

Broadening of Training: Reform of Undergraduate Curriculum in China in the 1990s

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Abstract

China's higher education experienced a period of great changes in the 1990s, especially after the implementation of socialist market economy in 1992. The reform of undergraduate curriculum became the focus of the whole reform of higher education. The purpose of this paper is to clarify the characteristics of the undergraduate curricular reform in this period. It examines a series of reforms took place centered on the curricular reform at the system level and the institutional level, which include restructuring of higher institutions, redefinition of specializations, changes in the ratio of the students by fields of study, and structure of curriculum. Though the reforms of undergraduate curriculum in the 1990s addressed almost the same problem, that is the over-narrowly specialized education, the path was more rapid than that in the 1980s. The reform of undergraduate curriculum in the 1990s is not only a process of broadening of training, but also a process of changing of images about the products of undergraduate education.

Key words: undergraduate curriculum, China, 1990s

Introduction

Deng Xiaoping's celebrated visits to the south and speeches in the spring of 1992 and the 14th National Congress of the Communist Party of China in October of the same year, defined the aim of the economic reform is to establish the socialist market economy. Along with the vital changes in the field of economic in the 1990s, reform was undertaken rapidly in nearly all fields of China's higher education: system of running and administration, system of financing, system of enrollment and employment of graduates, teaching content and curricular structure, and so on. There were mainly the following problems in China's higher education, as summarized by Zhou Yuanqing, former Vice-Minister of Education in charge of higher education: over narrowly defined specializations, lacking of humanitarian education, obsolescence of teaching content, and unified training model.¹⁾ In view of the above

problems and the new political and economic context, curricular reform was seen as the focus of the all the reforms in higher education during this period.

After a brief sketch of higher education policies in the early 1990s, this presentation will examine what changes took place in the higher curriculum in this period, at both system level and institution level, especially after 1992, and exemplify the characteristics of the curricular reform.

Higher education policy in the 1990s

The 4th National Conference on Higher Education held in the end of 1992 and the adoption of *Guideline for Development and Reform of China's Education System*, in 1993 marked that China's higher education entered a period of reform higher education adaptive to the market economy.

The reform document of 1993 reaffirmed and enhanced the significant role of education to the

modernization. According to this document, the tasks of higher education were to train professionals, to advance science, technology and culture, and to promote the socialist modernization. It also set forth the objectives of higher education reform in the 1990s: to fit in with the needs of reform and opening, and socialist modernization; seeking new approaches of development, to make considerable expansion on scale, to develop a balanced structure, to improve the quality and efficiency.²⁾

Concerning the curricular reform, *On the Implementation of Guideline for Development and Reform of China's Education System* issued by the State Council in July 1994 restated adjustment of offering departments and specializations, broadening of specializations, improvement of curricular structure, and reform of teaching content and method. In the same year, Ministry of Education adopted *Scheme for Reforming Teaching Content and Curricular System of Higher Education towards the 21st Century* to commence the national wide curricular reform of higher education. One of the key guiding principles of the scheme was to emphasize the development of quality (Suzhi), creativity and individuality of students. The ultimate goal is to establish a system of teaching content and curricular structure in higher education with Chinese characteristics. The reform focused on the development of training model and specialization structure toward the 21st century, definition of objective and requirement of each specialization or group of specializations, improvement of curricular structure of each specialization or group of specializations, renewal of teaching content of basic courses and main specialized courses, and innovation of teaching media and methods.³⁾ By 1997, this reform covered mainly 6 fields of study such as arts (including foreign languages), science, engineering, agriculture and forestry, medicine, economics and law. More than ten thousand university teachers, researchers and administrators from more than 300 higher institutions participated in this reform.⁴⁾

Curricular changes at the system level

Curriculum of China's universities at the system

level took place vital changes under the new higher education policies. This presentation will examine these changes mainly in three aspects: institutions, list of specializations, and ratio of students by fields of study.

Restructuring of Higher Education Institutions

Higher education institutions in China had been divided by sector after 1952 under the former Soviet influence. In the 1980s, most eminent characteristic of institutional changes took place in China's higher education was that universities broadened fields of study by establishing new departments or faculties within the same institutions. Comprehensive university, which had been allowed only pure disciplines of sciences and arts in 1952, developed a series of applied disciplines, as well as restoring such social sciences as sociology and anthropology, banned since the early 1950s. Polytechnical universities, with only applied engineering fields under the soviet model, established departments of mathematics and basic sciences, as well as developing related social sciences such as management and economics.

In the 1990s, amalgamation of institutions became one of the most significant characteristics of changes of China's universities. As results of the amalgamation, many comprehensive universities, at both national and local levels, were created, for example, Yangzhou University and Yanbian University at the local level, and Zhejiang University at the national level. This is closely connected with the new *Standard of Establishment of Higher Education Institutions*, which defined that a university should be an institution of higher learning having at least three fields of study among humanities, law, economics and finance, education, science, engineering, agriculture, and medicine. The whole process could be viewed as a remarkable reversal of the "reordering of colleges and departments" that took place under soviet guidance in the early 1950s, one that could well lead to the emergence of institutions that have somewhat the some similarities of American ones, comprehensive in curricular provision.

Table 1. Regular Higher Education Institutions by Type

	Comprehensive University	Natural Science and Technology	Agriculture	Forestry	Medicine and Pharmacy	Teacher Training	Language and Literature	Finance and Economics	Political Science and Law	Physical Culture	Art	Others	Total
1980	32	203	56	10	109	172	10	30	7	11	26	9	675
1982	32	206	56	10	112	194	10	36	9	13	27	10	715
1984	38	232	57	11	114	242	11	49	15	14	27	92	902
1988	49	281	59	11	119	262	14	80	25	16	30	129	1075
1990	50	286	59	11	122	257	14	80	25	16	30	125	1075
1996	79	280	53	10	123	232	15	75	26	14	31	94	1032
1999	74	268	47	7	118	227	15	74	25	14	29	173	1071

Source: Guojia Jiaoyu Weiyuanhui Jihua Caiwusi, *Zhongguo Jiaoyu Chengjiu 1980-1985 (Achievement of Education in China 1980-1985)*, Beijing: Renmin Jiaoyu Chubanshe, 1986. *Zhongguo Jiaoyu Nianjian 1982-1984 (China Education Yearbook 1982-1984)*, Changsha: Hunan Jiaoyu Chubanshe, 1985. *Zhongguo Jiaoyu Nianjian 1989, 1991, 1997, 2000 (China Education Yearbook 1989, 1991, 1997, 2000)*, Beijing: Renmin Jiaoyu Chubanshe, 1990, 1992, 1998, and 2001.

Redefinition of Specializations

Higher curricular of China's universities had been organized within different specializations since the introduction of soviet-derived model during the higher education reform in 1952. The number of specializations in the first list of specializations of higher education (Zhuanye Mulu) regulated by the central government in 1963 was 510, which increased to 1343 in the early 1980s when the reform era began. This is mainly because that the offering of the specializations during the Cultural Revolution period was in chaos and simply adding new specializations to introduce new knowledge content linked to modernization demands between the late 1970s and early 1980s. It is self-evident that China's higher education was over-specialized simply from viewing the narrowly defined specializations, for example, there is one higher education institution in the northeast of China with the name, Shenyang College of Gold (Shenyang Huangjin Xueyuan).

The Ministry of Education revised the list of specializations two times in the 1990s on the basis of the revision ended in 1987 in which cut the number of specializations to 671. The principles of the latest revision commenced in 1997 were:

Specializations were defined in accordance with the following ten fields of study, philosophy,

economics, law, education, literature, history, science, engineering, agriculture and medicine. Each field of study was divided into several sub-fields, and specializations were defined within sub-fields of study.

This reform is totally different from the classification of specializations before, which was directly with reference to professional activities, even products.

Specializations should be defined in a broader approach, and should be added adaptability, integrated with *the Scheme for Reforming Teaching Content and Curricular Structure toward the 21st Century*, in order to change the over-specialized education in the universities and to train personnel adaptive to the new market economy.

This revision reduced the number of specializations from 504 to 249, which represented a 50.6% decrease (see Figure 1).

Changes of Ratio of Students in Different Fields of Study

There were also changes in the macro-structure of curriculum in terms of enrollment in different fields of study in 1990s. Between 1988 and 1998, enrollments in finance and economics continually grew from 10 percent to 14.9 percent of the total, though it was not so dramatically as that in the

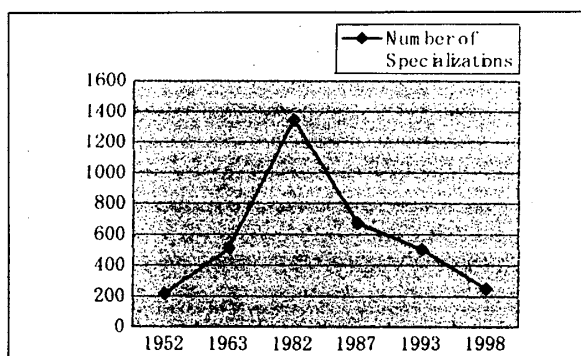


Fig. 1. The changes of numbers of specializations in regular higher education

Source: *Zhongguo Jiaoyu Nianjian 1949-1981 (China Education Yearbook 1949-1981)*, Beijing: Zhongguo Dabaike Quanshu Chubanshe, 1984. *Zhongguo Jiaoyu Nianjian 1982-1984 (China Education Yearbook 1982-1984)*, Changsha: Hunan Jiaoyu Chubanshe, 1985. *Zhongguo Jiaoyu Nianjian 1988, 1994, 1999*, (*China Education Yearbook 1988, 1994, and 1999*), Beijing: Renmin Jiaoyu Chubanshe, 1989, 1995, and 2000.

1980s, engineering from 35.2 percent to 39.7 percent. By contrast, agriculture and forestry continually dropped from 5.5 percent to 3.5 percent, and medicine from 9.3 percent to 8.3 percent. These changes initially represented the demands and influence of the economic system during transition.

Curricular reforms at the institution level-Beijing University

Since the implementation of a modified credit system in the early 1980s, Beijing University had reformed its teaching plan for two times, which had made remarkable changes to the teaching plan compared with the old ones. However, there were still some problems as identified in the conference on teaching held in May 1993:

Some specializations were still over narrowly defined with narrow range of curricular content, students were bounded into the certain specialization as soon as they entered the university, and the pedagogical process lacked flexibility, and closed training model lacked competition.

They analyzed that with the problems above, the university was unable to train their student to be adaptive to the market economy, and may weaken the competitiveness of their graduates in the market of personnel. Furthermore, these problems limited the advantages of Beijing University as a comprehensive university.

Seeking to solve the problems, Beijing University decided to reform the teaching plan on the

Table 2. Ratio of Students by Fields of Study

Year	Engineering	Agriculture	Forestry	Medicine	Teacher Training	Humanities	Science	Finance & Economic	Politics & Law	Sports	Fine Arts
1947	17.8	6.6	-	7.7	13.5	10.2	6.4	11.4	24.4	0.4	1.6
1949	26.0	8.4	0.5	13.1	10.3	10.2	6.0	16.6	6.3	0.2	2.4
1953	37.7	6.1	1.2	13.7	18.8	6.7	5.8	6.4	1.8	0.5	1.3
1958	39.0	8.8	1.5	11.7	23.8	3.9	6.2	2.2	1.1	1.1	0.7
1963	42.2	8.1	1.7	12.8	15.2	5.3	10.6	1.8	0.5	0.7	0.7
1978	33.6	6.3	0.9	13.2	29.2	5.4	7.5	2.1	0.2	1.0	0.6
1983	34.7	5.7	1.1	11.6	26.0	5.6	6.6	5.9	1.5	0.8	0.5
1988	35.2	4.5	1.0	9.3	25.7	5.4	5.3	10.0	2.1	0.7	0.8
1993	36.8	3.8	0.9	9.1	23.4	5.0	3.9	13.1	2.0	0.7	1.1

Table 2 (continued). Ratio of Students by Fields of Study

Year	Philosophy	Economics	Law	Education	Literature	History	Science	Engineering	Agriculture	Medicine
1995	0.2	14.9	3.2	4.0	12.6	1.7	10.7	40.1	3.8	8.8
1998	0.1	14.9	4.0	4.1	13.3	1.5	10.5	39.7	3.5	8.3

Source: Jiaoyubu, *Gongheguo Jiaoyu 50 Nian 1949-1999 (50 Years of Education in the People's Republic of China 1949-1999)*, Beijing: Beijing Shifan Daxue Chubanshe, 1999, pp.362.

basis of the following principles in 1990s.

Principles of the Reform of Teaching Program

Placing emphasis on the basic (Jiaqiang Jichu)-place emphasis on the basic courses in a broad pattern of knowledge for the first two years students;

Weakening the boundaries of specializations (Danhua Zhuangye)-on one hand, should strengthen the education in a certain specialization, on the other hand, should not be limited in one specialization. Teaching plan gives students more freedom to select courses by allowing all students to take courses of other departments or specializations, encourage students of arts to take courses in fields of sciences while students of sciences to take courses in the fields of arts. All students are required to take at least one course in the fine arts and management respectively.

Teaching students in accordance with their aptitude (Yincai Shijiao) and Training students in different branches (Fenliu Peiyang)-education of students of the last two years will be mainly divided into two groups, theoretical and practical, according to students' interest, aptitude, and directions for further employment.

Reform of Curricular structure

Courses were still divided into three clusters: required course, elective with limitations, and free electives. The credits of required courses should be about 70 percent of total about 150 credits, while elective about 30 percent, including no less than 10 percent.

Take the curricula of the physics in 1982, 1990 and 1996 as an example.

The proportion of required course decreased gradually, especially the required specialized courses, while the proportion of electives with limitations and free electives increased considerably. This reflected the principles of teaching plan reform of the university and the national reform document as a whole.

Another remarkable change took place in the field of common courses.

Also take the physics as an example. Table 4 shows the model of required common courses changed dramatically, from combination of political education, physical education and foreign language to combination of political education, physical education, foreign language, computer science, national defense education, and fine arts. In a word, it has been modified in a more liberal direction.

Furthermore, the university will offer out-of-

Table 3. Curricular Requirements of the Physics

	1982	1990	1996
Length of schooling	4 years	4 years	4 years
Total credits required	145	164	150
Required	115 credits (79.3 percent of the total)	125 credits (76.1 percent of the total)	102 credits (68 percent of the total)
Common courses	32 credits (22 percent of the total)	42 credits (25.6 percent of the total)	36 credits (24 percent of the total)
Specialized courses	83 credits (57.2 percent of the total)	83 credits (50.6 percent of the total)	66 credits (44 percent of the total)
Electives with limitations	12 credits (8.3 percent of the total)	21-30 credits (12.9-18.4 percent of the total)	25-33 credits (17-22 percent of the total)
Free electives	18 credits (12.4 percent of the total)	18-9 credits (11.0-5.5 percent of the total)	23-15 credits (15-10 percent of the total)

Source: *Beijing Daxue Wulixi Jiaoxue Jihua 1982, 1990, 1996 (Teaching Program of Department of Physics, Beijing University 1982, 1990, and 1996).*

class lectures such as Chinese Traditional Culture, Modern Development of Natural Sciences in order to expand the horizon of students.

Conclusion

The curricular reform in the 1990s addressed almost the same problems in China's higher education in the 1980s. The *Decision on the Reform of*

Education System adopted by the Central Committee of Communist Party in 1985 had stated many same problems as in the reform documents of the 1990s.

However, compared with the curricular reform of universities in the 1980s, which was, to a certain degree, a revival of 1960s and a gradual process, the reform in the 1990s was rather a rapid one. Both changes at system level and institution level were dramatic. Moreover, the curricular reform in the

Table 4. Common Courses and Other Required Educational Activities

Year	Common Courses	Others
1982	History of Communist Party of China Political Economics (Marxist) Philosophy Physical Education Foreign Language	Learning of Current Political Events (3 academic hours a week) Productive Labor (one week a semester) Military Training (two weeks)
1986	Development of Scientific Socialism Philosophy China's Socialist Construction Imperialism and Contemporary Capitalist Economy Physical Education Foreign Language Military Training (3 credits)	Learning of Current Political Events (half a day a week) Productive Labor (one week a semester)
1990	History of Chinese Revolution Philosophy China's Socialist Economic Construction Introduction of Capitalist Economy Physical Education Foreign Language Introduction of Law Special Subjects on History of China's Revolution	Productive Labor (one week a semester) Military Training (four weeks) Social Investigation, Teaching Practice, and Production Practice (four weeks)
1996	History of Chinese Revolution Philosophy Introduction of Capitalism China's Socialist Construction Theory and Practice of Contemporary Living Physical Education Foreign Language Computer Science Theory of Military Defense Fine Art	Military Training Public Physical Labor (at least one week in four years)

Source: Du Qin and Ju Xingyan, *Beijing Daxue Xuezhì Yangē 1949-1998 (History of Education of Beijing University 1949-1998)*, Beijing: Beijing Daxue Chubanshe, 2000.

1990s was truly nationwide and covered all the higher education institutions in China.

The problem of over-narrowly specialized education at the undergraduate level in China's higher education resulted from the reforms in the early 1950s upon the former Soviet model has been being the focus of curricular reforms during the last decades. Nevertheless, though several measures were adopted to solve it, the attempts seemed not successful. Even today, China's higher education is still looking for the best ways to broaden the training of undergraduate students.

To a certain extent, the reform of undergraduate curriculum in China in the 1990s is not only a process of broadening of the training, but also a process of changing of image about the products of higher education.

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