in many spheres of China's modernisation. It is neither a wholly novel, nor primarily contemporary social phenomenon in higher education sector. Nevertheless, there are striking novelties in the officially defined target to build up world-class universities in China. 'World-class university' has already become a buzzword within the past five years or so. On the campuses of major Chinese universities, pictures and slogans on this theme can hardly be missed at university main entrances, on the wall of major buildings, and even along crane arms at university construction sites. Such endeavours have been legitimised since President Jiang Ze-min pointed out in his speech at the conference celebrating Peking University's centenary in May 1998, "To realise modernisation, China must have quite a few first-rate universities of international advanced level" (<http://www.net.edu.cn/20010101/21881.shtml>, consulted on 30 March 2002). Since then, Peking, Tsinghua and eight other universities have been handpicked for Beijing's Transcentury Project. "We aims to make them world-class institutions within the next three years", says Education Minister Chen Zhili (<http://www.asiaweek.com/asiaweek/features/universities2000/article-china.html>, consulted on 12 February 2002). Towards this end, Chinese governments at different levels have taken various

administrative and financial initiatives. Among them, the most prominent are the “211 Project” and the plan to build up key national bases for humanities and social sciences research in regular higher education institutions.

The “211 Project”

“The 211 Project” is the Chinese government’s recent endeavour aimed at strengthening about 100 institutions of higher education and key disciplinary areas as a national priority for the 21st century. It is an important measure to facilitate the development of higher education in the context of the country’s advancement in social and economic fields (Christiansen, 1996; 2001b). Mok. Primarily aiming at training high-level professional manpower to implement the national strategy for social and economic development, the project has significance in improving higher education, accelerating the national economic progress, pushing forward the development of science, technology and culture, enhancing China’s overall capacity and international competitiveness, and laying the foundation of training high-level professional manpower mainly within the educational institutions at home.

The mission of the project is, via government-initiated activities, to strengthen a number of institutions of higher learning and key disciplinary areas. It is envisaged that after several years’ efforts some of them will have greatly improved their quality of education, research, management and institutional efficiency. In addition, these institutions will also have made remarkable progress in reforming their management and thus become the bases for training high-level professional manpower and for solving major problems for the country’s economic construction and social development (*China Education Daily*, 7 December 2001). As a result of such efforts, the group of institutions will set up national standards in overall quality, with some of the key universities and disciplinary areas approaching or reaching the advanced international standards. The majority of them will have enhanced their physical conditions and staff competence, in addition to noticeable achievements in human resources training and scientific research. Adapting to regional and sectional development needs, these institutions are expected to play a key and exemplary role.

The project consists of three major components for development: the overall institutional capacity, key disciplinary areas and public service systems of higher education.

The improvement of overall institutional capacity is the most important task of the project. It is also what the project is generally referred to. It requires great efforts in bringing up a large number of academic leaders and competent teachers who have high academic attainments and

prestige both at home and abroad. The training of young academic leaders is particularly stressed. The reform of education and teaching has been carried out in depth in order to optimise the structure of academic programs and to enhance the overall student development in moral, intellectual and physical aspects. Measures are to be taken to enhance the infrastructure and laboratory facilities indispensable for teaching and research to create necessary conditions for training as well as attracting outstanding talents. Steps are to be taken to improve efficiency through moderate institutional expansion, enhance scientific research, and strive for the commercialisation of research findings in order to accelerate the pace of transferring scientific achievements into productivity. Efforts have also been made to strengthen international exchange and cooperation in higher education, and raise the international profile of Chinese higher education institutions.

The development of key disciplinary areas is another major component of the project. It aims to enhance the capacity of training high-level manpower in the frontier fields of science and technology. Among the institutions with favourable conditions, efforts have been made to identify key research bases, which can exert significant impact on the country's social and economic development, scientific and technological innovations, and the national defence. Efforts have also been made to broaden the coverage of various disciplines to foster the emergence of groups of disciplinary areas and research bases. Emphasis has also been put on the establishment of some key disciplinary areas for national economic and social progress to optimise labour division and achieve mutual reinforcement.

The development of public service systems of higher education is often ignored by people as part of the project. It comprises three components: the Chinese Education and Research Network (CERNET), the Library and Documentation Support System (LDSS) and the Modern Equipment and Facilities Sharing System (MEFSS). Linking up all major universities in China and the Internet, the CERNET provides information services to the sectors of education, science and technology, and customers from all walks of life in China. The LDSS backed by the CERNET, establishes a national comprehensive documentation centre and a number of documentation centres for various disciplines, and forms a documentation and information sub-network with extensive connections to similar systems both at home and abroad. In light of regional conditions and development priorities of the disciplinary areas, the MEFSS service centre has been set up in major cities to raise the efficiency in utilising facilities.

The implementation mode of the "211 Project" deserves our particular attention in consideration of the changing governance in China's higher education. The "211 Project" is mainly oriented to economic development of China. In principle, all projects aimed at

strengthening key disciplines and public service systems of higher education are integrated in an overall plan and implemented in selected universities for consolidation, upgrading, and improvement, so as to effectively utilize financial resources and bring into full play the overall efficiency of higher education institutions. A small number of key disciplinary areas and other development projects are accommodated in other institutions of higher learning.

The funding required for the project can be generated through a co-financing mechanism involving the State, local governments and higher education institutions. In line with the existing administrative system of higher education, funding mainly comes from the central departments and the local governments that have the jurisdiction over the universities concerned. Special funds earmarked by the State serve to initiate, support, guide, and readjust the development of the project. The special funds allocated by the central departments and local governments accord priority first of all to meet the need of the State key disciplinary areas and the public service systems of higher education, and secondly to the infrastructure development which is imperative for universities to upgrade their standards.

Through the procedure, organization and management of the project, the role of the state can be illustrated clearly. The State Council set up a ministerial coordinating group for the project. The group is responsible for coordination and decision-making on major policy issues. Members of the group come from the State Council, the State Planning Commission, the Ministry of Education, and the Ministry of Finance. An office under the coordinating group was set up, charged with the responsibility for the project implementation, management, review and evaluation. The office, which is located in the Ministry of Education, consists of officials from the Ministry of Education, the State Planning Commission, and the Ministry of Finance.

The approval and management procedure of the project are subject to the same provisions for the State's capital construction projects. It is incumbent upon the responsible central departments and provincial governments, in consultation with the Ministry of Education, to conduct preliminary examination of the candidate universities and disciplinary areas that have applied for the project. After the preliminary examination, the departments concerned submit project documents to the Ministry of Education and the State Planning Commission. In accordance to the overall progress and national funding capacity, the Ministry of Education, together with responsible departments or provincial governments, submit to the State Planning Commission a report on the project feasibility. The State Planning Commission makes an overall assessment and approves projects on the case-by-case basis according to specific objectives, project merits, the availability of funds raised by the central departments, local governments, and institutions themselves, as well as the possibility of special funding from the State.

At present, under the direct guidance of the Communist Party of China Central Committee and the State Council, and with the coordination of the State Planning Commission, the Ministry of Education, and the Ministry of Finance, the “211 Project” has been carried out smoothly. 98 institutions of higher learning nationwide have gone through sector preliminary examination as scheduled. 602 key disciplinary areas have been identified. Among them, 62 (10.1%) are from social sciences and humanities, 57 (9.5%) economics and law, 89 (15%) basic science, 42 (7%) environmental resources, 255 (42.4%) industry and high-tech, 66 (10.6%) medicine and nursing, and 31 (5.1%) agriculture. The overall investment during the Ninth Five-Year Plan was 110.37 billion *yuan*. In addition, 73.32 billion *yuan* complimentary investment on construction and facilities was raised. By 31 August 2000, the actual investment reached 150 billion *yuan* (<http://www.cedudaily.com.cn/gb/2001/02/08/zy/jryw/3.htm>, consulted on 16 March 2002).

According to the Deputy Education Minister Wei Yu, the project has come to the implementation of phase one. Based on the sector preliminary examination, the inter-ministry coordinating group has instructed the 98 institutions to demonstrate and verify their feasibility study for the project. The State Planning Commission has so far approved the project feasibility study reports of most of those institutions. As a result, these projects were incorporated in the Ninth Five-Year Plan, and have already been launched. The examination and approval of the project feasibility study reports submitted by the rest of those institutions are now in full progress. The second phase of the project will focus more on the establishment of world-class universities in China (*China Education Daily*, 8 February 2001).

Building up Key National Bases for Humanities and Social Sciences Research

Many signs have indicated that China’s open door policy is only going to continue. Chinese universities are thus further confronted with an international context. Within this context, one urgent task is to improve the level of internationalisation in the humanities and social sciences. Due to the varied ideologies, paradigms and discourses inherent in these fields, and high dependency on language to convey their meanings, dialogue with international community is far more limited. The integration of social studies with the international community has, however, attracted the government’s attention to restructure research strengths and infrastructure in humanities and social sciences.

In June 1999, the Ministry of Education issued the *Plan to Build up Key National Bases for Humanities and Social Sciences Research in Regular Higher Education Institutions*. The plan included a selection of about 100 leading research centres in the country, chosen for their

relevance to economic and social development and to higher education reform; provision of spadework for future development by reforming the existing administration system --- including initiating major projects, allocating funds and grants, and supervision; and improvement of the overall research capacity of these listed centres to cutting-edge level, and thus ensuring a substantial international reputation. These initiatives have been well perceived nationwide. They are expected to have significant impact on the reform and development in the humanities and social sciences in Chinese universities.

To achieve the aforementioned targets, three stages have been scheduled to implement the Plan. Step one (1999-2000) focused exclusively on identifying 103 centres of research excellence. Step two (2001-2005) includes comprehensive policy implementation. This stage aims in particular to ensure that the overall research strength of the selected centres achieves leading level within China by 2005. Those failing to do so will be excluded from the plan, and new centres with recent excellent performance in similar areas will be added. The final stage will start in 2006.

It should be mentioned that while the plan is basically an initiative of the central government, with the Ministry of Education playing a major role in administration and finance, it is, just like the “211 Project”, a “fishing” project (as it is jokingly referred to in Chinese higher education circle): to generate revenue from all possible sources.

The plan has been in operation for two years, and has yielded intense competition among universities, which is welcomed by the Chinese government. This echoes the global paradigm shift in public management, as manifested by a more individualistic, competitive and entrepreneurial approach central to the new type of competitive contractual state settlement (Robertson & Dale, 2000). According to the Ministry of Education, such competition helps use financial and human resources at different levels where they are needed most. Those 103 listed centres are spread across 40 universities, of which 27 are under direct administration of the Ministry, and 13 are under other ministries and provincial governments. Despite their dissimilar administrative jurisdiction and geographical location, they share considerable features.

Together, these centres have shaped a general disciplinary structure that combines basic theoretical subjects and applied areas, including traditional disciplines and new multidisciplinary studies. The overall proportion of theory-oriented centres is nearly 50 percent, and traditional disciplines comprise a high proportion. For example, the Centres of Ancient Chinese Document (Peking University), Classical Chinese Literature (Fudan University), History and Theories of History (Beijing Normal University), and The Chinese Language History (Zhejiang University) are all ranked at the top of the list.

New multidisciplinary studies centres have also attracted much attention. The Centre for China's Financial and Banking Policy (People's University), for instance, was included for its effort to combine finance with banking, linking theoretical research to policies studies. Similarly, Chinese Language and Modern Application (East China Normal University) is a centre that emphasises the combination of theoretical linguistic enquiry with current practice. While theoretical enquiries consider potential applications, applied studies are strengthening their conceptual foundations. For example, Nankai University's Political Economy Centre goes far beyond a traditional economics framework by focusing on other more application-oriented issues such as the Internet and economic simulations. The same can be said of the Centre for Developmental Psychology at Beijing Normal University.

Themes with theoretical and practical significance for current economic, political and cultural development have been emphasised. The plan has included the Centre for Socialist Market Economy (Fudan University), State-Ownership Economy (Jilin University), and Social Welfare (Wuhan University). As for the area of law and order, of crucial interest in contemporary China, the plan has selected the Centres for Political Development and Government Administration (Peking University), Social Administration (Zhongshan University), and Criminal and Legal Studies (People's University). Education and culture are also included in the plan, in an effort to be relevant to the current situation. A number of large research centres have been established as the result of the plan. The most prominent ones include the Centres for the Theories of Deng Xiao-ping (Peking University), Ethics and Morality Construction (People's University), Rural Education (Northwest Normal University), and University Moral Education (Tsinghua University).

The listed centres are not confined to those with existing records of excellence. Programs that currently lack first-class research achievement but show promise and solid resource infrastructure enjoy special privileges. In this respect, issues relevant to China's development in the 21st century are especially obvious targets of the plan. The Centres for Rural Development (Central China Normal University), Northwest Historical Environment and Economic and Social Development (Northwest Normal University), China's Minorities (Central Minority University), International Law (Wuhan University), and World Trade Organization Studies (Foreign Trade University) all fall squarely into this category. Others include the Centres for Media Studies (Beijing Radio Universities), Chinese Folklore (Sichuan University), and Huizhou Culture Studies (Anhui University).

The plan echoes an international trend in educational restructuring: ongoing devolution in finance and administration with increasing central government influence in curricula

(O'Donoghue & Dimmock, 1998). This major initiative to promote research deserves our particular attention as China's scholars in the humanities and social sciences have achieved far less international visibility than their colleagues in engineering and the natural sciences. The humanities and social sciences, however, serve as a more accurate barometer of the extent of China's progress in the internationalisation of higher education.

Along with other features, the plan stresses China's practical needs. This would appear to be reasonable in China, where problematic issues demand urgent practical responses and concentration of limited resources is designed to "use the best steel to make the knife's edge." However, one thing is certain: the plan will excise an enormous impact in China on the humanities and social sciences in the years to come.

Achievements, Burden and the Road ahead

Since the reopening to the outside world, China's representation in the international scientific community has grown rapidly. The number of papers by China's scholars that appeared in prestigious mainstream journals in sciences and social sciences were 1,293 in 1981 but had climbed to 11,435 by 1995. The numbers of citation were 8,517 in 1981-1985, but had reached 77,841 by 1993-1997 period (World Bank, 2000, p. 124). While international major scientific citation indices [*Science Citation Index (SCI)*, *Index to Scientific Reviews (ISR)*, *Index to Scientific and Technological Proceedings (ISTP)*, and *Engineering Index (EI)*] ranked China differently according to 1989 data: 15th on SCI, 28th on ISR, 13th on ISTP and 8th on EI (Institute of Scientific and Technology Information of China, 1990, pp. 51-54), China has had a great leap forward to a substantial role in the hierarchy of international scientific powers, competitive with Spain, Switzerland and Sweden by the late 1990s (Zhong, 1998, pp. 61-62).

Taking information technology (I.T.) as an example, the Middle Kingdom, like every other country with an electricity grid, is trying to develop its I.T. sector. Unlike most, however, China has in the past several years made a rapid ascent up the I.T. food-chain, driven by leaders who won't accept a future where the country's critical infrastructure --- the telecommunication system, microchips, computers, software programs --- carry labels that read "Invented in the U.S.A.". China's sheer market size and large supply of enthusiastic I.T. professionals will turn ambition into reality in time. According to *Asiaweek*, China already has become a global centre for hardware manufacturing, and will be a global centre for software development in five to ten years. *Asiaweek* even questions "India should worry, but should Bill Gates"

(<http://www.asiaweek.com/asiaweek/technology/article/0,8707,168248,00.html>, consulted on 12 February 2002)?

Dr. Zeng Jie, an academic from The South China University of Technology, who is also an engineer-turned-Internet-entrepreneur based at Shenzhen, a southeast port city neighbouring Hong Kong, made the following comments:

“The future in China is high tech and we are making the future. Everyone is facing the same direction. The government, the market and the consumer all want to see China making its own high-tech products. If you work in high tech in Shenzhen, you feel you control the scene, like the U.S.A. five years ago. There is everything to play for” (Field Interview in Xiamen, December 2001).

China’s edge is in the quality of its students. Mainland universities draw from a huge gene pool. Some seven million Chinese apply for places annually. Every year, 20000 mainland students enter top-notch overseas universities. Increasingly they return home to help build a modern economy, a phenomenon the government is trying to foster. Part of a \$120 million Technology Innovation Fund launched by Beijing last year is earmarked for tech start-ups founded by returning students. Tens of thousands of new engineers pour out of Chinese universities each year. China is marketing its engineering and research talent to the world. Software giant Microsoft set up a major customer support facility in Shanghai because of this perceived fantastic talent pool.

Many Chinese universities including the top and the less prestigious ones often target at the world leading research. Professor Zhang Wei-ping, Dean of School of Mathematical Sciences at Peking University said:

“I always ask my faculty members to follow closely the latest international developments. If you have the best in China, I am not interested at all. Your research must be international standard. My top job is to insist my staff publish in international journals” (Field Interview in Beijing, December 1999).

This is not unique. Professor Wu Jun-qiang, Director of Academic Affairs Office at Zhongshan University responded:

“Let’s take Mathematics research as an example, you cannot be satisfied with the nationally leading level. The leading level in China is meaningless here. Only the internationally leading researches are really important to us” (Field Interview in Guangzhou, April 1998).

Even in less prestigious universities such as Qingdao Ocean University, internationally active scholars are not rare to find. Professor Liu Qin-yu, for example, a 60-year-old female Deputy

Director of Institute of Physical Oceanography, co-published an article in *Science* in 2001, and had three other publications in international mainstream journals. Another example at the same University is Professor Chen Ge, Deputy Dean of College of Information Science and Engineering has been internationally active, and is currently the Secretary of the Pan Ocean Remote Sensing Conference (PORSEC) at the age of 36 (Field Interviews in Qingdao, December 2001).

With such considerable achievements, can we ask whether or not mainland higher education institutions are catching up with their international peers? *Asiaweek's* recent university ranking reveals that in research and international recognition, Chinese universities are even lagging behind their Asian counterparts (http://www.asiaweek.com/asiaweek/features/universities2000/article_china.html, consulted on 12 February 2002), not to mention how they compare to world leading universities in industrialised countries.

Life science as one of the most important part of the contemporary science and technology can serve here as a stark example. To date, Chinese scholars have produced very few research articles in the leading journals in this field. Reasons are many, including their lack of the English language proficiency, and the likely prejudices of western editors. It is, however, the low-level research capacity and the shortage of creative thinking that are to blame. In 2000, *Nature* published 205 articles from Germany, 105 from Japan, 62 from Switzerland, 49 from Australia, 35 from Sweden, 17 from Austria, and 7 from China. *Science* published 71 articles from Japan, and 7 from China. In 2001, 5 mainland and 3 Hong Kong scholars published articles in the most prestigious life science journals: 3 appeared with *Science*, 3 in *Nature Genetics*, and 1 in *Nature Neuroscience* (Rao, 2002, p. 91).

These numbers show that on the one hand, researchers from mainland China have made encouraging achievements, which are closely related to China's recent economic growth and the increasing investment on science, technology and education. The fact that most of these articles came from a handful of institutions shows direct association with various Chinese government-initiated projects to promote knowledge innovations. On the other hand, these numbers demonstrate that catching up with the world cutting-edges in science and technology remains an arduous task, and arguably, except for a few special cases, a far dream in present China.

Within China, the situation is highly differentiated. Internal differentiation among various disciplines demands attention. The abovementioned achievement is largely confined to natural sciences and technology. China's humanities and social sciences scholars have not achieved the emerging visibility of their natural science and engineering peers in the international community.

The numbers of publications reported by international citation indices, which have become increasingly important in the assessment of research at institutional, departmental and individual levels, however, have not been popularly employed as an effective means in the social sciences (Deng, 1995, p. 165; 1998, pp. 43-46), precisely because too few publications produced by Chinese social scientists appear in internationally reputable journals (Yang, 2002c).

Within the current framework of international knowledge system, any knowledge that does not belong within the system is not knowledge, simply because it is not circulated internationally. This explains why indigenous Chinese scholarship is not treated seriously. To avoid being marginalized yields the following dilemma for Chinese scholars: on one hand there is no effective way to avoid marginalisation except by joining the world community which leads to reliance on foreign scholars, and returned students, in the process of knowledge transfer and intellectual contacts; on the other hand, this yields increased dependence on the international knowledge network, and in some ways reinforces China's peripheral status, by emphasizing the mainstream international knowledge (Altbach, 1998), at the expense of indigenous forms of scholarship and understanding.

Chinese researchers in the social sciences and humanities, in particular, face a challenge of paradigm shifts from the traditional Chinese to the most internationally accepted Western. This does not mean negation of Chinese traditions; but even the further development of Chinese research traditions should be on the grounds of a mastery of the Western tradition, too. During the course of the transition, paths will be bumpy (*The Australian*, 23 January 2002, p. 29).

Financial Stringency with Heavy Investments

Under the impact of globalising market forces, there has been a general trend towards the reduction of per capita public funding to higher education, despite the continuing increase in student enrolments, leading to the current fiscal crisis of higher education (Altbach, 1997, p. 17). The burden of funding higher education is being shifted more and more on to the shoulders of the individual. Even public universities are increasingly funded by non-governmental sources, especially via student tuition and other fees, donations raised from alumni and others, and direct payment from business for services provided by the universities. Higher education is being asked to be more accountable for how its diminishing portion of public financial support is spent.

The ideology underpinning this transformation has been summarised as the assumption that education is a private matter of individual choices and personal benefits gained by graduates for the employment market (Boumelha, 1998, p. 37). Behind this view stands the model of education

that devolves the responsibility for the common good to the aggregate of atomised individual choices. This approach breeds a spirit of competition among the different higher education sectors, driving institutions towards the supposed rewards and incentives of the market place and away from the traditional concept of an academic community of scholars dedicated to the pursuit of learning (Smolicz, 2000).

A major change has occurred in the evaluation of university performance, with a government initiative towards a more competitive allocation of operation funds. Such allocations have demonstrated increasing inequalities within higher educational institutions (see, for example, Taylor et al., 1998; Richardson, 1998).

Under the conditions of globalisation, the effect of government frugality in cutting back university funding, accompanied by the often indiscriminate expansion of student numbers has been deleterious. Across a range of countries, the quality of academic teaching has suffered in diminishing student contact, especially with senior staff, who often appear intermittently and whose lecturing standards may lose much through constant repetition and lack of updated material. The recent 'downsizing' perpetrated on academics has cut deeply into the heart of higher education, especially in the humanities and social sciences.

Parallel to financial cuts is the move to privatisation, which tends to favour those who can afford the fees involved. The defects revealed in the functioning of the privatisation measures, especially in relation to the calibre of graduates produced and the research quality and output of academic staff, demonstrate the danger of placing the fate of universities at the mercy of the market-driven forces of globalisation (Smolicz, 2000, p. 122).

China's higher education cannot immunise itself against the international context. While investment still relies heavily on national funds, diversification via donations from society, enterprises, public institutions and individuals is being encouraged. Universities are increasingly urged to cooperate with the private sector, and respond to market needs (World Bank, 1997, p. 43). Indeed, the private sector is becoming increasingly evident in China, both within and without higher education. Students are required to pay their tuition fees (Yin & White, 1993). Universities are increasingly asked to raise funds from various income producing sources (Cleverley, 1987; Hayhoe, 1996; Bray, 1998) and to generate their revenues (Min, 1999). As the professoriate is increasingly seen as a means to raise income for academic institutions (Altbach, 1998, p. 128), the need to operate profit-making enterprises distracts the staff from their legitimate academic functions. Engagement of faculty in moonlighting activities is a common event in China (Ch'I, 1997).

Professor Shen Ding-li, Director of International Programs Office at Fudan University pointed out:

“In the past, this University specifically was supposed to receive state funding only, which should guarantee its operation. It had been the case for many years, but has not been the case in the last 10 years or so. Money from the government becomes less and less. Nowadays, our budget from the (central) government accounts only for about 20%, something like 1/5 to 1/4, much less than 1/3. The central government gives us 80 million Chinese *yuan* a year, while we operate at a budget of 500 million. For the last four years, we have also received money from the city government. This is not enough. We have to raise money from various sources. The good news is that from this year on, and for the next three years, our University will receive 400 million Chinese *yuan* annually from the central and city governments combined. I won't imagine our government budgets will be cut in three years time” (Field Interview in Shanghai, April 1999).

Unlike many countries, however, China is now investing heavily on higher education in one sense. This has taken two forms: one is through national key programs, as shown by the abovementioned “211 Project” and the plan to build up key research centres in the humanities and social sciences. There are some other governmental initiatives including the 863 high-tech programs and the national natural sciences fund. Many ministerial and provincial/city governments also have their projects and grants to promote research and development. A substantial proportion of such resource goes to universities.

The other form is highly discriminative policy by selecting a handful of elite universities to invest focally. In 1999, Peking and Tsinghua Universities each received an extra \$36 million. For the current year, each will have twice that amount on top of its regular \$14.5 million allotments (*South China Morning Post*, 1 August, 2001). The resource is meant for new research spending, special stipends and housing. Such special allotments, however, are generally confined hierarchically to the prestigious universities, and geographically to those institutions in more affluent, especially coastal areas.

It is now a common practice for many universities to pay selected professors extra stipends every month, with those setting up laboratories getting more. Universities often have to be in partnership with business world to offer better welfare for their members, for instance, building apartment units for teachers and students. All of this requires resources. Eventually, the government wants universities to shoulder half of their budget --- without raising tuition fees beyond 20% of actual cost. The gap will have to be filled by private-sector endowments, consultancies and commercial spin-offs. For universities, 50% of their revenue needs to be raised by themselves. Such a task is only achievable for more prestigious universities such as Fudan

University, as they are well known, and have strong research capacity to attract investment from the industry.

The story of provincial universities, which form the mainstay of China's higher education, is totally different. One direct effect of the massive enrolment increment is the huge gap between student demands and the actual operating conditions in many universities. The continuous increase of student numbers for more than a decade, particularly since 1999 when admission rate increased from less than 30% to nearly 50%, has put great pressure for funding. Yet funding increase lags far behind, leaving most Chinese universities with overloading operation. Student dormitories are often dark and worn down by years. Many universities have daily problems with water, gas and electricity facilities. In some areas with tough climate, the situation is fairly serious. In the northwest region, for example, some university classrooms' temperature in winter was often 10-20 degrees minus, let alone other demands such as library collection, laboratory facilities, and the Internet access (see Ji, 2000, pp. 150). Under this scenario, education quality has to be compromised.

Another effect is the increasing differentiation within higher education sector. First is among different universities, while Peking and Tsinghua are in great delight to receive the special favour from the central government, other equally, if not more, qualified universities feel they are given the cold shoulder. Nanjing University, for instance, while boasting its top ranking for recent years, has not been equally fortunate in winning the privilege from the national government. Its president even resigned to protest.

Another form of internal differentiation is the regional differences. As shown above, China's imbalanced regional development has been a social problem for thousands of years. It is being aggravated, rather than reduced, by the current transformation from the planned to a market economy, and by the shift of regional development policy since 1978 (Hu et al., 1996). Higher education development, as both a stimulus for and an outcome of change, differs from region to region due to very different socio-economic conditions and tasks (Pan & Wu, 1990; Ding, 1995). Regional financial disparity has an evident effect on universities. Higher education institutions in better-developed areas are much more likely to receive significant assistance and investment from various organizations, particularly the private sector. Institutions in poorer areas, by contrast, often feel helpless in the face of the impossibility of building collaborative teaching and research programs.

Responses from the interviewees confirm this differentiation. While university administrators in Guangzhou, Shanghai and Beijing acknowledged that resources were always there, and the real issue was how to reach them (Field Interviews in Guangzhou, Shanghai and Beijing, respectively

in April 1998, April 1999 and December 1999), those from Xinjiang strongly insisted that despite that they had tried every means at their disposal, there was no way to raise sufficient funds (Field Interviews in Urumqi, September 2000).

A further element of differentiation is across disciplines. Different financial situations have provided various departments with very different bases for their future developments. Even within one institution such disciplinary disparities are striking. In the South China University of Technology, for example, a criterion for performance assessment with the central focus on economic benefits has been implemented in some faculties. The following comment of an interviewee from Chemical Engineering serves as an example:

“Nowadays in China, we can hardly support ourselves if we fail to be granted research funds from the governments. If we can’t cooperate with industry, we won’t live a good life. I think money means intelligence these days. The first priority must be money. It can also be utilized as the sole criterion for university development” (Field Interview in Guangzhou, April 1998).

One interviewee, a professor of English, also stressed the importance of finance, but from different perspective:

“Our situation is very different from the engineering departments. The most fundamental difficulty is our financial situation. Each year I receive at least three or four conference invitations. I can’t go because I can’t afford the airfare. I went to the University of Hong Kong in September 1997, but that was because they paid all the fees for me. Our Foreign Languages Department has been granted a research project by the National Social Science Foundation. As you know, it is very competitive, less than ten nationally, but it is about 20,000 *Yuan* only. As a foreign language department, we should have some foreign newspapers. This year we can only have the Hong Kong-based *South China Morning Post*, which costs us 4,000 *Yuan*. Last year I received an invitation from the City University of New York. They offered me a single airfare. But I still couldn’t go because I had difficulty to find support for the return leg of the journey” (Field Interview in Guangzhou, April 1998).

Conclusion

Parallel to the internationally fundamental change in the philosophy of governance and the way higher education is managed globally (Flynn, 1997; Hood, 1991), there has been a strong trend to diversification and decentralisation of higher education in China since the 1980s. The Chinese government has used this policy to allow more flexibility for governments and practitioners at

local levels to run universities. China is now experiencing both functional and territorial decentralisation (Bray, 1999, pp. 208-209).

Such developments have affected the mode of governance in higher education and the state-university relationships. Within this policy context, individual institutions now have more managerial autonomy in deciding matters related to student enrolment, specialty adjustment, staff recruitment, financial distribution, performance evaluation, salary differentiation, and international cooperation and exchange. Meanwhile, they face increasing financial pressure, and are required to improve their administration efficiency and accountability in response to the demands of different stakeholders.

At the same time, the latest developments in China's higher education confirms findings reported by many international comparative studies in higher education policies that decentralisation can be a mechanism for tightening the control of the central government over higher education (Mok, 2001c). There is a coexistence of both decentralising and centralising trends in higher education governance. While China's higher education has become marketised and privatised, this chapter has shown that the control of the central government over higher education has by no means been reduced.

As Gopinathan (1996) suggests, even as educational paradigms and ideas take on a global character nowadays, the factors that determine education policies are essentially national in character. The latest developments in China's higher education echo the features of the current transformative Chinese society. While China's higher education is under increasing pressure to flow with international tides, the lingering influence of China's longstanding planned system, and the complex domestic situation combine to add difficulties in smoothening China's ongoing social transformation. This chapter has analysed the challenges and tensions by delving deep into the progresses and paradoxes in the current massification of China's higher education.

Using the latest developments in China's higher education as illustrative examples, this chapter has demonstrated the change of governance in the Chinese society. It argues that the role of the state is still strong, although it is being altered. Unlike the situation in many countries, Chinese governments at various levels *are* investing heavily on higher education. Considering China's social, cultural and historical realities, the role of the state in China remains necessary, as a regulator, a facilitator and a negotiator. The current situation is that the state in China has all these roles, but arguably, such different roles are often not operated in a mutually beneficial way.

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