Programme of Dialogue and Co-operation with China

CHINA GOVERNANCE PROJECT

HIGHER EDUCATION – FINANCE AND QUALITY

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HIGHER EDUCATION – FINANCE AND QUALITY

Background

1. The Ministry of Education’s 2003-2007 Action Plan for Revitalising Education states that: “Education represents the basis of fundamental long-term development. In order to fully realise the building of a prosperous society and the great task of revitalising the Chinese nation, it is necessary to persevere in implementing the strategy of the developing the country through science and education and strengthening the nation through the cultivation of talent.” The Action Plan reinforces and expands on existing reforms to increase coverage and quality of compulsory education, especially in rural areas, development of top ranking universities, post secondary teaching quality, supporting min ban (non government) institutions, and, formulating an outline of Chinese educational development for 2020.

2. During the Ninth Five-Year Plan (1996-2000), higher education in China went through major structural changes and substantially expanded its intake of full-time students. Structural changes took place at two major levels. First, regulatory control and financing of higher education was modified and, second, comprehensive universities were created through merger of single disciplinary and professional higher education institutions (HEIs). As part of the modifications, HEIs were given greater autonomy to manage their own resources and operations. The overall goal was to rationalise the education system and to improve its performance so as to meet the social and economic needs of the country.

3. Coupled with these structural reforms, policy regarding higher education has gone through a major reorientation, shifting away from an elite-based education system to a mass-one by enlarging the total number of enrolments reaching 17 million students compared to 11.5 million in 2000 (Table 1). While the structural realignment and the streamlining of the regulatory function have no doubt helped improve the effectiveness of the education system, the dramatic increase of student numbers may exert a negative influence on the quality of education and may, in turn, hinder the stated goal of improving the human capital resource base of China.

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</thead>
<tbody>
<tr>
<td>Overall enrolment rate in higher education (percent)*</td>
<td>3.4</td>
<td>7.2</td>
<td>9.8</td>
<td>11.5</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Post graduate students (in thousands)</td>
<td>93.0</td>
<td>145.4</td>
<td>198.9</td>
<td>301.2</td>
<td>501.0</td>
<td>651.26</td>
</tr>
<tr>
<td>Students enrolled in the degree programmes of regular colleges and universities (in thousands)</td>
<td>2 062.7</td>
<td>2 906.4</td>
<td>3 408.8</td>
<td>5 560.9</td>
<td>9033.6</td>
<td>11085.6</td>
</tr>
<tr>
<td>Students enrolled in the degree programmes of colleges and universities of continuing education (in thousands)</td>
<td>1 664.4</td>
<td>2 570.1</td>
<td>2 822.2</td>
<td>3 536.4</td>
<td>5591.6</td>
<td>5591.6</td>
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*Overall enrolment number includes post-graduate students, students of regular colleges and universities, students of tertiary continue education institutions, students of military academies, students who registered for the diploma examinations, students of TV universities, students of self-study programmes.
4. Perhaps no tension is greater in modern China than that between the desire to provide increased access to education at all levels and the equally strong desire to maintain and increase educational quality to “world-class” standards. In resolving this tension, China will face a serious set of policy questions. Among the most pressing issues will be the following:

- Reduction of rural-urban and province-to-province disparities and income/social class inequalities in the provision of quality education at all levels.
- Improved retention of female, low-income and minority pupils for at least the compulsory cycle.
- Greater equalisation of the fiscal capacity to support education among the provinces and local authorities with central authorities emphasising a policy formulation, quality monitoring and resource equalisation role.
- Increased utilisation of instructional technology, especially where necessary to offset lower levels of teacher preparation or other instructional disadvantages.
- Improved relevance of skill training in secondary and post-secondary “professional education” and greater freedom of informed choice by higher education students in their selection of specialisations and careers.
- Greater reliance on student tuition, improved loan systems and private education alternatives to finance increased participation at the post-secondary level with the objective of freeing central and provincial/local funds to be used more for development of advanced post-graduate training, improving quality assurance activities, and equity concerns.
- Closer monitoring of employment patterns and creation of effective feedback of this information into both government and private educational decision making.
- Continued focus on quality development in higher education’s “211” (to develop 100 world-class institutions during the 21st Century) and “985” (from May, 1998, a further expansion of assistance for excellence involving a broader group of institutions as well as those in the “211” project) of projects in higher education, but with more emphasis on the second tier of quality institutions than has occurred over the last 5 years.

5. None of these policy concerns are unfamiliar to the educational professionals of China. What is needed, however, is a more systemic analysis of how these policy options interact with one another. For example, the large growth in private higher education has helped to pacify social demand at the first-degree level but is creating a greater future demand for places in graduate education. Similarly, increased success in retaining students through compulsory education will create greater demands for both professional and traditional higher education. For the foreseeable future, every education policy “solution” will create its own set of special new demands on the educational system. China potentially has the human and financial capital to meet these challenges, but immediate and effective response to these policy concerns is essential.
6. In tandem with the structural reforms and enrolment expansion, financing of higher education has also gone through a dramatic change. Presently, tertiary education institutions are classified into different categories of status and accordingly receive financing and other provisions from different sources, namely, from national, provincial, or local governments. Of the total of about 1300 HEIs, only just over 100 are now under the direct supervision of the Ministry of Education (MOE). The rest are supervised and funded by provincial or municipal governments and a comprehensive funding formula has been devised for budgetary purposes. Between 1995 and 2000 the Government (central, provincial, and local) share of higher education revenue in public institutions declined from 70% to 56%. Even though the absolute level of government financing continues to increase, the current levels of per student government expenditure cannot be maintained if the system is to expand as quickly and as responsively to societal and employment demand as higher education planners wish. For example, the gross enrolment rate (enrolment relative to the 18-22 year old cohort) is expected to climb from 11.3% in 2000 to 45.0% in 2020. This is an increase in total demand unprecedented in higher education, anywhere in the world.

7. Between 1995 and 2000, the per capita expenditure in higher education and the per capita current cost almost doubled while the government share has declined relatively. Over this same period, the average tuition and fees tripled to help offset this. In 2000, 22.2% of total expenditure and 27.7% of current expenditure per capita were financed by student tuition and other fees (compared to 13.5% and 17% respectively as recently as 1995).

8. In a detailed financial survey of public degree granting institutions conducted in 1997, the sources of current fund revenue were as follows:

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Central Government</td>
<td>11.0%</td>
</tr>
<tr>
<td>Provincial Governments</td>
<td>35.6%</td>
</tr>
<tr>
<td>Local Governments</td>
<td>3.9%</td>
</tr>
<tr>
<td>Tuition</td>
<td>19.0%</td>
</tr>
<tr>
<td>Sales and Services</td>
<td>22.2%</td>
</tr>
<tr>
<td>Other Sources</td>
<td>8.3%</td>
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</tbody>
</table>

9. The share of public versus private sources of funding varies in OECD countries. Norway, for example, has 96.9% public financing and 3.1% private whereas Korea is 15.9% public and 84.1% private. The mean for all OECD countries is 78.2% public and 21.8% private. 

10. Since 1997, the share of government contributions has continued to decline and the dependence on institutional sources (including tuition) has grown significantly to offset this. This financing arrangement, based as it is on reducing the share of government responsibility while substantially increasing aggregate enrolments and increasing quality, will have a direct and dramatic impact on the teaching capacity and capability of individual HEIs, and might inadvertently exert a negative impact on the effectiveness of the higher education programmes.

11. This systemic vulnerability to significant variations in quality within Chinese higher education is made more apparent when one considers the targeted resource allocations made to key universities (see

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1 TEIs (tertiary education institutions) consist of universities, 4- and 2-year colleges, 3-year colleges (polytechnics), advanced vocational education institutions (community colleges) and branch schools. Adult TEIs consist of radio/TV universities, workers'/peasants' colleges, institutes of administration, educational colleges (in-service training courses), independent correspondence colleges, evening schools, short-cycle courses.


description of the 985 and 211 projects below) and key disciplines for special project funding and other preferential treatment. These effects, combined with the already existing locational advantages and disadvantages of individual HEIs, pose the greatest challenge to equitable quality enhancement and financing efficiency for the coming years.

12. The “211” Project is the Chinese government’s endeavour aimed at strengthening approximately 100 institutions of higher education and key disciplinary areas as a national priority for the 21st century. It is funded 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 comes mainly from central departments and local governments which have jurisdiction over the universities concerned. Special funds earmarked by the State serve to initiate, support, guide and readjust the development of the Project.

13. The special funds allocated by the central departments and local governments are used mainly to subsidise the development of the national key disciplinary areas, the public service system of higher education, and the infrastructure improvement in a small number of universities necessary for raising the overall institutional quality. During the first round of “211” (from 1995 to 2000) total funding was RMB 10.894 billion, of which 2.755 billion special funds was earmarked by the State, 3.172 billion funds paid by central departments having jurisdiction over the universities concerned, 2.489 billion funds from local government, 2.363 billion raised by the universities themselves and 115 million funds is raised from other sources. An additional 7.472 billion funds from departments and local government have been allocated for infrastructure improvement at specific universities. For the second round of “211” the goal is to double the total funding. “985” funding is not published but is said to be considerably more than “211”.

14. Other components of the on-going higher education reform consist of investment reform, recruitment and job placement reform, and the “inner-institute” management reform in addition to the teaching reform. These individual reforms directly and indirectly affect the quality of the final outcome of higher education. These and related questions of quality and finance formed the framework for the OECD Review which was organised around the following three major topics: key aspects of the Chinese reform of higher education; quality management in Chinese higher education; and, the financing of higher education in China and the rationale for its support.

China’s higher education reform programme

15. The recent reform of higher education within China initiated in the Ninth Five-Year Plan and through the 2003 law on private education has dealt with the need for increases in quality (including relevance of the education provided) and the means for mobilising adequate financial resources to meet both quality and expansion objectives. It has been characterised by four major actions: i) a shift from a primary emphasis on elite higher education to more concern with increased access; ii) decentralisation of institutional affiliations of HEIs to provincial and municipal authorities and greater attention to institutional autonomy; iii) the allowance for, and even facilitation of, private min ban higher education; and iv) introduction of a cost-sharing approach through greater reliance on student tuition and other fees to finance higher education costs.

16. While the government is determined to maintain a number of “world-class” universities, it has recognised the need to meet the aspirations of the rapidly growing population of secondary school graduates who wish to continue their education to the tertiary level. Recognising the limits on central government financial and human resources, China has decentralised dramatically. From 1990 to 2000 the

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number of higher education institutions affiliated with central ministries and agencies declined from 354 to 111 and the number affiliated with provincial and municipal authorities increased from 721 to 1 114. By 2003, less than 10% of the institutions of higher education were directly affiliated with a central agency (although, because the central institutions are larger on average, the proportion of higher education students in these institutions is still proportionally greater).

17. Whereas no private institutions existed in 1990, over 100 were active in 2003 and this sector is the fastest growing part of higher education, both in terms of numbers of institutions and total enrolment. A second form of educational privatisation has taken place within certain public institutions where selected disciplines within a public university or college may operate as a private or quasi-private unit of the institution. Indeed, tuition and other fees are now charged to many students within the public institutions irregardless of whether they are in the ‘private’ or traditional part of the establishment. This cost sharing is both necessary (to finance the desired improvements in quality and access) and equitable (in that students, the major beneficiaries of higher education, are expected to pay some share of the costs of their own education).

Appropriate political foundation and public support for reform

18. Higher education, like all education and training programmes, has the ability to affect the lives of the Chinese population profoundly. Because of this, a natural conservatism exists in that change can rarely occur without some fear of loss or uncertainty of the specific results. The Chinese higher education reform has attempted to make clear why changes are required in the higher education system and the manner in which individuals, groups, and society will be affected by these changes. In this way, the proposed changes in policy and in programmes for higher education have gained sufficient political and popular support to be implemented and sustained. While much of the work of the reform process is inherently technical in nature and content, ultimately the higher education reform programme is a political and administrative process that requires broad acceptance from society at large to be effective. The reform appears to have been designed with appropriate attention directed to, and sensitivity shown for, the political, cultural and social considerations involved in the various reforms at both the governmental and institutional levels. However, in the area of cost-sharing, the need for “social marketing” of these policies will become more critical as the share of total costs borne by students and their families increases. Similarly, support for loan programmes for students will require that both students and their families be “educated” about the benefits and the risks of debt-financed educational opportunities. Finally, the legal framework for the effective operation of private education both general and tertiary needs to be more fully elaborated – from such basic concerns as land ownership to difficult matters of standards, quality and intellectual property.

Equity in access, attainment, and achievement

19. The major access/equity issues traditionally identified for China are the differences between locations (among Provinces and urban versus rural) and social classes (an issue even in a previous “classless” society). Equity issues may be analysed in terms of access, retention, and graduation as well as for learning achievement and the opportunities for employment. Equity assessments also can be made in terms of access to funding and to specific resources such as qualified instructors, appropriate instructional materials, and other learning resources (laboratory facilities and IT). At present, the higher education management information system is not sufficiently developed to provide data to measure and monitor resource equity. Such a system would assist the authorities to better target state subsidies.

20. A special equity concern in all societies is gender equity and China has a strong and improving record. However, it is necessary to determine whether achievement or programme selection (especially in some more overtly vocational and technical areas) represent a systematic pattern of inequality for women. In addition, the employment opportunities for women may be examined to illustrate the extent to which the
gains in gender equity apparent in China’s higher education and tertiary training systems are actually translated into fully equitable employment opportunities for female graduates.

**Support for an interactive planning model**

21. The reforms encouraged by China for the higher education sector area should be co-ordinated with the more general reorientation of social planning in the nation. An “interactive” planning model would have the Central Government issue broad higher education planning guidelines; the provincial, municipal and institutional administrators would then respond with comments, criticisms, and alternative suggestions. The central authorities could then develop more detailed proposals and, following further review by sub-national officials, the revised proposals for higher education could be implemented. Central responsibility for key decisions will be retained but an even greater opportunity will exist for local participation and review. Such an interactive model is already being used to some extent in the higher education reform in China and should be strengthened and expanded to include greater participation by the private sector. Even if only in an advisory capacity, suggestions from the private sector institutions and from employers can only strengthen the overall implementation process for the higher education reform.

**Inter-sectoral and intra-sectoral co-ordination**

22. The location of higher education responsibility within different government agencies at the national and sub-national levels continues to have the potential of fragmenting the planning and implementation processes for the sector. All higher education activities, in whatever ministry or agency they are conducted, also should attempt to co-ordinate with the activities of other sub-sectors (an obvious example would be co-operation between the education and labour ministries). Similarly, better co-ordination should be encouraged for higher education institutions with activities outside the public sector (including international institutions operating alone or in concert with domestic institutions). It is recognised in China that higher education development will depend on the larger economy to provide funds for support of education, training, research and development activities and to employ or otherwise utilise the graduates that are produced. This close linkage between education and the economy is important to insure that the system is in congruence with the needs of Chinese society.

**Development of a regional, national, and international emphasis**

23. The size and complexity of China requires that both a regional and a national orientation would be appropriate for many higher education programmes. Institutions in all parts of the nation should attempt to incorporate curricular and other adaptations to meet the specific needs of their regional communities and potential employers while at the same time producing graduates who have national and international employability as well. Public and individual interests in China will be best served by making the large majority of higher education programmes more effective regional and national resources for development. Programmes that serve these societal needs will also be serving the needs of the individual citizens.

24. Finally, Chinese specialists in research, administration, evaluation, and curriculum must have the resources and other support necessary to form strong international networks. The nature of higher education development is not limited by national boundaries, but each nation must have the capacity to examine the costs and benefits of each new development and decide whether it is appropriate for their own society or culture. Adaptation, more than simple adoption, of international progress will be the key for the Chinese institutes of higher education. Similarly, as the higher education reform programme continues to progress in China, Chinese experts should increasingly be prepared to share their findings and advances with international colleagues through publications, seminars, workshops, and other forms of dissemination.
Affordability

25. China has paid close attention to an obvious, but too frequently ignored, criteria for evaluation of higher education reform activities: the reform programme activities must be affordable within the budget levels assigned to them. Too often, a large gulf exists between a reform programme's goals and its realised effects because the programme was designed for a budget level substantially greater than that finally realised. Affordability must continue to be a criterion for higher education programme design in China or else it will just become an explanation for why a particular reform programme activity has not succeeded. A prior concern for China, of course, has been whether the higher education development programmes are receiving an appropriate priority within the government budget. Of greatest concern, perhaps, are the capital investment demands that will be required over the next 20 years to realise the quality and enrolment objectives of China's higher education reform programme. Estimates supplemental capital fund needed vary, it is certain that the needs will be massive over the next two decades.

26. "Affordability" is always a joint function of financial capacity, costs, and potential effectiveness (i.e. it is easier to justify financing a higher education activity that is effective). Affordability issues within higher education in China are especially of concern because the rapid development of individual academic fields means that expensive investments can be made in technologies or activities that quickly become outdated or irrelevant. Flexibility and sustainability are essential to assure effective use of monies invested in higher education programmes.

27. The higher education reform programme in China has been designed to encourage flexibility through recurrent analysis and policy adaptation. Planning steps are reconsidered periodically (at least yearly) and adjusted to fit the emerging realities of China’s social and economic environment. Since the ability to predict is always less than perfect, the flexibility to adapt is the key determinant of system and institutional success in higher education.

28. "Sustainability" refers to the ability of the higher education reform programme activities to continue efficient operation after the initial phase of government support is over. This is an especially crucial consideration for government higher education projects that involve short-term financial assistance and for private sector higher education activities that involve government subsidisation that is for a finite period only (including the example of provision of land or other property). In both cases, the critical question is whether the positive effects of the short-term higher education project can be sustained after government assistance comes to an end. If not, then one must question the value of an education intervention that will cease or be dramatically reduced after the project period is concluded. Because of the rapid evolution of knowledge in the higher education technology fields, China must be prepared to monitor and adapt higher education projects (such as “211” or “985”) to promote sustainability as well as immediate effectiveness.

Encouragement of supplementary resource mobilisation

29. All projects in a higher education reform will require financial and human resources. While some of these interventions, because of their nature, cannot be self-financing, all do have the responsibility of exploring ways in which additional resources might be generated for their support. For example, activities to expand computer availability in universities and colleges should stipulate how the new costs will be shared among the central and provincial governments, local communities, private companies, and individuals. Training in computer skills could be financed in part through the utilisation of existing facilities made available on a part-time basis by the private sector; and training workshops should prepare local government administrators and private sector personnel to deal with citizens and private sector companies to generate supplementary funds for their education and training activities. Over time, with the steadily rising participation rate in tertiary education, an increasing share of the costs of higher education...
development and dissemination in China is likely to become the responsibility of the private sector and of individuals. While initially the Chinese Government must play a major role in financing as well as co-ordination, the long term comparative advantage of the central government is in facilitation, co-ordination, quality control, and information management of higher education activities – not just their finance.

The Reform Process

30. Faced with constant changes in the social, economic and political environments, higher education is being forced to balance the need to adapt to the changing requirements of professional competencies, to maintain academic and scientific rigor in research, to keep pace with the scientific developments, and to serve the nation’s political and social objectives. One of the central issues related to the development of higher education is: How do China’s current reform measures impact the quality of higher educational outcomes in general and the quality of the learning process in particular and how can this relationship be improved?

Structural reform

31. The current structural reform of the Chinese higher education system is primarily geared towards rationalising and strengthening the policy and regulatory functions of China’s educational system. Regulatory control of the education sector is now centralised within the MOE with oversight from the State Council. Previously, 24 different line ministries supervised and administered their own colleges and universities each of which offered specialised professional degree programmes which resulted in relatively high unit (per-student or per-graduate) costs, low efficiency in resource mobilisation and utilisation, and stagnation in terms of educational quality. At the national level, this decentralised service delivery structure also caused sub-optimal use of scarce educational resources, human and financial, resulting in the establishment of diverse, and often inconsistent, educational and professional qualification standards, and hampered the desired scientific research and technological development within the HEIs. Instead of functioning as a central policymaking organisation, MOE was more akin to a multi-level administrative unit attempting to co-ordinate the higher educational activities across departmental and functional boundaries.

32. The structural streamlining and centralisation of the regulatory and management responsibilities to the MOE has improved the opportunity for more effective utilisation of educational resources and allows for the establishment of unified qualification standards for learning outcomes and accreditation for granting degrees. It also allows the MOE to become more of a policy oriented and facilitating organisation and less of a regulatory enforcement mechanism. This seems to have created a much more favourable environment to ensure greater effectiveness of the higher education system in China and the necessary conditions to achieve higher quality of college and university education.

Financial reform

33. Previously, the government was responsible for all HEIs and their provision. A new management system has been established wherein the government takes major responsibility in providing educational services at all levels with the active participation of society and individuals. Non-governmental colleges and universities commonly referred to as min ban have been created across the country and have become a distinguishable force in providing expanded access to professional and higher education. For instance, some are even accredited for granting bachelor degrees. With WTO membership, China will most likely experience an even greater participation of the international education providers in its domestic educational market. Indeed, the number of foreign universities that operate joint programmes with Chinese universities is constantly rising. This could be a positive trend, as long as the educational products fit with the demands of the Chinese job market and support China’s long-term sustainable development and consumers
(students and employers) are provided adequate information about the true costs and benefits of these courses and programmes.

34. Greater participation from the non-state actors in providing higher education helps complement the limited national education budget which amounts to a relatively low 3.41% of GNP (OECD average is 5.8% of GDP), at a time when most HEIs are in need of substantial new investments in upgrading their teaching facilities, living conditions for students, research capacities and, in quite a few cases, the quality of their instructional faculties. The level of development of HEIs seems to be positively correlated with the economic development of their localities. In other words, significant discrepancies regarding teaching capacities and equipment exist between HEIs belonging to the rich coastal provinces and HEIs belonging to the less-developed inland provinces and regions. Comparisons of “quality” of education in this context are hard to define in terms of instructional “value-added” given that the starting points and social conditions vary dramatically.

35. Resources from the social sector as well as from the private sector (companies and individuals) have been mobilised to fill part of the gap for some of the less advantaged institutions. Exceptional min ban universities have developed impressive infrastructure and learning technology. However, it is not clear how many other min ban HEIs are equipped with comparable educational capacities. Similarly, in the state-owned universities teaching staff of an international standard are said to remain scarce. This is a particularly challenging situation since min ban HEIs tend to use more part-time (often, staff who have full-time positions at a state institution) or retired faculty personnel. Excessive use of such personnel can curtail opportunities for student-instructor interaction outside the classroom and could restrain the development of resident knowledge centres needed for academic excellence and development. In addition, it leaves state institutions with the burden of health care and retirement contributions. Some form of cost sharing and definition of maximum part time work outside of the principal working place should be defined.

36. Although min ban universities and schools receive no state subsidies and are not eligible for research funding, they are provided with royalty-free land use and tax exemption and some enjoy financial self-sufficiency and even generate a surplus of income over costs. More than ten years after the establishment of the first min ban schools, the participation of non-state and non-Chinese actors in the Chinese education market remains limited in scope and still “experimental” relative to total enrolment. Laws concerning the ownership of educational properties are recent or under discussion. The Law on the Promotion of Non-State Schools took effect on September 1, 2003; the intent of this legislation is to clarify the rights and responsibilities of these institutions. Public perception of these non-state HEIs is mixed and therefore provides additional motivation for these HEIs to strive for excellence and recognition. One trend, nevertheless, seems to be clear: the participation of the non-state sector in providing higher education services will continue to increase, probably proportionally as well as in absolute numbers. Presently, there are 10 major min ban HEIs out of a total of just over 100 private HEIs. This number of prominent min ban HEIs will most likely change rapidly with the law governing private sector provision of higher education.

37. Both the min ban universities and colleges and the foreign HEIs supplement and extend the existing higher education capacities in China. Their presence also adds an element of competition that could be positive in uplifting the quality of education and in increasing higher education access of the student population as long as a stringent qualification system is applied when granting degrees. Min ban HEIs have to be sensitive to the needs of the students and the employers and continuously need to redefine their programme and curricula in order to survive financially. Thus, there is a high likelihood that these min ban HEIs would come up with some innovative curricula (products) which combine a multidisciplinary approach targeting specific job profiles. The need however remains for external monitoring of the quality of the learning process and for on-going feedback regarding competency attainment of graduates and ability to be integrated into the job market.
How is higher education financed?

38. In 1996 approximately 85% of funding came from the national contribution, but by 2000 the level had dropped to under 70% and continues to decline whereas tuition fees represent an increasing share. Significant levels of tuition fees and widely available student loans are both relatively new concepts in China. Increased student fees were introduced in 1994 and a broad loan scheme in 1999, concomitant with the current administrative reforms in higher education mentioned above. These two innovative funding mechanisms – tuition and loans – should be allowed to evolve together. Although the tuition for a leading university can be up to 4 000 EUR, the average is closer to 1 000 EUR for full-time students. These very significant increases in the levels of tuition fees required to fund the greatly expanded higher education system can only be borne by students and their families if a much more flexible student loans scheme becomes available. A loan scheme, that is more widely applicable, is vital from an equity point of view.

39. At present, public universities and colleges are funded through four broad income streams (each of which has several components): i) A per capita payment made to the institution by the central government for MOE institutions and provincial government for other HEIs, against an agreed quota of students. ii) Additional government funds provided (mainly) to the top universities, under the "985" and "211" project schemes. These are non-recurrent project grants, usually for capital projects such as laboratories, sports facilities or dormitories. iii) Tuition fees that are fixed by provincial governments on the basis of educational costs and "affordability". These fees are currently set at about 25% of actual cost levels determined by an algorithm developed by the MOE. And, iv) Additional income that universities and colleges are able to raise through supplementary teaching, research and other activities.

40. All public institutions receive the per-capita grants. The top research-oriented universities receive significant additional sums from the “985” and “211” projects and often generate significant levels of additional income. More instructionally-oriented universities and colleges have to rely almost entirely on tuition (from quota and non-quota students) to supplement their per-capita allocations. Private universities are financed from a combination of tuition and entrepreneurial earnings.

41. A trial student loans scheme was introduced in 1999 and since then about 800 000 students have taken out loans which is relatively low proportion of students (about 10 to 15%) and often benefits those who are from advantaged or middle-class families rather than from the least advantaged due to the stringent payback requirements representing more than 20% of annual salary outlined below and the fact that the bulk of the money goes directly to the institution with little left for living expenses.

42. The loans scheme has four principle features. First, students in financial hardship may be loaned sums of up to the cost of their tuition fees and residential charges, during their courses of study. Second, the loans are made by the national banks. Third, while they are studying, students are charged only half the interest due on these loans, and the other half is paid by the government. Fourth, on completion of study, the loans become liable for full interest and normally are scheduled to be repaid over the following 4 years (i.e. in 7 or 8 years in total from initial debt). However, extension of the repayment period to 6 or even 8 years after graduation, may be granted in certain circumstances, such as if the student proceeds to postgraduate study (however, students who receive such extensions must pay the full interest rate during this time of extension). These provisions, while better than no loan programme at all, are much more restrictive than found in most OECD countries and less generous and flexible than found elsewhere in Asia.

43. Lower average starting salaries and increased graduate unemployment has led to a higher default ratio which in turn has made banks less willing to make loans. The new Education Action Plan 2005-2007 of the MOE acknowledges this problem and the Government’s commitment to find solutions.
Quality effects of the financial self-responsibility system

44. State subsidies no longer cover all the operational and HEIs have to generate approximately 50% of the funds needed to cover their recurrent costs and research. On the budgetary side, HEIs are encouraged to establish collaboration with industry. Such collaboration is considered to be mutually beneficial and could help to reinvigorate the HEIs and facilitate innovation. This university-industry collaboration should also provide additional revenue for the HEIs.

45. The degree of success in this respect varies among different HEIs. Prestigious HEIs with substantial intellectual capital and accumulated technical know-how appear to enjoy great success in obtaining corporate sponsorships and research contracts and in offering continued education programmes and executive development. Does this financial self-responsibility system spur innovation and quality improvement within HEIs? There seems to be no clear-cut answer to this question. In pursuit of financial benefits, HEIs could potentially neglect the basic teaching and research activities for which they were created and focus instead on the more lucrative consulting and training activities. In this case, innovation could still be possible but the institutions’ regular students might not be the beneficiaries and could even have their interests placed at risk.

46. On the other hand, partial financial self-responsibility has generated the needed momentum for management reform within institutions and for product and curricula development. Accompanying the partial financial autonomy, consumers of educational products (students and employers) are increasingly conscious of the differences in product quality offered by the various HEIs. Financial reform in the education sector is gradually achieving its intended objectives to reduce the relative financial burden of education investment on the state and to use financial levers to improve the management of HEIs and their instructional and research performance. Have the recent financial reforms helped to improve the quality of education? Experiences from other countries show that market mechanisms need to be coupled with sound regulations and feedback mechanisms in order to ensure proper functioning of HEIs and quality of educational experience and outcome.

47. The decentralisation of the personnel management function and salary systems to the individual HEIs provided the institutional administrations with the needed managerial leverage to strengthen their performance management. This new approach has had a profound impact on the performance of individual faculties and of HEIs. For example in the appointment of individuals, emphasis is now placed more on professional qualifications and academic achievements than on political credentials. Instead of distributing the performance bonus according to the “rights of the employee,” the actual bonus is determined on the basis of performance results and on the level of individual contributions. Increasingly, income from bonuses and other supplementary sources for the high performers has surpassed the actual base salary itself and now constitutes a major part of the total personal income for instructional and research staff. The Action Plan 2005-2007 flags the need for a periodic standardised professional assessment system for teaching staff with certification criteria.

48. The current income structure of the personnel at public HEIs consists of the following elements, namely, the basic salary (which is promulgated jointly by the Ministry of Personnel and the Ministry of Education), and the university supplement, college supplement and department supplement (the major part of these last three components of the staff member’s personal income are directly tied to the individual HEIs “business” activities outside of the regular teaching programmes). Revenue generation, thus, has become a major driving force in the development of this sector. As a direct result, motivation of personnel is described as much improved.

49. A potential pitfall that could deflect the educational reform from its course, however, is the emergence of “profit”-seeking behaviour and short-term opportunistic choices on the part of both
individuals and HEIs. Profit-seeking and short-term, opportunistic behaviours can be fundamentally detrimental to more basic scientific innovations and breakthroughs, and could also undermine the quality of teaching and learning. In recent years, Chinese consumers of educational services have been driven by personal career objectives rather than societal objectives and consumers have not always had the information or the incentives to be particularly selective. In the past, the higher education “market” was supply driven and highly regulated; this led to the production of graduates and research that did not necessarily coincide with society’s needs (in type, quantity or quality). However, a demand-driven, unregulated market also will not automatically or inevitably encourage efficiency or innovation of the education outputs. A teaching staff, busy with various official teaching assignments, involved in special training courses for part-time students, and occasionally employed by more than one institution, will find it hard to invest the time and effort required to improve their teaching materials and teaching methodology. Management is more than motivation – it must consider what institutional goals staff are being motivated to achieve.

Existing system-wide quality management instruments and practice

50. The Academic Degrees Committee (ADC) of the State Council is responsible for defining the standards for the degrees of Bachelor, Master and Doctor and the MOE has established a Disciplinary Guidance Committee whose task is to define the academic standards of Bachelor Degrees in all disciplines (curricula and content) for recognition of academic titles and certificates.

51. At the institution level, a Committee for Accreditation, supported by the Ministry’s Educational Development and Planning Division, defines the qualification procedures for assessing the educational capacities for granting permission to establish Higher Educational Institutions. Requirements for accreditation purposes focus on the specific areas of faculty composition, research, quality of teaching and facilities (including key laboratories and library volumes). Both HEIs and research institutes can be accredited to offer academic degrees of postgraduates recognised by the government. The ADC is responsible for examining the qualifications of the HEIs and research institutes to offer academic degrees.

52. In addition to the initial accreditation, a system of operational monitoring and assessment has also been put in place. HEIs are subject to periodic appraisal and evaluations of their academic programmes and rights to grant degrees. An objective of this systemic quality control process is to raise the level of general education provision requirements and to improve the overall quality of HEIs. The assessment and evaluation is organised at two levels reflecting the difference in administrative responsibilities. The MOE deals with policy matters and establishment of the rules and regulations, while the provincial education authorities are responsible for the operationalisation and implementation of these policies.

53. Mechanisms exist to allow for recurrent assessments of the quality of HEIs. As a consequence the HEIs’ accreditation to grant academic titles is either renewed or cancelled (the latter is rare). Depending on the gravity of the situation, HEIs can be sanctioned through probation or even removal from the recognised programme registrar at MOE. Approval of doctoral and professional programmes is given by the MOE and the Provincial Education Commissions decide on the establishment of Master-level and undergraduate programmes. This division of labour is part of the educational structural reform and should improve the effectiveness and efficiency of the assessment and evaluation function. Another objective of this decentralisation is to ensure the responsiveness of the HEIs to local development needs.

54. Although standardised assessment procedures and criteria have been put in use since the 1980s, the popular perception persists that some HEIs offer superior quality of education while others are perceived as being “diploma mills” which provide sub-standard education. This perception is partially supported by the employment records of graduates from different categories of HEIs. Market perception
continues to be reinforced by the admission criteria based mostly on the universal entrance examination scores. Lastly, the distinction of “nationally accredited” versus “provincial” or “local” HEIs continues to have direct implications in terms of the perceived and actual quality of teaching staff and educational capabilities since better endowed schools attract higher quality teachers. A rigorous application of education assessment would help to ensure the minimum conditions and quality of education, no matter what type of higher education institution and wherever located.

55. The evolution of higher education assessment in China can be separated into two phases. The Discipline Assessment Phase, focusing on specific disciplines, existed from 1985 to 1994. The Comprehensive Assessment Phase lasted from 1995 to 2001 and consisted of the assessment of educational capacities of HEIs and of the actual teaching process and learning outcomes. During this phase, 20% of the 220 HEIs evaluated were not able to fulfil the required minimum standard.

56. Starting in 2002, a new procedure, a five-year cycle system, was put in place. Every university is to be evaluated once every 5 to 6 years by independent assessment bodies established to carry out this task. This task should be carried out by a non-governmental organisation, the National Evaluation Institute for Degree Granting Education (NEIDGE) which was founded in 1994 to pioneer in the development of this procedure. However, given the conservative nature of the education sector, reservations exist concerning the viability of entrusting a third-party institution and the idea of peer review with such a direct policy task of government. To address this concern, MOE might find it useful to consider such quality certification systems as ISO 10015 (International Quality Standard for Training) or the EFQM (European Foundation for Quality Management).

57. Presently, there are three types of institutional assessment and evaluation for HEIs in China, namely, Qualification Assessment, Excellence Assessment (xuan yu ping gu) and Random Assessment. The first qualification assessment is focused on HEIs with relatively weak institutional capacities and less experience with undergraduate education. Its objective to insure the minimum standards for operating as an HEI. Excellence Assessment is meant for HEIs with good institutional capacities, high teaching levels and a relatively long history of undergraduate education. It serves as a benchmark. Random Assessment is meant for HEIs falling in between the first two categories and is carried out on an ad hoc basis. The purpose of all of these assessments is to determine the quality of teaching and to monitor the existing conditions of HEIs.

58. The impact of the evaluation process to date is said to have been positive. Actual improvements concerning the administration and quality of education has been observed by the MOE. On the other hand it has become apparent that greater investment needs to be made in parts of the higher education infrastructure and especially in post-graduate studies. Findings from these assessments have resulted in increased financial appropriations for the higher education system and significant enlargement of the post-graduate level of higher education. Today, a substantial percentage of graduates from the key universities go on to post-graduate studies and pursue academic and research-oriented career paths at their universities. This should boost the future quality of teaching.

59. The evolving system of higher educational assessment and evaluation in China has enhanced transparency regarding the actual functioning of the HEIs and created competition among them through publicly available ranking. Institutional administrators and provincial officials alike take pride in receiving recognition for high performance and are motivated to strive for higher rankings. In the foreseeable future, Chinese consumers of educational products might be able to make better-informed choices regarding their higher educational options and be less driven by the allure of traditional (and often out-dated) reputations alone. Even though it is unrealistic to imagine that all 1 300 HEIs would or could reach the same level of excellence, it could assure that all students access to a minimally acceptable level of higher education.
60. Provincial and municipal governments are developing their own assessment and evaluation standards applicable to their respective local HEIs. This move could be very positive and lead to translation of the general national framework into location-specific solutions. Shaanxi Province, for example, ranked 4th nationwide in regard to its comprehensive educational infrastructure and assets. In 2001, there were 6 national, 36 provincial and 10 private HEIs with 370,000 regular students and 330,000 self-study students in Shaanxi. Although Shaanxi is one of the leaders in “exporting” higher education services within China, i.e., recruiting a large percentage of out-of-province students to study in Shaanxi, only a small percentage of outside graduates actually stay and work in the province. Its initiative in developing its own assessment and evaluation standards could potentially set the example for other provinces and autonomous regions in the Western part of China doing the same and for making regional HEIs more oriented toward serving local labour market and development needs.

61. Approaches to self-assessment vary greatly from comprehensive assessment systems to more rudimentary instruments. Most HEIs have installed some form of self-assessment mechanism. Key concerns of the HEIs are related to the quality of teaching. Evaluation methods involve end-of-course evaluation by students, peer reviews, and in-class inspection. More external oriented methods also exist such as obtaining inputs from the employers and the alumni. These discussions and feedback are used for curriculum development, to check on quality of teaching and to provide direction for future research. Some HEIs are considering benchmarking themselves against schools from other countries by using data provided by MOE through informational links provided by OECD and other international organisations.

62. So far, all the assessment and evaluation activities appear primarily to focus on knowledge acquisition and related performance. Output measures tend to focus on the number of PhD dissertations, research papers, projects, awards etc. Little has been said about students’ emotional intelligence, creativity and ability to cope with stress, etc. These are all attributes important in today’s work environment. The question requiring an answer from HEIs most urgently is: What happens to the soft targets of learning, such as personality development, critical thinking, and individual creativity, which require more than classroom learning but mentoring and teacher-student interaction?

63. Additional learning outcome measures need to be considered to deal with these learning dimensions. It has been mentioned by many HEIs that the employment rate of their graduates is used as an indicator of superior quality of a university. Both the central and provincial governments have started to publish statistics on the employment conditions of graduates from HEIs as performance measures. This development reflects a growing problem of the labour market structure and the imbalance of demand and supply of qualified human resources. The employment situation of the class of 2000 graduates with different levels of educational attainment and from different categories of HEIs is reported in Table 1. Generally speaking, graduates from prestigious key universities have few difficulties in finding a job or being assigned a job immediately after graduation. In contrast, graduates from local HEIs in general have much greater difficulty in finding employment quickly.

64. The number of higher education graduates seeking employment increased from 1.15 million in 2001 to 2.80 million in 2004, more than doubling in just three years. Employment is more than an aggregate problem of finding jobs for so many new employees, however. A serious structural problem exists in that the graduates have often prepared in specialisations for which there is not sufficient demand. The current extraordinary growth of the Chinese economy will help government deal with this in the short run, but in the long run plans must be made to attack both the aggregate and the structural problem.
Table 2: Employment Rates of the HEI Graduates in 2000

I. Graduate Schools

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<thead>
<tr>
<th></th>
<th>PhD holders</th>
<th>Master Degree holders</th>
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<tbody>
<tr>
<td></td>
<td>95.8%</td>
<td>95.8%</td>
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II. Universities

<table>
<thead>
<tr>
<th></th>
<th>Graduates of 4-year HEIs under MOE</th>
<th>Graduates of 4-year HEIs under other Central Ministries</th>
<th>Graduates of 4-year HEIs recently transferred to MOE</th>
<th>Graduates of 4-year HEIs under local governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates of 4-year HEIs under MOE</td>
<td>90.12%</td>
<td>76.2%</td>
<td>81.6%</td>
<td>c.a. 70%</td>
</tr>
<tr>
<td>Graduates of 4-year HEIs under other Central Ministries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>44.9%</td>
<td>45%</td>
<td>55.7%</td>
<td>c.a. 30%</td>
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III. 2 or 3 Year Higher Professional College

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<thead>
<tr>
<th></th>
<th>Graduates of 2- or 3-year HEIs under MOE</th>
<th>Graduates of 2- or 3-year HEIs under other Central Ministries</th>
<th>Graduates of 2- or 3-year HEIs newly transferred to MOE</th>
<th>Graduates of 2 or 3-year HEIs under local governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates of 2- or 3-year HEIs under MOE</td>
<td>44.9%</td>
<td>45%</td>
<td>55.7%</td>
<td>c.a. 30%</td>
</tr>
</tbody>
</table>


65. It should be understood that it is not only the graduates living in the economically depressed areas who have difficulties in either being assigned or finding a job. About 10% of the university graduates in Shanghai, one of the most prosperous coastal cities, are unemployed in the first 12 months after graduation.

66. Sub-optimal utilisation of higher educated talents represents both economic and social challenges. In a society where university graduates are still relatively rare in supply and where the economy continues to grow and the need for skilled work force remains high, why then is it that an average of 20% of the university graduates and 50% of the graduates from non-degree colleges cannot find jobs? This may be partially due to migration from the countryside to the cities. Graduates who moved to major cities are in general reluctant to return to their hometowns, thus adding to the high unemployment rate and long job-search periods of new graduates. Some Chinese specialists view that the fit between higher education and the competence requirements of the current labour market might be another contributor to this mismatch. To encourage the HEIs to take greater interest in the future career opportunities of their students would help to partially mitigate sizeable unemployment of HEI graduates.

67. In this context, incorporating the employment rate of the HEI by the MOE as one of the outcome assessment criteria would make an impact on the HEIs educational objectives and curriculum design. This could help create a better fit between education outputs and labour market demands, in turn fostering a more optimal use of limited education resources through full utilisation/employment of graduates. Seen from a management point of view, both educational planning at the local level and at the local HEIs need to be more market and practice oriented in order to ensure higher return on investment.