

China's Universities since Tiananmen: A Critical Assessment

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China's present leadership sees universities as being of key importance for the country's economic development and for its relationship with Western countries.¹ This is a kind of two-edged sword. On the one hand, considerable support and encouragement for scientific and technological development is provided, together with pressures for scientific findings to be applied to specific economic development needs. On the other, the reflective and theoretical social sciences and the humanities are being purged of Western influences in efforts to mobilize all resources against what is seen as the Western strategy of fostering "peaceful evolution" towards capitalism. The kinds of tension that arise out of this highly contradictory situation are severe.

My 1989 monograph *China's Universities and the Open Door* was an attempt to elaborate this contradiction, as it appeared then. The universities were in a strategic position in terms of China's open door and Chinese-Western interaction. With China's long classical tradition of maintaining social order through the regimentation of knowledge, it was not surprising to find that both Nationalist and Communist leaders preferred European and Soviet curricular influences, with their focus on classical disciplines of knowledge and narrowly-defined technical specializations, over Anglo-American ones. However, with the modernization initiative of 1978, and the recognition of the potential of universities to contribute in new ways to economic growth, there was considerable incentive to open up the curriculum, encourage greater cross-fertilization between basic and applied sciences and more interaction between the social and natural sciences. A major impetus for change came through large-scale World Bank projects in response to Chinese priorities for higher education development. While these projects opened up Chinese universities to influences from all the major OECD nations, American patterns were probably most influential overall.²

In the natural sciences, applied fields were redefined in broader categories and reconnected to basic scientific disciplines that had been institutionally separate in the Soviet model adopted in 1952. Thus the number of programmes was reduced and stronger links were forged between areas such as medicine and biology, engineering and physics. In the humanities, a whole range of new applied fields were developed alongside programmes in the classical disciplines of philosophy,

1. Li Tieying, "Jianshi you Zhongguo tese de shehui zhuyi jiaoyu tixi" ("Construct a socialist education system with Chinese characteristics"), in *Zhongguo jiaoyu bao* [hereafter ZGJYB, 29 January 1991], p. 1.

2. R. Hayhoe, *China's Universities and the Open Door* (Toronto: OISE Press, 1989), chs. 1-3.

history and literature, including museum studies, secretarial studies, library science and public administration. The social sciences saw the most dramatic changes. Theoretical disciplines such as sociology and anthropology, that had disappeared when Soviet patterns had been introduced, were now revived. The ruling social science disciplines – politics and law, finance and economics – which had all been based on Soviet precedents, were now transformed through a diversification of their content. These changes naturally relaxed the political control that had been effectively exercised through the curricular definitions in place, and the results could be seen in lively debates over academic/intellectual freedom and political structure reform,³ starting in 1985–86 and soon overflowing into student activism and calls for political accountability that culminated in the patriotic democratic movement of spring 1989.

The external influences affecting this process came through multi-lateral projects under the World Bank and UN organizations and bilateral projects with Japan, West European nations, the United States, Australia and Canada. While the knowledge transferred reflects in certain ways the capitalist societies whose universities produced it, there have also been specifically cultural dynamics at work, given that autonomy and academic freedom have made possible some critical reflection on capitalist development within the Western university. Thus a transformative process of knowledge transfer characterized by principles of equity, autonomy, solidarity and participation should be possible,⁴ with the knowledge used for empowerment and creative interaction rather than subjugation to external economic or political pressures. This ideal, drawn from the World Order Models Project (WOMP), made possible an evaluative framework that went beyond the parameters of Western modernization theory to the possibility of recognizing and respecting a distinctively Chinese form of modernization. WOMP scholars emphasize the possibility of cultural life stimulating interventions in social change, suggesting that the transformation of knowledge structures in Chinese universities had real potential for allowing Chinese scholars to interpret and even shape the change going on in their own society. The evaluative framework was useful as a tool for measuring the degree to which particular projects of knowledge transfer made possible mutuality and empowerment or tended to enforce conformity to externally imposed standards. The conclusions of this study were mixed, but there were some encouraging signs of a distinctively Chinese model of higher education emerging in the reform process.⁵

3. R. Hayhoe, "China's intellectuals and the world community," *Higher Education*, Vol. 17 (1988), pp. 121–138.

4. J. Galtung, "Is peaceful research possible? On the methodology of peace research," in J. Galtung (ed.), *Peace: Research Order Action* (Copenhagen: Christian Ejlertsen, 1975), pp. 272–73.

5. Hayhoe, *China's Universities and the Open Door*, chs. 4–7.

From this perspective, the Tiananmen events can be seen as a tragic failure of the political leadership to make positive use of the intellectual energy and social commitment released as a result of curricular changes and other reforms in Chinese universities during the 1980s. In the crisis they fell back upon military force to suppress the student movement, and subsequently used traditional patterns of political education to impose one uniform interpretation of all that had happened. A highly dogmatic approach to classical Marxist-Leninist texts replaced the critical dialogue that had been initiated in the mid to late 1980s over the wide-ranging social and political changes that were resulting from the economic revolution around commodity socialism.

What has been the result for China's universities? This article attempts to assess enrolment patterns after Tiananmen, curricular reforms and the research role of universities. Sources drawn upon include the *Chinese Education Newspaper*, which provides an authoritative account of official policy, the *Chinese Higher Educational Journal*, also emanating from the State Education Commission, and giving some elaboration of the official line. A third valuable source is *Gaodeng jiaoyu* (*Higher Education Teaching*), a series compiled at People's University that brings together research articles from higher education journals around the country.

Enrolment Trends

In the period between 1980 and 1988, there was a remarkable expansion of higher education enrolments in the formal system, from a yearly intake of 281,230 in 1980 to one of 669,731 in 1988. Total enrolments in the formal system reached 2,095,923 in 1988, up 238 per cent from the figure of 1,143,712 in 1980. Several interesting features characterized this rapid expansion process. Between 1980 and 1985 the humanities proportion of enrolments grew from 4.6 to 8.6 per cent of the total, including such areas as sociology and anthropology which are regarded as humanities in China. At the same time there was also a dramatic expansion in economics and finance, from 4.3 to 10.8 per cent of enrolments, and political science and law, from 1 to 2.6 per cent. These had been the definitive social sciences of the Soviet era, and their expansion was characterized by a considerable change in content and orientation. With the emergence of "commodity socialism" in 1985, enrolments in economics and finance continued to expand, reaching 11.4 per cent in 1988, while humanities dropped back to 5.7 per cent and political science and law to 2.2 per cent, probably indicating the economic obstacles facing graduates in these areas. Overall the expansion in humanities and social science was mainly at the cost of the basic sciences and medicine, which reflected a proportionate decline over the period,

while engineering and most other areas maintained a stable proportion of overall enrolments.⁶

Another significant change was the expansion of enrolments in short-cycle, two to three year programmes, aimed at forming mid-level technical and administrative personnel. In 1980 this group constituted 20 per cent of formal undergraduate enrolments, while by 1988 it made up 34 per cent, and by 1990 36 per cent.⁷ In the non-formal system of higher education, including television and radio universities, correspondence education and self-study programmes, short-cycle enrolments made up about 97 per cent of the total. The expansion of this sector was modest, from 1.5 million in 1980 to 1.67 million in 1990,⁸ but the focus was on improving quality and making possible diplomas and degrees of equivalent standing to those within the formal system.

The other striking development was in the expansion of graduate programmes, with total enrolments growing from 21,604 in 1980 to 93,018 in 1990, and the social science and humanities proportion growing from 12.1 per cent in 1980 to 23 per cent in 1989,⁹ then falling back to 19.1 per cent in 1990.¹⁰ Thus over the period when a whole range of Western ideas found their way into China, and around 7,000 works of Western literature and social sciences were translated into Chinese,¹¹ universities were turning out an increasing proportion of graduates in areas of key importance for the cultural, social and economic definition of "modernity" for China.

In the wake of Tiananmen, enrolment figures reflect the determination of the political leadership to curtail the cultural and social dimensions of this process, while at the same time seeking to maintain the impetus of economic change. Thus the intake of undergraduate students dropped from 669,731 in 1988 to 597,114 in 1989, with a further drop in the proportionate share of humanities, political science and law, while economics and finance maintained their proportion. The most severe cuts overall went to the 36 prestigious national institutions directly administered by the State Education Commission, where the movement had been centred. Their enrolments were cut back by over 18,000 students. This "punishment" was deeply felt and protested by faculty in areas such as history, sociology and philosophy, where the cuts were most drastic. The universities argued that they had the best resources for teaching in these areas and the cuts should have been made in new and lower level institutions where there was a genuine problem of academic quality. Graduate

6. For tables charting enrolment over the period, and a more detailed discussion, see R. Hayhoe, "The context of educational exchange: challenges for China and the West," *China Exchange News*, Vol. 20, No. 1 (1992), pp. 3–5.

7. *Educational Statistics Yearbook of China 1990* (Beijing: People's Education Press, 1991), pp. 24–25.

8. *Ibid.* pp. 90–91.

9. *Educational Statistics Yearbook of China 1989* (Beijing: People's Education Press, 1990), pp. 38–39.

10. *Educational Statistics Yearbook of China 1990*, pp. 38–39.

11. *China Daily*, 14 December 1991, p. 5.

study also suffered in the period after Tiananmen, with new entrants to graduate programmes dropping from 35,642 in 1988 to 28,569 in 1989, and rising only to 29,649 in 1990.¹²

The peak of 669,731 new entrants in 1988 had reflected a somewhat relaxed situation politically in which social and economic demands played an important role in pushing up enrolments. Of entrants in that year, 9.4 per cent were given places on the basis of direct contracts between universities and enterprises, and another 6.3 per cent were self-paying students.¹³ Universities were thus able to add to their state funding allocations through these new sources of income. In the aftermath of 4 June, however, self-funded students were cut back to 4.3 per cent of enrolments in 1989 and 2.8 per cent in 1990. Contract students were cut back to 8.4 per cent in 1989 and 8.8 per cent in 1990.¹⁴

There was clearly a political agenda in the restrictions imposed on enrolments in 1989. This is evident in the way in which nationally prestigious universities were targeted. For other levels of the higher education system, however, the limitations can be related to a policy document of the State Education Commission that was adopted in 1988, calling for a consolidation of the whole higher education system after the rapid expansion of the 1980s. Standards of evaluation were established in the areas of faculty qualifications, physical facilities, equipment for experimentation and library resources. All institutions were given a date to reach certain standards in these areas, or risk enrolment cuts and possible closure. This was intended to stimulate a more serious commitment by provincial and municipal governments to the funding of their institutions, and also to deal with inefficiencies and overlaps related to the small size and irrational geographical distribution of many of the new institutions.¹⁵

In 1991 a Ten-Year Development Plan for education was put forward, alongside the Eighth Five-Year Plan. It set the future development of higher education in the context of overall development goals. Internally the responsibility of higher education is stated as contributing to the preservation and development of the socialist system, while externally it is called upon to face the challenges of the high technology revolution, and Western strategies to undermine Chinese socialism through peaceful evolution. In face of these challenges, Chinese youth is to be encouraged to adopt a scientific world-view and a spirit of serving the people. Education is seen as the

12. *Ibid.* pp. 38–39.

13. *Zhongguo jiaoyu tongji nianjian 1988 (Educational Statistics Yearbook of China 1988)* (Beijing: Beijing Gongye daxue chubanshe, 1989), pp. 28–29.

14. *Educational Statistics Yearbook of China 1989*, pp. 24–25. *Educational Statistics Yearbook of China 1990*, pp. 24–25.

15. "Putong gaoxiao chongshi zhengdun gongzuo huigu yu fazhan" ("Reflection and development in the work of consolidating regular higher institutions") *ZGJYB*, 16 April 1991, p. 2; See also Wang Congfang and Zeng Zida, "The role of Chinese higher learning institutions in China's development," concept paper written for the Canadian International Development Agency, February 1992.

"basic engineering" for socialist modernization, and the task of higher education over the decade will be to raise the quality and efficiency of its programmes, to develop multiple sources of funding and to strengthen the teaching force and educational research. Enrolment expansion will take place mainly at lower levels, with only modest and controlled expansion at the tertiary level in the formal system. Overall, higher education is charged with staying open to the outside world, yet maintaining stability in China.¹⁶

There is thus a very clear commitment to enhancing and consolidating the higher education system over the coming decade and assuring its direct contribution to economic change, seen in terms of the application of scientific research to development needs. At the same time social and political stability is a key concern, and is to be assured through imposing a non-negotiable set of Marxist–Leninist dogmas. It seems that the Chinese leadership believe they can engineer a rapid economic change process from above while maintaining tight political control. This control is based on Marxist–Leninist dogma at one level, but probably its deeper roots lie in the same Confucian patterns that were so effective in the modernization of societies such as Taiwan, South Korea and Singapore.

Curricular Reform

The situation for curricular reform in Chinese universities since Tiananmen is mixed. On one level, the impetus for a greater breadth of knowledge in various programmes and a better integration of theoretical and practical dimensions of knowledge goes forward. Universities are taking very seriously the challenge to adapt to the rapidly changing needs of the commodity economy, and considerable research into the question of how employing units evaluate their graduates is going on.¹⁷ In turn this leads to attempts to adapt the curriculum to such perceived needs as a broader knowledge base and a more practical grasp of pedagogical principles for graduates of normal universities,¹⁸ and greater practical and technical expertise for graduates from basic science programmes.¹⁹

Earlier reforms oriented towards this kind of curricular broadening, such as a modified elective system and the possibility of a double degree in two fields for exceptional students, are being extended and

16. Li Tiesing, "Jianshi you Zhongguo tese de shehui zhuyi jiaoyu tixi," p. 1; "Zhonggong Zhongyang guanyu zhiding guomin jingji he shehui fazhan shinian jihua de jianyi," *ZGJYB*, 29 January 1991, pp. 1–2.

17. Lu Shihua, "Shehui dui daxuesheng wenke jiaogai de yixiang" ("Society's expectations of the teaching reforms in humanities programmes for university students"), in *Jiaoyu yanjiu*, No. 12 (1990), pp. 24–28, in *Gaodeng jiaoyu*, No. 1 (1991), pp. 35–39.

18. Xue Tianxiang, Tang Anguo and Tang Yuguang, "Lun gaoshi kecheng tixi de chongxin goujian" ("On the reconstruction of curricula for higher normal education"), *Jiaoyu yanjiu*, No. 9 (1989), in *Gaodeng jiaoyu*, No. 4 (1990), pp. 32–36.

19. Nanjing daxue, "Mingque renshi tansuo gaodeng like jiaoyu gaige de tujing" ("Clarify, understand and explore a path for the reform of high science education"), *Zhongguo gaodeng jiaoyu*, Nos. 7/8 (1990), pp. 41–44.

built upon. Thus the double degree programme, which has very limited access (there were only 5,313 students nation-wide in 1990)²⁰ is being complemented by a new type of programme allowing for a specific minor field (*fuxiu ke*) to be added to a student's major, giving greater breadth, but making less rigorous demands than a full double degree.²¹ Likewise many new elective courses are being developed and researchers are calling for these to form a more significant proportion of students' overall programmes.²² These reforms came from concerns to adapt university programmes more closely to changing economic and technological needs, and to maintain and enhance academic quality.

On one level, therefore, the trends of the 1980s continue and there is some deepening of their effects. On another level, however, a major constraint has been introduced into the curricular change process as a result of Tiananmen. New Party secretaries were appointed to many universities after 4 June. It has been their task to initiate and oversee a thorough expunging of all tendencies towards "bourgeois liberalization," which were seen as responsible for the student movement. All department chairs in the humanities and social sciences have been called upon to carry out a review of each programme within their department, and indeed each course being taught, in order to remove anything regarded as tainted with bourgeois liberalism. University journals and student graduate theses have been investigated in order to carry out a thorough criticism of the errors made by faculty and students in the pre-Tiananmen period.²³

The State Education Commission has affirmed and led the rectification of all curricula in the humanities and social sciences through the establishment of a high-powered committee given the responsibility for providing new programme outlines in the major fields. These are to ensure absolute political orthodoxy along with high academic standards.²⁴ The Vice-Commissioner for Education, Teng Teng, in a 1991 speech on the problem of job assignment for humanities and social science students, stressed that the purpose of education in this area is to form successors to socialism, not democratic individuals, and that all elective courses should be strictly monitored to ensure they fit into a Marxist framework. They should not be seen as a free market-place of ideas.²⁵

20. *Education Statistics Yearbook of China 1990*, p. 24.

21. "Huadong shida jiaochang kecheng jianshe," *ZGJYB*, 18 May 1991, p. 2.

22. "Dongbei shida kaishe duokexing gonggong xuanxiu ke" ("East China Normal University strengthens the construction of curricula"), *ZGJYB*, 24 February 1990, p. 2.

23. Si Hua (an obvious pen-name, meaning "Think about China"), "Renzen qingli zichan jieji ziyouhua sichao zai xueke lingyu de yingxiang" ("Northeast Normal University opens general elective courses in multi-disciplinary areas"), *Zhongguo gaodeng jiaoyu*, No. 11 (1991), pp. 26–27.

24. "Guojia jiaowei zuzhi bianxie wenke jiaoxue zhidao gangyao" ("Make every effort to purge influences of the tide of bourgeois liberalism in various disciplines"), *ZGJYB*, 27 November 1990, p. 1.

25. Teng Teng, "Wenke jiaogai tixi jiachi Makesi zhuyi zhidao he lilun lianxi shiji" ("The State Education Commission has organised and edited guidelines for humanities programmes"), *Zhongguo jiaoyu bao*, No. 6 (1991), pp. 2–7.

These constraints fit into a general pattern in which all education in the humanities and social sciences is seen as subservient to political education, with all faculty required to take responsibility for the political orientation of their students and all courses aimed to expose the evils of the Western strategy of "peaceful evolution" and advocacy of pluralism in the political, economic and ideological arenas.²⁶ The world view to be inculcated in young people is depicted as "scientific socialism" in contrast to the "democratic socialism" which emanates from the perpetrators of "peaceful evolution." Science is assumed to be an authoritative monolith, leaving little space for the kinds of critical discussion and absorption of Western ideas that was taking place before Tiananmen. The conflicts arising out of the sharp contrast between traditional collective values of orthodox Marxism and new values emerging in Chinese society as a result of the commodity economy cannot really be discussed. Instead of integrating the energy generated by these new values into the change process, or working out a balance between legitimate individual interests and basic collective interests, individualism is allowed to flourish on the level of practice and behaviour, as long as it is camouflaged by the rhetoric of Marxist orthodoxy. The Party's attempt to bring about modernization without Westernization through the reinstatement of an orthodox and unquestioned Marxist dogma, is thus likely to foster an unchecked and unreflected Westernization in people's behaviour as they adopt outright values of capitalism in response to new conditions of the commodity economy, without being given any opportunity for open discussion of this process.

It is fascinating to see how the new movement for political control of social science curricula is being implemented in a traditional top-down manner throughout the whole higher education system. People's University was originally given a mandate to ensure political orthodoxy throughout the country both in the training of teachers and the setting of texts and course outlines in the Soviet-derived social sciences, and also through the standard political education courses required of all students.²⁷ Programmes had been greatly broadened and opened up through influences coming from outside in the pre-Tiananmen period, but the university has now been required to take up its former role as political watchdog for the whole system. Numerous articles describe its efforts in fighting peaceful evolution through the research of its faculty and a thorough review of all its programmes. The leading idea is the recognition of the class nature of the social sciences and their "party nature" (*dangxing*). In each department, courses are being adjusted to suit the new orthodoxy. The Economics Department now stresses political economy and exposes the characteristics of imperialism in the present period. The Philosophy Department has the only programme in moral philosophy for the

26. A whole series of articles contrasting "democratic socialism" with "scientific socialism" appeared in *Zhongguo gaodeng jiaoyu*, No. 11, (1991), pp. 7-16.

27. Hayhoe, *China's Universities and the Open Door*, pp. 33-34.

whole country and so its task is to fight individualism and strengthen the philosophical basis of collectivism. The Department of International Politics is called on to strengthen teaching of Lenin's "Imperialism, the highest stage of capitalism" and to ensure adequate criticism of Western ideas in all its Western economics courses. At the same time, it is encouraged to absorb useful techniques in market analysis from the West which will have clear and direct benefits for Chinese economic development. Finally, the Journalism Department is to criticize thoroughly the bourgeois idea of press freedom.²⁸

To complement this, major national comprehensive universities are being called on to revise the social science and humanities curriculum at the provincial level. Two detailed accounts of the rectification of the social sciences at Jilin University²⁹ and Wuhan University³⁰ explain how the changes made are taken as exemplaires for other higher education institutions in their respective provinces. These articles give details of curricular changes under way, which emphasize the strengthening of traditional disciplines alongside the introduction of classical Marxist and Maoist texts. These are to be read and studied in the original in areas such as literary theory, law, philosophy and economics.

This combination of academic and political authority has interesting parallels with the higher education policies of the Nationalist government in the 1930s, when arguments for the preservation of academic standards made possible a fairly tight control of university administration and the marginalization of progressive faculty who were seen as subversive to the political order of the time.³¹ Corresponding to the present obsession with the "Party nature" (*dangxing*) of social knowledge, the term current then was the "partification" (*danghua*) of higher education. Just as the forces of revolutionary change at that time swept over attempts to maintain the status quo, it seems likely that the economic revolution now under way under the name of "commodity socialism" will place a great strain on these policies.

It is difficult to say at present which of the two opposite currents—one towards politicization and academicization and the other towards commercialization and a direct service to the economy—is winning in the social sciences. However, it is notable that

28. "Zhongguo renmin daxue ba jianchi zhengque banxue fangxiang luo dao shichu. Pipan zichan jieji ziyouhua sichao, cujin jiaoxue gaige he xueke jianshe" ("China People's University has taken the policy of maintaining a correct orientation in running the school to a practical level, criticizing the tide of bourgeois liberalism and promoting teaching reform and the construction of courses"), *ZGJYB*, 11 October 1990, p. 1.

29. "Jilin daxue jianchi zhengque fangxiang jiachang wenke jianshe" ("Jilin University is maintaining a correct orientation and strengthening the establishment of humanities programmes"), *ZGJYB*, 12 December 1989, p. 2.

30. "Wuda jiehe wenke jiaoxue pipan zichan jieji ziyouhua" ("Wuhan University is combining the teaching of humanities with criticizing bourgeois liberalism"), *ZGJYB*, 2 February 1991, p. 1.

31. Yeh Wen-hsin, *The Alienated Academy: Culture and Politics in Republican China 1919-1937* (Cambridge, MA: Harvard University Council of East Asian Studies, 1990), pp. 172-79.

much of the rhetoric of politicization relates to basic fields such as history, literature, philosophy and sociology. In the areas of economics, finance and management, crucial to the success of economic reforms, it seems that the changes under way before Tiananmen have quietly gone forward. Major reforms in the finance and economics curricula as part of a project supported by the World Bank have continued since Tiananmen, although at a slackened pace. Several of China's best-known universities have brought together distinguished Western and Chinese scholars in these areas to produce a new core curriculum of 11 key courses that introduce the most advanced work being done in the West in such areas as international finance, money and banking and development economics. These courses are required of all students in the 48 programmes of economics and finance offered by 250 higher institutions around the country.³² It seems likely that this quiet continuation of projects is also going on in other applied social science and humanities areas. This would explain numerous articles that describe changes in programme towards a more applied orientation in response to the specific needs of employing units.³³

In science there is an even more striking dissonance between political rhetoric and the reality of ongoing change. The pragmatic recognition of the importance of the applied sciences to economic change and of the increasingly close relations between high technology and advances in basic scientific theory, has led to dramatic changes in the curriculum. During the 1980s there was a process whereby institutions in engineering, agriculture, medicine and other applied areas were broadening the definition of their programmes and strengthening the basic theoretical disciplines. At the opposite end of the spectrum, comprehensive and normal universities, which only had programmes in basic disciplines under the Soviet model, had begun to develop a range of applied fields. This process has continued and intensified with the stimulus of economic change, and the commodity economy in the period since Tiananmen.

While engineering universities have been doing quite well in this period, in some cases opening up whole new programmes in co-operation with central ministries or enterprises and enjoying considerable opportunities to augment their income by contract training,³⁴ things have been more difficult for comprehensive universities

32. International Advisory Panel and Chinese Review Commission, *Evaluation Report: Chinese Universities Development Project II* (Washington, D.C.: National Academy Press, 1991), pp. 59–75.

33. See for example a general and entirely non-ideological article on the reform of arts curricula under the title "Xiuding gaodeng xuexiao wenke benke zhuanke mulu jidian yijian" ("A few suggestions for the process of revising the list of humanities programmes at the baccalaureate level"), *Zhongguo gaodeng jiaoyu*, Nos. 7/8 (1991), p. 34, and "Zhengzhou daxue mianxiang shiji tiaozheng zhuanke jiegou" ("Zhengzhou University faces up to the practical task of revising the structure of its programmes"), *ZGJYB*, 18 May 1991, p. 2.

34. See for example "Shanghai Jiaoda yu Nengyuanbu lianhe banxue" ("Shanghai University runs joint programmes with the Ministry of Energy"), *ZGJYB*, 6 April 1991, p. 1.

whose main scientific teaching is in basic fields. Nanjing University conducted a survey in 1988 to find out why it was so hard to place their science graduates and they concluded that employing units tended to look for the immediate and short-term benefits of hiring technically educated people, and to lack understanding of the value of a broader scientific education for long-term adaptation to new technologies. Secondly, the creation of new basic science programmes in various engineering and professional institutions had flooded the market with science graduates. Finally, there was a problem with students being unwilling to accept job assignments in grass roots level units.³⁵ Nanjing University has dealt with the situation in an imaginative way. All science students accepted by the university are given a two-year common programme in which they have basic courses in maths, physics, chemistry and biology, as well as some elective courses in the arts and social sciences, and common courses in a foreign language and politics. They are then divided for their third year into two main streams, one leading into a range of technologically-oriented programmes, the other into programmes oriented towards basic fields and research. The students in the latter category spend their last year in a research institute, while those in technological programmes have a six-month internship in a factory or other work site for the first half of their last year.

This approach fits into a general new orientation for science programmes that came from a national work conference for the sciences convened at Lanzhou by the State Education Commission in July 1990. At this meeting Vice-Commissioner Zhu Kaixuan set out new directions for university science education that would see a much stronger applied and technological emphasis, with basic theoretical work being restricted to 15 key universities where high academic quality could be assured and maintained. A new kind of streaming (*fenliu peiyang*) will orient the majority towards technological work and teaching, while a minority with outstanding talent are kept in programmes intended to form scientific researchers. The idea of the selection being made after two years of common programmes, already tried out at Nanjing University, was also put forward in Zhu's speech.³⁶

This change may smack of elitism, but the two-year common science curriculum should provide an opportunity for science students to find out where their interests and talents lie. It is also true that technological programmes leading into some of the newly-developing high tech industries and joint venture operations may be more attractive to students than research oriented programmes. The most difficult problem is likely to be persuading science graduates to go into science teaching, especially at the secondary level.

35. Nanjing daxue, "Mingque renshi tansuo gaodeng like jiaoyu gaige de tujing."

36. Zhu Kaixuan, "Guanyu shenhua gaige gaodeng like jiaoyu de ruogan wenti" ("Several problems concerning the deepening of reform in higher science education"), *Zhongguo gaodeng jiaoyu*, No. 9 (1990), pp. 6-13.

Generally there seems to be a lot of creative thinking going on over science curricula, and in the inevitable discussion of the political education of science students there is far less polemic than in articles over social science and humanities programmes. Science students are to be given courses on the history and philosophy of science, as well as China's own scientific history, in addition to standard political courses.³⁷ Such courses are likely to be quite stimulating, if well taught.

As for the quality of teaching, large-scale projects supported by the World Bank have contributed in substantial ways to improving standards in science teaching in over 150 national and provincial institutions.³⁸ Faculty have had the opportunity for overseas training, world-renowned specialists in various fields have visited individual departments, evaluating the teaching programmes and offering advice for improvement, and considerable equipment has been acquired in order to enhance the amount of scientific experimentation possible. Many Chinese university campuses now have excellent computer centres, and all science students are required to become computer literate.

Thus the reality of what is going on in science curricula stands in striking contrast to the notion of an authoritative monolith associated with "scientific socialism." They are constantly changing to adapt to economic change, yet there is a core of basic theoretical work that is being consciously protected and upgraded.

Research

One of the most remarkable changes in Chinese higher education during the 1980s was the development of its research orientation. The patterns of the 1950s, based on the Soviet model, had decreed that research would be concentrated in the Chinese Academy of Sciences and other state research institutes, while the main function of higher institutions would be teaching. Although a certain amount of significant research did go on in universities over the period before 1978, financial support for these efforts was limited and there was no strong overall mandate for research. It was only with the reforms of the early 1980s that universities were given an explicit research mission. This development was crucial to curricular reform. Knowledge was no longer seen as an authoritative set of dogmas dictated from above in the form of national teaching plans that had a "law-like" authority, but rather as contingent and changing, something which the universities themselves were involved in creating and revising. Thus the greater authority which university departments

37. Chen Zufu, "Zhazha shishi de tuijin gaodeng like jiaoyu de gaige" ("Promote the reform of higher science education in a down-to-earth manner"), *Zhongguo gaodeng jiaoyu*, No. 10 (1991), pp. 32–33.

38. Hayhoe, *China's Universities and the Open Door*, ch. 7.

gained over the content of teaching in various fields combined well with this new research function.³⁹

However, it is very difficult to take scholars whose major orientation has been to teaching and turn them into effective researchers in a short period of time. One of the most significant achievements of the World Bank projects at all levels of higher education has been to support this process. Funding for advanced research equipment has been provided, and Chinese scientists have been put in contact with researchers in similar fields around the world, who can offer helpful advice on the development of their research projects. Many have also been supported in periods of study abroad and returned to develop new areas of research. While there have been plenty of problems with these projects,⁴⁰ including the buying of equipment for prestige purposes rather than practical use and the non-return of younger scholars, the present involvement of Chinese universities in scientific research is remarkable evidence of the overall success of the World Bank projects.⁴¹

In the Seventh Five-Year Plan period (1986–90) universities undertook 36.7 per cent of all national scientific research projects under the plan.⁴² A decade earlier they would have had a much lower profile in what remains the major forum for scientific research. Topics set by the national plan, with specific reference to various developmental goals, are announced, and research units compete for the right to take on particular projects. There is thus a competitive element, although the definition of the topic is determined by the plan.

A second increasingly significant source of funding for scientific research is the National Natural Sciences Foundation which dispensed about 500 million *yuan* of research money in the first five years of its existence (1986–90). Modelled on such Western agencies as the National Science and Engineering Council of Canada, it provides funding on a competitive basis to research projects which are defined by the scientific community itself according to scientific rather than developmental criteria. All funding decisions are based on a process of peer review. Here universities have done remarkably well. Over this five-year period they gained 70 per cent of all funding and 74 per cent of all projects.⁴³ Of 60 prizes given for outstanding achievements, 27 went to universities and another two to projects where university scholars and those from the science academy co-

39. *Ibid.* pp. 41–42.

40. International Advisory Panel and Chinese Review Commission, *Evaluation Report: Chinese Universities Development Project I* (Washington, D.C., 1986).

41. For a Chinese evaluation of one such project, see Li Peisheng, "Gaoxiao waici guanli chutan" ("A preliminary discussion of the management of foreign capital in higher education"), *Xibei gaodeng nonglin jiaoyu* (Yangling), No. 1 (1991), pp. 79–82, in *Gaodeng jiaoyu*, No. 3 (1991), pp. 70–73.

42. Beijing *Xinhua* in English, 30 September 1991, *FBIS*, No. 191, 2 October 1991, p. 23.

43. "Gaoxiao she jichu keyan 'guojiadui' zhuli" ("Universities are a major force in 'network teams' of basic research"), *ZGJYB*, 3 February 1990, p. 1.

operated. Universities constituted three of the five units which received three prizes or more.⁴⁴

Of 71 state key laboratories which started being planned in 1984 and are supported substantially by central government funds, 41 are associated with universities. By 1990, 34 of these had already been established and another 17 were in process. Altogether 700 doctoral students and 3,000 master's students had been trained by these laboratories and over 200 foreign researchers had spent extended periods of time working there on joint projects.⁴⁵

Not only have universities won for themselves a key role in basic scientific research, as the above figures indicate, but they are also increasingly being involved in applied research linked to local and regional development needs and funded through contracts with enterprises and local government agencies. In Shanghai, for example, five major universities created a team in 1990 that took on major problems of urban development with the support of municipal government funding.⁴⁶ Universities are gaining more and more of their funding for scientific research in this way. For provincial and local level institutions links between scientific research and local development problems can be academically stimulating as well as providing important sources of funding. For national institutions, however, there is a need to balance long-term basic research with applied research for direct developmental needs. The temptation for universities to prostitute themselves to immediate and highly practical research opportunities, simply to get funding that will keep sophisticated research instrumentation operable, is a serious one. The commercialization of science, with scientific knowledge being more and more recognized as a valuable commodity, thus brings both gains and problems to the university community. Generally, however, it is fair to say that scientific research in universities has continued to flourish since Tiananmen and that efforts to ensure it is directly linked to economic development needs have paid off. Universities are thus in an excellent situation to gain funding for applied research, while the best among them are struggling to maintain a high profile in basic scientific research as well.⁴⁷

The situation for university research in the social sciences could hardly be more different. Although a national social research foundation has been established to dispense funding, its resources are extremely limited. The main research funding is provided under

44. "Gaoxiao 29 xiang chengguo huo guojia ziran kexue jiang" ("Results from 29 projects in universities won national natural science awards"), *ZGJYB*, 10 March 1990, p. 1.

45. "Guojia zhongdian shiyanshi keyan yuren shuang fengshou" ("National key laboratories have reaped a double harvest in research and education"), *ZGJYB*, 15 March 1990, p. 1.

46. "Gaoxiao 'jituanjun' chengdan zhongda keyan xiangmu" ("The university 'bloc' has taken on major national research projects"), *ZGJYB*, 25 August 1990, p. 1.

47. For a discussion of the dimensions of this struggle, see "Jichu keyan xiang hechu?" ("Where is basic scientific research going?"), *ZGJYB*, 26 January 1991, p. 4.

topics listed in five-year plans, ensuring political and strategic control over the projects funded. Individual universities and groups of scholars may apply for projects defined within the plan and they are subjected to a scrutiny that includes both political and academic dimensions.

A national meeting for discussing social science research in universities was held in Beijing early in 1990, where the principle of the University Party committee controlling all social science research was emphasized on the grounds that all such research really falls into the category of the Party's theoretical work. There is a parallel with the fact that all faculty teaching in the social sciences are called upon to be political instructors in the post-Tiananmen period. The main principle behind social research is the presumption of a "unity between its Party nature and its scientific nature." "If the Party nature is abandoned, then the question of its scientific nature cannot even be discussed."⁴⁸ This recourse to "science" to bolster the Party's authority over research evokes the image of science as a body of dogma, in striking contrast to the relatively open and tentative pursuit of knowledge that is going on in natural scientific research.

The practical problems of social science research are delineated in another article about this national meeting which affirms the same ideological principles while giving a realistic depiction of social science research in universities.⁴⁹ The first weakness identified is a lack of theoretical knowledge of Marxism and of the Party's policies, which make researchers timid about undertaking projects and fearful of bringing problems on themselves. Secondly, researchers tend to prefer theoretical research with a strong historical orientation. A recent survey on social science research in Shanghai indicated that only 11 per cent of all research dealt with the contemporary period and with practical problems. Several reasons are suggested for this situation. One is the lack of funding for quantitative survey work or investigative types of research. Secondly, faculty tend to see research as a way of improving the content of their teaching and so prefer the theoretical. Thirdly, the publication of research results has become an important part of promotion decisions, so faculty prefer types of research that are of short duration, fairly simple and can be quickly turned into publications. They are much more concerned with the scholarly evaluation that will be applied to their work within the university community than with the broader social evaluation of projects that attack real problems. Finally, difficulties in getting work

48. Wang Maogen, "Jianchi dangde jiben luxian, gaohao gaoxiao shehui kexue yanjiu" ("Hold firmly to the Party's basic line and do a good job of managing social science research in universities"), *Gaoxiao shehui kexue*, No. 2 (1990), p. 18-21, in *Gaodeng jiaoyu*, No. 6 (1990), pp. 51-54.

49. Tang Yinghua, Lou Lisheng, Shuai Xiangzhi, "Gaoxiao shehui kexue yanjiu cunzai de wenti yu gaoshan guanli de cuoshi" ("The problems existing in university social science research and strategies for improving its management"), *Shandong Shida xuebao: shekeban*, No. 4 (1990), pp. 47-54, in *Gaodeng jiaoyu*, No. 9 (1990), pp. 64-70.

published force faculty to move towards more superficial and popular forms of research writing.⁵⁰

This explanation of the weakness of social science research rings true, but it does not go more deeply into the problem of the cultural alienation between intellectuals and the political leadership. This can be seen in the strident polemical language used by political authority, which stands in strong contrast to the more open rational approach to social research before Tiananmen. A 1988 document of the State Education Commission, for example, suggested that Chinese social scientists should draw upon "the rich development experience of countries around the world and healthy elements of their cultures, to enrich and fill out the theory of China's initial stage of socialism, and gain a scientific understanding of the laws of political and economic development in the contemporary world."⁵¹

Now, however, the main intellectual newspaper, *Guangming ribao*, is dominated by a political monologue so intolerable that many university faculty have simply cancelled their subscriptions.⁵² Meanwhile, some of the most popular journals for introducing ideas from abroad and for general intellectual and social comment, such as *Xin guancha*, *Jingjixue zhoubao*, *Xiaoshuo xuankan* and *Shulin* have been forced to close.⁵³ The popularity of most of these publications was such that they needed little subsidy, so that this action was evidently political.⁵⁴

The response of intellectuals has been varied. Many have simply ceased playing an active role in research and publication, since they are unwilling to submit their work to the kinds of political censorship now in place. Others have cynically complied with calls to do research that will expose the "evils of bourgeois liberalism" for the sake of the rewards offered for this kind of behaviour. One of the most striking cases of this became evident in an article written by the Party Secretary of Wuhan University which describes how a group of influential professors in the Chinese department had been invited by the Party to hold a series of 27 open lectures on the following topics: Criticizing pluralism in literary theory and establishing the leadership

50. *Ibid.*

51. "Temporary provisions for managing social science research work in the universities" issued by the State Education Commission on 5 November 1988 in *Zhongguo jiaoyu nianjian 1989* (*China Education Yearbook 1989*) (Beijing: Renmin jiaoyu chubanshe, 1989), p. 795.

52. This was widely reported to me informally during my many visits to university campuses while living in China from August 1989 to July 1991. A recent Hong Kong press article estimates the fall in subscriptions to be from one million before 4 June to 100,000 at present. See Fang Chung, "Jiang Zemin was rebuked by two sides while trying to restore publication of *Shijie jingji daobao*," *Ming Bao* in Chinese, Hong Kong, 9 March 1992, in *FBIS-Daily Report China*, No. 46 (9 March 1992), p. 22.

53. Hua Lun, "Xu Weicheng wantonly stops publication of *Zhongguo jingji xinwen bao* and Li Ruihuan is unable to send assistance," *Hong Kong Dangdai* in Chinese, No. 64 (23 February 1991), pp. 14–15 in *FBIS*, No. 39 (27 February 1991), pp. 21–22.

54. See Zhang Weiguo, "Press freedom is the only way for mainland newspapers to extricate themselves from their predicament," *Ming Bao* in Chinese, Hong Kong (9 March 1992), in *FBIS-Daily Report China*, No. 48 (11 March 1992), p. 19.

of Marxism; criticizing those who attacked Mao Zedong's Yanan Talk on Literature and the Arts; criticizing those who negate the value of China's cultural tradition; criticizing those who claim there is no systematic Marxist-Leninist literary thought; criticizing sexual culture and upholding healthy literature; and criticizing all-out Westernization. Twenty-two of these articles were subsequently published by Wuhan University Press in a collection entitled *Wentan shifei bian* (*Discriminating between Right and Wrong in Literary Circles*).⁵⁵ Participation in this project no doubt assured certain political privileges to scholars, but it is hard to imagine such a volume or its contributors gaining any scholarly recognition.

Still others have taken an openly oppositional stance, such as the action of distinguished writer and former minister of culture, Wang Meng, who launched a suit for libel against the journal *Wenyibao* after it suggested that one of his recent stories constituted a direct attack on Deng Xiaoping.⁵⁶ Finally, there are some who quietly go ahead with genuine research which is published by a range of scholarly journals that the Party has to tolerate.

Perhaps the most creative response to the present tight situation in the social sciences is that of the students. No longer allowed to group themselves into informal salons for the study of Western social theory, they have started up independent groups for studying the Marxist classics and Mao's writings. Party authorities can hardly fault them for this kind of activity, but they are clearly nervous about unauthorized interpretations that may emerge.⁵⁷

Another response may be in the possibility of a spill-over effect from what is happening in the sciences. A recent article on Fudan University describes how a "science and technology salon" meets regularly with attendance by scholars from the mathematics, physics, chemistry and biology departments, together with members of the computer science, electronics and material sciences departments. Each meeting is led by a different informal grouping of scholars who are working together in interdisciplinary projects with interesting technological spin-offs. The kind of atmosphere described for these meetings reminds one of the salons for discussing social and political theory in the pre-Tiananmen era.⁵⁸

55. Ren Xinlian, "Jianchi jiaoxue lingyu de shehui zhuyi fangxiang, pipan zichan jieji ziyouhua sichao" ("Hold firmly to a socialist orientation in educational circles and criticize the tide of bourgeois liberalism"), *Zhongguo gaodeng jiaoyu*, No. 5 (1991), p. 18.

56. Hong Kong *Hsin Pao* in Chinese, 28 October 1991, in *FBIS*, No. 212 (1 November 1991), p. 41.

57. Jin Zhenyi, "Jiushi niandai Zhongguo daxuesheng de zhengque xuanze—dui daxuesheng xue Malie qingkuang de diaocha yu yanjiu" ("The correct choice for Chinese university students in the 1990s—some investigation and research into the situation of university students studying Marxism-Leninism"), *Qingnian luntan*, No. 2 (1991), pp. 13–20, in *Gaodeng jiaoyu*, No. 9 (1991), p. 64–72.

58. Ke Yan, "Keji changgu jingji tuidong xueke fazhan" ("Science and technology's economic spin-offs are promoting the development of academic fields"), *Huadong keji guanli* (Hu), No. 3 (1991), p. 10–12, in *Gaodeng jiaoyu*, No. 4 (1991), pp. 17–19.

However, generally the mood on Chinese campuses is a subdued one and there is little encouragement for the kind of open-ended critical discussion needed to stimulate good research. All faculty must attend weekly political study meetings on one afternoon, and weekly departmental meetings for discussing academic work on another. The latter have become an arena for the campaigns to purge bourgeois liberal ideas from all teaching materials described earlier. For Party members, there is an added weekly Party meeting at the departmental level. Thus, as much as one and a half days every week are taken up with political meetings. Those who do not participate are penalized by having the subsidy to their salary cut, which may be as much as 20 per cent of their monthly income, as well as by other forms of harassment.

Is The Door Still Open?

The State Education Commission and the national political leadership has repeatedly reaffirmed adherence to the open door policy since Tiananmen. In some ways they have had no alternative, since the Chinese economy has been so effectively integrated into the world economy in recent years that their own legitimacy now depends on continuing to deliver the economic performance that has brought major changes in urban patterns of consumption. Thus programmes for sending scholars abroad continue at the national, regional and local levels. From a high of 4,888 scholars sent by the State Education Commission in 1985, the number being sent annually at this level dropped to 3,786 in 1988, 3,329 in 1989 and 2,950 in 1990.⁵⁹ The majority are visiting scholars aged 35 or above, although a few graduate students are sent to select countries where the risk of non-return is considered low.

China also continues to hire a large number of foreign teachers, mainly for language teaching, and many Western scholars are participating in various kinds of development projects in Chinese universities, supported by the World Bank, UN organizations, and various national aid agencies. Probably the most difficult area is the development of joint research projects, especially in the social sciences. A State Education Commission regulation, newly implemented since Tiananmen, requires that all joint projects be approved by a ministry level institution, and data gathering is likely to be very difficult without this approval.

The door remains open, yet the possibility of genuine critical interaction that will contribute to a deep understanding of social change processes going on in China and in the West is limited. There is a challenge here for scholarly communities on both sides. On the Chinese side, social scientists need to demonstrate to the political leadership that greater freedom could lead to a more profound critical understanding of the West rather than a peaceful evolution towards

59. *Educational Statistics Yearbook of China 1990*, p. 16.

capitalism. They also need to demonstrate what they may be able to contribute to ensuring that modernization has both “Chinese and socialist characteristics” through serious study of the new values emerging with the commodity economy. Western scholars, for their part, need to find ways of involving the Chinese scholarly community in critical debates going on in the West, rather than casting themselves as “experts” in authoritative areas of knowledge that are being transferred to China through various development projects. They also need to establish kinds of discourse that will enable them to participate in a non-threatening way in theoretical work around new political, social and economic developments in the Chinese context.