Four Decades of Compulsory Education in China: Achievements, Experience and Challenges

SONG Yingquan$^{1,2}$

1 SONG Yingquan, Associate Professor, China Institute for Educational Finance Research, Peking University.
2 This working paper is the result of an independent research project titled “China’s experience in Child Development and Protection and its Significance to Other Developing Countries” jointly commissioned by CIKD and UNICEF. It aims to contribute to the ongoing discussion and research in the field of child development.
DISCLAIMER:
The views and opinions contained in this report are the sole responsibility of the author, and do not necessarily reflect the views and opinions of CIKD and UNICEF. The data cited in this report comes from multiple sources, which may include unofficial sources and data based on the author’s own calculations. Inclusion of this data in the document does not imply official endorsement or acceptance by CIKD and UNICEF. The author welcomes constructive criticism from colleagues and peers.
Contents

Executive Summary .............................................................................................................. 1

Introduction ......................................................................................................................... 3

I. Major Achievements in the Development of Compulsory Education ............... 6
   1. Changes in the scale of compulsory education ......................................................... 6
   2. Impact of compulsory education achievements on human capital .................... 11
   3. Significant improvement in the quality of compulsory education ...................... 14
   4. Enhanced equity in compulsory education ............................................................ 16

II. Developments in Compulsory Education and Related Financial Policies ... 23
   1. Four stages of policy development on compulsory education ......................... 23
   2. Reform and development of the compulsory education financing system ....... 26

III. Development of Compulsory Education: Experience and Case Studies .... 30
   1. Experience ................................................................................................................. 30
   2. Major cases .............................................................................................................. 32

IV. Compulsory Education in China: Current Challenges .............................. 37
   1. Persistent urban-rural education gap and rural education challenges due to
      internal migration ........................................................................................................ 37
   2. Children with special needs face challenges in access and quality ................. 41
   3. Tension between exam-oriented and quality-oriented education persist due to
      embedded competition in basic education caused by the college entrance exam .... 42
   4. Financial investments in compulsory education faces equity challenges ........ 43
   5. Appeal and pressure to extending compulsory education from nine years to 12
      years ............................................................................................................................ 44

V. Summary and Conclusion ......................................................................................... 49

References ......................................................................................................................... 51
Executive Summary

In the late 1970s, China embarked on the process of extensive reform and opening-up. In this process, profound changes have taken place in various policy areas relevant to the economy, society, population, household registration, finance and education. The achievements in the development of compulsory education have attracted worldwide attention and are worthy of review and reflection. What has been achieved in China’s compulsory education over the past four decades? What are the characteristics of the development trajectory of compulsory education in China? What has driven and promoted the development of compulsory education? Which institutional reforms and policy practices have contributed to the development of compulsory education? What are the challenges facing the development of compulsory education in China? Through the analysis of second-hand data (particularly census data and household survey data), literature review, policy analysis and other methods, this report reviews and describes the main achievements of China’s compulsory education and its related systems development, summarizes China’s experience in the development of compulsory education, and presents the existing issues and challenges.

The report consists of five sections. The first section describes the main achievements of compulsory education in China over the past four decades, including student population size, enrollment rate, transition rate into higher levels of education, and the impact of the development of compulsory education on China's human capital-namely the declining number of illiterate adults and the increase in average years of education received. It also discusses the improvement of quality and equity in certain areas, such as gender equity in education, the scale of special education, and the implementation of the learning in regular class model among children with disabilities.

The second section reviews the development of compulsory education and the policy processes related to the reform of the education financing system.

The third section summarizes China's experience in the development of compulsory education, and provides cases to illustrate the need to actively involve governments at all levels and the general public in jointly promoting the development of compulsory education. Particularly, this includes lower-level governments (township level, and villages/communities below the district/county level) and the parents of students. In addition, it requires the central government to bear increased financial responsibilities for compulsory education.

The fourth section describes the numerous challenges faced in the development of compulsory education in terms of equity and quality. This includes the widening gap between
urban and rural education; the challenges in the education of three groups of children affected by migration (migrant children, children left-behind and migrant children returning to hometowns) and two types of schools (rural boarding schools and small rural schools) as a result of urbanization and migration; the education of children with special needs (e.g. children with disabilities and ethnic minority children); the contradiction between exam-oriented and quality-oriented education; and the inequitable distribution of the government's substantial financial investment in compulsory education.

The fifth section provides a summary and conclusion. China has explored a unique way to promote the development of compulsory education. In the mid-1980s, when the level of economic development was inadequate and resources were seriously limited, the central government put forth an ambitious policy goal in compulsory education. To achieve this goal, the government adopted a step-by-step strategy for policy implementation by region, which was integrated with its policy efforts in poverty alleviation and elimination of illiteracy. At the same time, the central government leveraged the capacity of local governments and the general public through mobilization, planning and promotion. After the overall financial reform and the reform of the compulsory education financing system, governments at all levels, particularly the central government, have assumed more responsibilities for safeguarding financing of compulsory education. As a result, free nine-year compulsory education was universalized throughout the country, which laid a foundation for the expansion of higher education, the accumulation of human capital, and the development of the national economy. Facing fierce international competition, it is recommended that the Chinese government consider extending the length of compulsory education.

**Key words:** compulsory education; education financing system reform
Introduction

In the late 1970s, China embarked on the process of reform and opening-up to realize economic reform to its socialist market economy. Profound changes have taken place since then, including policy changes regarding the economy, society, population, household registration, finance and education. China gradually transformed from a planned economic model to a market economy system. With regard to economic development, regional and urban-rural gaps have widened, with eastern coastal areas experiencing accelerated economic development and urbanization. In most parts of the country, the one-child family planning policy was strictly implemented, resulting in a substantial reduction in population growth. Gradual reforms to the household registration system have made it easier for rural workers to migrate to urban areas. Tax sharing reforms have been implemented. In education, the National College Entrance Examination was resumed in 1977, reopening an important channel for the upward social and economic mobility of ordinary citizens. Then in 1998, education reforms to expand college enrollment further promoted the accessibility of higher education system to the masses.

China’s compulsory education has witnessed remarkable progress in the past four decades, in the context of the above-mentioned changes in macro-systems and the socio-economic environment. These exceptional developments originated from fundamental changes in how education was valued. Deng Xiaoping first proposed "science and technology are drivers of productivity" at the 1978 National Science Congress, which suggested that education, as the basis for science, was the most important human capital, and recognized and valued by the government again. This vision values education as the basis for economic development and modernization, as a means to improve the quality of the labor force, and as a national strategy for human capital investment. That is to say, the economic value of education was established and strengthened. In particular, compulsory education became the cornerstone for improving the quality of workers and building the “material and spiritual civilizations of Socialism”. Following these shifts in the value of education, its fundamental role for economic development through training talents was established, and this marked the beginning of China’s compulsory

---

3 In the communique of the Third Plenary Session of the Eleventh Central Committee of the Communist Party of China (1978), it was proposed to "vigorously strengthen the scientific and educational work necessary for modernization". In the report of the Twelfth National Congress of the Communist Party of China (1987), it was proposed that as "universal access to education is an important prerequisite for the construction of material and spiritual civilization", and it was important to "give priority to the development of science, technology and education, and ensure economic development relies on the advancement of science and technology and the improvement of the quality of workers". For the first time, the famous assertion that "education is fundamental to the country's enduring prosperity" was put forward, and it was proposed to "insist on highlighting the development of education in strategic planning and strengthen intellectual development". (Wang Jianglu, Liu Mingxing, 2015)
education development.

China’s compulsory education development has experienced several important milestones. In 1985, the central government extended the length of compulsory education from six to nine years, a decision legalized in 1986 by the Compulsory Education Law. At the time, the level of economic development in the country was inadequate, with extremely limited government financial resources, and exceptionally scarce educational resources. Thus, extending the period of compulsory education represented the government’s ambitious policy vision. Through joint efforts by governments at all levels, including the central government, local governments at the county/district and township level, the village/neighborhood committees, and the involvement of parents and families, compulsory education was essentially universalized by 2000. However, the objective of free compulsory education was not yet achieved. Since the rural taxation reforms in 2010, the central government has continuously increased its financial investment in compulsory education, particularly in the rural areas of China’s central and western regions. In 2005, institutional reforms to the financing of rural compulsory education were initiated to establish cost-sharing between central and local levels, and realize free compulsory education in rural areas of central and western China. Universal access to compulsory education was fully achieved in 2010, and universal access to free compulsory education was achieved in both urban and rural areas by 2015. Compulsory education in China transitioned from a focus on increasing education access to improving education quality, and then towards enhancing education equity and balanced development across urban and rural areas. Remarkable improvements have been achieved across the levels of education: adult illiteracy has been eliminated, the average years of education across the country has doubled, and the proportion of the labor force with junior secondary education or higher has risen sharply. Meanwhile, universalization and improvements in compulsory education have laid a solid foundation for the expansion of higher education.

In the past four decades, what has been achieved in compulsory education in China? What forces promoted the development of compulsory education? Which institutional reforms and policy measures have contributed to the development of compulsory education? What are the key characteristics of the development process of China’s compulsory education? What are the challenges faced in the development of China’s compulsory education? Through a variety of methods, including secondary data analysis of census and household survey data, literature review, and policy analysis, this report reviews and describes China’s achievements in the development of compulsory education and its related systems, summarizes experience and lessons learned, and presents current issues and challenges.

This report purports that China has explored unique ways to promote the development of
compulsory education over the past four decades. In the mid-1980s, when economic development was slow and resources were critically limited, the central government established an ambitious policy goal for compulsory education. To achieve this goal, the government adopted a gradual step-by-step strategy for policy implementation by region, which was integrated with its policy efforts in poverty alleviation and the elimination of illiteracy. The central government also leveraged the participation of grassroots governments and the general public through mobilization, planning and promotion of compulsory education. Moreover, governments at all levels, particularly the central government, assumed increased responsibilities for safeguarding the financing for compulsory education through financial system reforms, including reforms to the compulsory education financing system. Free nine-year compulsory education was fully realized throughout the country, thus laying a foundation for the expansion of higher education, the accumulation of human capital, and the development of the national economy. Facing fierce international competition in human capital development, the Chinese government should consider extending the length of compulsory education to 12 or 13 years, either downward to include pre-primary education or upward to include senior secondary education.

---

4 The discussion on whether to extend the length of compulsory education downward (to pre-primary education) or upward (to senior secondary education) is complex and technical, and outside the scope of this report.
I. Major Achievements in the Development of Compulsory Education

One of the most important achievements in China’s education development over the past 50 years, particularly during the past four decades⁵, is the full realization of free nine-year compulsory education. The main accomplishments in compulsory education can be described from the perspectives of the changes in scale, the impact on the accumulation of human capital, and the improvements in quality and equity.

1. Changes in the scale of compulsory education

The most evident feature of the development of China’s compulsory education is the improvement and universalization of junior secondary education. In quantitative terms, the main achievements can be illustrated by general indicators such as student population size, gross enrollment rate, transition rate from primary to junior secondary education, and transition rate from junior secondary to senior secondary education.

   (1) China has maintained a vast compulsory education system

Following the implementation of China's family planning policy, the student population in primary school peaked in 1975 (about 150 million) and then declined, as shown in Figure 1. In the 1990s, it rose again and reached about 140 million in 1998, and then declined to 99.4 million in 2010 and about 99.13 million in 2016. The overall decline in the number of school-age children was the result of the implementation of the family planning policy. The average fertility rate among Chinese women dropped from about six births in 1960-1970s to 1.4 births in 2010 (Li, et al, 2017). Accordingly, the population size of students receiving compulsory education was affected. Even so, the population size of China’s primary school students remained between 93 million and 150 million in the past four decades between 1978 and 2016.

---

⁵ To review the development of compulsory education over the longest historical period possible, the earliest data in this report goes as far back as 1949, not 1978, provided that the data is available.
As a result of the declining birth rate due to the implementation of the family planning policy, the scale of China’s junior secondary student population also experienced an overall trend of rising then falling in the past four decades. The number of students attending junior secondary education approached 50 million (49.95 million) in 1979, peaking at 66.18 million in 2003, then dropping to 43.29 million in 2016 (Figure 2).

The combined number of primary and junior secondary school students represents the population size of students attending compulsory education in China. In terms of scale, the
compulsory education system in China is one of the largest in the world because of its huge population base. As shown in Figure 3, between 1978 and 2016, the number of students attending compulsory education ranged from 130 million to approximately 200 million. Specifically, the figure was 196 million in 1978, 193 million in 1998 and 138 million in 2011.

![Figure 3. Changes in the size of the student population receiving compulsory education in China (1949-2016) (unit: 10,000 persons)](image)

Source: Data for 1949-2008 are from the Collection of Statistical Data for 60 Years of Reform and Opening-up, and data for 2009-2016 are from the China Statistical Yearbook 2017. Figure developed by the author using the relevant data.

(2) Changes in the gross and net enrollment rates of primary and junior secondary students

Gross and net enrollment rates are two important indicators to understand education development. Gross enrollment rate refers to the ratio of all students (regardless of age) in a particular education stage to the population size of that age group multiplied by 100 per cent, while net enrollment rate refers to the ratio of students in a certain age group to the population size of that age group multiplied by 100 per cent. The long-term development trends of the gross enrollment rates in primary and junior secondary education have been well-documented. As shown in Figure 4, the gross enrollment rate\(^6\) in primary education already exceeded 100 per cent during the late period of the Cultural Revolution. According to preliminary estimates, the gross enrollment rate in primary education between 1978 and 1991 was more than 120 per cent. This suggests that a large

\(^6\) When the gross enrollment rate exceeds 100 per cent, it means that more students who should have been enrolled in the preceding year are instead enrolled in the current year, or more students are enrolled ahead of schedule. This is the result of inadequate arrangements for compulsory education, and not necessarily a favorable indicator for the universalization of compulsory education. When the value rises, it means that problems and issues persisting from the previous period are being resolved. When the gross enrollment rate approaches 100 per cent, it means the problems and issues from the previous period are gradually decrease.
proportion of children were not enrolled in primary schools on time for an extended period. The net enrollment rate in primary education has risen steadily, from 95.5 per cent in 1978 to 99.9 per cent in 2016.

**Figure 4. Gross and net enrollment rates in primary education (1978-2016) (unit: %)**

*Source*: Data for 1978-2008 are from the *Collection of Statistical Data for 60 Years of Reform and Opening-up*, and data for 2008 onward are from the *Educational Statistics Yearbook of China*, 2009-2017. The net enrollment rates before 1992 were calculated based on the child population aged 7-11. The net enrollment rates after 1992 were calculated according to the varying school enrollment ages and schooling systems across the country.

According to available data released by the Ministry of Education\(^7\), the gross enrollment rate in junior secondary education has continued rising, from 66 per cent in 1990 to 100 per cent in 2010, and 106 per cent by 2016 (Figure 5).

---

\(^7\) While drafting this report, the author did not find any official pre-1990 data on the gross and net enrollment rates in junior secondary education.
Figure 5. Gross enrollment rate in junior secondary education (1990-2016) (unit: %)

Source: Figure developed by the author based on data from the Educational Statistics Yearbook of China, 1990-2017.

(3) Continued growth in the transition rates into junior and senior secondary education

The transition rates from primary and junior secondary education have been rising sharply. The transition rate from primary to junior secondary education increased from 87.7 per cent in 1978 to 95 per cent in 2000, and reached 99 per cent in 2016 (Figure 6), and the transition rate from junior secondary to senior secondary education increased from 41 per cent in 1978 to 42 per cent in 1985, to 51.2 per cent in 2000, and reached 93.7 per cent in 2016 (Figure 7).

Figure 6. Transition rate from primary to junior secondary education (1987-2016) (unit: %)

Source: Data for 1978-2008 are from the Collection of Statistical Data for 60 Years of Reform and Opening-up, and data for 2009-2016 are from the Educational Statistics Yearbook of China 2017. Figure developed by the author based on the relevant data.
Figure 7. Transition rate from junior secondary to senior secondary education (1987-2016) (unit: %)

Source: Data for 1978-2008 are from the Collection of Statistical Data for 60 Years of Reform and Opening-up, and data for 2009-2016 are from the Educational Statistics Yearbook of China 2017. Figure developed by the author based on the relevant data.

2. Impact of compulsory education achievements on human capital

(1) Significant reduction in the proportion of illiterate and semi-illiterate populations

An important indicator for the achievement of universalization of compulsory education is the significant reduction in the proportion of illiterate and semi-illiterate adults in China. The adult (above age 13) illiteracy rate in 1964 was 32.26 per cent,\(^8\) approximately one third of the population. The figure dropped to 23.6 per cent in 1982\(^9\), 15.88 per cent in 1990, 6.72 per cent in 2000, and was only 4.08 per cent in 2010 (Figure 8).

---

\(^8\) The illiteracy rate in 1964 was 38.4 per cent according to the Census Communiqué of 1982.

\(^9\) Since 1982, the statistical scope was adjusted to encompass the labor force aged 15-64 years.
Figure 8. Change in the adult illiteracy rate in China (1964-2010) (unit: %)


(2) Change in the highest level of education attained per 100,000 persons

As the length of compulsory education in China increased from six to nine years, the country witnessed improvements in the population’s overall education level over the past 50 years, which are reflected in the upward educational attainment trends since 1964 (Figure 9). According to data from the Census and the 1% National Population Sample Survey, in terms of the changes among people with varying education levels, the number of people with junior secondary education witnessed the fastest increase, while those with only primary education decreased. As shown in Figure 9, the number of people with junior secondary education was 4,680 per 100,000 in 1964, rising to 17,884 per 100,000 in 1982, 21,322 per 100,000 in 1987, 23,344 per 100,000 in 1990, 33,961 per 100,000 in 2000, and 38,788 per 100,000 in 2010. Post-secondary and senior secondary educational attainment have also risen significantly. The number of people holding a post-secondary degree was 416 per 100,000 in 1964, 617 per 100,000 in 1982, and 8,930 per 100,000 in 2010. The number of people with senior secondary education was 1,319 per 100,000 in 1964, 6,784 per 100,000 in 1982, and 14,032 per 100,000 in 2010.

Figure 9. Highest level of education attained per 100,000 persons (1964-2010) (unit: person)

(3) Significant increase in the average years of education received

Over the past 40 years, a notable impact of the development of compulsory education in China has been the significant increase in the average years of education received by the population. The average years of education among the Chinese labor force (ages 25-64) more than doubled from 4.3 years in 1980 to 9.6 years in 2015 (Li, et al, 2017). The increase in the average years of education in China since 1950 has been remarkable compared to the global average and the average for developing countries. As shown in Figure 10 and Table 1, in terms of the average growth rate per decade and the average annual growth rate in educational attainment, China has surpassed the global average and the levels in both developed and developing countries. The average years of education received globally increased from 3.12 years in 1950 to 7.89 years in 2010, with an average growth of 0.80 years per decade and 2.55 per cent annually; the average years of education received in developed countries increased from 6.10 years in 1950 to 11.3 years in 2010, with an average growth of 0.87 years per decade and 1.42 per cent annually; and the average years of education received in developing countries increased from 2.02 years in 1950 to 7.20 in 2010, with an average growth of 0.86 years per decade and 4.27 per cent annually. In comparison, the average growth in China was 1.08 years per decade, with an average annual growth rate of 6.25 per cent.

![Figure 10. Comparison of the average years of education received in China and other countries/regions (1950-2010) (unit: year)](image)

**Source:** Figure developed by the author using data from Barro & Lee, 2013.

**Table 1.** Average years of education received in China, in developed countries, and
3. Significant improvement in the quality of compulsory education

A large number of studies have shown that the correlation between the average years of education or education level and economic growth is not necessarily causal in nature (Hanushek & Woessmann 2012; Hanushek & Kimko, 2000), with the actual driver of economic growth being education quality—particularly the development of students' cognitive skills. As measuring the quality of education is not an easy task, this report measures education quality using three indicators: 1) student-teacher ratio (most studies have confirmed that smaller the student-teacher ratio, better the students' academic performance, and hence higher the quality of education); 2) tests scores from the standardized Programme for International Student Assessment (PISA); and 3) data from the latest monitoring report on basic education quality published by the Ministry of Education.

The student-teacher ratio in compulsory education has continued to decline in China, an undeniable indicator of improved quality of education and teaching. As shown in Figure 11, the average student-teacher ratio in primary schools decreased from 28 in 1978 to 17 in 2016, and in junior secondary schools dropped from 21 in 1978 to 12 in 2016. One reason for the decline

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>World</th>
<th>Developed countries</th>
<th>Developing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>1.79</td>
<td>3.12</td>
<td>6.10</td>
<td>2.02</td>
</tr>
<tr>
<td>1960</td>
<td>2.8</td>
<td>3.6</td>
<td>6.72</td>
<td>2.50</td>
</tr>
<tr>
<td>1970</td>
<td>4.16</td>
<td>4.39</td>
<td>7.64</td>
<td>3.35</td>
</tr>
<tr>
<td>1980</td>
<td>5.74</td>
<td>5.34</td>
<td>8.74</td>
<td>4.37</td>
</tr>
<tr>
<td>1990</td>
<td>6.45</td>
<td>6.14</td>
<td>9.55</td>
<td>5.28</td>
</tr>
<tr>
<td>2000</td>
<td>7.79</td>
<td>7.10</td>
<td>10.52</td>
<td>6.33</td>
</tr>
<tr>
<td>2010</td>
<td>8.25</td>
<td>7.89</td>
<td>11.30</td>
<td>7.20</td>
</tr>
<tr>
<td>Average growth per decade</td>
<td>1.08</td>
<td>0.80</td>
<td>0.87</td>
<td>0.86</td>
</tr>
<tr>
<td>Average annual growth rate</td>
<td>6.01</td>
<td>2.55</td>
<td>1.42</td>
<td>4.27</td>
</tr>
</tbody>
</table>

Note: (1) Table compiled by the author according to data from Barro & Lee, 2013. (2) "World" consists of 146 countries with available data; "developed countries" include 24 countries, namely Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Switzerland, Sweden, Turkey, the United States and the United Kingdom; "developing countries" include 122 of the 146 countries with available data, excluding the developed countries.

10 All three indicators for the quality of education have potential limitations. For example, the student-teacher ratio is not equal to the actual class size, but obtained by dividing the number of students by the number of teachers, which may be different from the actual class size. Therefore, the student-teacher ratio is not necessarily directly related to the quality of teaching, in other words, small schools in rural areas does not mean higher quality of education. Students who have taken the PISA in China are not adequately representative of all students throughout the country. At present, it most probably represents students in regions with the best level of basic education in China. The data from the National Assessment Center for Education Quality under the Ministry of Education are cross-sectional one-year data. Academic performance cannot be compared in a time series, and it is impossible to make international comparisons.
in student-teacher ratio is the continued increase in the number of teachers, and the continued decrease in the number of students.

![Figure 11. Changes in the student-teacher ratio for primary and junior secondary schools in China (1978-2016) (unit: %)](image)

**Source:** The 1978-1992 data are based on the number of full-time teachers in primary and junior secondary schools and the size of the student population in that year according to the *Educational Statistics Yearbook of China*, 1979-1993. Specifically, the data on full-time teachers in 1978-1988 are from the *Educational Statistics Yearbook of China 1988*, and the 1992-2016 data are from the *Educational Statistics Yearbook of China 2016*.

Chinese students receiving compulsory education have performed well on international tests. The PISA, developed by the Organization for Economic Cooperation and Development (OECD), mainly targets students around age 15 (or in grade 9 or grade 10) and covers reading, mathematics and science with varying focus each year. The prioritized subject for PISA was reading in 2009, mathematics in 2012 and science in 2015. In both 2009 and 2012, Chinese students from Shanghai ranked first in PISA, and their scores in reading, mathematics and science were far higher than the averages across the OECD countries. In 2015, students from Shanghai, Beijing, as well as Jiangsu and Guangdong provinces took the test, ranking 8th, 6th and 18th in science, mathematics and reading, respectively. Table 2 shows the average scores of Chinese students and students from OECD countries in the three subject areas, including students from Hong Kong, Finland, Singapore, Korea, Canada and the United States.

**Table 2. Comparison of student test scores from China and other countries on three PISA tests (2009, 2012, 2015)**
The author compiled the data according to the OECD’s PISA report data of 2009, 2012 and 2015.

Students receiving compulsory education in China generally exhibited good or excellent academic performance, according to the most recent report issued by the National Assessment Center for Education Quality of the Ministry of Education at Beijing Normal University. The proportion of grade four and grade eight students that reached an intermediate or above level in Chinese language and literature was 81.8 per cent and 79.6 per cent respectively, and those that reached an excellent level was 21.0 per cent and 22.7 per cent respectively. The proportion of grade four and grade eight students that reached an intermediate or above level in mathematics was 84.6 per cent and 78.9 per cent respectively, and those that reached an excellent level was 23.8 per cent and 26.7 per cent respectively. The proportion of grade four and grade eight students that reached an intermediate or above level in science was 76.8 per cent and 83.6 per cent respectively, and those that reached an excellent level was 16.0 per cent and 12.0 per cent respectively. However, the learning assessment data only includes national averages, which masks the regional differences and the locations with poor performance (including urban-rural disparities and disparities between Han and ethnic minority groups).

4. Enhanced equity in compulsory education

Equity in compulsory education has been significantly improved as embodied across two dimensions: improved gender equity, and increased access to compulsory education for children with special needs.

(1) Gender equity in compulsory education

Many studies have shown that China has made significant gains in gender equity in education since 1978, particularly in compulsory education where there is almost no significant gender difference (Zeng et al, 2014). This can be explained from several angles.

11 It should be noted that the report fails to reveal the differences in student development in different subjects between different countries and within different regions of China.
Firstly, there is a high proportion of female students receiving compulsory education. Overall, the percentage of female students attending primary schools has increased. The proportion of female students among primary school students increased from 45.4 per cent in 1987 to 46.37 per cent in 2016. The proportion of female students among junior secondary students remained between 46 per cent and 47 per cent, which is roughly in line with the high sex ratio at birth skewed in favor of boys.

![Figure 12. Proportion of female students in primary school (1987-2016) (unit: %)](image-url)

Source: 1978-2016 data are from the *Educational Statistics Yearbooks of China*, 1988-2017. Figure developed by the author based on the relevant data.

Secondly, the gap in the illiteracy rates among women and men has significantly narrowed. Based on the data from the last three census in 1990, 2000 and 2010, the illiteracy rates of women and men in the population above age 15 was calculated. In 1990, 22.1 per cent of women and 9.3 per cent of men above age 15 were illiterate, a difference of 12.8 per cent. By 2000, the difference reduced to 8.61 per cent, where 13.47 per cent of women and 4.86 per cent of men were illiterate. By 2010, 7.29 per cent of women and 2.52 per cent of men were illiterate, a difference of 4.77 per cent.
According to 2010 census data, the gender gap in illiteracy rates among different age groups (ages 15-64) varied. The younger age groups had narrower gaps, and there is no significant gender gap by age 15. In the past four decades, there are no significant differences in the illiteracy rates between men and women among the younger generations.

Thirdly, regarding the difference in the average years of education received, China has made remarkable progress in gender equity. As shown in Figure 15 (data from Golley & Kong,
2016), according to the 2010 China Family Panel Studies (CFPS) household survey, among those born between 1940 and 1944, the average years of education received by men and women in 2010 was 5.4 years and 2.2 years, respectively, with a difference of 3.2 years. For those born between 1975 and 1979, the average years of education received by men and women in 2010 was 9.2 years and 8 years, respectively, with a difference of 1.2 years. Among those born between 1985 and 1989, the average years of education received by men and women in 2010 was 10.2 and 10 years respectively, with a difference of only 0.2 year.

Figure 15. Comparison of average years of education received in 2010 by year of birth and sex (unit: year)

Source: Figure developed by the author based on data from Table 1 of Golley & Kong, 2016.

(2) Increased access to education for children with disabilities

Since the 1980s, education of children with disabilities in China has experienced significant development with a marked increase in the number of children with disabilities receiving education. As shown in Figure 16, the number of children with disabilities enrolled in education increased from over 50,000 (52,876) in 1987 to approximately 500,000 (491,740) in 2016, an almost ten-fold increase. The increase in the number of children with disabilities receiving education in China is related to the promotion of inclusive education since the late 1980s and early 1990s (Chen, 1996).
Comparing data from the First and Second National Sample Survey on Disability conducted in 1987 and 2006, access to compulsory education has substantially increased among children with disabilities. According to the Second National Sample Survey on Disability in 2006, “there were 2.46 million school-age children with disabilities aged 6-14, including 130,000 with visual disabilities, 110,000 with hearing disabilities, 170,000 with speech disabilities, 480,000 with physical disabilities, 760,000 with intellectual disabilities, 60,000 with mental disabilities, and 750,000 with multiple disabilities. In the same year, among school-age children with disabilities, 63.19 per cent received compulsory education in regular or special education schools. The enrollment rates in compulsory education of children with various types of disabilities were: 79.07 per cent with visual disabilities, 85.05 per cent with hearing disabilities, 76.92 per cent with speech disabilities, 80.36 per cent with physical disabilities, 64.86 per cent with intellectual disabilities, 69.42 per cent with mental disabilities, and 40.99 per cent with multiple disabilities.”\(^{12,13}\)

Promoting inclusive education through enrolling children with disabilities in regular schools has become an important approach. Figure 17 shows that before 1992, the proportion

---

13 According to the First National Sample Survey on Disability conducted in 1987, the enrollment rates in compulsory education of children aged 6-14 by type of disability were: “45% with hearing and/or speech disabilities, 42.9% with visual disabilities, 61.9% with intellectual disabilities, 59.9% with physical disabilities, 41.2% with mental disabilities, and 17.6% with multiple disabilities” (China Disabled Persons’ Federation, *Status of Children with Disabilities in China based on the 2017 National Sample Survey on Disability*, http://www.cdpf.org.cn/sjzx/cjrgk/200804/20080407_387559.shtml)
of students with disabilities learning in regular schools was less than 20 per cent of the total number of children with disabilities enrolled in compulsory education in China. Since 1993, this proportion has increased and exceeded 50 per cent, peaking at approximately 70 per cent in 2001. In 2016, it was 55.1 per cent.

Figure 17. Proportion of students with disabilities attending regular schools during compulsory education (1987-2016) (unit: %)

Source: Figure developed by the author based on relevant data from the Educational Statistics Yearbook of China, 1988-2017.

In summary, compulsory education in China has made remarkable achievements in terms of scale, quality and equity. What forces have promoted the development of compulsory education? There are several factors. Firstly, the central government recognized that the development of compulsory education is a form of human capital investment, and put forth the idea that education is the foundation for the advancement of science and technology, the foremost productive forces. Secondly, the central government strategically established an ambitious goal of nine-year compulsory education in spite of the country’s low economic development at the time. The government advanced the development of compulsory education in a series of distinct stages, involving various social organizations and resources, and integrating the development of compulsory education with policy efforts in poverty alleviation and elimination of illiteracy. Thirdly, China has traditionally placed great importance on education. The development of compulsory education was advanced when the college entrance examination resumed as a system for admissions. Fourthly, economic growth and educational development have reinforced each other, with economic growth requiring a well-educated workforce. China’s economic growth led to increased government and household financial resources, and in turn provided the necessary conditions for continued investment in education. In particular, government financial resources and public finance expenditure increased
substantially. Figures 18 and 19 show that both the public expenditure per student and the public budget per student have steadily increased since 1999. The average public expenditure per primary school student increased from RMB 633 in 1999 to RMB 10,786 in 2016, and per junior secondary school student increased from RMB 807 in 1999 to RMB 14,983 in 2016. The average public budget per primary school student increased from RMB 415 in 1999 to RMB 9,558 in 2016, and per junior secondary school student increased from RMB 640 in 1999 to RMB 13,416 in 2016.

![Figure 18. Public expenditure per student for compulsory education in China (1999-2016) (unit: RMB)](image_url)

**Source:** Figure developed by author based on relevant data from the *China Educational Finance Statistical Yearbook*, 2000-2017.
II. Developments in Compulsory Education and Related Financial Policies

This section reviews the policy evolution in the development of compulsory education in China, with the aim of elaborating on the government’s efforts in leading and involving the entire society in the development of compulsory education. It covers two aspects: policies related to the development of compulsory education, and reforms to the financing system for compulsory education.

Figure 20 briefly summarizes the four key periods of compulsory education development and financing system reforms. The development of compulsory education faced different challenges and accomplished different objectives in the various periods, and its stages of development slightly differed from the reform to the financing system for compulsory education, with the latter often slightly lagging behind the former.

Figure 20. Stages of development for compulsory education (left) and stages of reform to the financing system for compulsory education (right)

1. Four stages of policy development on compulsory education

The policy evolution in China’s compulsory education can be roughly divided into
four stages. The first stage, from 1978 to 1984, was the "period of exploring the development goals of compulsory education". In this stage, the government had not yet announced the policy of nine-year compulsory education. The decade-long Cultural Revolution had recently ended, and the government's national development goal for compulsory education was to increase enrollment in compulsory primary education. In December 1980, the Decision of the Central Committee of the Communist Party of China and the State Council on Several Issues Concerning the Universalization of Primary Education put forward that "the historical task of universal access to primary education should be basically realized throughout the country" in the 1980s. Then in 1982, the Constitution stated the development goal of "universal access to primary compulsory education"; and in 1983, the government released the Interim Provisions of the Ministry of Education on Universal Access to Primary Compulsory Education. At the time, since the country had just begun implementing the reform and opening-up policies, the level of economic development was slow, thus the government had not yet promulgated the goal of nine-year compulsory education. It should also be noted that in 1982 the government's responsibility for the education of people with disabilities was established in the Constitution.

The second stage, from 1985-2000, was the period of "establishing and steadily advancing the nine-year compulsory education despite extremely limited educational resources". The main achievement in this stage was the establishment of the ambitious goal of nine-year compulsory education, which was implemented simultaneously with the strategies in poverty alleviation and elimination of illiteracy. The primary challenge was the extreme scarcity of educational resources in China’s central and western regions and poor rural areas. In 1985, the groundbreaking document, the Decision of the Central Committee of the Communist Party of China on the Reform to the Education System, proposed the "incremental realization of nine-year compulsory education", the implementation of a compulsory education management system "under the leadership of the State Council, with local accountability and tiered management", and the strategy of "county governments responsible for senior secondary education, township governments responsible for junior secondary education and village committees responsible for primary education". Adopted at the National People's Congress in 1986, the Compulsory Education Law formally established guidance on nine-year compulsory education, including mandated years of education and tuition fees. The Regulations on the Elimination of Illiteracy released by the State Council in 1988 stated that the elimination of illiteracy among youth and young adults should be coordinated with the implementation of compulsory education. The Detailed Rules for the Implementation of the Compulsory Education Law promulgated in 1992 recommended that the implementation of nine-year
compulsory education be divided into two stages, with the first stage focused compulsory primary education, and the second stage focused on compulsory junior secondary education based on experiences of the first stage. Implementation of the two stages should be led by municipal/district governments in urban areas and county governments in rural areas, with implementation down to the township/village level. In 1993, the Central Committee of the Communist Party of China and the State Council issued the Outline of the Programme for Education Development and Reform in China, which established the "Two Basics": "[1] basic popularization of nine-year compulsory education, and [2] basic elimination of illiteracy among youth and young adults" across the country by the 1990s, with the illiteracy rate falling below 5 per cent.

The main challenge during this period was the severe lack of resources in the poor rural areas of China’s central and western regions. Many teaching facilities in remote mountainous areas of these regions were built with funds raised from the villages and towns, and schools often owed teachers their salaries. Despite the lack of resources, significant achievements were made in compulsory education. By 2000, 2,541 counties (or county level equivalents) passed the "Two Basics" evaluation. The population coverage rate of the "Two Basics" was 91 per cent, and the proportion of the illiterate and semi-illiterate population above age 15 in China dropped to 6.72 per cent (Ha Wei, et al, 2017).

Meanwhile, the Compulsory Education Law in 1986 stated that all school-age children should have access to nine-year compulsory education, including children with disabilities, and that the government shall establish special education schools for children with visual, hearing, speech, intellectual and mental disabilities. In 1990, the Law on the Protection of Disabled Persons also specifically protects the right to education for children with disabilities.

The third stage, from 2000 to 2010, was the "period of transition from basic popularization to universalization of nine-year compulsory education". The major goals for this period were to accomplish the "Two Basics" in the western region, and achieve universalization of free nine-year compulsory education. Major policy developments began in 2001 with the Decision on the Reform and Development of Basic Education, which proposed a "county-based" compulsory education management system, and delegated local governments and public schools the primary responsibility for the education of migrant children. In 2003, the Decision of the State Council on Further Strengthening Rural Education called for accelerated implementation of the "Two Basics" in western China, requiring local governments to achieve the “Two Basics” within five years. The Compulsory Education Law was revised in 2006 to formalize the guaranteed financing mechanism for compulsory education. In 2007, the
Guiding Opinions on Further Strengthening the Elimination of Illiteracy was released. Then in 2009, the State Council released the Several Opinions on Further Strengthening Rural Compulsory Education Guaranteed Financing Mechanism Reform and Fund Management.

The fourth stage, from 2010 to the present, is the "period of advancing balanced development of compulsory education". During this stage, the main goal is to ensure balanced development of compulsory education in both urban and rural areas. In 2010, the Outline of the National Programme for Medium- and Long-Term Education Reform and Development (2010-2020) proposed the strategic goal of promoting equity and improving quality, and called for balanced development across rural and urban areas by 2020. In 2012, the Outline for Rural Poverty Alleviation and Development in China (2011-2020) was released. In 2013, the Decisions of the Central Committee of the Communist Party of China on Several Important Issues on Comprehensively Deepening Reform proposed a reduction in the linkage between public expenditure and economic growth to improve general transfer payments.

2. Reform and development of the compulsory education financing system

The development of China’s compulsory education has been closely related to financial system reforms and developments. The reform and development of the compulsory education financing system can be divided into four stages (Ha Wei, et al, 2017; Li Xiangyun, 2008).14

The first stage, from 1978 to 1993, featured fiscal decentralization and multi-channel financing for compulsory education. During this period, fiscal decentralization was the main feature of the government's financing system. The financing system went through a decentralization process from "tiered responsibility" to "tax-sharing responsibility" to "central and local responsibility". The local governments’ fiscal strength grew gradually and they became independent stakeholders responsible for the supply of local public services. Township level governments had the primary responsibility for compulsory education. At the same time, tuition became an important source of education revenue, with the Detailed Rules for the Implementation of the Compulsory Education Law in 1992 stipulating that "schools providing compulsory education are entitled to collect miscellaneous fees".

In the second stage, from 1994 to 2000, fiscal power was centralized, and compulsory education investments were made primarily by governments below the county level or individual households. In this period, the financing system was still characterized by cost sharing between governments below the county level (including townships, villages and

14 In this report, the proposed stages of the compulsory education financing system reform is slightly different from that defined in Ha Wei et al, 2017.
communities) and parents. In 1994, reforms to the tax sharing system were implemented, and the central government’s fiscal revenues began to increase substantially. Although the central government increased special funds for compulsory education, the aggregated amount was still very low. In 1994, the special funds disbursed by the central government for basic education only totaled RMB 220 million. From 1995 to 2000, the central government invested RMB 3.9 billion to implement the largest special fund project for education since the founding of the People’s Republic of China under the *National Compulsory Education Project in Poverty-stricken Areas* (Wang Rong, Tian Zhilei, 2018). Meanwhile, to improve guaranteed financing of rural compulsory education, the collection methods for the education surtax were standardized across urban and rural areas by 1994. Urban and rural education surtaxes quickly became the second largest source of education revenue apart from the fiscal budget allocations. In particular, rural education surtaxes became a significant funding source for the operation of rural primary and secondary schools (Wang Rong, Tian Zhilei, 2018). In 2000, reforms to the rural taxation system abolished rural education surtaxes and education fundraising, which resulted in serious funding shortages for rural compulsory education. The central government provided a special transfer payment aimed at resolving the public funding gap at county and township levels, accounting for a large proportion of overall rural education funding. The *Opinions of the State Council on Comprehensively Promoting the Pilot Taxation Reform in Rural Areas* stated that "following the reform, investments in rural compulsory education shall not be lower than the previous rural education surtax; rural education fundraising and regular financial investment in education approved by the central government shall gradually increase, so as to ensure adequate wages, operation and security". However, the funds transferred by the central government were far less than the education funding shortfall caused by the tax reform. Therefore, rural teachers' salaries could not be paid on time, tuition and miscellaneous fees increased, and there was an increase in arbitrary fees. Students dropping out of school due to inability to afford tuition fees became more prevalent (Liu, 2014).

**In the third stage, from 2001 to 2005, fiscal power continued to be centralized, and the county-based financing system for compulsory education and financing mechanism for rural compulsory education was established.** In the *Decision of the State Council on Reform and Development of Basic Education* released in 2001, it was proposed that the management system for rural compulsory education should be realized "under State Council leadership, with local accountability and tiered management, and primarily a county-based management system". The document also prohibited local governments and schools from arbitrarily charging fees to students. In September 2003, the *Decision of the State Council on
Further Strengthening Rural Education put forward the "Two Exemptions and One Subsidy" policy (exemptions for textbook fees and miscellaneous expenses, and subsidy for living expenses of boarding school students) to enables students from economically disadvantaged rural families to receive compulsory education by 2007. With the expansion of the policy in rural areas, the Notice on Deepening the Reform to the Financing Mechanism for Rural Compulsory Education in 2005 proposed the "gradual integration of rural compulsory education into the scope of guaranteed public financing, and establishment of a rural compulsory education financing mechanism based on proportional cost-sharing between central and local levels". Specifically, funding for free textbooks with central government approved curricula should be supported by the central government and funding for free textbooks with local curricula should be supported by the local governments; living expenses of boarding school students should be equally shared (50:50) between central and local governments; and public funds required by the benchmark quota should be proportionally shared by central and local governments. For example, in the central region, the central government is responsible for 60 per cent and the local government is responsible for 40 per cent; in the western region, the central government is responsible for 80 per cent and the local government is responsible for 20 per cent (Wang Rong, 2016).

The fourth stage, from 2006 to date, is the period of "developing the new financing mechanism for compulsory education based on urban-rural integration". During this period, the central government increased fiscal transfer payments and provincial level funding allocations, and gradually developed a new financing mechanism for compulsory education with urban-rural integration. To support the implementation and national scale-up of the new financing mechanism for rural compulsory education, revisions to the Compulsory Education Law in 2006 proposed incorporating compulsory education into the scope of guaranteed public financing and providing a legal basis for establishing the compulsory education public financing system. The "Two Basics" were achieved throughout the country in 2011 as a result of the new financing mechanism, and the financial resources for compulsory education gradually increased and stabilized. In July 2010, the Outline of the National Programme for Medium- and Long-Term Education Reform and Development (2010-2020) put forward the goal of promoting education equity and improving quality, and proposed that the national education expenditure should account for 4 per cent of the Gross Domestic Product (GDP) from 2012, and basically achieve balanced development in all regions by 2020. In 2010, the central government implemented reforms in disadvantaged rural schools, and provided special financial support to rural schools in poor condition. In 2012, the Outline for Rural Poverty
Alleviation and Development in China (2011-2020) was promulgated, which increased the number of special post teachers in 11 concentrated poverty-stricken areas, Tibetan ethnic minority areas in four provinces, key counties in western China working to achieve the "Two Basics", as well as former revolutionary base areas, ethnic minority areas, remote and border areas, and poor areas in the central and western regions. According to data from the Ministry of Finance, the central government's investment under the new financing mechanism increased from RMB 15 billion in 2006 to RMB 134.5 billion in 2016.

At the end of 2015, the Notice of the State Council on Further Improving the Guaranteed Financing Mechanism for Compulsory Education in Urban and Rural Areas proposed to "establish a standardized guaranteed financing mechanism for compulsory education in both urban and rural areas, with a focus on supporting rural areas". As a result, the "Two Exemptions and One Subsidy" policy for rural students, particularly poor students, was extended to all students in compulsory education. The exemptions from miscellaneous expenses and textbook fees was applied to all students receiving compulsory education in urban and rural areas, and the boarding subsidy was provided to all poor students receiving compulsory education. Moreover, the exemptions and subsidy were expanded to cover students in private schools providing compulsory education. Public budget and expenditure on compulsory education were no longer divided between urban and rural areas. The standards of public expenditure for students receiving compulsory education in urban and rural areas were also unified, and the allocated public expenditure for students can be transferred if they migrate away from their registered residence. Moreover, the subsidy standards were increased for small rural schools and boarding schools.

The evolution of the development of compulsory education policies differs from that of the reform of the compulsory education financing system, because the financing system reforms lagged behind the development of compulsory education by a few years.
III. Development of Compulsory Education: Experience and Case Studies

This section outlines China’s achievements in the development of compulsory education over the past four decades, and describes three cases during different historical contexts on the interactions between non-governmental organizations (NGOs), the central government’s financing system and academic think tanks.

1. Experience

(1) China put forth an ambitious development goal for compulsory education, and implemented a step-by-step strategy in stages to achieve the goal.

At the beginning of reform and opening-up, China had basically achieved universal access to primary education. However, achieving universal access to junior secondary education was an ambitious and seemingly unattainable goal at the time considering the national conditions. However, under the leadership of the older generation of leaders, including Deng Xiaoping, the central government resolutely put forward the goal of universalization of nine-year compulsory education in the Decision on Deepening the Reform and Development of Education in 1985. This goal set the vision and guideline for the development of compulsory education in China.

The central government formulated step-by-step strategies during different time periods to achieve the universalization of nine-year compulsory education in stages. Universal access to compulsory education was set in law by the Compulsory Education Law in 1986. This was further expanded in 1993, when the Central Committee of the Communist Party of China and the State Council issuing the Outline of the Programme for Education Development and Reform in China which introduced the “Two Basics”, and stated the goals of basic popularization of compulsory education by 2000 and universalization of compulsory education by 2010. Moreover, the western region, rural areas, and poverty-stricken areas were prioritized in the governmental agenda to universalize nine-year compulsory education.

(2) Development of compulsory education was integrated with the strategies on elimination of illiteracy and poverty alleviation.

The Government of China integrated the development goal for compulsory education with the two key strategies on elimination of illiteracy and poverty alleviation. In 1993, the government put forward the National Seven-Year Priority Poverty Alleviation Program (designed to lift 80 million people out of absolute poverty in seven years), and integrated the strategy on poverty alleviation with the strategy on universal access to compulsory education. Since 2000, the preliminary surveillance report on poverty alleviation in rural areas
demonstrated that the development of compulsory education was an integral part of China’s poverty alleviation efforts.

(3) The central government mobilized and promoted participation of governments at all levels, the general public, and families in the development of compulsory education.

In the 1980s, China’s central government mobilized local governments and various social actors to participate in the development of compulsory education in order to overcome the challenge of limited government financial resources. First, as the main advocate, mobilizer, and organizer for the universalization of compulsory education, the central government encouraged local governments at all levels and the general public to participate. At the local level, townships governments and village/neighborhood committees were designated as the entity responsible for compulsory education financing. Thus, fundraising for education became an important source of education investment in rural areas. For a long time, because compulsory education was not free, parents often paid various compulsory education fees including tuition, textbook fees, miscellaneous expenses, and contributed to the rural education surtax. Finally, in 2001, the government gradually increased public financial investment in compulsory education, minimized and exempted family expenditure on compulsory education, and supported the rollout of free compulsory education. In addition, the central government involved non-governmental organizations (NGOs) to help achieve universal access to compulsory education, most notably through the China Youth Development Foundation’s Project Hope\textsuperscript{15}, which improved rural compulsory education, and successfully attracted the attention and investment of various social actors.

(4) Government responsibility for compulsory education financing was strengthened, particularly for the central government.

Following the rural taxation reform in 2000, to ensure universal access to compulsory education, the central government's responsibility for compulsory education financing was gradually clarified and strengthened through special projects and the financing system reform. The central government has persistently fulfilled its financing obligations, beginning with the two phases of the Compulsory Education Project launched in 1995, followed by the establishment of the guaranteed financing mechanism for rural compulsory education in 2005.

\textsuperscript{15} It should be noted that the amount and proportion of funds raised by Project Hope for building schools were very small when compared to the other combined investments in compulsory education, such as tuition paid by families, funds raised by local governments, and funds from other sources.
the numerous rural compulsory education projects and initiatives implemented in the central and western regions since 2006, and finally since 2015 when the balanced development of compulsory education across urban and rural areas was prioritized, and free compulsory education was achieved. As shown in Figure 21, the central government's expenditure through the new financing mechanism in 2006 totaled RMB 15 billion, and this increased to RMB 134.5 billion by 2016.

![Figure 21. Growth in the central government’s investment through the new financing mechanism in China (2006-2016) (unit: RMB 100 million)](image)


2. Major cases

Three cases are provided to exemplify the process of achieving universal access to compulsory education. They illustrate the complex, arduous and lengthy process of achieving universal access to compulsory education in rural areas, and demonstrate the important driving forces in the process, particularly the leadership from the central government and local governments at all levels, participation of parents, various fundraising efforts, and involvement of academic think tank.\(^{16}\) However, depending on the historical period, governments, parents, NGOs and academic think tanks have played different roles.

In the 1980-1990s, financing through various forms of fundraising was a main institutional feature of compulsory education when the Chinese government had insufficient financial

---

\(^{16}\) There are other excellent case studies from local governments, NGOs and academic think tanks, such as the policies and practices of the Shanghai Municipal Government for migrant children education in 2008-2012; the China Development Research Foundation efforts in nutritional lunches for students; the participation of the Institute of Education Finance and Science of Peking University in policy making for the compulsory education financing mechanism; and the "New Tales from a Thousand and One Nights" bedtime stories developed by the Beijing Growing Home Foundation for rural boarding school students. These are not described here in detail in consideration of the length of this report.
resources. Following the establishment of the county-based financing system for compulsory education in 2001, the central government gradually increased transfer payments for compulsory education, and improved school infrastructure development (including buildings, classrooms and other basic infrastructure) in rural areas of China’s central and western regions to ensure adequate operations of schools. With the increased financing obligations of the government, particularly the central government, and the thorough implementation of free compulsory education, there were increasingly fewer students failing to complete compulsory education due to economic poverty, and the government became the main funding source for compulsory education. While government investment in education increased and universal access to compulsory education was achieved, rural education still faced serious challenges, including serious iron-deficiency anemia and malnutrition among primary school students in poverty-stricken areas of western China, high incidence of poor eyesight among students, and high dropout rates among junior secondary students. The government’s investment in infrastructure and increased financial support to students’ tuition fees could not effectively resolve these issues. Therefore, academic think tanks played an important advocacy role in tackling these issues.

(1) Diversified financing for compulsory education

Prior to the establishment of the county-based compulsory education financing system in 2001, the central government’s investment in compulsory education was limited, and local educational resources were extremely insufficient. Given the lack of funding, the implementation of a diversified education financing system was the only realistic choice for China (Yuan, 1988; Wang and Tian, 2018). During this period, the government advocated for the involvement of the general public in education financing. Village/community level fundraising and parents’ contribution to tuition, miscellaneous fees, textbook fees and urban/rural education surtaxes were the main sources of compulsory education funding. NGOs were also involved in fundraising for compulsory education.

Project Hope was one such example. Undertaken by the China Youth Development Foundation, it was a project aimed at supporting the development of rural compulsory education in poverty-stricken areas. Since its launch in 1989, government leaders at all levels and the general public have both been actively involved. Chinese NGOs also actively participated in promoting compulsory education through Project Hope. At the time, given the government's limited financial resources in supporting the development of compulsory education, Project Hope mobilized social actors to support fundraising for building Project Hope schools and
sponsoring students facing financial difficulties. Project Hope raised a total of RMB 5.3 billion, supported over 33.8 million rural students with financial difficulties, helped build 15,444 primary schools, 14,000 libraries and 2,500 sports complexes, provided 200 sets of film projection equipment, and trained more than 52,000 rural primary school teachers.

(2) Universalization of rural compulsory education supported through various special projects of the central government

Following the tax sharing system reforms in 1994, the central government began to increase its financial capacity to transfer payments to underdeveloped areas in the central and western regions. Since 1995, the central government designed and implemented numerous projects and initiatives in support of compulsory education, including the following nine large-scale projects, many of which are still ongoing: two phases of the National Compulsory Education Programme in Poverty-stricken Areas (1995-2000; 2000-2005); the Rural Boarding School Construction Project (2004-2008); the Rural School Building Safety Project (2009-present); the Nutrition Improvement Programme for Rural Compulsory Education (2011-present); the Rural Weak School Improvement Programme (2010-2012); the Rural Weak School Improvement Programme (2012-present); the Rural Teachers’ Capacity Building Program (2015-2020); and the Special Post Teacher Programme (2006-present). These projects included investments in education hardware (e.g. infrastructure) and software (e.g. teacher training), both of which are important for the development of compulsory education and achievement of universal access to compulsory education. The following section describes the National Compulsory Education Project in Poverty-stricken Areas, the Rural Boarding School Construction Project and the Nutritional Meal Program for Rural Students Receiving Compulsory Education in further detail.

National Compulsory Education Project in Poverty-stricken Areas. In the project’s first phase between 1995 and 2000, the central and local governments invested more than RMB 12.6 billion, including RMB 3.9 billion from the central government and RMB 8.7 billion from local governments. The funds were mainly used to promote the "Two Basics" in poverty-stricken areas, including 852 poverty counties in 22 provinces, autonomous regions, municipalities directly under the central government and the Xinjiang Production and Construction Corps. Among them, 568 national level poverty counties were selected for the National Seven-Year Priority Poverty Alleviation Program. After the first phase of the project, 428 counties fulfilled the "Two Basics", but 522 counties still failed to achieve universal access to nine-year compulsory education. Consequently, during the period of 2000-2005, a total of RMB 7.36
billion was allocated for the second phase of the program (RMB 5 billion from the central government and RMB 2.36 billion from local governments), with the 522 counties finally achieving universal access to nine-year compulsory education.

**Rural Boarding School Construction Project.** Since 2004, the central government has disbursed RMB 10 billion to ensure western China realizes the universal access to nine-year compulsory education target by 2007. The funding supported the building and renovation of boarding schools in the western region, predominantly rural junior secondary schools, to provide rural students in poverty-stricken areas the opportunities to enroll in boarding schools with necessary infrastructure conditions.

**Nutritional Meal Program for Rural Students Receiving Compulsory Education.** In 2011, this program was launched by the State Council for rural students receiving compulsory education. The central government disbursed more than RMB 16 billion annually to provide a nutritional dietary stipend for these rural students (RMB 3 daily per student). Approximately 26 million students in 680 counties/cities have benefited from the program. Since November 2014, the stipend in pilot areas increased to RMB 4 daily per student and RMB 800 yearly per student, benefiting 32 million students. In August 2016, the Ministry of Education and the Ministry of Finance jointly issued the *Opinions on Further Expanding the Coverage of the Student Nutrition Improvement Programme and Achieving Full Coverage in Key Counties under the National Poverty Alleviation and Development Plan*. The ministries also signed agreements with 10 provincial governments, including Hebei and Shanxi, to formalize the target of full coverage of the nutritional meal program in key counties under the *National Poverty Alleviation and Development Plan* by the end of 2017. By 2017, 1,596 counties (accounting for over 50 per cent of all counties) implemented the nutritional meal program, with full coverage achieved in the key counties. More than 36 million students benefited from the program, accounting for about a quarter of the total number of students receiving compulsory education in China.

**(3) Rural Education Action Program (REAP)**

Established in 2005, the Rural Education Action Program (REAP) is a research organization consisting of scholars from internationally recognized universities and research institutions. Its research team primarily consist of researchers at Stanford University, the Center for Chinese Agricultural Policy of the Chinese Academy of Sciences, Peking University, Tsinghua University, Shaanxi Normal University and Renmin University of China. REAP has
carried out substantial research activities focused on education in rural China, particularly in basic education. These activities not only identified and revealed issues and challenges in rural education in China, but it also leveraged a variety of study methods, including randomized control trials (RCTs) and other development economics approaches, to examine the impact of various interventions on students. REAP studies have found iron-deficiency anemia is common among children in poor rural areas; a large number of children suffer from poor eyesight; there is a high dropout rate for junior secondary students in rural areas; and there are mental health issues among children left-behind in rural areas and migrant children. To address these issues, the research team has leveraged RCTs to explore the effects of vitamin tablets and eggs on students' physical fitness; the effect of eye glasses on students' academic performance; and the impact of conditional cash transfers (e.g. merit-based scholarships), career planning and information intervention on rural students’ education choices and dropout behaviors. REAP's research findings have been published in world-class academic journals and attracted the attention of the general public and policy makers. REAP has also proposed possible perspectives and conducted policy advocacy for identifying issues and challenges in compulsory education, and the relevant solutions for these issues.

---

17 In addition to basic education, REAP also carries out research on pre-primary education, senior secondary education and post-secondary education, as well as rural health care.
IV. Compulsory Education in China: Current Challenges

Compulsory education in China has achieved significant developments over the past four decades, although challenges remain due to regional differences in economic development, long-standing institutional obstacles caused by the urban-rural divide, slowed progress in the household registration system reform in megacities, and the dominating impact of the college entrance examination on the development of basic education.

Other key issues and challenges include: the persistent and seemingly widening education gap between urban and rural areas, disparities in compulsory education for vulnerable children (particularly children left-behind and migrant children), access to and quality of compulsory education for children with disabilities, and overall education quality and equity.

1. Persistent urban-rural education gap and rural education challenges due to internal migration

(1) The urban-rural education gap persists and may be widening

The most persistent inequity in China’s education is the urban-rural gap (Golley & Kong, 2016; Yang, et al 2014; Qian & Smith, 2008; Hannum, 1999), which includes the disparities in the average years of education received in urban and rural areas and the access to senior secondary education between students with urban and rural household registrations. In Figure 22, the urban-rural gap in the average years of education received by those born in different years is shown based on the data of Golley & Kong, 2016, and based on the findings of the CFPS 2010 and CFPS 2012 conducted by the Institute of Social Science Survey at Peking University. The figure shows that, in 2010, among the population cohort born between 1940 and 1944 (age 65-70), the urban-rural education gap was a 3.6 years (7.3 years of education in urban areas and 3.7 years of education in rural areas); among the population cohort born between 1985 and 1989 (age 20-25), the urban-rural education gap was 4.1 years (13.4 years of education in urban areas and 9.3 years of education in rural areas). This demonstrates that the education gap between urban and rural populations is still significant and has not narrowed.
Education disparities are further corroborated by differences between urban and rural residents enrolled in regular senior secondary education (not including vocational schools). Figure 23 shows the percentage difference in the level of education of the 17-year-old age group between urban and rural areas from 1990 to 2010. In 1990, there was a 23.8 per cent gap between the percentage of 17-year-old urban and rural residents enrolled in regular senior secondary education (31.6% in urban areas, 7.8% in rural areas). The enrollment gap grew to 29.2 per cent in 2000 (64.3% in urban areas, 25.1% in rural areas), increased to 47.7 per cent in 2005 (83.8% in urban areas, 36.1% in rural areas), and reached approximately 50 per cent in 2010 (94.65% in urban areas, 45.56% in rural areas). This clearly demonstrates that the disparities in the level of education between urban and rural areas are expanding.
Figure 23. Changes in the percentage of urban and rural residents enrolled in senior secondary education in the 17-year-old age group (1990-2010)

Source: The percentages in 1990 and 2000 were calculated according to the micro-data from the annual sampling census; the percentages in 2005 was calculated according to the 1% National Population Sample Survey; and the percentages in 2010 was calculated according to the 2010 data of the CFPS.

(2) Migrant children and children left-behind face challenges in education and psychological development

With urbanization and the loosening of China’s household registration system, huge numbers of rural laborers have migrated across the country for work. According to statistics, there were 286 million migrant workers in 2017, including 171 million that migrated to other regions and 147 million that migrated to urban areas\(^{18}\). These migrant workers face an either-or choice in the education of their children: they either leave their children behind in rural hometowns where they are classified as children left-behind, or bring their children into urban areas where they are categorized as migrant children. According to 2010 national census data, there were an estimated 35.81 million migrant children aged 0-17 and 61.205 million children left-behind, accounting for 37.7 per cent of all rural children. Together, children affected by migration totaled approximately 100 million, accounting for about one third of the children in China’s compulsory education system. By 2015, there was 34.26 million migrant children and 68.77 million children left-behind. The total number of children affected by migration was 103 million, accounting for 38 per cent of the total population of children in China. In other words, about four out of every 10 children in China was directly affected by migration in 2015 (National Bureau of Statistics, UNICEF, and UNFPA, 2017).

Number of empirical studies have shown that migrant children and children left-behind face challenges in education and psychological development (Meng & Yamauchi, 2017; De Brauw & Giles, 2017; Wu & Zhang, 2015; Wang & Mesman, 2015; Zhang, et al, 2014; Lai, et al, 2014; Zhao, et al, 2014). Migrant children’s access to public primary and junior secondary schools in urban areas is significantly hindered, with more than 20 per cent studying in private schools for migrant children (Yang Dongping et al, 2017), paying tuition fees, and often prematurely dropping out of school (Zhang, 2017; Song Yingquan, et al, 2017). Many studies have found that the absence of parents can have a significant negative impact on the academic performance and psychological development of children left-behind (Meng & Yamauchi, 2017; Zhang, et al 2014; Zhang, Wang, et al 2015; Zhao, et al 2014). Due to the policy that requires students with rural household residence to take the college entrance exam in the place of their registered residence, and the obstacles for migrant children to enroll in urban public schools, large number of migrant children have to eventually return to their hometowns. This has a negative impact on the children's psychological development and academic performance (Zhang Wenyu, 2018; Ling, 2017; Koo, et al, 2014). The high drop-out rate among junior secondary students in rural areas cannot be ignored (Yi, et al, 2012). There is a large gap in the proportion of rural and urban students attending senior secondary schools. According to Ministry of Education, 97 per cent of urban students aged 15-17 were enrolled in senior secondary schools in 2015, while the figure was 77 per cent for rural students (Wang, et al, 2018).

(3) Challenges in child development in rural boarding schools and small rural schools

The education quality in rural boarding schools and small rural schools deserves attention.

The government has invested heavily in the construction of rural boarding schools since 2006. By 2016, there were 30.76 million students attending boarding schools during compulsory education, accounting for 21.6 per cent of all students receiving compulsory education. Among those attending boarding schools, there were 10.64 million students in primary education and 20.12 million students in junior secondary education, accounting for 10.7 per cent and 46 per cent of all primary and junior secondary students, respectively. There were 9.425 million children in rural boarding primary schools, about one third of all students in rural primary schools (32.6 per cent).19

19 According to the Educational Statistical Yearbook of China, only 28.92 million rural students were counted, and 37.54 million students at county or township level were not counted as a denominator for rural students.
Rural boarding school students face disparities in academic performance, and challenges in terms of mental health and interpersonal relationships on campus (Hou Haibo, et al, 2018; Song Yingquan, 2016; Zhang Haoyu, 2017; Wang, et al, 2014). In addition, studies have indicated that campus bullying is a serious issue in rural boarding schools. The incidence of campus bullying among students in rural boarding schools was as high as 31.5 per cent, higher than that of primary and junior secondary schools in China’s urban areas, and much higher than the international average (Lu Wei, et al, 2017; Huang Xiaoting, et al 2017).

Small rural schools also faced challenges. In 2015, China had 115,000 small rural schools with 4.247 million students, accounted for 4.4 per cent of all primary school students, and 6.4 per cent of all rural primary school students. Small rural schools had 36.9 students on average, and the average number of classes per school was 3.1. There were 10 students or less in more than 20 per cent of these schools, and five students or less in around 10 per cent of these schools. More than 60 per cent of small rural schools consisted of only grades 1-3. There were only 4.7 teachers on average per school, although approximately half of the small rural schools had no more than three full-time teachers, and more than one fifth of the schools had only one teacher per school (Ministry of Education, 2017).

2. Children with special needs face challenges in access and quality

In this report, children with special needs refer to two groups, namely, children with disabilities and ethnic minority children.

(1) Challenges for children with disabilities

As mentioned previously, school enrollment of children with disabilities in China has grown substantially since 1990. Learning in regular schools has been the main form of compulsory education for children with disabilities, and is the primary approach for inclusive education. However, there is still significant room for improvement in terms of safeguarding the right to compulsory education for children with disabilities, increasing enrollment in regular schools, and enhancing education quality.

While enrollment rates have increased over time for children with disabilities, enrollment rates of children with disabilities is not on par with general enrollment rates. Barriers to school enrollment of children with disabilities include strict admission conditions in special education schools (limited to children who are blind, deaf or who have intellectual disabilities), and parents’ reluctance of school enrollment due to discrimination against children with disabilities.

Regarding the quality of special education, learning in regular schools provides children
with disabilities the access to education, but they still face many challenges. Large class sizes in regular schools make it impossible for children with disabilities to receive individualized education. Moreover, most teachers in regular schools have never received training in special education (Krizter, 2011; Deng & Harris, 2008; Worrell & Taber 2009).

(2) Challenges for ethnic minority children

China is a multi-ethnic country composed of 56 ethnic groups. The education of children from ethnic minority groups20 is extremely important as it relates to national unity and stability, yet complicated as ethnic minority groups have their own languages, religions and cultures, and mostly reside in remote, economically poor and deprived areas. The issues involving ethnic minority children are often more complex than those involving rural children. Various measures have been taken by the government to improve education of ethnic minority children, but disparities still exist in educational attainment between ethnic minority children and Han children. As shown in Figure 24, it seems the differences in educational attainment between the two groups has not significantly narrowed over time, on the contrary, an overall widening trend has been observed.

Figure 24. Comparison of the average years of education received by Han majority and ethnic minority by birth year (unit: year)

Source: Figure developed by the author according to Table 1 of Golley & Kong, 2016.

3. Tension between exam-oriented and quality-oriented education persist due to

---

20 According to the sixth national census in 2010, ethnic minority groups accounted for 8.49 per cent of the population.
**embedded competition in basic education caused by the college entrance exam**

China’s national college entrance examination system, commonly known as *Gaokao*, provides a channel for upward social mobility of all Chinese children, particularly those from low socio-economic backgrounds. College admissions in China is a competitive process primarily based on students’ *Gaokao* scores, and this has had a negative consequence on the basic education system. The intense competition in college admissions is passed down to senior secondary education, junior secondary education, primary education, and even down to pre-primary education. Competition embedded in basic education warrants exam-oriented teaching, which is not conducive to quality-oriented education that fosters innovative talent.

Primary and junior secondary school students in China are heavily burdened by the pressures of academic performance, with relatively high prevalence of after-school tutoring (Huang Xiaoting, Wei Yi, 2018). According to a national survey conducted in 2017 (Huang Xiaoting, Wei Yi, 2017), the participation rate in after-school tutoring was 47.7 per cent among primary school students and 47.3 per cent among junior secondary school students. Moreover, 33.4 per cent of primary school students and 43.7 per cent of junior secondary school students received tutoring on *Gaokao* subjects. The average annual after-school tutoring fees for primary school students was RMB 1,475 and for junior secondary school students was RMB 2,443. Another study (Ministry of Education Quality Monitoring Center for Basic Education, 2018) found that many students spent significant time on homework and attended after-school academic tutoring classes. Specifically, 43.8 per cent of fourth-grade students and 23.4 per cent of eighth-grade students attended math tutoring, and 37.4 per cent of fourth-grade students and 17.1 per cent of eighth-grade students attended Chinese language and literature tutoring.

**4. Financial investments in compulsory education faces equity challenges**

There are two main equity challenges in the financial investment in compulsory education. One is the horizontal equity of financial investment in compulsory education, where there are regional disparities in the distribution of education funding. The other is the level of family expenditure on education in addition to existing public financial inputs.
Figure 25. Gini coefficient of interprovincial differences in per capita financial investment for students in three stages of education (2000-2013)

Source: Data in the figure calculated by the author according to the China Educational Finance Statistical Yearbook, 2001-2014.

Regarding the distribution of compulsory education funding, provincial public expenditure seems to be declining (as shown in Figure 25), although some evidence shows funding in compulsory education is more equally distributed than pre-primary education. Most empirical studies (Xiao & Liu, 2014; Wang, 2014; Wang Rong, Yang Jianfang, 2008; Wang Rong, 2003) have concluded that the inter-provincial or inter-county imbalance in the financial investment per student receiving compulsory education (based on the Gini coefficient and other indicators for measuring inequality such as the Bessel coefficient and the range coefficient) has not been significantly reduced over time, or has exhibited an increasing trend mainly due to the differences between counties.

Recent empirical studies have shown evidence that families still bear considerable compulsory education costs, despite the government’s substantial efforts to increase public investment in compulsory education and provide institutional guarantee for free compulsory education. Family expenditure on education mainly included after-school tutoring fees (Huang Xiaoting, Wei Yi, 2018). This type of expenditure on after-school tutoring is closely related to socio-economic status: families with higher socio-economic status are able to afford the costs and are more likely to send their children to after-school tutoring. As a consequence, this may lead to a widening socio-economic gap among students, and an intergenerational transmission of inequity.

5. Appeal and pressure to extending compulsory education from nine years to 12 years
A significant number of studies have indicated that China's nine-year compulsory education no longer caters to the demands for a more adaptable and globally competitive labor force in a rapidly changing and technology-driven world. Many of these studies advocate for the extension of nine-year compulsory education to 12 years. For example, according to Li et al., 2017, and as shown in Figure 26, about 30 per cent of the Chinese labor force has completed senior secondary education, far lower than OECD countries (approximately 80%), and lower than the United States, Germany, Japan and Korea, and notably lower than BRICS countries like Russia (more than 90%), and Brazil (about 50%). Recent studies have shown that China has reached more than 70 per cent enrollment in senior secondary education (Wang, et al, 2018). In order to further expand higher education and increase the proportion of the work force with college education, the bottlenecks in accessing regular senior secondary education need to be addressed.

There have always been policy discussions regarding whether to extend compulsory education downward to preschool education or upward to senior secondary school. The appeals to include pre-primary education and senior secondary education are based on the beliefs that both stages are significant and important.
Figure 26. Proportions of the labor force with senior secondary or college education in China and other countries

Source: Figure 3 of Li, et al, 2017.

This trend can be confirmed and explained by the slowdown in the growth rate of China’s average years of education. Other BRICS countries have outpaced China in this indicator over the last 40 years. Figure 27 summarizes the growth rate of the average years of education in the past 60 years in four BRICS countries based on data of Barro & Lee, 2013. China’s growth rate increased significantly from 1950 to 1980, but slowed down substantially after 1980, with Brazil surpassing China in 2010.
Equally important is the role of pre-primary education in providing a foundation for achieving equity and quality in compulsory education. The gross enrollment ratio in the three-year pre-primary education in China reached 79 per cent in 2017, however, the most disadvantaged children have limited access to affordable, quality pre-primary education (UNICEF, 2018). Pre-primary education is a strong predictor for the quality of learning in the subsequent stages of education, regardless of the country’s economic status or the supportive learning environment at home (UNICEF, 2019). Access to affordable, quality pre-primary education has a lifelong impact, with the potential to reduce disparities and support all children to enroll in compulsory education on more equal footing. In terms of improving children’s readiness for primary education, pre-primary education has narrowed early achievement gaps for children from disadvantaged households, reduced delayed enrollment in primary education, decreased dropout rates and repetition rates, increased the likelihood of completing primary and junior secondary education, and improved financial efficiencies needed to address the aforementioned issues (UNICEF, 2019). Pre-primary education investment yields the highest return on investment of any level of education (Heckman, 2012; G20 Development Working Group, 2018). It has the immediate potential of increasing caregivers’ participation in the labor market, improving labor market productivity of children when they become adults, and boosting a country’s human capital development (UNICEF 2019; G20 Working Group, 2018;
Heckman, 2012).

In view of the existing challenges in the quality, equity and balanced development of compulsory education, coupled with the public funding demands in other education stages such as pre-primary education, higher education and vocational education, the government is under enormous financial pressure. Nevertheless, upon review of the extraordinary achievements in the development of compulsory education in the past four decades, one experience seems to stand out: the government’s financial resources do not necessarily have to be fully set up before the establishment and implementation of an ambitious education policy goal. The time is ripe for the government to consider extending the length of compulsory education in China.
V. Summary and Conclusion

Compulsory education in China has made remarkable achievements in the past four decades. Through policy analysis and review, second-hand data analysis, and literature review, this report summarizes the key achievements, include the universalization of free nine-year compulsory education, basic elimination of illiteracy in the adult population, and the significant increase in the national average years of education, with a growth rate higher than the global average and the average among developing countries. Significant progress has also been achieved in the dimension of gender equality in compulsory education; children with special needs (including children with disabilities and ethnic minority children) have increased opportunities to receive compulsory education; structural quality of compulsory education (such as teacher-student ratio) has been significantly enhanced; and the quality of education has improved greatly, with Chinese students around age 15 from developed regions attaining high academic achievement in mathematics, reading and science on international examinations. The Chinese government has explored various methods to promote the development of compulsory education, and has gained unique experiences. In the mid-1980s when economic development was slow and government resources were severely limited, the central government established an ambitious nine-year compulsory education policy goal. To achieve this goal, the government adopted a gradual step-by-step strategy by region, and integrated the compulsory education policy goal with the policy goals in poverty alleviation and the elimination of illiteracy. Different education financing strategies were adopted in different periods. During the period of limited government resources, the government promoted compulsory education by mobilizing public participation and diversifying fundraising efforts. When sufficient financial resources were secured, the government, particularly the central government, assumed increased responsibility for compulsory education financing. Through the aforementioned efforts and strategies, the goal of universal access to free nine-year compulsory education was fully realized throughout the country, which laid a solid foundation for the scale-up of higher education, accumulation of human capital, and growth of the national economy.

Nonetheless, compulsory education in China still faces many challenges and pressures. For example, the widening urban-rural education gap is closely linked to urbanization and migration, particularly leading to challenges in the education of migrant children, children left-behind and migrant children returning to hometowns, as well as difficulties in the operation of rural boarding schools and small rural schools. There are several other issues, including access to and quality of education for children with disabilities; bilingual education of ethnic minority
children; tension between quality-oriented and exam-oriented education; and equity issues in public financial investment in compulsory education.

In addition, the government faces a critical policy choice: with the continued development of and support to pre-primary education, whether to extend the free nine-year compulsory education to 12 or 13 years. Given the impact of human capital on economic development and the demand for it in the internationally competitive environment, the time is ripe for the government to extend the length of compulsory education, and ensure equitable access to quality pre-primary education. China has a large gap in human capital when compared to BRIC countries, to Asia’s Four Little Dragons (Taiwan, Hong Kong, Korea and Singapore), and to OECD countries. For China to escape the middle-income country trap and effectively remain globally competitive, it can consider the inclusion of three-year senior secondary education into compulsory education, and establish free one-year pre-primary education. This policy vision is not only necessary but also feasible, as senior secondary education has been basically universalized in China’s developed regions. Moreover, providing 12-year compulsory education in poverty counties and 15-year compulsory education in deeply poverty-stricken counties is recommended as part of the poverty alleviation policy implementation in rural areas. Based on the review of the development of compulsory education in China over the past four decades, it is necessary for the government to extend the length of compulsory education from nine years to a longer period.
References


rural China. Journal of Human Resources, 52(1).


