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A Remarkable Move of Restructuring: Chinese Higher Education

Fang Zhao

**University of Western Sydney
Australia**

Abstract

In this article, the current remarkable trend of institutional amalgamation and the establishment of cross-institutional consortiums in China are examined. The principal purpose of this study is to explore policy options on issues connected with the trend and the significant implications of the trend for the future development of higher education in China. I discuss the outstanding issues raised in the restructuring, the main factors behind them and proposes policy options to redress the adversities of the trend at the end. The article draws on national data as well as a case study. The research reported here is constructive for comparative and empirical research of similar issues in international perspectives.

Introduction

The dilemma between rapid growth of higher education and increasing financial constraints has led to an increasing emphasis on the need to improve efficiency by better utilisation of resources. Like elsewhere, in China, attempts have been made to optimise educational funds through institutional mergers and cooperation between institutions in sharing resources, with the intention of raising student-staff ratios and cost-effectiveness. Between 1992 and 1995, more than 70 institutions were merged into 28 institutions and over 100 institutions set up cross-institution consortiums. (Zhu.Kaixuan, 1995) This remarkable trend is a focus of this paper. Hopefully, the research reported in this paper is constructive for comparative and empirical research of similar issues in international perspectives.

The World Bank (The World Bank, 1987) maintained in a mission report on Chinese universities that an increase in the student-teacher ratio could significantly

reduce unit recurrent cost, given that the ratio in China is much lower than the average ratio in East Asia and the Pacific. Also, it was found after an analysis of data elicited from 136 Chinese universities that there was an underlying relationship between unit recurrent cost and the size of enrollment; and that the larger an institution, the lower unit recurrent cost.

Pennington (1991) held from his experience of Australian amalgamations between universities and colleges of advanced education that many problems and difficulties must be weighed against the benefits which have accrued or may yet accrue on the amalgamations. He pointed out some major problems, such as the risks of loss of independence and diversity of the amalgamated institutions and of collegial commitment and staff's morale. Karmel (1992) suggested that the benefits of larger institutions were not yet established and held that smaller institutions promoted innovation. Williams (1988) cast doubt on "bigger is better," evidenced by some of the greatest universities in Europe and North America which were smaller than the universities in Sydney, Queensland and Melbourne. Gilbert (1991) indicated that amalgamation contributed to the emergence of a larger, more differentiated, less well resourced university sector than its predecessor.

In China, a recurring theme in the current literature is enthusiasm for boosting consolidation and cooperation of higher education institutions, while few articles deal with difficulties and problems underlying the trend. Li Peng (1995), Chinese Premier, suggested that jointly-running institutions including consolidation and cooperation of institutions may optimise educational resources. Zhu Kaixuan (1995), director of the State Education Commission (SEC), proposed that conditions would be created to promote consolidation of those small institutions with a narrow range of specialities and redundant courses; and that those institutions within close proximity but with different disciplines be encouraged to set up cooperative relations in sharing resources, complementing each other and combining disciplines for mutual viability.

Li Zhengyuan (1995), however, had a different opinion that the current pursuit of larger and more comprehensive institutions failed to produce cost-effectiveness and improve the quality of Chinese higher education but caused a false upgrade of education establishments (two-year colleges upgraded as four-year universities when consolidated with universities, for example), duplication and overlapping of organisations, and contrary to expectations, increased staff members due to redundancy. Wang Wenyou (1995) conducted a survey over 71 institutions in Beijing and concluded that smaller institutions may not be inefficient, and that the efficiency and effectiveness was determined by appropriateness of size of class, rationalised course offerings and fulfilment of enrollment quota.

The brief review of related literature above shows that the movement towards consolidation and cooperation between institutions has both strengths and deficiencies within international perspectives. What remains to be explored, however, are policy options on issues connected with the movement, and significant implications of the movement for future development of higher education in China. This is the principal purpose of this study. The study is based upon evidence in the literature, theory grounded in international debates and a case study.

Higher Education Structure: Post-1977

It is necessary to briefly overview the development of Chinese higher education in historical perspective before discussing its current trends and issues. In terms of the expansion of higher education, the most remarkable changes occurred following the 1978 economic reform in China. The changes in higher education structure can be

divided into two stages as shown in Table I below. At the first stage between 1978 and 1985, the changes were represented by rapid growth in the number of higher education institutions and enrollments. The second stage, post-1985, was characterised by continuously rapid increase in enrollments but relatively stable viability of institutions without any increase in the total of institutions in 1986 and 1995.

Table I
Development in Institutions and enrollments: 1977-1995

Year	No. of institutions	Total enrollments* (million)	Annual increase (thousand) X_i
1995	1,054	3.05	120
1994	1,080	2.93	290
1993	1,065	2.64	360
1992	1,053	2.28	150
1991	1,064	2.13	-30
1990	1,075	2.16	-20
1989	1,075	2.18	0
1988	1,075	2.18	100
1987	1,063	2.08	90
1986	1,054	1.99	200
1985	1,016	1.79	340
1984	902	1.45	140
1983	805	1.31	130
1982	715	1.18	-120
1981	704	1.30	130
1980	675	1.17	130
1979	633	1.04	173
1978	598	0.86	242
1977	404	0.63	-

$$X = 135$$

$$s = 123$$

Sources: Ministry of Education and the State Education Commission (1984, 1991); The State Statistic Bureau (SSB) (1992-1996)

*Note: Including all undergraduate and graduate students on campus.

Table I indicates that the average annual growth (arithmetical mean) in enrollments between

1978 and 1995 is 135,000 but the growth is extremely uneven with a large standard deviation of 123,000. The fluctuations included negative growth in 1982 (when students in the first major rise in intake in 1978 graduated) and in 1989-1991 (due to three consecutive years' economic entrenchment). Table I also shows that at the first stage of seven years (1978-1985), 612 institutions, over a half of the total institutions formed within 47 years since 1949, emerged, leaving no increase in numbers of institutions during the following ten years. The rapid emergence of 612 institutions was mostly through upgrading former secondary colleges and polytechnics. The dramatic and rapid growth in institutions was intended to accommodate an unprecedented expansion of enrollments without much consideration of the actual capabilities of those newly upgraded institutions. Most of them were relatively small in size of enrollments as shown in Table II and not well supported in both human and financial resources as disclosed in the Chinese press (Ribao, 1985).

It was reported that in 1986, 90 percent higher education institutions were below the standard required for an education institution set by the State Council in that year, in terms of staff quality, teaching and research facilities and equipment, student accommodation and libraries. It was believed that it was the devolution of accreditation of two-year colleges and polytechnics to local governments that contributed to the rapid growth in institutions with poor quality before 1987 (Zhongguo Jiaoyubao, 1991).

Table II
Frequency Distribution of Institutions by Size of Enrollments: 1978-1990

Year	Total insti- tutions	300 & below (%)	301-500 (%)	501- 1000 (%)	1001-1500 (%)	1501-2000 (%)	2001-3000 (%)	3001-4000 (%)	4001-5000 (%)	5001 & over (%)
1990	1,075	5.4	7.3	20.7	21.3	13.6	16.0	6.51	2.7	6.6
1988	1,075	5.6	8.0	21.9	20.7	13.7	14.0	6.2	3.3	6.6
1986	1,054	9.4	9.0	22.8	19.3	12.5	12.6	5.2	3.0	6.2
1984	902	12.3	10.3	28.4	20.2	9.2	10.8	4.8	2.3	4.3
1982	715	8.4	9.7	31.0	17.9	11.2	10.9	5.5	3.6	1.8
1980	675	11.7	8.0	30.2	17.0	11.4	11.1	4.7	3.3	2.1
1978	598	16.6	12.5	29.1	16.4	10.4	8.7	4.7	1.0	0.7

Sources: Adapted from the State Education Commission (SED) and the Ministry of Education, (1984-1991)

Table II provides detailed statistical information about changes in size of enrollments or size of institutions between 1978 and 1990 (no national and official data available after 1990). In 1978, institutions with 501 to 1,000 students accounted for 29.1 percent of all institutions, the modal percentage, followed by institutions with fewer than 300 students; whereas in 1990, the biggest percentage of all institutions, 21.3 percent, accrued for institutions with a range of 1,001 to 1,500 students, followed by 20.7 percent of institutions with 501 to 1,000 students.

Table III
**Cumulative Frequency Distribution of Institutions by Size of Enrollments:
1978-1990**

Year	1 or more %	301 or more %	501 or more %	1001 or more %	1501 or more %	2001 or more %	3001 or more %	4001 or more %	5001 or more %	Mdn. enrollment
1990	100	94.6	87.4	66.7	45.4	31.8	15.8	9.3	6.6	1393
1986	100	90.6	81.6	58.8	39.5	27	14.4	9.2	6.2	1229
1982	100	91.6	81.9	50.9	33	21.8	10.9	5.4	1.8	1026
1978	100	83.4	71	41.9	25.5	15.1	6.4	1.7	0.7	862

Sources: Adapted from the State Education Commission (SED) and the Ministry of Education, (1984-1991)

Table III further displays a clear trend of development towards bigger institutions. In 1978, only 0.7 percent of institutions had an enrollment of more than 5,000 students but in 1990, the number of such institutions rose to 6.6 percent. In 1978, 83.4 percent of institutions had more than 300 students and the number rose to 94.6 percent in 1990. Also, the median enrollment was only 862 students and it rose to 1393 in 1990, an increase of 61.6 percent. Despite the increase, only about 15 percent of institutions had more than 3,000 students in 1990 and much fewer prior to 1986.

In 1986, to restrain the extremely fast growth in institutions and improve the quality of higher education, the State Council circulated the Provisional Regulations on Establishing Higher Education Institutions, and revoked the accreditation of higher education by local governments. In 1988, the State Education Commission issued another policy paper to reinforce the quality standard on higher education institutions set by the State Council in 1986 (Zhongguo Jiaoyubao, 1991, October 8, p. 1).

As shown, since 1986, the emphasis on the expansion of higher education began to be shifted from setting up new institutions to adjustment of the structure of existing institutions. Confronting serious tensions raised in the first seven years of expansion, such as growth versus quality and expansion versus cost-effectiveness, the central government also sent a clear message to the higher education sector that no encouragement would be made to build new institutions in the next five years, and that expansion of enrollments was to be achieved through tapping the existing resources and extending the existing institutions (Li, Peng, 1986). Under the guideline of this policy proposal, the exuberant growth of institutions was eased and a trend towards larger institutions began to take shape as shown in Tables I, II and III.

A Recent Trend and Corresponding Issues

A brief overview of the Chinese higher education structure above illustrates that a large gap exists between the rapid growth in participation in higher education, (that is, the national enrollments) and the enrollment capacities of individual institutions which had only limited expansion. The national enrollments increased by 148 percent from 0.86 million in 1978 to 2.16 million in 1990, but the median enrollment of individual institutions rose only 61.6 percent during the same period, as shown in the above tables. Additional enrollments had to be accommodated through the building of new institutions, a costly strategy compared with the expansion of existing institutions. Hence there was an urgent need to enlarge the enrollment size of institutions so as to accommodate the rapid growth in participation in higher education. As the total government revenue as a ratio of GNP was continuously declining from 32.2 percent in 1978 to 21.8 percent in 1985 and

to 17.2 percent in 1992 (Zhongguo Jiaoyubao, 1994, October 6, p.1), it was getting harder for the government to afford building new institutions than to enhance the capacity of existing institutions. The financial constraint was a major driving factor for a shift towards institutional consolidation and cooperation with the intention of achieving cost-effectiveness and optimisation of resources.

As early as 1986, the first cross-institution consortium was set up in Beijing which has the largest number of institutions as a municipality in China. The consortium was composed of eight higher education institutions with a total enrollment of 47,000 students and fixed assets of 0.6 billion RMB. The eight institutions set up close cooperative relations in a number of areas, including open access to laboratories, libraries and lecture, exchanging academic staff and teaching materials, cooperation in research and joint-training staff (Zhongguo Jiaoyubao, 1987, July 7, p.1).

However, the development of such cross-institution consortiums was very slow and few and far between, and there was no official report on institutional consolidations before 1992. In late 1992 and early 1993, the Central Government proposed a new round of reform in higher education by concentrating on higher education management. As a part of the reform, consolidation and cross-institution cooperation were highly recommended by the government as a means of optimization of resources (Li, 1995; Zhongguo Jiaoyubao, 1995, July 12, p.1; Zhu, 1995). The most dynamic development of such structural changes occurred in 1995 and prevailed in almost every province in China. In major cities such as Beijing, Shanghai and Guangzhou, where there were more institutions than in other areas, institutional mergers and cross-institutional cooperation were growing more vigorously. In terms of the latest statistical information, more than 70 institutions got involved in institutional mergers, among which 42 institutions consolidated in 1995; and about 100 institutions joined in cross-institution consortiums (Zhongguo Jiaoyubao, 1995, November 24, pp.1-2). In the writer's view, the waves of such consolidation and cooperation will shake up the entire structure of Chinese higher education over the next few years. The significance of restructuring cannot be too great for the future viability of Chinese higher education.

There exists a common belief that institutional consolidation helps achieve cost-effectiveness and optimization of the insufficient resources supplied to higher education, through raising student-teacher ratios, reducing waste and redundancy, and sharing resources (Clark and Neave, 1992). It was on the basis of this common belief that consolidation and cross-institution cooperation were initiated and developed in China. As the trend of consolidation and cross-institution cooperation started not long ago and is still in progress, it is too early to locate much evidence of the actual outcomes of the structural changes. The following discussion is based upon both potential and realities.

In 1995, Shanghai boasted a total of 45 higher education institutions with about 140,000 students on campus. The average enrollment for each institution was 3120 students. However, there were 23 institutions whose enrollments were below 2000 students and 11 institutions with fewer than 1000 students. In the light of a government's plan for restructuring higher education in Shanghai, the 45 institutions will be consolidated into 30 institutions with an average enrollment of over 4680 students. The capacity of enrollment of each institution will increase by 50 percent (Zhongguo Jiaoyubao, 1995, December 4, p.1). It is evident that consolidation is likely to enlarge the institutional capacity of enrollment. But the capacity is also determined by other important factors such as popularity of course offerings, quality and morale of staff, teaching and research facilities, student services, etc. Besides, cost-effectiveness is achieved through increasing student-teacher ratios and removing redundancy. The above mentioned plan did not deal with this sensitive issue, that is, how much redundancy would be cut to achieve efficiency, as student-teacher ratios were very low with around a

7.3:1 ratio nationally by the end of 1995 (SEC, 1996).

There was a news report about increasing student-teacher ratios from 5.5:1 in 1991 to 8.1:1 in 1994 through restructuring higher education institutions administered by the Ministry of Internal Trade in China (Zhongguo Jiaoyubao, 1994, August 25, p.1). This is one of a few successful cases reported as having achieved a relatively high ratio of students and teachers through consolidation.

In a World Bank mission report on Chinese universities in the late 1980s, it was found that substantial economies of scale existed in university operations in China. By a statistical analysis of data submitted from 136 Chinese universities, the mission reported that there was a generally declining average recurrent cost for institutions of larger size in the 136 universities. Based upon the sample of the 136 institutions, the mission also made a simulated measure of the effect of increases in enrollment and in student-teacher ratios on recurrent costs in six different kinds of institutions with a simulated enrollment range from 500 to 15,000. The results suggested that there were significant savings in terms of lower average unit cost up to a level of about 8,000 to 10,000 students and further expansion would lead to less substantial reductions in unit costs. The results also displayed that much higher savings would be produced if student-teacher ratios of 8:1 by 1990 and 12:1 later could be achieved in terms of an approximate target set by the SEC, closer to an international average. So the mission recommended that smaller institutions operating in close proximity should consider the possibility of consolidation under a single administration (World Bank, 1987).

As shown above, the realised and potential benefits of larger institutions imply greater opportunities to expand higher education by tapping existing resources without injecting additional funding. The World Bank survey also provided evidence in favour of larger institutions and raised student-teacher ratios to produce substantial savings. However, the above reports including that of the World Bank failed to look at or estimate possible difficulties and problems institutional consolidation may raise in practice. A case study of a cross-institutional consortium, a loose federal model of consolidation in fact, is illustrated below to highlight the issues accompanying consolidation.

A Case Study

(This case study drew heavily on an official journalistic report published in Zhongguo Jiaoyubao, 1995, April 20, p.3.)

In early 1994, five higher education institutions in Beijing founded a cross-institution consortium called "Eastern University City." The five institutions were Beijing Chinese Medicine University, Beijing Chemical Industry University, Foreign Trade and Business University, Beijing Fashion Design Institute and China Finance Institute. The consortium had one central governing body as a coordination and supervision commission to manage overall business of the consortium. Under the central governing body, there were six sub-committees in charge of academic and administrative affairs, institutional industry and business, and student and staff services of the consortium. The five member institutions still retained their own full administrations, which were separately funded and governed by five different state ministries.

On the foundation of the consortium, the five member institutions reached an agreement on cooperation in a number of areas. The agreement included setting up common basic courses, exchanging faculty members, combining library and laboratory resources, credit transfer, cooperation on research projects and on trading and transferring research products, sharing research achievements, sharing student and staff services, and jointly building and sharing student and young staff residences, and the like.

One year later after the foundation of the consortium, a survey was conducted over the progress of the consolidation. It was found that very limited cooperative programs had

materialized but most of the agreed cooperation was not implemented and some cooperative activities failed to achieve the desired results. Of the materialized cooperative programs, the most successful was the operation of the Eastern University City Credit Union which attracted 30 million RMB from each member institution and other investors in one month after its foundation and seemed to have a prosperous future.

However, difficulties and problems were raised when it came to other cooperative areas. As far as exchanging staff was concerned, few arrangements could be made because the five institutions had the same problems of over-supply of staff for some courses and under-supply of staff for other courses. Also, because it was often too late to make changes in overall staff arrangements when the five institutions submitted to coordinating committees their respective staff arrangement plans, as any changes would cause conflict in lecturing timetables of teachers.

As to sharing library and laboratory resources, it was hard for students and staff to use other member institutions' libraries and laboratories due to some complicated approval procedures. Cooperation on research was also infrequent because it was difficult to obtain joint-research grants from the five government agencies which funded and administered each of the five institutions. When it came to consolidation of staff and student services, no progress was made as a result of lack of profits and fears of loss of jobs on the part of the staff who worked at the services. Also, the plan to build shared student and staff residences for the five member institutions failed, due to financial stringency

The above brief description of the findings illustrates that institutional consolidation and cooperation are complicated processes involving full commitments and great efforts of every participant in the agreed areas - teaching, research and services. Problems raised in the processes of the consolidation of the five institutions can be summarized as:

- lack of a powerful central administration with clearly-defined roles and responsibilities to ensure cooperation plans were enforced;
- lack of materialized support rather than the rhetoric of approval from
- the government agencies which administered the participating institutions to inject sufficient funds into the consolidation;
- pre-occupation with quick economic returns from consolidation;
- fears of losing jobs because of the potential redundancy caused by consolidation;
- concern about losing institutional status; and
- consumption of time in consolidation processes.

These problems may be relevant to other institutional consolidations and cooperation. Failure to realize and solve those problems has led to a loose federal arrangement of the five member institutions, which obviously increased administrative cost with a new central superimposed administration, contrary to the initial objective of achieving greater savings through consolidation. Given that little sharing of resources was realized and few cooperative programs were completed as shown above, the consolidation of the five institutions was in fact unsuccessful and resulted in a nominal rather than an actual consolidation.

This case study, though it may not apply to the entire trend and issues, implies that many difficulties and problems exist such as those of administration, funding and culture in the processes of consolidation and cooperation. The difficulties and problems inherent in the processes need to be fully understood so that positive outcomes can be achieved, and adversities be minimized.

Policy Options

A further analysis of the factors causing the problems in the processes of consolidation and cooperation reveals that there exist some serious weaknesses in the current higher education management system in China. Firstly, consider the problems of administration. Higher education institutions are under the jurisdictions of different government agencies, each of which independently funds and administers a number of institutions. These institutions become in fact subordinates and properties of a certain government agency. If institutional consolidation and cooperation was implemented between institutions under different government agencies, it would be much harder to succeed, as with the case of the five institutions, because greater bureaucracy and more consideration of each government agency's interests would be involved.

To alleviate the adversity, institutional autonomy should be respected by more than lip service from the government agencies. Institutions should also change their tradition of excessive reliance upon the government and keep an "arm's distance" from the government. Fully-fledged institutional autonomy facilitates processes of consolidation and cooperation between institutions under the jurisdiction of different government agencies. This is because institutional freedom facilitates the development of administrative and educational links between institutions without interference of the government agencies concerned. Institutional autonomy when fully implemented can also weaken and modify the current artificial demarcation of external administration over institutions in the system. The artificial demarcation in the current management system has led to considerable waste and managerial inefficiency in terms of duplication and overlapping of course offerings in institutions under different government's agencies and redundancy of bureaucracy.

Secondly, consider problems of funding. The current funding formula in China is still a student-number based one which makes it hard for academics to obtain research funds, let alone get funds for joint research projects between consolidated institutions. This problem may be partially solved through government's earmarked grants and especially through the sale of academic services to industry/business. But funding for basic fundamental research still relies on the government's support, as industry/business will be more interested in research projects with immediate economic returns.

Now that funding difficulty restricts the development of consolidation, the government should provide adequate infrastructure resources for consolidation and cross-institutional cooperation if it believes that such consolidation and cooperation will achieve more economic and social returns in the long run. Also, resource allocation within institutions needs to be improved. Financial responsibility should be delegated to academic departments and research centres to facilitate cross-department collaboration and/or joint research, if this has not been realized. The government should also consider a shift from financing research jointly with teaching to funding it separately to ensure fundamental research and also to provide a springboard for the attraction of supplementary research funds from consumers of research products. The sale of academic services has been evidenced to be a major supplementary source of income for many institutions in China (SEC, 1995), thus alleviating financial stringency of institutions. If a full integration of academic services is fulfilled between institutions, greater savings can be produced by sharing administrative and physical resources, such as having a single administration and joint use of research facilities and equipment.

Thirdly, the cultural problems of consolidation are as important as those of administration and funding discussed above. Efficiency and effectiveness in consolidation can only be achieved where staff fully accept each other, where there is acceptance of common purpose, and where staff are fully committed to a consolidated institution. As reported in the consolidation of the five institutions in Beijing, lack of staff's commitment was partially conducive to the failure of consolidation. When interviewed, some staff

expressed their indifference to the consolidation and some revealed their fears of losing status and even jobs (Zhongguo Jiaoyubao, 1995, April 20, p.3).

A possible solution is to promote changes in attitudes and enhance morale of staff. A positive environment for consolidation can be created through convincing arguments and evidence on the benefits for students, staff and institutional management that can accrue from institutional consolidation. Financial incentives and administrative discipline should also be enforced to assist the solution. Furthermore, there should be a collegial and democratic process of decision making on major issues within an institution such as whether to institute consolidation or not. The faculty participation in governance is also an option to enhance staff's spirit or commitment to what they choose to do.

Finally, geographical contiguity, educational links and administrative links are all important factors for implementation of consolidation and cooperation. If consolidation and cooperation is instituted between institutions with these links, it is more likely to succeed in achieving significant cost savings and effectiveness. This can be justified in terms of savings in administrative costs through a single central administration that controls several entities in close proximity and under a common government agency. Consolidation with educational links reduces duplication and overlapping course offerings, as redundancy can be removed through sharing staff between institutions that offer common educational programs. But savings can also be produced by a group of institutions offering complementary courses, because sharing existing resources is much less expensive than setting up a wide range of new courses by each institution. The rationale for consolidation lies in educational and economic benefits of broader institutional profiles, readier access to physical resources and more extensive equipment and facilities. The full benefits will require strong links between institutions in the three aspects: closer location, a common government administration, and common or complementary educational programs.

Notwithstanding the significance of the three factors influencing consolidation, there are other alternative possibilities for institutions to achieve both educational and economic benefits. The writer of this paper suggests the following three models warrant investigation.

Agreement Model

In this model, sharing human and/or capital resources is achieved by agreement between institutions without loss of institutional identity. The rationale for this model is its flexibility, voluntary collaboration and maintenance of diversity. Institutions in this model are free to seek academic partners and facilities from any institutions without artificial barriers of identity. There can be a variety of cooperative models at each level of institutions - cross-institution consortiums, cross-department consortiums, common staff development, joint research programs, reciprocal services, joint use of buildings and sporting fields, etc. Since any cooperation in this model is based upon formal and informal agreements between voluntary partners, some administrative and cultural problems and difficulties raised in consolidation will be avoided. The diversity of institutions is retained as no change of institutional identity is involved in this partnership.

Sponsoring Model

This model represents an arrangement between a large, well-established and well funded institution and a fledgling institution or a poorly funded one. The sponsoring institution provides substantial academic and physical support for the sponsored institution to develop to fully-fledged status. This sponsorship has the outstanding advantage of making full use of existing and potential resources of the sponsoring

institution to reduce its potential redundancy. Another advantage is that the academic cultures of both the sponsored and the sponsoring interact in this model. Last, there are no risks of changing or losing institutional status or identity in the cooperation.

Government Model

Government model refers to a government funded and run project. The local government builds up common teaching and research facilities, libraries, student and staff residences and living services that are accessible to all institutions in a local area. The local government funds and runs these facilities through levying an educational tax from local enterprises and residents and through charging institutions a sum of below-market service fees. This model applies to medium and large cities where more institutions are gathered. There are four potential advantages to be seen in adopting this model. First, resources are concentrated in this way rather than scattered in each institution. Second, the concentration of resources promotes the highest quality of teaching and research and alleviates severe shortages of student and staff residences and services, as only concentrated funding can afford to do so in the current financial stringency in China. Third, the accessibility of those facilities helps optimize the use of resources rather than having them under utilized in single institutions. Finally, a single government management of those facilities reduces disputes that may occur in using the facilities between institutions as the local government is the only supplier and coordinator of the facilities and institutions are all customers.

Compared with consolidation, the greatest common benefit of the three models comes from no additional administrative costs involved in these institutional links. In addition, institutional identity and diversity are retained, a matter of great concern in relation to consolidation. In view of the objectives of consolidation and cooperation, any appropriate arrangement of links between institutions is highly recommended so long as efficiency and effectiveness in using resources are achieved to its greatest extent.

Conclusion

The purpose of this article was to explore policy options connected with the current trend of institutional consolidation and cooperation and the significance of this trend for the future development of higher education in China. Through discussing the factors behind the trend from an historic perspective, the paper identifies and analyses critically the current trend and its corresponding issues. To address these issues, this paper provided a series of policy options to be implemented or investigated. The study of this paper concluded that the trend to consolidation and cooperation will develop further as a result of pressures from the government and the economy. The development of the trend implies that higher education institutions will grow larger with more capacity for enrollments, broader educational profiles and more concentration of resources with potential cost savings. On the other hand, the trend is also likely to generate a series of acute consequences shown below:

- more managerial and centralized processes of administration as larger and sophisticated institutions require more powerful central control;
- more pressures for partners to combine against their wishes;
- more extensive academic drift through colleges consolidating with universities;
- narrower range of teaching and research activities to achieve economies of scales;
- lower academic quality and standards due to highly increased workloads of staff and normative upgrade of status through consolidation;
- less diversity in the nature of courses and approaches to course provision; and

- more industrial disputes in view of varying wages and different standards for staff's promotion between institutions.

For policy makers and university managers in other countries, the Chinese experience and the discussion of both potential benefits and adversities of the trend is worthy of consideration for improving current policy and practice relating to institutional mergers and consortiums.

References

- Clark, B.R. and Neave, G.R. (Eds.). (1992). The encyclopedia of higher education. (Vol. 1-2). Oxford: Pergamon Press
- Gilbert, A. (1991) Current issues and future developments in higher education. *Journal of Tertiary Education Administration*, 13 (2)
- Karmel, P. (1992) The Australian universities into the 21st century. *Australian Quarterly*, 64 (1)
- Li, Peng(1986). Keep reforming educational system and give more materialised support to schools.
- Li Peng (1995). Developing higher education through reforms. *Zhongguo Jiaoyubao (China Education Daily)*, 1995, July 12 p1
- Li, Zhengyuan. (1995, November 9). Problems in institutional links should be noted. *Zhongguo Jiaoyubao (China Education Daily)*, p3.
- MOE & SEC (1984, 1991). *Achievements of education in China (1949-1990)*. Beijing: Author
- Pennington, D. (1991) *Amalgamations in higher education in Australia: issues in Australian higher education*. Canberra: The Australian Vice-Chancellors' Committee
- Ribao, Renmin (People's Daily) 1985, January 20 p5; 1988, March 31 p3; 1988; March 10 p3
- Ribao, Renmin (People's Daily,), 1986, December 3 p3
- SEC (1995). *China's education at a glance: essential statistics for 1994*. Beijing: Author
- SEC (1996). *The ninth five-year plan for educational development and the long range development program toward the year 2010*. Beijing: Author
- SSB (1993-1996). *Statistical yearbook: China*. Beijing: Author
- Wang, Wenyong, (1995, November 23). It is not advisable to set up too many specialities.

Zhongguo Jiaoyubao (China Education Daily), p2

Williams, B. (1988) The 1988 white paper on higher education. Australian Universities Review, 2

World Bank. (1987) China: management and finance of higher education. Washington D.C.: Author

Zhongguo Jiaoyubao (China Education Daily), 1987, July 7 p1

Zhongguo Jiaoyubao (China Education Daily), 1991, April 16 p2

Zhongguo Jiaoyubao (China Education Daily), 1991, October 8 p1.

Zhongguo Jiaoyubao (China Education Daily), 1994, August 25 p1

Zhongguo Jiaoyubao (China Education Daily), 1994, October 6 p1

Zhongguo Jiaoyubao (China Education Daily), 1995, April 20 p3

Zhongguo Jiaoyubao (China Education Daily), 1995, November 24 pp1-2

Zhongguo Jiaoyubao (China Education Daily), 1995, December 4 p1

Zhu. Kaixuan, (1995, November 24). Actively and intensively promoting reforms in higher education management system. Zhongguo Jiaoyubao (China Education Daily), p1.

About the Author

Fang Zhao

Faculty of Education

University of Western Sydney

P.O.Box 10

Kingswood, 2145 NSW Australia.

Postal address: 28/74 Hawkesbury Road, Westmead, 2145 NSW Australia

Email address: n9502277@scholar.nepean.uws.edu.au

Ms Fang Zhao was an Associate Professor in one of key universities in China before she started her research in Australia. She was awarded Master of Education degree by an Australian university for her research in higher education and economic development. She is at the final stage of her doctoral research in the governance and funding of higher education.

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