EDUCATION AND NATIONAL DEVELOPMENT IN CHINA
SINCE 1949: OSCILLATING POLICIES AND ENDURING
DILEMMAS

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I. INTRODUCTION AND CONCEPTUAL FRAMEWORK

Since the founding of the People’s Republic of China (China) in 1949, Chinese society has undergone tumultuous changes in its socio-economic, political, and cultural realms. Led by the Chinese Communist Party (CCP), the Chinese people were plunged into national experiments the scale of which were unmatched by previous ones in the written history of humankind. Among these experiments, observers of contemporary China could easily point out the bold Great Leap Forward campaign to march towards communism in 1958-60, the social upheaval of the Great Proletariat Cultural Revolution during the ten year period of 1966-1976, and the gigantic economic transition from a centrally-planned economy towards a market-oriented socialist economy in the post-1978 period. These experiments in national development were characterized by big policy changes and controversies; they were also associated with impressive successes and heart-wrenching human dislocations.

Educational policies in China in the past five decades have also been characterized by bold moves, major shifts and reversals. Educational change is inextricably linked to changes in the larger society. Some observers may point out the substantial gain in literacy of the great masses of people, the large expansion of the education system, and the nurturing of some world-class scientists and engineers. Others may instead lament the education loss resulting from the major disruption in educating a generation of Chinese during the period of the Great Proletariat Cultural Revolution. The Chinese government certainly thinks that splendid achievement has been achieved in education under the three successive generations of CCP leadership of Mao Zedong, Deng Xiaoping, and Jiang Zemin. And China’s educational development compares favorably with countries with similar level of economic development.

This is a chapter on education and national development in China since 1949. It attempts to provide a critical review of major educational policies and their shifts over time in the contexts of changing socio-economic and political development in the country. To make the review manageable, the chapter concentrates on three tasks: (1) explaining the origin of major educational policies and assessing the intended and unintended effects of such policies on educational development; (2) identifying the links between shifts in educational policies and changes in the external development contexts for education; and (3) highlighting the impact of the CCP on State policy and on education policy, and the enduring dilemmas confronting the educational system in China.

The conceptual framework guiding this review is based on a conflict theory of the Chinese State tied to unique characteristics of the country. Such a framework posits that an adequate understanding of policy shifts in education must focus on conflicts within the Chinese State and their impact on educational policy. There is widespread recognition among social analysts and observers that the State (or public sector) has a major role in shaping policies and practices in many different areas, including education. Among other things, the State is characterized by its nature, structure, decision-making process, and ability to adapt to change.

While there are different characterization of the nature of the State in different countries, some China observers point out that, even after five decades of transformation, the Chinese State remains a one-party State with power monopolized by the CCP. While officially representing the interests of the people, the party is an organization that seeks to perpetuate its own power and interest. Yet the power structure within the CCP is not monolithic. There are clear factions within the party with sharply different ideologies and approaches to national development. The history of the post-1949 Chinese State is dominated by conflicts in national-development policies of party leaders and in struggles for power between factions in the CCP. Decision making within the party is characterized by a top-down process; policies are implemented by directives from the party leadership and often promoted through large-scale media campaigns controlled by the State. The mandate for policy is often justified by an appeal to the views or thinking of a paramount leader. Informal relationship is an important determinant of the access to power or influence. Patronage is an important means for cultivating support for State policy. "Rule by man" dominates "rule by law" in
governance and in policy implementation. Yet some observers point out that the CCP is an organization capable of adapting itself to a changing environment in its quest to survive and maintain power. While insistence on communist ideology has had a negative effect on the party, the party has also initiated political reforms to strengthen itself, reduce external resistance, and increase its popular appeal. They include efforts to rejuvenate the leadership, diversify party membership, initiate legal reform, change the civil service system and fight corruption, as well as broaden political participation by non-State groups.

There is a common understanding among policy-makers and analysts that the goals of national development are multi-faceted and can be conflicting. While the promotion of economic growth has been consistently emphasized in different countries over time, observers and critics alike point out that the economic growth will normally benefit a small segment of the population if there is no accompanying policy to promote a more equal distribution of income. Some point out that growth and reduced inequality are conflicting goals; others argue that the two can be compatible. In addition, socio-economic development could be limited without political development in both civil society in and in State. It is important to develop institutions and organizations in civil society to support democratization, political socialization and participation. The State’s goals of national development set the broader contexts for the development of various sectors, including education. To understand educational-development objectives in China, it is necessary to understand the CCP’s perspectives on national development over time.

There is also divergent views on the potential of the education system for effecting social change. On the one hand, education may be seen as a relatively autonomous social institutions such that interventions in education could ultimately address social ills in the larger society. On the other hand, education may be regarded as a mere apparatus within the State and often becomes an instrument for furthering the interests of those in power. Observers of post-1949 China believe that education is not an autonomous social institution; it is part of the CCP-dominated State and is an important arena over which different factions within the CCP compete for control and through which to realize their vision for national development. In short, policy shifts in education has to be linked to conflicts among factions within the CCP.

In post-1949 China, many important organizations of civil society, such as independent media and autonomous trade unions, are either weak or virtually absent. The party and the State have a strong influence on most aspects of national life in civil society. For most of the post-1949 China, institutions in civil society have a weak influence, if any, on the State and on the party. In fact, the party, through the State apparatus and the strategy of mass mobilization, brings civil society to bear upon policy formulation and implementation in the education sector.

The review is organized into two parts in this chapter. The first part presents a concise overview of major educational policies in various periods in post-1949 China and relates them to conflicts within the CCP and to changing national-development contexts. The second part provides a more detailed case study of four specific educational issues. The literature for this review is based on three sources: information and education documents of the Chinese government, studies on Chinese education by scholars from both inside and outside of China, and relevant studies on education and national development from international or comparative perspectives. The rest of the chapter is divided into three sections: Section II presents an overview of major education policies and development since 1949; Section III presents the four case studies; and Section IV identifies emerging challenges for the educational system.

II. EDUCATIONAL POLICIES AND CONFLICTS WITHIN THE CHINESE STATE: AN OVERVIEW

The CCP has been the ruling party of China since 1949, with monopolistic control of the Chinese State. Although CCP’s grip on power in the State has loosened somewhat in recent years, it maintained tight control of the State throughout much of the post-1949 period. Struggle for power and for national-development directions among factions with the CCP has been a defining feature of the Chinese State in the past five decades. Outside observers often label the two major factions as the radicals and the moderates (or as the conservatives and the reformers in more recent years). These two factions differ fundamentally in
their goals and approach to national development and in their policies for education. Led by Mao Zedong and others, the radicals see the achievement of political consciousness, ideological devotion to communism, and human liberation as the primary goals of the development of Chinese people. The approach to national development is characterized by continuing class struggles and revolution to transform the social relation of production and by having communist politics and ideology at the core of social life. National-development efforts are to be undertaken under the leadership of the CCP, the uncontested dictatorship of the State by the proletariat class, the CCP-led active grass-root level participation of the masses, and the unrelenting use of large-scale social movements and media campaign. Being a part of the super-structure of society, education has a key role to play in political and ideological development of the Chinese people and society. In addition to fostering a love for communist ideals (“redness”), the education system should be a vehicle for promoting social equality and socially-oriented goals. The radicals oppose stratification and elitism in education.

Led by Liu Shaoqi, Deng Xiaoping, and others at various times, the moderates focus on the material and moral improvement of people’s life. According to them, the approach to national development is mainly economic and technical, and much less political and ideological. The first major step in socialist national development is the transformation of the forces of production, not the social relation of production; and it consists in the development and application of science and technology, the modernization of key sectors, and the development of a skilled labor force. Education has a key role in developing the human input to production and supporting the development of science and technology. Educational institutions should foster the acquisition of skills and knowledge (“expertise”) as well as moral development of the learner. The moderates favor stratification within education to prepare a diversified workforce for an economy in need of different types of skilled labor. They also favor the establishment of key schools and universities and competitive examinations to effect educational selection and the preparation of leaders and elite.

The “two-line struggle” between the radical and moderate factions of the CCP during much of the post-1949 period has led to wildly oscillating policies for national development and for education. In the education section, in particular, party leaders have been sharply divided over three enduring policy dilemmas: educational for political/ideological development versus education for economic development (redness vs. expertise), education for social equality versus education for efficiency (e.g., education for the masses vs. education preparing well-trained elite), as well as enlisting intellectuals and high-skilled personnel in socialist development versus treating them as antagonists and suppressing them. Policy shifts in education reflect power shifts among party factions. Table 1 divides post-1949 China into four periods. It identifies the key changes in the Chinese State, the national-development contexts, and educational policies and development in these four periods.

Table 1: The State, Changing Development Contexts, and Policy Shifts in Education Since 1949

<table>
<thead>
<tr>
<th>Periods</th>
<th>Chinese State and National-Development Contexts</th>
<th>Major Education Policies &amp; Development</th>
</tr>
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</table>
| 1949-57 (Reconstruction & 1st Plan Period) | - Founding of People’s Republic of China in 1949  
- Unified party under leadership of Mao Zedong  
- Creation of a new Chinese State, constitution established in 1954 based on Soviet model  
- Focus on national reconstruction  
- Three-Ants and Five-Ants Campaigns against corrupt bureaucrats and capitalist class in 1951-52  
- Collectivization of | - Building of a national system of education: (1) Nationalization of educational institutions at various levels in 1949-52 (including private schools and schools previously controlled by Nationalist Party); (2) centralized planning and financing of education; (3) policy to popularize putong-hua (common language) in 1955  
- Policy of universal primary education: (1) set target in 1956 to achievement universalization in 7-12 years; (2) based on strategy of “walking on two legs” (provision by both government and non-government groups); (3) employing different formats of primary schooling; (4) building a stable and qualified teaching force; and (5) developing and revising primary curriculum in 1952-55 |
agriculture. Adoption of Soviet model of economic development, central planning and heavy industrialization. Centralized system of administration and finance

- Involvement in Korean War; U.S. policy of containment
- Hundred Flowers Campaign of 1956-57 and Anti-rightist Campaign of 1957. Beginning of tumultuous relationship between CCP and intellectuals

1958-65 (2nd Plan & Adjustment Period)

- "Great Leap Forward" national experiment led by Mao Zedong: Accelerated development towards communism in 1958-60. Establishment of production teams, brigades and communes as units of production in rural areas. Split with Soviet Union in 1960. Economic decline and famine
- Economic adjustment under leadership of Liu Shaoqi and Deng Xiaoping in 1961-65. Liu proposed two systems of labor and two systems of education. Private incentives and individual responsibility in economic production
- Intensification of “two-line struggle” between Mao and his supporters on one side and Liu, Deng, and their supporters on the other side

- Expanded access, quality improvement, & diversification of curriculum in secondary education: (1) expansion of general secondary education in 1953-57; (2) reconstruction of secondary technical schools in 1952-54 and skilled workers schools in 1953-57; (3) shift of teacher education from lower-secondary to upper-secondary education in 1954; (4) focus on quality improvement in 1954-55
- Development of a new model of higher education: (1) nationalization and reconstitution of institutions founded before 1949; (2) adoption of Soviet model of higher education and reorganization of higher education institutions in 1952-53; (3) policy to centralize higher education (admissions, placement of graduates, management and finance) in 1953; (4) sending of students to Soviet Block for university and advanced studies

- CCP policy for education in 1958: (1) education must serve the proletariat class; (2) education to be combined with manual labor; (3) CCP leadership over education; (4) emphasis on political and ideological education; (5) education theory based on Marxism and Leninism; and (6) emphasis on both redness and expertise, for both teachers and students
- Rapid quantitative expansion during Great Leap Forward Period and contraction during Adjustment Period
- Large enrollment change in primary education: rapid increase in 1958 and continuing decline in 1959-62
- Defining effort to eradicate adult illiteracy
- Reform and adjustment in secondary education: (1) Introduction and rapid expansion of agricultural schools; (2) addition of manual labor and work study program in school; and (3) experimentation with alternative academic programs for primary and secondary education
- Rapid expansion and change in higher education: (1) 1958 directive to provide access to higher education for all qualified and willing youth and adult in about 15 years; (2) number of institutions increased from 229 to 1289 through “walking on two legs”; (3) reduction of instruction on theory and addition of manual labor and social activities in curriculum; and (4) criticism of “rightist” professors and experts
- Further diversification and vocationalization of education system during Adjustment Period: (1) Introduced “two systems of education and two systems of labor (full-time & part-time systems); and (2) introduction of secondary vocational
schools in urban areas in 1963

- Key educational challenge throughout 1958-65 period: how to bring education to the masses (peasants) and preparing elite through secondary and university education at the same time. Emergence of a dual system of regular schools (with key schools among them) and work-study schools

1966-76 (Cultural Revolution Period)

- Re-capture of leadership by Mao Zedong and Gang of Four through the launching of the Great Proletariat Cultural Revolution, purge of political opponents, oppression of intellectuals
- Re-emphasizing collective incentives in economic production
- Mass campaigns in cultural institutions
- Re-orientation of goals and methods of education: (1) focus on political and ideological education again; (2) educational approach based on combining of theory and practice, academic study and manual labor; (3) sending of educated youth to country side for re-education
- Many rural primary teachers forced to work for work-points instead of a salary and reclassified as rural residents
- Drastic change in higher education: (1) discontinuation of national examination for admissions to university; (2) complete stoppage in admissions of undergraduate students for six years and of graduate students for 12 years; (3) initiating the admission of students from peasant and working classes in 1970 to “attend, manage, and reform” universities; and (4) 1971 plan to consolidate, close, and reconstruct 106 of the 417 institutions of higher education
- Reversal of diversification and vocationalization of education (closing down various types of vocational-technical schools)
- Discontinuation of admissions to secondary teacher training schools in 1966-71. Loss of school campus, equipment and library materials
- CCP issued the “two assessments” (i.e., Mao’s proletariat education policy not implemented during 1949-1966; most of the teachers had a capitalist world view) in 1971

1976- (Reform & Opening Up Period)

- Death of Mao Zedong in 1976 and capture of Gang of Four
- Party leadership under Deng Xiaoping in 1978, initiating reform and opening up policies, four modernizations, emphasis on economic development, and establishment of first special economic zone in Shenzhen in 1980 for economic experimentation
- Rebuilding of CCP and strengthening of its
- Reversing policies of the Cultural Revolution Period in late 1970s and early 1980s: (1) resumption of national examination for university entry; (2) repudiation of CCP’s “two assessments” of 1971; (3) reconstruction of education system; (4) emphasis of education development to be in line with national economic development; (5) initial effort to re-vocationalize secondary education; (6) experimentation with decentralization in educational management and finance; (7) more emphasis on educational quality at all levels and developing key educational institutions at various levels
- In 1983, Deng insisted that “education must face modernization, face the world, and face the future”
legitimacy: acknowledgment of errors, rehabilitation of “rightists”, rectification of party members, and pensioning off of senior CCP cadres

• Aggregate plan for reform of economic system, 1982; and CCP decision on reform of economic system, 1984.

• Agricultural reform (introduction of production responsibility system, incentives to individual household level), industrial reform (open door policy for foreign investment, trade, and technology; gradual change in ownership from State to non-state), public finance reform (decentralization and diversification), enterprise reform (separation of party & enterprise affairs, changes in management and incentive)

• Student demonstration, June 4, 1989
• Tour of southern China by Deng Xiaoping in 1992, reconfirmation of economic-reform policies
• Death of Deng in 1997 and continuation of reform and opening up policies under Jiang Zemin

• Reform of the system of education announced in 1985: (1) achieving nine-year compulsory education by 2000; (2) structural reform of secondary education; and (3) reform in admissions, graduate placement, and management of higher education

• Sending students for graduate studies in the United States and other countries

• Outline of education reform and development in 1993: (1) implementation of nine-year compulsory education and eradication of youth and adult illiteracy; (2) raising of educational quality; (3) development of 100 key universities and key disciplines.

• In 1995, Jiang Zemin proposed national development strategy based on science, technology, and education

• Action Plan for Education Development and Decision on “Furthering the Education Reform and Promoting Quality-Oriented Education” in 1999: (1) implementation of quality-oriented education at all levels; (2) reform of pedagogy to encourage students’ independent thinking and creativity; (3) continuation of national compulsory education program in poor areas accompanied by increased government funding; (4) expansion of upper-secondary and university enrollment (gross enrollment rate for higher education to reach 15% by 2010); (5) more power for provincial governments with higher-education affairs, especially with two/three-year colleges; (6) implementation of project to develop high-level creative personnel; and (7) development of private education institutions.


In the first few years after 1949, much of the attention of the leaders of CCP was focused on the establishment of a new Chinese State and on national re-construction. The CCP was unified under the undisputed leadership of Mao Zedong. With the creation of a new state constitution based on the Soviet
model of 1936, the CCP exercised complete control of the new state by making state administration the executive arm of the CCP. Coordination between party and state affairs was achieved through dual membership in both organizations. The Soviet model of economic development was adopted. Unity in focus and in specific policies were also found in education. The major focus was on building a national system of education for the new country. This involved nationalizing existing educational institutions, building new schools and new types of institutions (especially specialized technical and research institutes based on the Soviet model of higher education), creating and extending control of CCP over a new centralized educational bureaucracy, and setting a policy to popularize putong-hua (the common language) and simplify Chinese characters.

Mao and the CCP leadership had launched the Three-Antis and Five-Antis campaigns against some potential adversaries of communist development (such as corrupt officials and capitalists) in 1951-52. Thinking that intellectuals were essential and sympathetic to communist development, Mao initiated the Hundred Flowers Campaign at the end of the First Five Year Plan to ask intellectuals to air their views about the party and the country’s development. However, the out-pouring of criticisms of the party and its policies by the intellectuals in 1957 caught Mao by surprise. Mao’s view of intellectuals turned negative; he stopped the Hundred Flowers Campaign and then promptly launched the Anti-Rightists Campaign in which many intellectuals were labeled “rightists” (enemies of the people) and persecuted. This marked the beginning the CCP’s antagonism against the intellectuals in years to come.

The Great Leap Forward during 1958-1960 was a history-defining national experiment in communist development. It represented a bold and idealistic attempt led by Mao Zedong to achieve an accelerated move towards communism; its disastrous failure also led to a split in party leadership and the intensification of the two-line struggle. Believing that people’s love for communist ideals could move mountains, that collective goals could transcend individual interests, and that peasants in the vast country side could only be liberated in a mass-line revolution, Mao organized rural production into communes and set ambitious production targets for all sectors of the economy. This was accompanied by a corresponding shift in the focus of and approach to education. The political and ideological function of education began to gain dominance over acquisition of expertise for economic production. Promotion of social equality was a key national-development goal and was to be achieved through a substantial expansion of access to education for peasant and working-class children. A scientific approach to education must combine Marxist-Leninist theory with manual labor. Mao’s educational perspective set into motion a rapid quantitative expansion of education at all levels, the proliferation of new schools (especially work-study schools) for children from peasant households, and the incorporation of political education and manual activities into the educational curriculum at all levels.

After three years of sharp economic decline, Mao relinquished control of national affairs to Liu Shaoqi and Deng Xiaoping in the winter of 1960. Liu and Deng quickly ushered in policy adjustments in both the economy and education. They reset production targets to more realistic ones, introduced private incentives and individual responsibility in economic production, proposed two systems of labor (full-time and part-time employment) with two systems of education (full-time and part-time studies), abruptly reversed the expansionist policy in education, and further diversified the structure of education through vocationalization. By 1965, a dual system of education consisting of regular schools and work-study schools, aiming to produce trained elite and to educate the masses. Regular schools had much higher academic standards and could lead to university education. Work-study schools were attended by children from peasant background with negligible probability of getting into the university. Key schools (regular schools with a concentration of the best teachers, best students, and best facilities), first experimented by the party during the Yanan years before the defeat of the Nationalist Party, were re-introduced into the education system. Expertise was re-emphasized, along with redness. Intellectuals had a positive but guarded role to play in education and in national development.

The 1958-65 period witnessed the first major and complete oscillation in CCP policy for national development and for education. The leadership split in the CCP hardened and the struggle for control of the party between the two factions intensified. Dissatisfied with the policies of Liu and Deng, Mao launched the Great Proletariat Cultural Revolution (GPCR) in 1966, seized control of the party again, and stayed in
power until his death in 1976. Assisted by his supporters, particularly the “Gang of Four”, Mao returned to the earlier emphasis on collectivist production, ideological and political conformity, and egalitarianism. During the 1966-76 period, political opponents were purged, intellectuals were oppressed, and peasants and workers were elevated. In education, the pendulum swung back towards redness and towards a unified structure for social equality. The education system came to a halt during the first few years of the GPCR, and the education of a generation of Chinese was lost. In 1971, the party issued the “two assessments” highly critical of the education system and educators: it contended that Mao’s proletariat education policy was not implemented during the 17 years after 1949 and that most of the teachers had a capitalist worldview.

Mao died in 1976 and the Gang of Four were captured by their political opponents. By 1978, Deng Xiaoping gained paramount leadership in the CCP and carried out a major reversal of Mao’s policy. In the subsequent two decades, he led China through the largest economic transition to a “market-oriented socialist economy” known in human history. With a focus on economic development and modernization, his twin policies of reform and opening up to the outside world succeeded in achieving a rapid and sustained economic growth and a clear improvement in the living standard of the Chinese people. At the same time, the tight control of the people by the party has begun to loosen somewhat and the overall environment has become less oppressive. However, the legitimacy of the party has been on a long-term decline because of the social upheaval brought about by the party leadership in previous periods and by corruption of party members and government officials. Aggregate economic progress was accompanied by substantial and widening socio-economic disparities and by inequitable access to power and resources. Student protest in 1989 brought into question of whether a more prosperous and open society is possible within accompanying political reform. While top Chinese leaders have been in general agreement with the focus on economic development and the adoption of the twin policies, there is still difference in opinion among them about the pace of reform and on specific policies issues. Thus, although one does not see gigantic shifts in national policies, relatively small swings do occur in both directions.

In the education sector, despite occasional calls for a balance between redness and expertise, the persistent major goal of the education system since 1978 has been to prepare a mix of skilled personnel for the developing economy. Sustained economic growth over time has created an increased demand for skilled personnel and thus an expansion of the education system. Over time, the scale of the education system has enlarged substantially to provide expanded access for children and adults from various backgrounds; and a segment of key educational institutions at all levels has been re-introduced to prepare highly trained elite. Chinese leaders support a highly stratified education system to prepare people for a diversified workplace and different roles in society. The party attempts to reduce its antagonism with intellectuals and to enlist their help in three ways: first by upgrading the educational qualification of senior cadres of the party to the university level, second by recruiting more educated individuals into the party, and third by recognizing the positive role of intellectuals and improving their living and working conditions. Educational policy formulating in the past two decades has been characterized by gradualism, by experimentation, and by occasional hesitation about the pace of reform. Educational development in post-1978 China has been successively guided by the redirection of education policy by Deng in 1978, the 1985 policy for systemic reform of education, the 1993 Outline of Educational Reform and Development, as well as the 1999 Action Plan for Educational Development.

While this section sketches the oscillating policies and enduring dilemmas in education and national development for the entire post-1949 period, the next section provides a more detailed analysis around four prominent issues in education and national development.

III. CASE STUDIES OF EDUCATION POLICY AND NATIONAL DEVELOPMENT

1. The Structural Reform of Secondary Education

The structural reform of secondary education promulgated by the Central Committee of the Chinese Communist Party (CCP) in 1985 was an important change in educational policy of the Chinese leadership.
The reform called for the vocationalization of upper-secondary education so that, over time, upper-secondary education would change from a predominance of general education to an equal mix of general education and vocational-technical (VT) education. In 1985, there were three types of VT schools at the upper-secondary level: secondary vocational schools run by educational bureaucracies, skilled-workers schools run by the Ministry of Labor and its local affiliates; and secondary specialized schools (consisting of teacher-training schools run by educational bureaucracies, and secondary technical schools run by other ministries, departments, and enterprises). By increasing student enrollment in these three types of VT schools relative to that in general secondary schools, the reform attempted to alter the structure of secondary education from a monolithic to a diversified one.

According to the Chinese government, the reform was prompted by economic changes brought about by the modernization policy since the Third Plenary Session of the Eleven Congress in 1978. As industrialization gathered steam in the early 1980s, there was an acute shortage of skilled workers, semi-skilled workers, and middle-level technicians. However, VT education was the weakest part of the education system and was unable to turn out the needed skilled personnel. The dominance of general secondary education in the late 1970s was regarded as a major problem in Chinese education. The economic reform also emphasized efficiency in production. With general-education graduates found to be inadequately prepared for technical work in the workplace, Chinese decision-makers believed that VT education would be better than general education in technical training of the young for employment in industry. The vocationalization of secondary education should result in increased productivity of secondary graduates and in increased efficiency in educational investment. Educational streaming at the upper-secondary level was also a relevant consideration for the government. With a transition rate of only 4 percent between upper-secondary education and college, there was tremendous pressure at the secondary-higher education juncture. Upper-secondary schools were geared primarily towards college preparation. Schools at lower levels were also caught up in teaching students for examination. The structural reform would presumably siphon off half of the students to VT education and subsequently to employment and thus ease the transition pressure.

The origin and rationale of the structural reform of secondary education in 1985 can be better understood by recognizing the development of secondary education since 1949. Soon after the founding of the People’s Republic of China, the CCP turned its attention to national reconstruction and educational development. At the secondary level, initial effort was devoted to the quantitative and qualitative development of general education, including the preparation of the secondary curriculum and textbooks, the conversion of private and foreign-subsidized schools to government schools, and the expansion of enrollment capacity. This was followed by the development of the different types of VT schools, including the reconstruction of secondary technical schools in 1952-54 and of skilled-workers schools in 1953-57, the shifting of teacher training from lower-secondary education to upper-secondary education, the rapid expansion of agricultural schools (secondary vocational schools in rural areas) in the early 1960s, and the emergence of secondary vocational schools in urban areas in 1963. By 1965, China had a diversified system of secondary education (see Table 2). The differentiation in the educational system to meet the diverse needs of the economy was an accepted practice.

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<td>0</td>
<td>0</td>
<td>809</td>
<td>8501</td>
<td>3743</td>
<td>911</td>
<td>1931</td>
<td>4310</td>
<td>56</td>
</tr>
</tbody>
</table>
This diversified structure, however, changed drastically during the period of the GPCR, 1966-76. Education was at the center of the social upheaval during this period. Some new leaders (referred to as the “Gang of Four” by their opponents) of the period argued the educational policies in the early 1960s were not serving the interest of the proletariat class and that the teaching force had a capitalist view of the world; thus a new model of education was needed. In particular, they charged that the diversified structure of secondary education promoted social differentiation and elitism. They called for the conversion of secondary vocational schools into secondary general schools. Many secondary technical schools and skilled workers schools were closed down, consolidated, or turned into factories. By 1976, there were 192,152 secondary general schools and no secondary vocational schools. At that time, lower-secondary education was all general education; and less than 1.2 percent of upper-secondary students were in vocational-technical education. Secondary education had a monolithic structure.

The first call for strengthening VT education came from Deng Xiaoping, then the Vice Chairman of CCP, in April 1978. And the 1985 reform decision was the high point of efforts to re-vocationalize secondary education since 1978. The party leadership then launched a vigorous campaign to promote VT education. Through clear directives from the top as well as various communication means (newspapers, education working conferences, party meetings, etc.), provincial and local educational leaders were instructed to expand VT education. As shown in Table 2, the quantitative change in upper-secondary education in the 1980s was very dramatic. For example, between 1980-1989, enrollment increased by 641 percent in secondary vocational schools, by 96 percent in secondary technical schools, 143 percent in teacher training schools, and by 81 percent in skilled-workers schools; but enrollment decreased by only 26 percent in general-education schools. As a percentage of total enrollment in upper-secondary education, VT education increased from 18 percent in 1980 to 45 percent in 1989. In the early 1990s, government officials set higher enrollment targets for VT education. By 1997, VT education actually accounted for 56% of total enrollment in upper-secondary education. The quantitative change, however, was accompanied by significant problems in the implementation of the reform. The most obvious problems were related to the poor quality and inadequate funding of secondary vocational schools. Many of these schools lacked qualified teachers, were under-equipped, did not have facilities for practical training, and were not well received by parents and students. Some of them were closed down while others changed their curriculum so that general education was offered in the first two years and vocational training in the third year.

From a broader perspective, the structural reform of secondary education is not simply a change in the mix of curriculum at that level, but it reflects a fundamental shift in the emphasis of the Chinese leadership regarding the role of education in national development since the downfall of the Gang of Four in 1976. As mentioned in the previous section, political and ideological roles were paramount for education during the GPCR. Political studies were at the core of the curriculum; schools were to prepare students with Communist ideals (being “red”), and not just technical “experts.” Education should also be geared towards promoting social equality through a “mass line” approach; and a uniform general education at the secondary level was aimed at reducing social differentiation and elitism in education. National leaders in the post-Cultural Revolution era, in contrast, see that the major role of education is to contribute towards economic development (which is the focus of socialist development) through the preparation of skilled personnel. School should teach expertise, not just redness. They also oppose the mass-line approach to education and accept the stratifying function of education that allocates individuals to different places in a differentiated workplace. Curricular differentiation at the upper-secondary level is an implicit policy to reduce the social demand for higher education. The structure reform of education is an instrument of social control.
From a historical perspective, the structural reform of secondary education was one episode in a cycle of changes in education which oscillated between “redness” and “expertise” after the late 1950s. The contest in educational policy is part and parcel of the continuing contest among the two major factions within the CCP. Being a part of the Chinese State controlled by the CCP, conflicts within the education system reflect conflicts within the CCP.

Without getting into an ideological debate about the correctness of the competing policies of the two factions, it is instructive to critically assess the empirical basis of the rationale of the reform and to contrast the Chinese experience with the vocationalization of education in other countries. First, empirical studies in China show inconsistent findings regarding the presumed productivity advantage of VT graduates over general education graduates. A study in Beijing finds that VT graduates from a company-affiliated school (which is usually well equipped, well funded, with good practical training, as well as with good prospect of employment by the company) engaged in factory work relevant to their prior training have a modest productivity gain than general-education graduates. But in Shenzhen, general-education graduates are found to outperform graduates from secondary vocational schools. The lack of productivity advantage of VT graduates was also reported in other studies in China. The literature on productivity studies in other countries is also mixed. In general, there is no consistent and convincing evidence in support of the presumed productivity advantage of VT education over general education. On the other hand, there is evidence in China and in other countries that VT education is much more expensive than general education. General education, not VT education, is likely to have a higher rate of return for society and is thus a more efficient type of educational investment. Second, the thinking that VT education is a solution to youth unemployment has been shown to be a fallacy. There is now widespread recognition the solution to youth unemployment lies in the availability of jobs, not in the type of education acquired by youths. Third, in China and in other countries, students still prefer the type of education that has a higher probability of leading to higher education, which is high-quality general education, not VT education. Fourth, vocationalization of secondary education is a commonly adopted method for social differentiation and for discouraging the social demand for higher education. In short, there is little or no empirical support for the economic argument for the structural reform of secondary education in China. The empirical basis lies in the role of education for social stratification and social control.

The structure reform of secondary education in China is also a clear example of the process of decision making and implementation in the country for much of the time since 1949. The decision-making process was very much top-down, and was highly dependent on the view of the top leadership, particularly that of the paramount leader. Research and empirical studies were not part of the process for informing educational decisions. Directives and mobilization through various propaganda means were the common instruments for translating policy into practice. Officials at lower levels had to adhere to the official policy of the party leadership.

In the coming years, the structural reform of secondary education will become an increasing dilemma for the Chinese leaders, due to conflicting economic and social roles of secondary education. In an increasingly global and fast-changing world, economic productivity depends highly on the ability of individuals to adapt to change, to make decision under uncertainty, and to seek and make judicious use of information, and not on specific skills and a narrow base of knowledge. Secondary general education, not secondary VT education, would be suited to the emerging economic context, particularly in the economically more developed coastal region of China. VT is becoming a less efficient form of educational investment while it continues its social stratification role. Alternatives for resolving this dilemma have to be explored.

2. Financial Reform and Government Investment in Education

Reform in resource mobilization and allocation has been a key part of the overall development of the education sector since the early 1980s. The structure of educational financing has since undergone a fundamental change from a centralized system with a narrow revenue base to a decentralized system with a much more diversified revenue base.
The official pronouncement of the financial reform was made in 1985, along with calls for changes in other part of education. The financial reform consists of two major strategies: decentralization and diversification. Financial decentralization is based on the principle of “local responsibility and administration by levels,” according to which lower levels of government are responsible for the provision (implying also financing) of education and that different levels of education are administered by different levels of education. A common arrangement is that provincial, county, township, and village governments are respectively responsible for higher education, upper-secondary education, lower-secondary education, and primary education respectively. The central government operates and finances some institutions of higher education.

Diversification of financial sources consists in broadening the base for government’s revenue for education, and broadening and intensifying non-government resource mobilization. Educational surcharges in urban areas and levies in rural areas are examples of new revenues collected by the government. Non-government resources are often collected and used by educational institutions; they include social contributions, tuition and fees, and income generated by activities undertaken by educational institutions. Funds collected from these sources constitute the extra-budgetary resources for education. They are distinguished from the budgeted funds which are derived from the annual allocation of the budget of the government at various levels.

The reform in educational financing was part of the larger reform of public finance that began at the end of the 1970s. Before the reform, China had a centralized public-finance system, characterized by the practice of tong shou tong zhi (complete collection and complete distribution) according to which a lower-level government submitted all its tax revenues to a higher-level government and received all its expenditures from the higher-level government. In 1982, the practice of feng zou chi fang (eating from separate pots) was introduced by which a government at each level was responsible for its own finances. A major objective of the educational financing reform was to mobilize additional resources for education.

An analysis of educational expenditure over time shows that significantly more resources were spent on the education sector in the reform period than before the financial reform. For example, during the 1950-78 period, government education expenditure (budgeted funds) amounted to 6.50% of total government expenditure and 2.20% of national income. But during 1979-92, it rose to 11.01% of total government expenditure and 2.88% of national income (see Table 3).

<table>
<thead>
<tr>
<th>National Development Plan Periods</th>
<th>As % of total government expenditure</th>
<th>As % of national income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-1952 (reconstruction period)</td>
<td>6.43</td>
<td>1.53</td>
</tr>
<tr>
<td>1953-57 (first plan)</td>
<td>6.92</td>
<td>2.30</td>
</tr>
<tr>
<td>1958-1962 (second plan)</td>
<td>6.58</td>
<td>2.65</td>
</tr>
<tr>
<td>1963-1965 (adjustment period)</td>
<td>7.58</td>
<td>2.57</td>
</tr>
<tr>
<td>1966-1970 (third plan)</td>
<td>6.36</td>
<td>1.95</td>
</tr>
<tr>
<td>1971-1975 (fourth plan)</td>
<td>5.65</td>
<td>1.94</td>
</tr>
<tr>
<td>1976-1980 (fifth plan)</td>
<td>7.16</td>
<td>2.47</td>
</tr>
<tr>
<td>1981-1985 (sixth plan)</td>
<td>11.57</td>
<td>3.15</td>
</tr>
<tr>
<td>1986-1990 (seventh plan)</td>
<td>11.08</td>
<td>2.77</td>
</tr>
<tr>
<td>1991-1992 (eighth plan)</td>
<td>12.15</td>
<td>2.75</td>
</tr>
<tr>
<td>Average, 1950-1978</td>
<td>6.50</td>
<td>2.20</td>
</tr>
<tr>
<td>Average, 1979-1992</td>
<td>11.01</td>
<td>2.88</td>
</tr>
</tbody>
</table>

Table 4 shows that government budgeted funds for education increased from 26.50 billion yuan in 1986 to 135.77 billion yuan in 1997 in current prices, with an average annual nominal growth rate of 16.0%. In 1986 constant prices, government budgeted funds for education increased from 26.50 billion yuan in 1986 to 48.63 billion yuan in 1997, with an average annual real growth rate of 5.7%. Not only was government budgeted funds for education growing, extra-budgetary education funds were also growing, at an even faster rate. For example, during the same period, extra-budgetary funds increased from 8.13 billion yuan to 117.40 billion yuan in current prices, with an average annual nominal growth rate of 27.5%. In 1986 constant prices, extra-budgetary funds grew from 8.13 billion yuan to 40.25 billion yuan, with an average annual real growth rate of 15.7%. Total educational expenditure increased from 34.63 billion yuan in 1986 to 253.17 billion yuan in 1997 in current prices or 90.68 billion yuan in 1986 constant prices. For the 1986-97 period, total educational expenditure grew at an average annual rate of 19.9% in current prices or 9.1% in 1986 constant prices.

Table 4 also shows that financial sources for education have become more diversified over time and that the share of budget funds in total educational expenditure was declining rather substantially over time. Additional analysis indicates that per-student educational expenditure was also increasing over time since the financial reform and that there was a marked improvement in the physical conditions of educational institutions.

Table 4  Changing Sources of Funding for Education Over Time (billion yuan, current prices)

<table>
<thead>
<tr>
<th>Sources</th>
<th>1986</th>
<th>1991</th>
<th>1997*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>% of Total</td>
<td>Amount</td>
</tr>
<tr>
<td>Government budgeted funds</td>
<td>26.50</td>
<td>76.52</td>
<td>45.97</td>
</tr>
<tr>
<td>Extra-budgetary funds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levies and surcharges</td>
<td>1.71</td>
<td>4.94</td>
<td>7.52</td>
</tr>
<tr>
<td>Enterprise-run institutions</td>
<td>1.80</td>
<td>5.20</td>
<td>4.27</td>
</tr>
<tr>
<td>Institution-generated resources</td>
<td>1.44</td>
<td>4.16</td>
<td>3.72</td>
</tr>
<tr>
<td>Social contributions</td>
<td>1.59</td>
<td>4.59</td>
<td>6.28</td>
</tr>
<tr>
<td>Tuition and fees</td>
<td>1.06</td>
<td>3.06</td>
<td>3.24</td>
</tr>
<tr>
<td>Others**</td>
<td>0.53</td>
<td>1.53</td>
<td>2.16</td>
</tr>
<tr>
<td>Subtotal</td>
<td>8.13</td>
<td>23.48</td>
<td>27.18</td>
</tr>
<tr>
<td>Total</td>
<td>34.63</td>
<td>100</td>
<td>73.15</td>
</tr>
</tbody>
</table>

Source: Ministry of Education, China

* Preliminary estimates.

** Include resources from institutions run by individuals and non-government groups.

With respect to the primary objective of resource mobilization, the financial reform of education has been successful in bringing in more resources for education and in diversifying the revenue bases. The reform has been indispensable for supporting the quantitative development of the education sector since the 1980s. However, the financing of education in China still suffers from three major problems: inadequate government investment in education, substantial and widening financial disparities in education, and the financial difficulties of poor areas. The last two problems represent the down-sides of the financial reform.

For a long period since the founding of the People’s Republic of China, government investment in education has been low, in terms of international comparison and in the adequacy of resources for supporting educational development in China. For example, in 1985, government expenditure on education amounted to only 2.8% of GNP in China, which was lower than that of most of the countries in Asia and much lower than the average of 4.0% for developing countries. This national effort for education was actually on the decline during much of the 1990s. As a percentage of GDP, government expenditure on education was 2.86% in 1991 and 2.49% in 1997! Despite the increase in total resources for education since the early 1980s, education at various levels remains inadequately funded, especially in terms of low/unpaid/under-paid teaching salaries, poor conditions of many rural schools, and sub-standard equipment and facilities of educational institutions are various levels. Without the financial reform and
sustained economic growth in the past two decades, the financial conditions of the education sector would have been even more dire. The recent financial crisis in Asia and the slowdown in economic growth in China are causes of further concern for the education sector in China. There is an unmistakable need to substantially increase government investment in education in the near future to address current educational deficiencies resulted from a long period of low investment in the past, to meet the current educational needs of an expanding economy, and to develop a comparative advantage in human resources so that China can more effectively compete in a knowledge-based, information-intensive, global economy in the twenty-first century. There is both theory and empirical evidence in the international literature that government spending in education could be a very profitable investment.

The financial reform in education and the larger socio-economic development outside of education are closely related to the emergence of substantial and even widening disparities in education. For example, about a decade after the initial reform, there was large financial disparities among different regions in China. Table 5 shows variations in per-student education expenditure for three levels of schooling among the 30 provinces, direct administrative cities, and autonomous regions in the country. It shows that, at the primary level, per-student expenditure of the top-spending region was 5.2 times that of the low-spending region. This disparity ratio was 4.5 times for secondary education, and 2.2 times for higher education.

Further analysis shows that per-student educational expenditure was significantly related to per-capita output of each region. Regions with higher per-capita output tended to spend more from both budgeted and extra-budgetary sources. Table 5 indicates, in particular, that there were very large differences in per-student spending from extra-budgetary sources.

Table 5 Variation in Per-student Education Expenditure by Education Level and by Region, 1989 (yuan per student)

<table>
<thead>
<tr>
<th>Statistical Measures</th>
<th>Primary education</th>
<th>Secondary education</th>
<th>Higher Ed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Budget</td>
<td>Extra-Budget</td>
<td>Sum</td>
</tr>
<tr>
<td>Mean</td>
<td>116.3</td>
<td>52.5</td>
<td>166.2</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>56.6</td>
<td>24.6</td>
<td>69.8</td>
</tr>
<tr>
<td>Maximum</td>
<td>297.9</td>
<td>95.8</td>
<td>392.9</td>
</tr>
<tr>
<td>Minimum</td>
<td>46.4</td>
<td>7.8</td>
<td>52.2</td>
</tr>
<tr>
<td>Maximum/Minimum</td>
<td>6.4</td>
<td>12.2</td>
<td>5.2</td>
</tr>
</tbody>
</table>


Findings from a recent study based on a representative sample of 511 counties in China indicate that educational disparities are substantial and have been increasing among counties in the country. Table 6 presents disparity measures for per-student spending in primary and low-secondary education in the 1994-97 period. First, the GINI coefficient (a measure of inequality) shows a slight increase in inequality for both levels of schooling between 1994 and 1997. Second, at the primary level, the ratio of per-student spending between the top 10% counties and the bottom 10% counties increased from 4.20 in 1994 to 4.54 in 1997. At the lower-secondary level, the corresponding ratio increased from 4.04 in 1994 to 4.69 in 1997. Third, data from primary education indicates that the disparity between urban and rural areas was also on the increase; the urban-to-rural spending ratio was 1.28 in 1994 and 1.46 in 1997. Additional analysis indicates that there are clear disparities in teacher quality and in enrollment gap between boys and girls among counties in China. Another study points out that there are large disparities in higher education between eastern and western provinces and between key and non-key universities.

Table 6 Disparities in Per-student Recurrent Expenditure Across Counties, 1994 & 1997

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per-student recurrent expenditure (yuan/student)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National sample</td>
<td>294</td>
<td>438</td>
</tr>
</tbody>
</table>
These disparities are problematic for education and for Chinese society. They reflect inequities in the financing of education in which children who are male, or who are from urban and resource-rich areas are favored over children who are female, or who are from rural and resource-poor areas. These gender and socio-economic factors undermine fair competition in education. Disparities in education and in the larger society could be politically destabilizing for the country, especially when they are excessive and deemed to be unjust.

The educational plights of poor rural and remote areas are especially disheartening. Highly inadequate financing of education in these areas has contributed to poor learning conditions and limited opportunity for advancement in education. The private costs of schooling could be a heavy economic burden to parents and could lead to lower schooling attendance. The vision of “Access to Quality Education for All” pushed by the international education community remains a cherished but not-yet realized goal for many children in these areas.

The goals of financial decentralization and diversification must be balanced against the effects on social inequality and the needs of the most vulnerable populations. But experience from countries with decentralized system indicates that financial reform is not inevitably linked to widening disparity and the plight of the poor. Technical solutions, such as the institution of a system of intergovernmental grants in education and targeted assistance to the poor are available. What is really need is political commitment to a balanced view on education and national development.

3 Choice and Privatization in Basic Schooling

Accommodating parental choice in basic (i.e., primary and secondary) schooling is a rather recent phenomenon in education in China. According to the government’s general policy on school assignment, students should attend school in their district of residence. Parental choice in school is a departure from this general policy and it can take one of the several forms, such as allowing students to pay a fee in order to attend a government school in another district, allowing students with a lower examination score to attend a government school with a higher entry threshold by paying a fee, and allowing students to attend fee-charging non-government schools. Here government schools refer to schools sponsored, funded, and

<table>
<thead>
<tr>
<th>Poor counties</th>
<th>240</th>
<th>360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower-secondary Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National sample</td>
<td>544</td>
<td>718</td>
</tr>
<tr>
<td>Poor counties</td>
<td>457</td>
<td>623</td>
</tr>
</tbody>
</table>

Gini coefficient for distribution of per-student expenditure

<table>
<thead>
<tr>
<th>Education Level</th>
<th>National sample/poor counties</th>
<th>Top 10% counties/Bottom 10% counties</th>
<th>Urban areas/rural areas</th>
<th>Minority counties/Non-minority counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary education</td>
<td>1.23</td>
<td>4.20</td>
<td>1.28</td>
<td>0.98</td>
</tr>
<tr>
<td>Lower-secondary education</td>
<td>1.19</td>
<td>4.04</td>
<td>1.01</td>
<td></td>
</tr>
</tbody>
</table>

managed by government agencies at various levels. Currently, there are two categories of non-government schools: traditional private schools and people-run schools. Traditional private schools are schools sponsored and managed by a private individual or group and funded by tuition and other private sources. People-run schools are sponsored and managed by a community of people or a collective organized; they are funded by community resources, tuition, financial assistance from the government, and other sources.

School choice has become a prominent issue in urban China and has attracted the attention of various stakeholders of education since the early 1990s. With steady progress made in the quantitative development of basic schooling, the government has begun to pay more attention to the quality of schooling in recent years. It is particularly concerned about the low quality of some government schools. Recognizing the influence of school quality on student promotion up the educational ladder and the large quality differences among government schools, parents are demanding more choice in school selection so that their children have a better chance of getting in a higher quality school and eventually going to college. Some parents want their children to attend a non-government schools because of the special educational programs offered by some of these schools. Principals of government schools are interested in raising additional school revenue from choice students but are concerned about competition from non-government schools. Teachers of government schools have more income derived from choice students; they can also leave a government school to work in a non-government school. So far, the school choice issue is mostly confined to urban areas where residents have higher income and can better afford the additional costs of having school choice.

In the past few years, school choice has been an issue of intense discussion and debate among educators, analysts, and education decision-makers in the government. Some argue that allowing school choice, especially through the development of non-government schools, have several benefits, including satisfying parental preference, bringing much needed additional resources to the education sector, and possibly improving the quality of some government schools through competition in the education market. School choice can enhance efficiency in education. But others point out that school choice favors those families with more financial resources and thus intensifies inequity in education, that the development of different types of school could exacerbate existing inequality in education, and that the government’s focus should be on improving low-quality government schools. The controversy over school choice reflects the conflicting roles of education for promoting efficiency, equity, and equality. A brief outline of the pre-1990 changes is useful for understanding the historical context of and the government’s response to this controversy.

Officially-run schools and private schools have a long history in Chinese education. More than two thousand years ago, prominent educators like Confucius and Lao Tzu established private schools for the common people which broke the monopoly of officially-run schools. These two types of schools coexisted in the next two millennia in China. During the era of Republican China during the early 1990s, private education received two new sources of sponsorship: educators (such as Tao Xingzhi) who received their training overseas and who set up private schools to spread learning among the rural populations, and western missionaries who came to China to establish private schools and spread the gospel. The education system at that time tended to be fragmented and differentiated, with limited access that favored students from privileged backgrounds. Families with resources undoubtedly had more schooling options for their children.

Soon after the founding of the People’s Republic of China, traditional private education institutions at all levels were converted to government institutions by the new leaders. The conversion was consistent with the heavy emphasis on the role of the State in a socialist country; it was also aimed at ridding the country of western influence and at reducing social differentiation. Between 1949 and the late 1980s, traditional private education vanished in the Chinese education system. School choice was not made available to parents. During much of the post-1949 period, the egalitarian ideal was strong, in society and in school. The collective ideology was dominant, and individual goals were submerged in favor of social goals. It should be pointed out that, while only government educational institutions were found in urban areas during this period, many of the primary schools in villages in the rural areas were not government schools in the traditional sense. They were “people run (minban)” schools with government assistance. Such schools
were sponsored and managed by the village community and were primarily financed from community 
resources, even though they also received some subsidies from the government.

However, in its Outline of Chinese Education Reform and Development in 1993, the Chinese leadership 
presented a new policy that encouraged the development of schools by social groups and individual citizens. 
Parents can send their children to people-run schools and traditional private schools. The government 
establishes guidelines to allow some government schools to admit students from another district. By 
allowing parental choice and breaking the monopoly of government schools in urban areas, the 1993 policy 
represented a clear departure from the past in both development ideology and education practice.

The policy reversal could be attributed to several changes in Chinese society and government since 1978. 
First, the twin policies of reform and opening up since 1978 have not only contributed to rapid economic 
growth and an increase in the standard of living for the Chinese people, they have also led to a relatively 
more relaxed political environment in which citizens could begin to speak their mind. These days, parents 
can voice their preference for school choice through the education subcommittees of the National People’s 
Congress and the National People’s Political Consultative Congress. Second, with economic progress and 
improved material resources, families want more and better education for their children. Some of them are 
able to afford the costs of school choice. Parents’ interest in education is also intensified by the 
government’s one-child policy in urban areas. Third, the reform policy since 1978 has been associated with 
substantial and widening disparities in society and in education. The traditional cultural value that parents 
place on education and the large quality gap among government schools constitute a powerful driving force 
for school choice. Fourth, government investment in education has been relatively low for a long period of 
time since 1949. The decentralization in educational finance since the mid-1980s has been accompanied by 
substantial financial disparities among schools and localities and by financial difficulties of schools in 
disadvantaged areas. School principals have the important task of raising additional revenue, for example, 
to augment the meager income of teachers and to improve the physical conditions of their school. 
Additional school revenue from choice students can be an important non-government financing source. 
Fifth, there has been diminished role of the State in economic production and an increased reliance on 
market forces. Increased school choice through privatization of schooling reflects a corresponding change 
in the education sector.

With official encouragement, non-government schools developed rapidly in China in recent years. For 
example, in 1994, there was an estimated 500 registered non-government schools in urban areas, but the number increased to about 4000 by the end of 1997. The pace of the development of non-government 
schools varies across different levels of schooling and in different urban areas. Table 7 gives information on non-government schools and enrollment in the four centrally-administered metropolitan areas in China. 
For all four areas, the proportion of non-government enrollment at the secondary level was clearly higher 
than that at the primary level. This pattern is consistent with the observation that the quality gap among primary schools is smaller than that at the secondary level. Chongqing and Tianjin had a significantly 
higher proportion of non-government enrollment than Beijing and Shanghai.

Table 7: Government and non-government schools in metropolitan areas*, 1997

<table>
<thead>
<tr>
<th>Area/School level</th>
<th>Government Schools</th>
<th>Non-government Schools</th>
<th>% enrollment non-government</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. schools</td>
<td>Enrollment</td>
<td>No. schools</td>
</tr>
<tr>
<td>Beijing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>2,696</td>
<td>977,323</td>
<td>4</td>
</tr>
<tr>
<td>General secondary</td>
<td>735</td>
<td>626,208</td>
<td>41</td>
</tr>
<tr>
<td>Vocational secondary</td>
<td>174</td>
<td>108,308</td>
<td>9</td>
</tr>
<tr>
<td>Shanghai</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>1,533</td>
<td>1,024,402</td>
<td>20</td>
</tr>
<tr>
<td>General secondary</td>
<td>825</td>
<td>744,337</td>
<td>78</td>
</tr>
<tr>
<td>Vocational secondary</td>
<td>75</td>
<td>102,852</td>
<td>2</td>
</tr>
</tbody>
</table>
Chongqing
Elementary  16,261  2,854,307  125  19,694  0.69
General secondary  1,606  1,002,915  47  8,544  8.45
Vocational secondary  206  79,507  36  7,702  8.83

Tianjin
Elementary  860,800  19,000  2.16
Secondary (general & vocational)  540,100  63,700  11.79


* Note: Beijing, Shanghai, Chongqing, and Tianjin are the four metropolitan areas in China reporting directly to the central government; they are at the level of a province in China’s administrative structure.

A review of recent development in school choice has several findings. First, school choice has hastened the change in school governance in education in China. Principals of non-government schools have more decision-making power than their government counterparts, for example, in matters concerning the hiring of teachers, the admission of students, and the choosing of teaching materials. Second, increased school choice has so far not had any significant impact on innovation in school curriculum or pedagogy. The curriculum and teaching practices are still geared towards the competitive examination system. Third, local governments require non-government schools to give a portion of their revenue from choice students (about 10-15%) to the local educational bureaucracy to be used for improving the quality of low-quality government schools. Fourth, education leaders in different areas often adopt different policies. For example, educational leaders in Beijing concentrate their effort on the improvement of the quality of government schools instead of expanding non-government schooling. On the other hand, educational leaders in Tianjin are at the forefront of the promotion of school choice and non-government schooling. Fifth, there is a range of non-government schools, in terms of management and financing. Some are closer to the traditional government schools while others are closer to the traditional private schools. Many schools do not fall neatly into the government and private categories.

Faced with conflicting impact of increased school choice and privatization, the national government tries to pursue a mix of balancing policies. First, it forbids government schools at the compulsory stage (that is, the primary and lower-secondary education) from accepting choice students so as to ensure merit-based access to compulsory education for children from all backgrounds. Second, it allows school choice in non-government schools to accommodate parental demand for choice and to expand access to basic education. Third, it allows local governments to obtain revenue from choice students which is then used on improving the quality of low-quality government schools. Fourth, school choice is incorporated as part of the overall effort of the government to improve basic education, not as a stand-alone intervention. In other words, school choice is undertaken in conjunction with interventions to improve school quality, mobilize additional resources for education, and experiment with alternative methods of school governance.

The experience of other countries has also demonstrated that school choice and privatization are associated with conflicting educational goals and remain controversial issues. A key issue is whether or not the government should fund private schools. Funding private schools and allowing parents to choose between government and private schools is a positive development if choice is the only criterion. But privatization of schooling has often been accompanied by educational inequity and social stratification. Privatization of schooling may undermine social cohesion. There is still unsettled debate about whether or not private schools are more effective and efficient than government schools. Privatization and school choice will likely remain prominent educational issues in the near future.

4. The Appropriate Scale of Higher Education
The issue of the appropriate scale of higher education in China can be distinguished into two related aspects: the aggregate size of the higher-education system, and the institutional size of universities and colleges. The appropriate aggregate size concerns policy regarding the role of higher education in national development and who should be enrolled in higher education. Aggregate size can be proxied by the total number of students (especially number of undergraduate students, since the number of graduate students is relatively very small) in regular higher-education institutions and the number of regular higher-education institutions. Expansion in aggregate size can be achieved by institutional multiplication (i.e., adding new institutions to accommodate increased enrollment) and/or by institutional enlargement (i.e., increasing the number of students in existing institutions). Reduction in aggregate size can be done by reducing the number of institutions and/or reducing the number of students in existing institutions. Institutional size is usually measured by the number of students in a university or college; it is equal to aggregate size divided by the number of institutions. Institutional size concerns policy regarding the efficient use of scarce educational resources.

The appropriate aggregate size of higher education has been a recurrent subject of intense policy debate among Chinese leaders and educators in post-1949 China. Conflicting views on the subject have been associated with large shifts in student enrollment at the higher-education level. At least three episodes of debate and policy change can be identified. The first episode was found during the period of Great Leap Forward and Adjustment. As part of Mao’s bold and ambitious national experiment towards communism, the CCP set a policy of rapid expansion and curriculum reform for higher education in September 1958. The goal was that, in about 15 years’ time, access to higher education would be provided to youth and adults from all backgrounds who are qualified and willing to attend higher education. Based on the approach of walking on two legs and using a mass campaign, the CCP encouraged government and non-government organizations at central and local levels to set up different types of post-secondary institutions. The number of institutions increased from 791 in 1958 to 1289 in 1960 (see Table 8). Student enrollment jumped from 660 thousand to 962 thousand in the two-year period, an increase of 46%. Obviously, such a rapid increase put a heavy burden on the financial resources of the government and had adverse effect on the quality of higher education. The failure of the Great Leap Forward experiment led to the Adjustment period of 1961-65. In 1961, Deng Xiaoping emphasized quality instead of quantity in higher education and argued that the aggregate size of higher education should be in line with the development of the national economy. Actions for contraction and consolidation followed. By 1965, the number of institutions was reduced to 434 and student enrollment dropped back to about the 1958 level.

The second large swing in aggregate scale came during the period of the GPCR. This swing in scale differed from the first episode in two major ways. First, there was a big contraction in student enrollment as the higher education system was paralyzed by the political campaign of the time. Higher education admission was actually discontinued during the first half of the GPCR. Thus, total enrollment declined from 534 thousand in 1966 to about 48 thousand in 1970. Second, class background prevailed over merit as the important determinant of entry into higher education. In 1970, students from peasant and working class backgrounds were admitted into university as part of CCP leaders’ strategy of reforming higher education. Higher education should be operated in accordance with Maoist thought and should serve the interests of peasant and working class people. Resumption of university admission led to a recovery in student enrollment by 1976 to about the level of 1966.

The third episode took place in the reform and opening up period. Actually there is much agreement among leaders in China about the role of higher education in national development. Higher education has a very important economic-development role, particularly in the preparation of high-skilled personnel and future leaders and in the development of science and technology. Intellectuals, scientists, engineers, and other high-skilled personnel can have a positive role to play in the country’s transition to a socialist market economy and are not regarded as enemy of the people. In fact, CCP undertook an initiative to upgrade the educational qualification of its senior cadres in the early 1980s. During the decade of 1978-88, the aggregate scale of higher education was in a general upward trend with a significant increase in both student enrollment and number of institutions (see Table 8). For example, student enrollment increased by an average of 12.1% per year and the number of institutions by 9.9% per year during this period (see Table 9).
Such an expansion was clearly a response to the need for high-skilled personnel of a rapidly growing economy, especially in light of the disruption to higher education in the previous period.

The expansion of the aggregate scale of higher education slowed down after 1988 and different views emerged regarding the pace of higher-education expansion. One view favored a relatively slow rate of expansion. It pointed out that the higher education system in China was able to produce enough high-skilled personnel for the national economy, even though the gross enrollment ratio of higher education is less than 10 percent. The national economy may not be able to absorb all the university graduates if the economy slows down and if new enrollments are increased substantially. Widespread unemployment of university graduates may lead to social and even political unrest. This view gained added strength after university-student demonstration in 1989. The other view maintained that the growing national economy, especially one that is increasingly driven by technological change, could absorb more university graduates. It pointed out that there is strong parental demand for the expansion of higher education and it would be a wise national policy to direct private consumption on educational investment instead of on other areas. The slower-growth view prevailed during much of the 1990s. For example, during 1989-98, enrollment grew only at 5.3% per year, and the number of institutions actually declined from 1075 to 1022 (see Table 9).

However, in 1999, the State Council set a large increase in new entrants into regular higher education (from 1.08 million in fall of 1998 to 1.53 million in fall 1999, a 42% increase), despite concerns voiced by educators about the potential negative impact on quality. The motivation for such a large increase was largely economic. Since the onset of the Asian financial crisis in 1997, economic growth in China has slowed down from an average of 9.5% in the past two decades to about 7%. It was assumed that the increase in scale could induce additional private consumption on higher education and provide a boost to rate of GDP growth, even though there was disagreement on the size of increase in growth rate. The national government plans to increase new enrollment by 12.5% in 2000. Its target is to raise gross enrollment ratio from 9% to 15% by the year 2010. An emerging issue here is the relative role of public versus private institutions in China’s new effort towards mass higher education.

Table 8  Scale of Regular Higher Education in China by Period

<table>
<thead>
<tr>
<th>Period</th>
<th>Year</th>
<th>No. institutions</th>
<th>Enrollment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruction and 1st Plan</td>
<td>1949</td>
<td>205</td>
<td>116,504</td>
</tr>
<tr>
<td></td>
<td>1957</td>
<td>229</td>
<td>441,181</td>
</tr>
<tr>
<td>Great Leap Forward and Adjustment</td>
<td>1958</td>
<td>791</td>
<td>659,627</td>
</tr>
<tr>
<td></td>
<td>1960</td>
<td>1,289</td>
<td>961,623</td>
</tr>
<tr>
<td></td>
<td>1965</td>
<td>434</td>
<td>674,436</td>
</tr>
<tr>
<td>Great Proletariat Cultural Revolution</td>
<td>1966</td>
<td>434</td>
<td>533,766</td>
</tr>
<tr>
<td></td>
<td>1970</td>
<td>434</td>
<td>47,815</td>
</tr>
<tr>
<td></td>
<td>1976</td>
<td>392</td>
<td>564,715</td>
</tr>
<tr>
<td>Reform and Opening Up</td>
<td>1978</td>
<td>598</td>
<td>856,322</td>
</tr>
<tr>
<td></td>
<td>1983</td>
<td>805</td>
<td>1206,823</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>1075</td>
<td>2065,900</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>1065</td>
<td>2535,500</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>1022</td>
<td>3408,800</td>
</tr>
</tbody>
</table>

Sources: Educational statistics published by Ministry of Education, China
* Undergraduate enrollment

Table 9 Quantitative development of regular higher education institutions in China, 1978-98

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment* (thousand)</th>
<th>No. institutions</th>
<th>Average size of institution</th>
<th>Enrollment growth (%)</th>
<th>Growth in no. of institutions (%)</th>
<th>Growth in average size of institutions (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>856</td>
<td>598</td>
<td>1431</td>
<td>37.0</td>
<td>48.0</td>
<td>-7.5</td>
</tr>
</tbody>
</table>
The second aspect of the appropriate scale of higher education concerns the institutional size of universities and colleges in China in the post-1978 period. As higher education expanded in the 1980s, there was concern that higher education institutions were too small in size. Table 9 shows that, during 1978-88, the number of institutions grew by an average of 9.9% per year while the number of students per institution grew only by 2.2% per year. Thus, the growth in aggregate scale was achieved mainly by the institutional multiplication model, not the institutional enlargement model. This approach is probably a legacy of the Soviet model of higher education. However, it results in many small institutions which suffer from deficiencies in both internal and external efficiency. There is low internal efficiency because of the under-utilization of educational resources, especially in terms of low utilization rates of equipment and facilities and low student-to-teacher ratio. The student-to-teacher is generally in the 10-15 range in higher education in other countries. External efficiency is also problematic because training in narrow skills does not adequately prepare graduates for a changing world of work.

Using data from 156 institutions in five provinces in China in 1988-89, an econometric study found that per-student recurrent expenditure decreased with increasing enrollment. It estimated that there could be a savings of seven billion yuan (in 1988 prices) in recurrent spending between 1977-1989 if institutional size were increased to 3,000 and the student-to-teacher ratio were increased to 8. The study proposed a number of alternatives for improving resource utilization in higher education, including the rationalization of specializations and units within an institution, joint production of educational services among neighboring institutions, institutional merger, and increasing the size of existing institutions.

It may be noted that institutional enlargement was the dominant approach to the expansion of the aggregate scale of higher education in China during the 1989-98 period (see Table 9). The ratio of student to (full-
(time) teacher increased from 5.3 in 1988 to 8.4 in 1998. There is additional room for institutional enlargement in the near future in China to accommodate a further increase in aggregate size of higher education.

Table 10 Regular higher education institutions by type in China, 1989

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>No. Institutions</th>
<th>Average Size</th>
<th>Student/teacher Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Universities</td>
<td>49</td>
<td>4710</td>
<td>5.0</td>
</tr>
<tr>
<td>Natural Science &amp; Technology</td>
<td>286</td>
<td>2604</td>
<td>5.0</td>
</tr>
<tr>
<td>Agriculture</td>
<td>59</td>
<td>1944</td>
<td>4.7</td>
</tr>
<tr>
<td>Forestry</td>
<td>11</td>
<td>1589</td>
<td>3.9</td>
</tr>
<tr>
<td>Medicine &amp; Pharmacy</td>
<td>121</td>
<td>1612</td>
<td>4.4</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>256</td>
<td>1922</td>
<td>6.4</td>
</tr>
<tr>
<td>Language &amp; Literature</td>
<td>14</td>
<td>1075</td>
<td>3.2</td>
</tr>
<tr>
<td>Finance &amp; Economics</td>
<td>81</td>
<td>1488</td>
<td>5.9</td>
</tr>
<tr>
<td>Political Science &amp; Law</td>
<td>25</td>
<td>1104</td>
<td>5.5</td>
</tr>
<tr>
<td>Physical Culture</td>
<td>16</td>
<td>837</td>
<td>3.8</td>
</tr>
<tr>
<td>Art</td>
<td>30</td>
<td>426</td>
<td>2.3</td>
</tr>
<tr>
<td>Others</td>
<td>127</td>
<td>771</td>
<td>6.8</td>
</tr>
</tbody>
</table>


IV SUMMARY AND EMERGING ISSUES

In post-1949 China, the State has a dominant role in all major aspects of national life, including education affairs; and the CCP has a monopolistic power over the Chinese State. The “two-line struggle” between the radical and moderate factions of the CCP during much of the post-1949 period has led to wildly oscillating policies for national development and for education. As party leaders fought over alternative goals and approaches to national development, and as the education system served as a reactive vehicle for realizing the party’s development objectives rather than an autonomous institution for social change, educators, parents, and students have been unwillingly caught in cycles of heart-wrenching dislocations and adjustments. Major educational policies and reversals have been undertaken to resolve enduring dilemmas regarding the political/ideological versus economic functions of education, education for economic efficiency versus education for social equality and equity, and the proper role of intellectuals in the Chinese State and society which supposedly represent the interests of the proletariat class. Policy shifts in education reflect shifts in power and development perspective among party factions. The case studies of specific educational issues provide substantive and quantitative illustration of the links between party policy, national-development contexts, and educational development.

The focus on economic development and the twin policies of reform and opening up to the outside will likely be continued for some time to come. Not only is there popular support for such policies, continued economic progress will also strengthen the legitimacy of CCP’s mandate to govern the country. Further economic development will create additional stimulus for political reform. And the party will have to continue to face the challenge of meeting the popular and economic demand for political reform and controlling the pace and extent of political reform to ensure its grip on power. Some zigzag in policy will probably be inevitable. Added to the challenge for the party is the economic and other consequences of the country’s full incorporation into world trade. There will likely be further diminished role of the State in economic production, the wider application of technology and more open channels of communication (including the Internet), and more confrontation between traditional practices and the discipline and forces of the world market economy. The dilemma between economic efficiency and social equality will remain to be resolved. Excessive socio-economic disparities will breed political instability which may threaten continued economic progress. The party will need to confront widening socio-economic disparities to ensure political stability and its survival and/or to achieve a more humane and just societyxli. All these likely developments will constitute the broader development context for the education sector.
For some years to come, education will likely remain a “driven” social institution, instead of being an autonomous agent of social change. Its degree of autonomy vis-à-vis the Chinese State will depend on the extent of political reform and the extent of privatization of education. Nevertheless, education should remain a foundation for national development based on science, technology, and a comparative advantage in human resources. Educational policies will likely have to address a number of fundamental development questions: What is the definition of an educated Chinese in an increasingly global environment characterized by rapid technological change? What combination of interventions in education and in other sectors could best be undertaken to lift the large group of marginalized populations out of poverty To what extent could the educational system be harnessed to contribute to a socially tolerable level of socioeconomic inequality? The response to these questions will determine who will be educated, how they will be educated, and the contents of education.

Conflicts in perspective for national development and for education will likely persist in China, as they will in other countries. What is really at issue is whether or not there are institutionalized structures and processes for managing such conflicts in ways that appropriately balance the legitimate diverse interests of a society. The key to this issue in China is the evolving relationship between the CCP, the State, and civil society. For much of post-1949 China, the CCP has dominated the State which has dominated civil society. However, this dominating relationship has begun to lessen somewhat in recent years. The CCP leadership has initiated a policy to separate party and State leadership in economic, educational, and other arenas. The economic reform policy has also called for a reduced role of the State in economic production. Communist ideology has lost its appeal in civil society; and non-government groups have surfaced to begin to challenge the CCP. It is possible that the twin policies will lead to more openness in civil society. It is also possible that, as the Chinese people become more educated and as the means of communications become more diversified, the character of civil society may be altered. These changes may ultimately stimulate populist demand from civil society that leads to reciprocal changes in the State and the CCP.

Over the years, the CCP has demonstrated its ability to adapt to change. It will likely continue to undertake internal and external reforms so as remain in power. As the CCP continues to push for “a socialist market economy with Chinese characteristics”, it has to confront the challenge of responding to the demand from civil society for change and exercising control over the direction and pace of such change. The power relationship between the CCP, the State, and civil society is an important determinant of China’s policy for national development and for education. Education may have the potential of indirectly affecting those institutions and organizations that normally shape policy and development of the education system.

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xi The People’s Press. (1985). Documents on the reform of the educational system.


