

China's Mass Higher Education: Problem, Analysis, and Solutions

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China is eagerly spearheading a massive expansion of higher education in a very radical way in recent years, enrolment has doubled in just 3 years and the participation rate has reached 17%. Its pioneering spirit will set an example for many other modernizing and industrializing nations, and its experiences and lessons are of help to them too, and while leaving much room for discussion. The paper deals with the higher education great expansion process with China as a case analysis. Firstly the system of higher education in China is described to give a general idea of China's higher education system, which is also the start point of massive expansion. The focus of this paper is, however, mainly on the process of frog-leap expansion of higher education taking place in recent years in particular. Besides the description of the process, the challenges arising and the measures to meet these challenges are detailed, and finally three implications are explored.

Key Words: mass expansion of higher education, higher education, administration

Of great interest is it that during recent years China has been taking a bold drive towards mass higher education. The total enrolments have been doubled over just 3 years, reaching 16-odd million in 2003, and its participation rate has jumped more than 4% over 1998, to more than 17%, reaching the stage of mass higher education. From 1999 to 2001, an acceleration period of mass expansion, there were at least 300 papers on the topic of Chinese mass higher education. Those papers however mainly focus on the strategic choices of sustainable development (Chen, M., 2001; Pan, 1999; Xie, 1999), and the problems and solutions arising from these massive strides (Cai, 2001; Guo, 1999; Li & Hu, 2001; Zhang, 2000). Before 1999, the year in which the acceleration expansion of Chinese mass higher education began, studies

were generally focused on the debate over the feasibility, scale and speed of how to realize mass higher education (He & Lan, 1998; Pang, 1998; Shi, 1992; Tan, 1994; Xian, 1991). Mass higher education as a world trend is pushing ahead in developing countries. So it is of significance to review experiences of the biggest developing country, China, in its expansion of higher education. This paper thus lays the focus on the historical perspective of the development of Chinese mass higher education with special emphasis on the current expansion in realizing mass higher education, which is of great help to both other developing countries and the enrichment of study on mass higher education.

China has witnessed a steady and rapid growth in the 1990s though the speed of expansion has been a hot debate. The gross enrolment rate went from 3.6% in 1991 up to 11% in 2000, an increase of over 3 times, a prominent signal for the determination to massively expand Chinese higher education. The most striking and most sudden growth took place in 1999, putting an end to the long debate over what pace to keep up with, and awakening obviously the strong sense of great expansion in higher education in China, further fire-starting the sprint towards mass higher education in just a few years. New entrants to regular universities and colleges,

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the backbone and representative of China's higher education institutions, rose in 1999 by some 47% over 1998, recruiting approximately 2.8 million college freshmen, then the total enrolments climbed up by some 32%, or about 10.5% of the college-going cohort (18-22) studying on university campuses, the highest increase both in absolute numbers and in relative amplitude in two decades. Afterwards, as premier Zhu Rongji said "enrolments in institutions of higher learning should be further encouraged..." ("Saving Students", 2000) the impetus to move forward to the expansion of higher education has never been greater, followed by another three years consecutive expansion. Up to the present, with a participation rate of over 17%, China is on the track towards mass higher education. This trend will not be reversed in years to come, and the expansion will be effectively realized well ahead of the time scheduled in the Plans for the goal of mass higher education, though the speed will hardly retain the same impetus as those in the last 4 years if the bottleneck created by the resources possibly given and alarming difficulties existing in the job market are considered. All these increases in the 1990s are internal expansions, i.e., not by establishing new colleges rather by increasing the economic scale size of every existing university from the average of below 2,000 in 1990 per school to over 6,000 in 2001,¹ meanwhile the institution numbers are approximately the same. In fact, with the gigantic advancement of structural rectification, the institution number has shrunk more after the radical amalgamation of universities in 1990s (Chen, D. Y., 2002). Interestingly, the total enrolments of postgraduates has also risen continually in these 3 years, from 199,000 in 1998 up to 393,000 in 2001, nearly a 2-fold rise. It is reported that there will be another 35% growth over 2002, recruiting 270,000 new postgraduates in 2003 (Jiao, 2002), a record high. So, the growth of higher education is all-around, straightforward and consecutively fast, which is probably the reason for it having drawn so much interest recently. Generally speaking, the drastic expansion is due to two prime reasons: to stimulate the economy and also to alleviate the pressure of competition for colleges.

Problems and Solutions

A process of mass expansion is never smooth, thus the author here would like to discuss some challenges and problems arising from this transformation in China although Martin Trow has studied this before in the context of western patterns (see a serial studies by Trow, 1969, 1970, 1974, 1979). As far as the problems are concerned, the most

serious arise in the period during which the first steps towards the creation of the mass higher education are taken; it is also this which forms the basis of this analysis.

Conflicts of Ideas

The widening of access to higher education is substantially the broadening of ideas about higher education. What is higher education for? Who have the right or privilege to receive a higher education? Can higher education be purchased in the market economy? Who is responsible for the provision of higher education? What is the quality of higher education? How does higher education respond to or maintain distance from the market? Is university still an ivory tower? Many questions confront and confound university insiders and make the transition from the elites to the masses a torturous experience, while outside laymen are forcing authorities to change higher education, the last stronghold of conservatism in this fast moving contemporary world. Given this context it is not therefore unusual in China that the current widening of enrolment of higher learning was proposed at first by economists.

This growing participation as was arguably expected, led to a changed concept of higher education, with more emphasis on the right of enjoying higher education on the basis of merit and the establishment of a cost-sharing policy rather than the free privilege only for a privileged few. Does higher in higher education mean the upper echelon of the masses? Are there far more talented individuals in the country than we had guessed or were willing to recognize? The definitions of human ability and of human educability have over the last century has become progressively more generous, and comparisons of participation rates in England and Wales with Scotland, Northern Ireland and the Republic of Ireland (never mind France or Japan) suggest that elitist assumptions about a strictly limited "pool of ability" have proved to be false. In the words of Lindsay Patterson: "There is no fixed 'pool' of potential students: people respond to opportunities that are available" (Paterson, 1997, p. 44). The notion of a so-called "pool of ability" severely impedes the smooth transformation of modern higher education. As Floud stated that "There is no iron law of the national intellect imposing an upper limit on the educational potential of the population. What only the few could do yesterday the many can do today . . ." (Floud, 1963, p. 52). Vernon also contested the belief "that there exists in the population a fixed distribution or 'pool' of intelligence which limits.... the numbers of individuals capable of higher education." (Vernon, 1963, p. 170). He

again argued that "something like 15 per cent of the population should.... be capable of work of university standard" (Vernon, 1963, p. 174). All these comments and viewpoints put forward in the early 1960s and though having relevance only to the UK, are still of a great significance to understand today's higher education changes related to broadening access. The Chinese always consider that engaging in higher learning is so lofty and dignified a goal that only a few can do this and those who have it can deservedly win higher social status and respect. If the access were relaxed, this status would as a result be depreciated, how could higher education maintain its current image? It is hardly acceptable to most people in a short period of time.

Pertinent to this traditional idea is how to assure the quality of higher education if the participation rate rises. Elite higher education has amassed a number of quality concepts, which are commonly unified and abided by strictly. The rigor of higher education acknowledged whilst restricted to the elites period seems to decreasing in the initial period of mass expansion, however what is actually happening is that it is being diversified. Because of this, since 1999, the very year of the sudden expansion of recruitment, hundreds of papers and articles have jammed the journals and newspapers headlines on the quality of higher education, even the theme of the first national conference of the Higher Education Society after the enlargement was on the quality of higher education and its assurance (Pan, 2001; Yang, D. G., 2001). The quality standard should be stratified accordingly or the expansion of mass higher education is unlikely to continue smoothly. The consensus of quality diversification has almost been reached (at least theoretically), thus China is changing its obstinate system of qualifications for university students, encouraging every tier and every college to build its own system of qualifications and to realize first-class standards among its partners rather than building up other tiers and other colleges. Continuing and indeed finishing the process of quality diversification by decentralising the setting up of programs and the recruitment of students to universities themselves, as has been undertaken by Ministry of Education (MOE), will be of tremendous help in achieving quality in the midst of mass expansion.

Resources Restraints

The development boom provided more young people with opportunities to receive a higher education, but it also strains the resources at colleges and universities when teachers and facilities fail to be improved at the same pace.

Such sudden increases in student enrolments brings about sudden constraints of resources, (which are the necessary preconditions for the healthy development of higher education). This results later in a sudden slowdown of enrolment enlargement due to cut backs in the scale of recruitment or the closure of underperforming colleges. The same restraints are appearing too during the latest great enrolment expansion, being the typical by-products of the process of mass expansion. Such practices have negatively affected the quality of teaching, angering students and parents.

According to a survey made by the Beijing municipal education commission earlier 2002, all 50 colleges and universities surveyed are adopting a cautious attitude towards enrolment (Hua, 2002). Among those surveyed, 63.8% hold a positive attitude to enrolment expansion. But 86% reported inadequate teaching standards and accommodation. Only 15% said they still have the potential for further expansion. Furthermore, 65.3% said they could no longer afford it. Many of those surveyed said the influx of students has crowded classes, swamped teachers and made it hard for students to concentrate on their studies in their now noisier dormitories. The annual statistics in the 2001 academic year presents the national ratio between students and teachers on average as over 18, compared with 11.6 in 1998, and well over 20 reportedly in 2002. On average, over 6,000 students per college are studying on campus; universities with over 10,000 enrolment students is not unusual over the nation, the largest one has more than 50,000 students (Wu, B. D., 2001). The speedy increase of school size poses severe challenges for the running of universities and also for the quality of student's general education as well.

The awful shortage of teachers thus is frequently the first headache met, especially for those teaching-intensive colleges that are very active in enlarging enrolment for the purpose of surviving economically by collecting more tuition fees from students. The bulging of students aggravates the already severe teacher shortages in basic courses like mathematics, physics, and foreign languages, computer sciences, among others which are the main and most important compulsory lessons for almost every major or program. Consequently, the contingent measures taken are to broaden the class size by multiples to reportedly some thousands of students having their class in an auditorium (Song, 2001), to increase teaching loads for teachers while maximize teaching salaries, and to re-employ the retired teachers and employ some concurrent temporary teachers, even to relax the qualifications for newcomers to teaching. Crowded classes make students feel

fretful, and over-loaded teachers have less time for their own professional development, leading to anxiety about instruction quality.

Moreover, physical facilities fall far short of those needed for student expansion. The deficiency of labs causes more students than is desirable to conduct experiments at one time in one group, even just to watch experiments performed by the teacher. The insufficiency of classrooms impels students to do their work in their crowded dormitory, school authorities to rent adjacent houses around the campuses and to re-use the canteens and other possible spaces usable as classrooms. The scarcity of library resources shortens the cycle of book borrowing and the lengthening span of opening time. Additionally, it is even difficult for students majoring in some programs to perform their fieldwork.

Of course, the expansion optimizes the resources on the one hand, and as a result, greatly improves their economy benefits. On the other, it arouses great concerns about quality (Li, 2000; Luo, 2001; Wu, 2002); thus, improving academic quality becomes the top priority. The Chinese government soberly recognizes this minus side of resource restraints, and then hurried to increase financial input into the physical infrastructures. Billions of Yuan in total have been channelled into campus construction by issuing state treasury bonds, by attracting funds from companies, and by lending bank loans to universities. Meanwhile, since 1998 education funding in the central budget has been increased by one percentage point each year, and the ratio of educational investment in GDP has reached the highest level in the last decade. Most importantly the socialization reform of rear services has been greatly quickened to lessen the burden for universities so as to let them concentrate primarily on their scholarship roles. Now, a great many of modern dormitory buildings stand up on or around the campuses, new cafeterias and refurbished canteens are everywhere to satisfy the expanding needs of students. The MOE stipulates in a circular that the lowest requirement for teaching input from students' tuition and fees and the strict condition for all professors to teach undergraduates rather just postgraduates and give priority to the conduct of their research. In addition, the pace of recruitment expansion has obviously slowed. In the past 4 years, the year-on-year increase in students enrolled in colleges and universities has declined this year, compared with the last three years. This year, a little more than 2.8 million high school graduates have been able to enter institutions of higher education; an increase of around 10% over last year's 2.6 million. That's far lower than the 47% growth rate for new entrants to regular institutions in 1999,

the 25% rate in 2000 and the 17% rate in 2001.

Policy Packaging

Mass higher education must be supported by policies and meanwhile makes the policy be repackaged to be adaptable.

Employment Policy. In China, university graduates are always considered as the state cadres, and therefore assigned officially by the state in a completely planned way. However, as the market economy is taking roots and the graduate population is growing very rapidly, this employment policy is no longer affordable. China then at the start of the 1990s began to reform this student employment policy, encouraging graduates to find jobs in the market by themselves under the guidance and help from government and university authorities. This policy has been received by students and their parents gradually, and the job-hunting markets at various levels have been installed nationwide. The improvement of employing services has promoted the rapid mass expansion of higher education.

Apart from this, of concern over the latest enrolments is the fact that recruitment has expanded faster than the number of jobs available because of the global economic slowdown and China's huge population. Graduates have already felt the chill in the employment market. In the year 2003, 70% of graduates found jobs. By 2004, that number is expected to hit 69,000 (Hua, 2002), though this is partly because the curriculum's design has failed to reflect market demand. Meanwhile, employers' demand for new graduates has increased only slightly. While with greatly improved productivity (helped by the advancement of information technology and a quickened pace of scientific innovation), enormous labour forces have been freed from agriculture and secondary industries. To absorb those redundant labour forces, the country is taking advantage of cheap labour costs and of globalisation to expand the manufacturing industry, to vigorously support tertiary industry, in particular, to enable likely areas to enter the post-industrialization stage at an earlier date, with the result of broadening the scope for student employment. Most importantly the government announced recently that residence quotas in provincial capitals and big cities will be eliminated so that college graduates can seek jobs across the country without residential limits ("College Graduates", 2002). The increased talent mobility and integration of the national job markets will definitely facilitate more efficient matches between job applicants and employers. Campus career centers set up in

almost every college are playing the necessary roles and providing up-dated job information and training courses. More importantly, graduates themselves have been reluctantly changing their ideas and redefining their employment expectations and adjusting their career goals, starting with a few pioneers becoming self-employed by setting up their own business.

Student Policy. China carried out a free education policy; higher education was free. In the mid-1980s, due to the huge demands for higher education after 10 years' tardiness, some forms of fee-paying students like contracted and oriented ones, whose scores were below the requirements for university entrance, from companies that were hungry for talent in the process of economic expansion, were adopted which can be seen as the pilot experiment for the successful implementation of the cost-sharing policy in the 1990s. Right now, paying for higher education is generally accepted by the public, and the student pays about one fourth of the university costs. Together with fees, every student spends about 10,000 Yuan per year on campus. The tuition and fees provide the university with the possibility of renewing the facilities and increasing the staff's payment, and develop a truly mass system of higher education.

However, China is still a developing nation whose wealth is distributed in a very unbalanced way with the relative better-off coastal areas and backward inland provinces, and wealthy cities but poor rural countryside. Consequently, the cost-sharing policy has surely led to some students from poor families and disadvantaged groups being unable to afford such a big educational expenses even though they are very successful in the college entrance exams. Students from worse-off families account for 20% of the total, and some 10% have severe difficulties. The Chinese government has so far built up a governmental administration system to aid poor students. From 1994 to 2000, China put 945 million Yuan into helping poor students at some schools ("China Initiates", 2002). Students can apply for loans from banks at a state-subsided lower rate. Moreover, universities set aside money to enlarge the coverage of scholarship, to provide temporary on campus jobs for students in need, to set up other helpful funds. Society extends its hands for such kind of students by paying partial endowments for their tuition and fees. China has initiated a national scholarship recently to assist needy college students to complete their schooling. The scholarship will be awarded to 45,000 students annually, of whom 10,000 top award winners will each have 6,000 Yuan each academic year, and the other

35,000 will have 4,000 Yuan. Freshmen and on-campus students may in person apply for a scholarship of more than one year in duration ("China Initiates", 2002). Based on this notice released by the concerned ministries, universities and colleges will not charge tuition fees from students who win the national scholarship. Schools like teacher's universities, universities for ethical studies and those with agriculture and forestry majors which are always the least popular majors but encouraged by the state and very important for the state are allowed to have more candidates for the scholarship.

Even so, for an industrializing country, soaring education fees for college students have revealed serious negative effects in the current policy of cost sharing. Ever-increasing tuition fees for higher education hit a new high in 2002, with many students having to pay 4,000-6,000 Yuan tuition and several thousands in other fees before being allowed to register. In a country where around 60% of the 7 million regular college and university students come from economically backward rural areas, such charges are no small burden for their families. The MOE has repeatedly called on colleges and universities to conform to State regulations and not extract excessive fees from students. It has also warned that severe punishments will be meted out for wrongdoers ("Saving Students", 2000).

Study Policy. In the past, China had a unified higher education system, in which every student studies the same length of time, after having decided his or her major is recruited in a system which doesn't allow easy transfers afterwards, has only one chance at a national entrance exam in vying for a scarce seat in university, and is not married and sufficiently young. However, this policy is too rigid and too inaccessible for the coming of mass higher education. Students in some universities are now allowed to study according to their own study plans, not restricted by common policies between universities. Besides this, the nation began national entrance exams twice a year in some provinces. And the transfer of majors is easier now at least in some colleges. Almost all institutions have instituted the credit system for the growing numbers of students. Furthermore, in 2001, China abolished restrictions on marital status and the age for college candidates, allowing a 73-year-old man to sit the college entrance examination, and a 63-year-old man to take on full-time college education. All these steps fuel the advancement of mass expansion of higher education in China. Universities are redesigning their curriculum according to the market feedback, renewing the teaching materials and pedagogical methods in order to sharpen their competitive

edge and enhance the flexibility of their graduates.

Rear-Service Policy. This policy is unique to China, whose society is organized by the Danwei or Unit structure. University is also looked as a Danwei, and is responsible for all living and working necessities of its constituents, a society or a city in many westerners' eyes. The university president, like a mayor, has to spend a lot of his or her time and energy on dealing with rear service matters. As social security reform continues more urgently, the growth of mass higher education after 1998 in particular, the rear services have become an obviously heavy burden for university's operations. Hence, the reform of university rear services or the socialization of rear services, has been expedited.² The physical facilities are rented out or even sold to newly built financially independent rear services companies whose members are transferred from regular employees before the reform to contracted employees after the change. The rear services companies are operated according to the market rule while abiding by the educational laws. In this way, the redundant workers of rear services are activated by the new mechanism.

Furthermore, to quicken the socializing pace, the Chinese government encourages social funds to be channelled into the infrastructure construction and operation by levying preferential taxes, among others methods. Many modernized new dormitory buildings and canteens are erected by private companies other than universities themselves. The university parks, built and run by businesses and providing mainly the integrated services of logistics with newly built facilities, are mushrooming under the guidance of governments with preferential policies around the university campuses in some cities. And the management of real estate, even the operations of accommodations are no longer the work of the university but of the company employed. The nearly unfettered university can run faster in the process of mass expansion of higher education even though rear services reform is still ongoing.

Two-Legged Policy. The international practice of mass higher education has identified that without the development of diversified forms of higher learning mass expansion would not be realized. China's higher education has been principally dominated by the public institutions for many years, being comparable to its overwhelming public ownership. Beginning in the mid-1980s, China has permitted the participation of private funds in practicing higher education by law but with the restriction of not pursuing profits as the

goal of running higher education. Since then, minban or private higher education has been growing very fast, reaching one-third of the number of institutions of higher education. However, these colleges mainly run utilitarian short-cycle programs, and provide the study aids to self-taught students or remedial instruction for those who failed in the national college entrance exam. Except for 100-odd colleges, more than 90% of institutions have no qualification to award diplomas and degrees, so are highly marginalized and suspected by students and parents. Many private institutions have difficulties in recruiting and retaining their enrolments in the enlarging process nationally (Jiang, 2001, pp. 34-36; Li, X. P., 2001, pp. 21-24), for over a long period of time, people have adopted an unshakable confidence in State-run universities and colleges, and private colleges are yet to be accepted by the public and are generally thought to have inferior teaching quality.

Since the launch of mass higher education, private higher education has appeared on the high agenda. Besides the increase of institutions which retain the right of issuing diploma, from a few years ago to over 100 today, many universities have been setting up their own subsidiary second level colleges with private funds. Those second level colleges, financially independent legal entities, are the product of university's fame and trustworthiness with the activeness of private investment and the elasticity of market mechanism, and are warmly welcomed by the authorities and the public at large. It seems this trend is unstoppable in spite of the hot debate over its legitimacy (Wang & Wu, 2000, pp. 23-26; Xie, 2001, pp. 44-46).

Presently, the law to promote the growth of private higher education is being worked out, with the hottest debate over whether those institutions can make reasonable economic returns or not (Chu, 2002; Ke, 1999, pp. 26-27; Zhang, Li, & Wang, 2002).³ Regardless of this minban based higher education will surely play an ever-bigger role in the mass expansion of China's higher education in the future since public higher education is almost saturated. A two-legged policy of higher education development will be a balanced means of promoting the expansion.

Structural adjustment

Many problems which emerged in the process of mass expansion are due to structural rigidity. China is making great efforts in adjusting the structure of higher education which first took shape in the earlier 1950s; structural problems also create a bottleneck mass expansion.

Institution Structure. The fundamental institution structure formed in the 1950s has a prominent feature: being highly specialized. All comprehensive universities were split into highly vocational colleges that are the mainstream of Chinese higher education. Since the spread of large-scale national structural reform in late the 1990s, mergers, as a major force to promote the great move of comprehensiveness that has always been the focus of disagreements about higher education since the 1980s. Up to now, a batch of comprehensive universities has boomed. Besides this, China has recognized the importance of vocational education and training in this mass progress, and as a result set up many vocational schools by affiliating them to some universities and transforming some technical secondary schools, which are endangered by the fierce competition for students, into vocational colleges. However, among all the institutions, the problem still exists that they all are chasing the higher level instead of individuality without clear positioning in the ladder of higher education. In 2001, there are 411 universities engaging in postgraduate education, accounting for some 34% of 1,225 regular institutions (Ministry of Education [MOE], 1990-2001). Therefore, now China is repositioning the mission and goal for every type of institution in a bid to stratify the higher education more clearly. In fact, a few famous universities are consciously limiting their enlargement in this currently popular move towards mass expansion in order to keep their nature of elitism with high standard and selectiveness.⁴

Discipline Structure. Discipline is the lifeline for “producing” students. China laid its discipline structure in the 1950s reorganization, emphasizing majors of technology, stressing the immediacy of utility. After the hard-won achievements made since the 1980s, the disciplines in natural sciences, social sciences and humanities are in progress, which is not just the requirements for producing highly qualified students but the reflection of Chinese societal changes. The question is how to upgrade the old, quicken the development of the new, fuse and interact disciplines to grow the comprehensive are the principal challenges in massifying higher education.

Layer Structure. “Layer” here refers to the different stages of education, say, the primary, secondary and tertiary. The mass expansion of higher education should have an appropriate proportion among layers. In the latest enlargement of higher education, the recruitment ratio of high school graduates to colleges hits a historic high after the

1950s, standing at 50% to 60% for straight 4 years, at the same time, that of secondary school graduates to high schools in 2001 was at 52.9%, and primary graduates to secondary schools at 95.45% (MOE, 1990-2001). In 2001, the ratio among the total enrollment for higher, high, secondary, and primary schools is 1:2.2:5.4:10.5, indicating that the enrollment of high school is incomparable to that of higher one, and too big a share, say, 20-odd percent, of total educational financial input is invested in the higher-speed higher education. As a result, China is expediting the development of high schools, and establishing the popularization of nine-year compulsory education and the eradication of illiteracy as two primary tasks.

As far as the higher education is concerned, there should be a proper proportion among different degrees. China is developing at a thrilling speed, and needs advanced skills. During the latest expansion, the recruitment of postgraduates has been climbing up vertically at 21.4% in 1999, 39.4% in 2000, 28.6% in 2001, and 21% in 2002, and 35% in next year reportedly.⁵ The consecutive increase in postgraduate has thus posed great challenges for the infrastructure and the capability of university in the context of great increases of undergraduates. Meanwhile China is a society pursuing the extravagant consumption of skilled graduates, resulting in a higher need for postgraduates whose places may be filled if undergraduates or graduates from the short-cycle technical or vocational schools were employed. A great majority of vocational colleges and short-cycle technical schools survive with great difficulty because of this socially improper concept. Consequently, the waste of higher education is unavoidable, leading to on the one hand the majority of short-cycled graduates and a few undergraduates who can find getting employed very difficult; on the other hand, employers can hardly find well-trained employees. Even some university graduates go to have technical training in technical schools after their graduation from university so as to find a job (Wang, 2002).

Regional Structure. Regarding higher education, the majority of universities are in the coast and cities, few in mountainous and destitute land-locked areas, making the east more developed and the west more and more behind. Additionally, the policy of university recruitment fuels this widening disparity. The difference of score thresholds in national entrance exams, the benchmarking for every college's recruiting students in each province, can be hundreds, with in general the developed provinces and municipalities being lower, even the lowest. Therefore,

some provinces like Jiangsu, Zhejiang, Guangdong and municipalities like Beijing, Shanghai, Chongqing, among many others, have already massively expanded their higher education.⁶ In 2000, only 21.4% of the total national enrollments are studying in western provinces, 25.7% lower than that in the east (Li, S. X., 2001, pp. 22-26) meanwhile 23% people live in 12 west provinces and municipalities, accounting for 56% by jurisdiction areas. The recruitment policy exacerbates the ever-growing regional polarization and arouses serious concerns over equality. Thanks to the strategy of western development enacted in 1999, the preferential policies catering to the west have been tailor-made to stimulate a faster growth of higher education than actually occurs in the West.

Conclusion

The move towards a mass higher education system is becoming an irreversible world trend for achieving overall human advancement. However the process of mass expansion is always challenging and these challenges are influenced by the reactions of the society in question, which has to cope with the social and political events consequences of such a sudden growth. This suddenness often leads to initial misgivings over its success. Critics worried that enormously enlarging the enrolments would result in overcrowding at colleges, which in the period of academic elitism were accessible predominantly to members of society's elite class. They are concerned that the beneficiaries would wreak havoc on original higher educational standards and overburden campuses with their lack of preparation for the rigors of higher learning and with the lack of preparation of campuses facilities and conditions needed to guarantee that academic rigor. The Chinese experience reveals that the misgivings are not unreasonable and indeed must be intelligently tackled. To overcome these difficulties, preparations cannot begin soon enough. Lack of awareness and unpreparedness impels the development and threaten to slow these change in higher education. Additionally, this passiveness is forcing changes to the concepts of higher education; to reconsider the function that higher education is expanding from it's primary goal—education—to a more mixed portfolio —education and economy stimuli. Higher education is an theatre not only of human socialization, but also of economic consumption. Is higher education in the process of industrialization?

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Notes

1. All these data are calculated based on the statistics the yearly communiqué released by the Ministry of Education(MOE) (MOE, 1990-2001).
2. In a report given by the minister of MOE, she summarizes the complete advancement of Chinese reforms on rear services of university, and expresses the unswerving efforts to continue the reform (Chen, Z. L., 2002).
3. As reported, Li Peng, chairman of the Standing Committee of the National People's Congress (NPC), China's top legislature, said in his inspection tour to some private colleges in North China that promoting the healthy growth of privately funded education contributes to the overall development of national education... investors should be allowed to see legitimate economic returns in this sector which will help encourage more private involvement in education. He called for establishing a legal network to direct the booming number of private-education institutions, also warned that profit-seeking should not become the sole target of such businesses(Zhang et al., 2002).

Peking University and Tsinghua University - have said they will not expand but maintain the current enrollment scale for a few more years. The two also said they will focus on improving academic quality to compete with the world's first-class universities since academic quality has not been improving at the same quick pace as the State's expansion plans. Wuhan University in Hubei Province has gone farther: cutting enrollment for undergraduates by 1,000. (Hua, 2002)

5. The news from the MOE tells that in 2003 China will enroll 270 thousand postgraduates, another considerable growth.(Jiao, 2002).
6. Beijing started the expansion in 1999 too, and the growth rate being 21% annually on average. In 2001, the total enrollment it owns is about 730 thousands, and the participation rate is up to 45% ("The Capital", 2002). Again, it is reported that the enrollment rate of Zhejiang province, one of the wealthiest coastal provinces in China, was 15% in 2001. ("A Report", 2002)

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4. It is reported that the country's most prestigious universities-

Appendix. *China's Higher Education Changes in 1990s*

Year	total Enrollment	total new entrants	new entrants to regular institutions	selection rate%	enrollment rate%
1990	371.7	110.3	63.9		3.7
1991	360.5	111.5	65.0		3.6
1992	375.7	137.8	78.8		3.9
1993	450.5	182.9	96.6		5.0
1994	527.9	196.8	95.1		6.0
1995	562.2	189.1	97.7		7.2
1996	583.9	197.1	102.5		8.3
1997	607.5	206.8	106.4		9.1
1998	643.0	215.8	115.1	36	9.8
1999	742.3	284.7	168.9	49	10.5
2000	939.9	389.6	233.5	56	11.0
2001	1214.4	480.7	284.8	57	13.2
2002	1400.0	500.0*	300.0*	58	>14.0

Note.

1. Data marked by * are estimated.
2. All data for year 2002 are from the latest news report, so open for revisions.

Source:

1. Ministry Of Education (1990-2001). *The National Statistics Communiqué of Education*. Beijing, China: People's Education Press.
2. Expansion: higher education strides to the era of massification (November 2, 2002). *Guangming Daily*, p. 2
3. Ji, B. C. (January 16, 1996). On the Participation Rate of Higher Education. *China Education Daily*, p. 4.
4. Expansion Makes Chinese Higher Education Frog forward (October 1, 2002). *China Education Daily*, p. 1