Teacher Education Reform and National Development in China (1978-2017): Four Metaphors

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1 Introduction

This chapter reviews the history of China's teacher education over the past four decades (1978-2017). Different from previous work on the same topic (Lee & Song, 2016; Li, 1999; J. Zhou, 2014), this review explores an important relationship that has been scantly examined in the existing literature: how teacher education has been shaping and is being shaped by the national development discourse? Drawing on policy documents, statistical data, and research literature, this chapter contends that teacher education has played varying roles in supporting China's national development during different historical periods. Specifically, teacher education has served as a cornerstone for national reconstruction (1978-1992), an engine for boosting economic growth (1992-2004), an equalizer for harmonizing the society (2004-2012), and a window for envisioning a global agenda (since 2012). On the one hand, the national development discourses continually drive the teacher education system to reform its goals, structure, and practices for preparing educators. On the other hand, the development of teacher education in return supports national development.

In the remainder of this chapter, we elaborate on the interactive relationships between teacher education and national development within four specific periods of China's national development. These are: 1. Reconstructing a broken society left by the Cultural Revolution (1978-1992); 2. Focusing on economic development (1992-2004); 3. Constructing a harmonious society (2004-2012); 4. Aiming to rise as a global power (since 2012). Before we dig into each period, two caveats should be mentioned. First, for the purpose of this work, and as informed by previous studies (Pettis, 2014; Zhu & Hu, 2009), we use key historical events (e.g., the birth of the "Reform and Open-Up Policy" in 1978) to chronologize the past four decades into the aforementioned four periods. However, we by no means intend to suggest that how we segment the history is the only or best way. Neither do we mean to imply the four periods are neatly separate from one another. Rather, we believe history

is a continuous flow of time and events. Therefore, we devote special efforts to show how each period relates to the ones before and after it. Second, we use a metaphorical approach (McCandless, 2012; Paine, 1995) to try and capture the key role(s) that teacher education plays in each of the four national development stages. However, we acknowledge that teacher education may concurrently play multiple roles in a given period. Thus, in addition to characterizing the dominant role in each period, we also discuss how these metaphorical roles sustain or transform over time.

2 1978-1992: TE as a *Cornerstone* for Reconstructing the Nation

Before the Cultural Revolution[1], China had already successfully improved the basic conditions of education with two decades of concerted effort since modern China was founded in 1949. By 1965, net enrollment for primary education reached 80%, up from 50% in 1953 (Bramall, 2009). Yet, the graduation rate was low, and year-to-year enrollment fluctuated. The education sector was systematically destabilized when the Cultural Revolution brought upheaval across the country. This 10-year-long movement (1966-1976) had also seriously damaged the socio-political, economic, and cultural foundations of the Chinese society (L. Wu, 2013). When facing the broken society left by this movement, the former Chinese leader, Deng Xiaoping, and his leadership team formulated and enacted the "Reform and Opening-Up" policy in 1978, hoping to restore social order and refocus the society on economic development. The birth of this policy also marked the beginning of a period of nation-wide reconstruction. The reconstruction lasted fourteen years until Deng's South China Tour[2] in 1992, an event regarded as a catalyst for China's rapid economic growth in the following years (Wong & Zheng, 2001).

Teacher education was considered a cornerstone for reconstructing the nation during this period. Two slogans, first established in the 1980s, thoroughly illustrated the foundational role that teacher education was expected to play in the national reconstruction: "Education is the foundation of a 100-year [national development] plan[3]," and "Teacher education is the machine tool for the education enterprise[4]." Because of its high visibility on the national development agenda, the teacher education system underwent a series of legislative, administrative, and financial reforms during this period. As China's governance system is fairly centralized, a series of policies and regulations were set at the national level to reform teacher education. Table 1 lists several key policies and legislative acts that demonstrate the State's strong emphasis on teaching and teacher education during this period.

[1]The full name of the Cultural Revolution is "the Great Proletarian Cultural Revolution". It was a political movement launched by Mao Zedong, the supreme leader of the Chinese Communist Party (CCP). Its goal was to rectify the over-bureaucratization of the CCP since it took power in 1949, but it eventually evolved into factional fights and social turmoil (See L. Wu, 2013)

[2]South China Tour refers to Deng Xiaoping's visits to several southern cities in early 1992. During this tour, Deng made important speeches that have formed the conceptual framework for China's reform and opening-up as well as the socialist modernization process (Source: http://www.china.org.cn/china/CPC_90_anniversary/2011-04/19/content_22392494.htm)

[3]"百年大计，教育为本。" It was discussed and set as the guiding principle for education reform at the 13th National Congress of Communist Party of China in October 1987.

[4]"教师教育是教育事业的工作母机。" It was discussed at the National Conference on Teacher Education in 1980.

Table 1
Key policies/legislations about teaching and teacher education

Year	Policies/legislations	Impact on teaching and teacher education
1978	*Strengthening and Developing Teacher Education*	Set the goal of rebuilding the closed, three-level teacher education system.
1985	*Decision on Setting Every September the 10th as Teacher's Day*	Increased the prestige and respect of teaching and teacher education.
1986	*Suggestions on Strengthening and Developing Teacher Education*	Outlined the specific reform objectives of each of the three-level teacher education institutions.
1993	*Teachers' Law of People's Republic of China*	Guaranteed the legitimate rights of teachers.

Notes: 1) Though Teachers' Law was passed in 1993, we still include it here as evidence of the State's emphasis on teaching and teacher education because the formulation of this law primarily occurred during the national reconstruction period (1978-1992). 2) For a comprehensive review of policy and legislative documents about teacher education, please refer to J. Zhou and Reed (2005).

These policies and legislation have significantly improved the teacher education enterprise. Particularly, they have helped re-establish the closed, three-level teacher education system that already existed before the Cultural Revolution (J. Zhou, 2014). Closed means that teachers were exclusively prepared by teacher education institutions, and these institutions also focused on the initial preparation and continuous development of teachers. The three-level teacher education institutions refer to secondary-level teacher schools (*zhongshi*, 中师), three-year normal colleges (*shizhuan*, 师专), and four-year normal universities (*shida*, 师大). In this hierarchical system, *zhongshi* was mainly responsible for preparing kindergarten and primary school teachers (grades K-6), *shizhuan* for preparing middle school teachers (grades 7-9), and *shida* for preparing high school teachers (grades 10-12) (J. Zhou & Reed, 2005). Such a closed and highly structured teacher education system supported the national reconstruction in several ways.

First, this system guaranteed the supply of sufficient school teachers. A key strategy was the rapid expansion of elementary and middle school education (Bramall, 2009). In order to ensure that every school-aged youth—a society's future human resource—could receive the required minimum years of education, the Chinese government passed the *Compulsory Education Law* in 1986, mandating that every child was entitled and obliged to receive nine years of compulsory education (Ministry of Education, 1986). Aided by this law, the enrollment in primary and middle schools sharply increased during this period. As a result, a large number of new teachers were needed to educate the expanding student population. Benefiting from the centralized governance structure, the closed teacher education system had successfully met the growing need of teachers within a short period of time. This was achieved by expanding teacher education institutions, incentivizing students to apply for teacher education programs (e.g., providing financial support and guaranteeing job placement), and using institutional power to channel teacher education graduates to targeted high-need schools. As J. Zhou (2014, p. 510) argues, "It can be seen that the policy of resetting the teacher education system directly addressed the shortage of teachers

in the 1980s and ensured an adequate supply of teachers to schools."

Second, the three-level teacher education system sustained the traditional assumption of knowledge (J. Zhou, 2014). An underlying belief of the leveled system is that the teachers who teach at a higher grade-level need to possess more specialized content knowledge, thus they need to receive longer and more intensive professional preparation. Such a hierarchical conceptualization of knowledge is deeply rooted in Confucianism, which believes that knowledge should be placed at the center of teaching and learning, learning is a process of accumulating a pre-existing body of knowledge, and students should respect the authority of teachers and their knowledge and work hard to acquire knowledge (Chan, 1999). From a 1980s viewpoint, this ideology did contribute to the quick expansion of compulsory education, because knowledge-centered pedagogy could be efficiently taught in teacher education programs and then carried out in public schools where the class sizes were usually very large.

Third, the development of teacher education made people value education again. The stigmatization of education was one of the most seriously damaging consequences of the Cultural Revolution (L. Wu, 2013). Many school teachers, scholars, and intellectuals were publicly humiliated and punished because the then-authorities perceived the educated person as a defender of the "outdated" traditional culture as well as a threat to their regime. However, during the national reconstruction, the government reinstated teacher education at the center of its reform agenda, leading to the significant development of teacher education. Coupled with this developmental agenda was improved work conditions and new benefits for the teaching profession. These reforms rekindled people's interests in pursuing a career in education. For instance, many high-performing middle school graduates, especially those from poor rural families, chose to become a teacher through attending *zhongshi* programs because of generous financial aid from the state, shorter time of preparation, and stable job placement (Zhu & Hu, 2009).

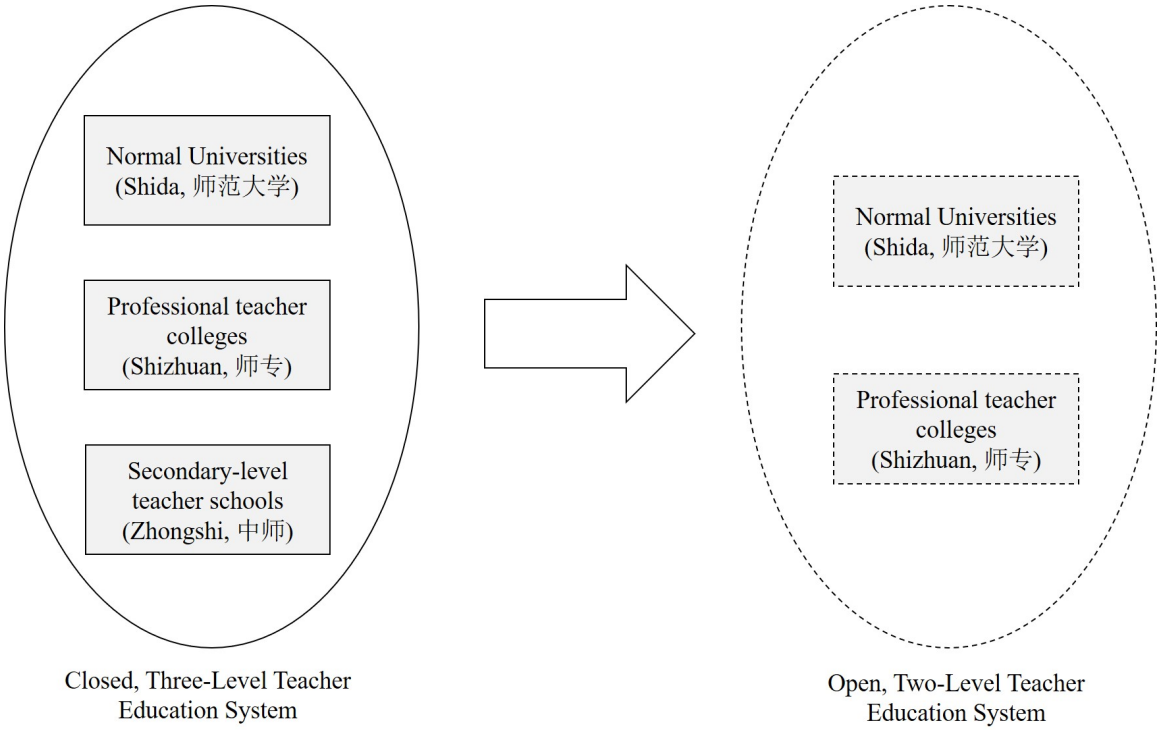
In brief, during the fourteen years following the Cultural Revolution, China strived to drag society back on track for economic development and modernization. Guided by this national development agenda, teacher education re-established the closed, three-level system. This system provided foundational support to the national reconstruction by feeding schools with sufficient educators, sustained the traditional educational beliefs that contributed to the rapid universalization of compulsory education, and helped to nurture a societal discourse of respect and value toward education.

3 1992-2004: TE as an *Engine* for Boosting the Economic Growth

After Deng Xiaoping's South China Tour in 1992, China embraced a period of rapid modernization by further transforming the planned economy to a market economy (Wong & Zheng, 2001). The marketization reform had also penetrated higher education; universities and colleges were granted greater autonomy, for example, but the reforms also necessitated competition among institutions for students and resources in a freer market (Yang, 2004). Teacher education as a component of higher education was also influenced by the marketization movement. While the teacher education system continued to play a cornerstone role in preparing a sufficient number of teachers for schools, the closed, three-level teacher

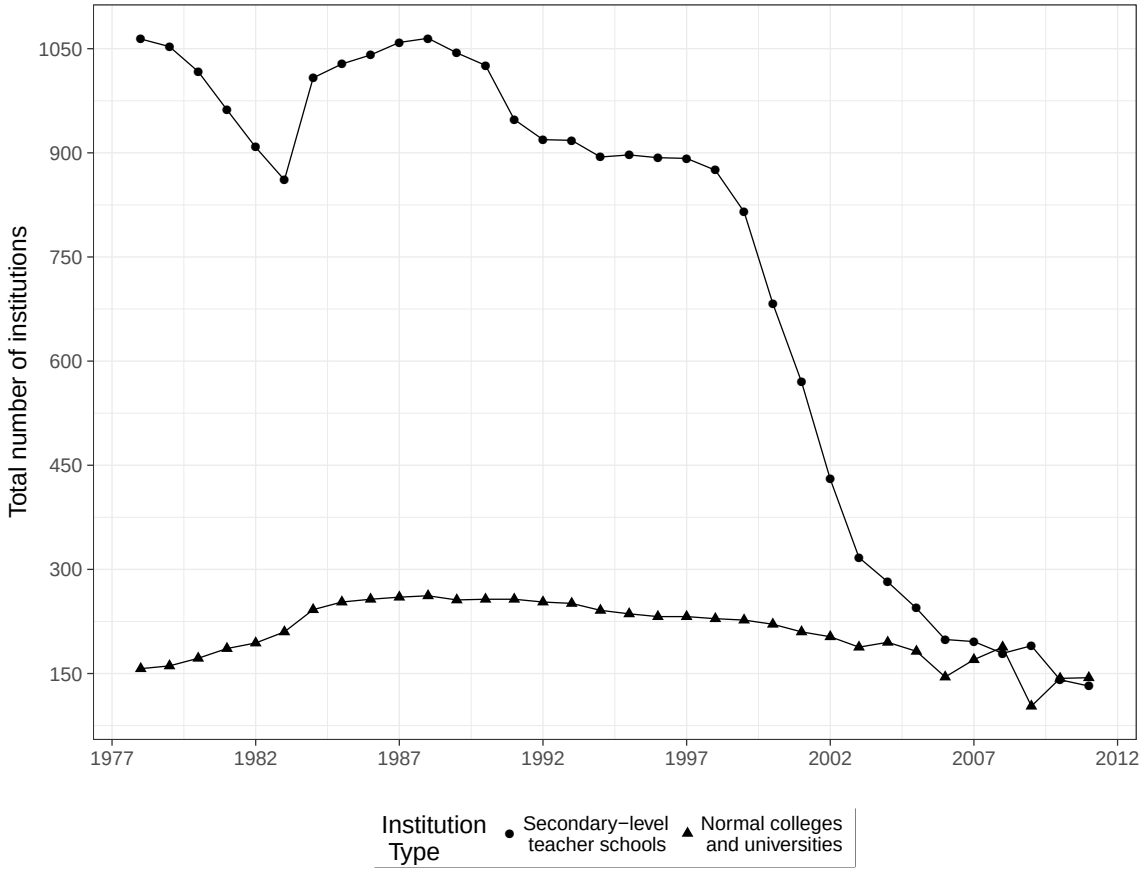
education system had started to transform (Figure. 1).

Figure 1. The structural shift of China's teacher education system



Specifically, the teacher education system had significantly changed in two respects. First, the three levels of institutions started to merge into two levels. The secondary-level teacher schools, *zhongshi*, which prepared middle school graduates to become preschool and primary school teachers through 2-3-year programs, had significantly contributed to the universalization of public education during the mid-1980s and 1990s. Nevertheless, with the focus of national development shifting from restoring social order to boosting modernization and economic growth, it was viewed that the secondary-level teacher schools could no longer produce high quality teachers. As a result, many were shut down while others actively sought reform by strengthening their programs (e.g., elongating the program length) and elevating themselves to achieve post-secondary-level status (Zhu & Hu, 2009). Figure. 2shows the numbers of the secondary-level teacher schools (*zhongshi*) and normal college/universities (*shizhuan* and *shida*) from 1978 to 2011. As shown in this figure, the number of normal colleges and universities remains stable over time, but the number of secondary-level teacher schools plummeted from 1,064 (as of 1978) to 132 (as of 2011), with the steepest section of the curve between 1992 and 2004.

Figure 2. The number of secondary and post-secondary level teacher education institutions



Notes: 1) Data of 1978 to 2007 are from Zhu and Hu (2009, p. 112), and data of 2009-2011 are from the website of Ministry of Education (MOE): http://www.moe.gov.cn/jyb_sjzl/moe_364/. Starting from 2012, MOE stopped publishing the numbers of teacher education institutions.
2) Secondary-level teacher schools = *zhongshi* (中师); normal universities and colleges = *shida* (师大) + *shizhuan* (师专). In certain years, the data about *shizhuan* and *shida* are reported separately, but in other years they are lumped together. In this figure, we report the total of *shida* and *shizhuan* in order to maintain consistent data structure across different years. Please refer to Appendix A for the separate data about *shida* and *shizhuan* in the years available.

Another change was the opening of a once closed teacher education system. Two national policies issued by China's Ministry of Education triggered this shift, the "Suggestions on the Reforms and Development of Teacher Education (1996)" and the "Suggestions on the Adjustments of Distribution and Structure of Teacher Education Institutions (1998)." Both policies state that normal colleges and universities were allowed to offer non-teacher education programs, and comprehensive colleges and universities were now allowed to participate in teacher preparation. After almost two decades of development since 1978, the teacher education system was no longer struggling to prepare a sufficient number of teachers. Rather, the primary challenge in the 1990s became the quality of preparation instead of the quantity of educators produced.

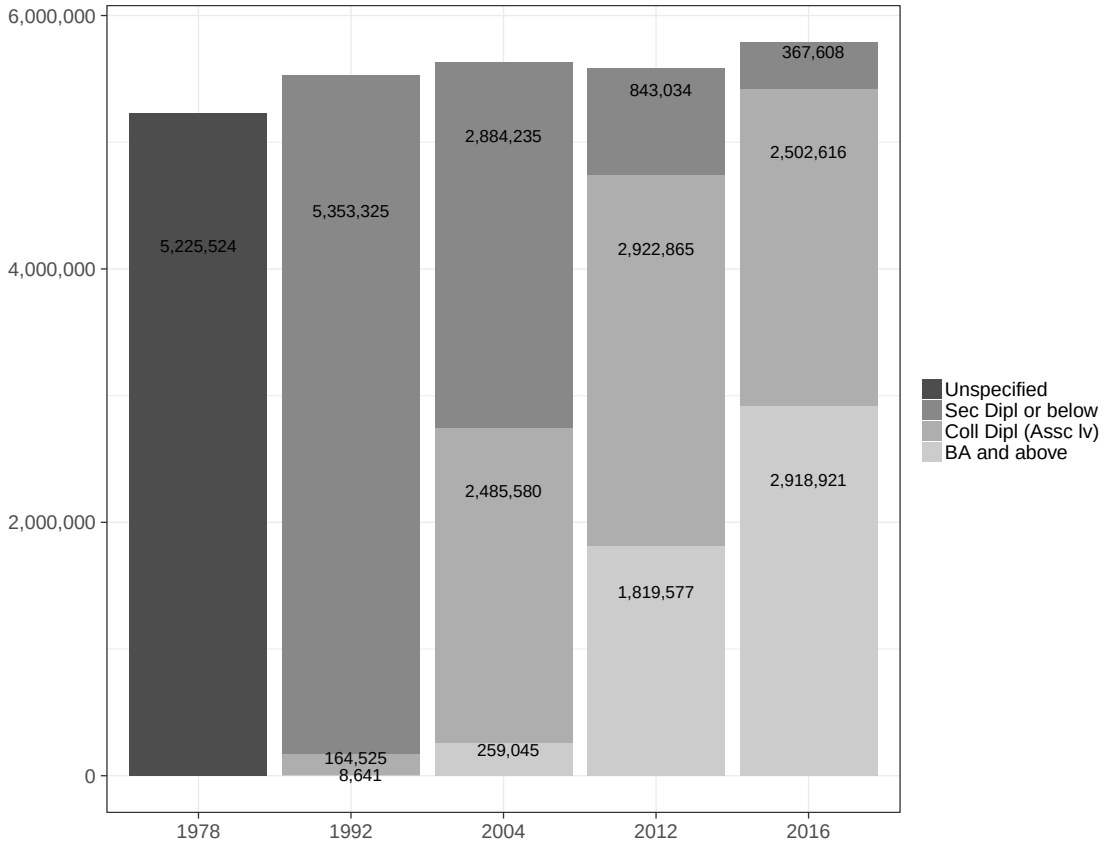
Influential academia claimed that teacher education in many developed countries all pointed to an open system that facilitates competition between normal colleges/universities and comprehensive universities, as such a setup could help improve the overall quality of teacher education programs (Zhu & Han, 2006). This argument fueled the structural shift in teacher education. Furthermore, this shift was also contextualized in the massification of China's higher education beginning in 1998 (Yang, 2004). In order to capitalize on the growing needs of higher education, many normal colleges and universities repositioned themselves as comprehensive colleges or universities and started to offer non-teacher education programs in order to compete for high-caliber students and more resources. As a result, teacher education was gradually marginalized inside normal college and universities.(Zhu & Hu, 2009) A typical example of teacher education becoming peripheral in teacher education institutions is the shift of Southwest Normal University (SWNU) to Southwest University (SWU). SWNU was a normal university located in the prominent city of Chongqing, exclusively preparing educators for the southwestern regions of China from 1950. Influenced by the massification movement in higher education, in 2005 SWNU merged with Southwest Agricultural University to form a new comprehensive university called Southwest University (SWU). Teacher education became only one of many academic units inside SWU.

While the social discourse around economic development from 1992 to 2004 enabled the teacher education system to reform, the resulting transformations have in turn contributed to the economic growth. The teacher education system during this period served as an *engine* for boosting the economic growth as viewed by the public. Similar to the functions of an engine, the revised teacher education system (open, two-level) sustained the development of the economy, and was reflected in two distinct aspects.

First, compared to the closed, three-level teacher education system, the open, two-level system was able to feed Chinese elementary and secondary schools with higher quality teachers. Teacher quality is a complex concept. Researchers have proposed a range of indicators to measure teacher quality, such as educational attainment, certification status, classroom teaching performance, and student learning outcomes (Strong, 2011). While in academia there are still widespread debates on whether and to what extent these indicators can reflect the quality of a teacher, these indicators have been widely used in teacher education policy and practice. Using a teacher's educational attainment as a proxy, Figure 3 - Figure 5 demonstrate the increasing quality of primary and secondary school teachers. For instance, in 1992, only 0.1% of primary school teachers held a bachelor's degree or above,

yet this number climbed to 4.6% in 2004 and 50.4% in 2016. Similar patterns are present in the data about middle and high school teachers. Another noticeable change is that the numbers of middle and high school teachers have drastically increased, climbing from 2,564,987 and 576,145 in 1992 to 3,487,789 and 1,733,459 in 2016, respectively. Taken together, these changes suggest that the teacher education reforms have improved both the *quantity* and *quality* (using educational attainment as a proxy) of teachers in China's primary and secondary schools.

Figure 3. The number and educational attainment of primary school teachers



Notes for Fig. 3-5:
1) Data sources: *Educational Statistics Yearbook of China* (1978, 1992, 2004, 2012, 2016). Beijing: People's Education Press.
2) Teachers' educational attainment was not reported in the 1978 Yearbook, but it has the numbers of teachers in primary, middle, and high schools. We still include the 1978 data in these figures in order to show the changes in the numbers of school teachers.
3) Please refer to Appendix B for more information regarding the numbers and educational attainment of primary, middle, and high school teachers in selected years.

Figure 4. The number and educational attainment of middle school teachers

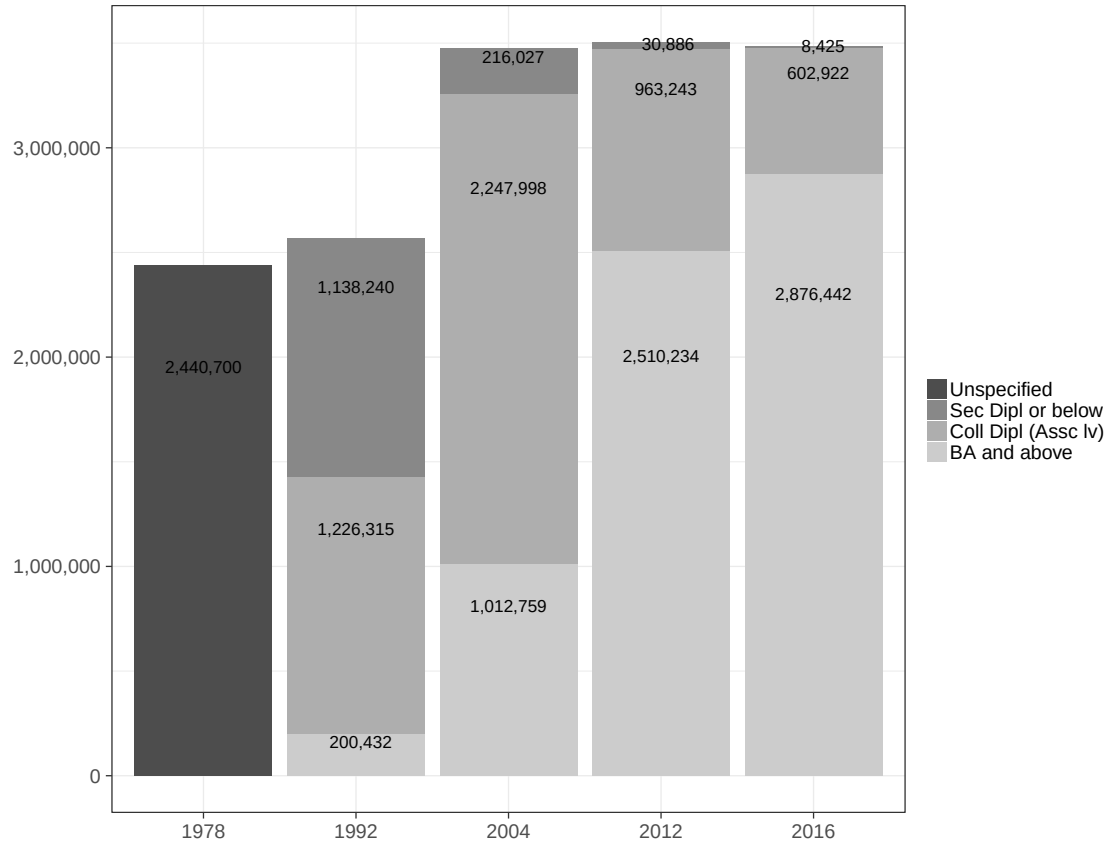
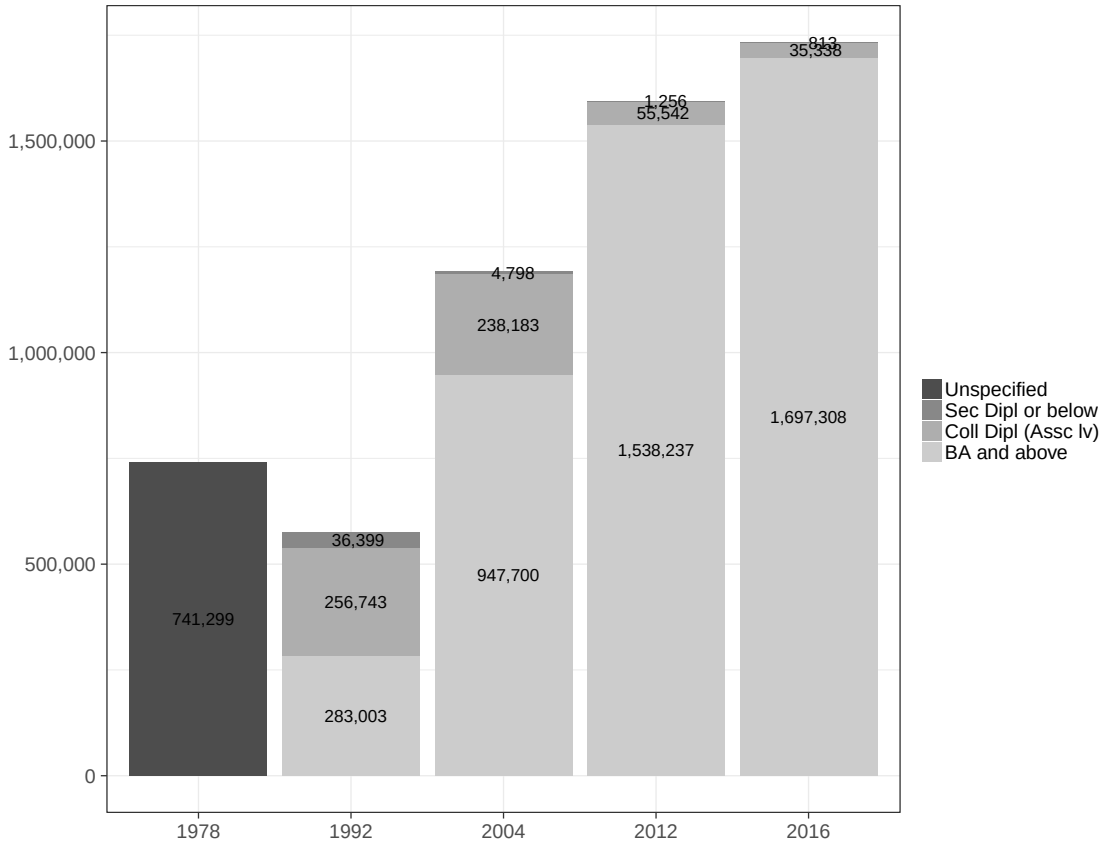


Figure 5. The number and educational attainment of high school teachers



Furthermore, the relaxed structure of the teacher education system has nurtured the explorations of new models for preparing educators. In Shi's influential book, *Knowledge Transformation and Education Reform* (Shi, 2001), he argues that the traditional understanding of knowledge—something fixed, hierarchical, and accumulative—could no longer fit the learning needs in the postmodern era where knowledge is fragmented, constructive, and elusive. Thus, the call for a new version of teaching and teacher education has become emphatic. Both the traditional teacher education institutions (i.e., normal colleges and universities) and the new players in this field (comprehensive colleges and universities that participate in teacher education) started exploring new models for preparing high-quality teachers for the new era. For instance, Beijing Normal University—one of the leading teacher education institutions in China—started piloting the "4+2" model of preparing teachers. In the first three years of this model, students receive education in subject areas (e.g., mathematics, history, chemistry) along with other students majoring in the same subject areas. By the end of the third year, students who are interested in teaching are enrolled in teacher education programs. After one year of coursework (the fourth year) that transitions the students from learning in subject areas to pedagogy, and from undergraduate level to graduate level, the students receive master's level education in teacher education in their last two years in the program. During their graduate studies, they receive intensive preparation in the most cutting-edge pedagogical ideas and strategies (Zhu & Hu, 2009, p. 136-138).

In short, from 1992 to 2004, the national development discourse around economic development interplayed with the field of teacher education. On the one hand, the demands for higher quality human resources for a developing economy had transformed the teacher education system to be an open, two-level system. In return, the reforms in teacher education guaranteed the supply of sufficient teachers with higher educational attainment and more rigorous preparation in both content and pedagogy, which further contributed to the economic growth during this period.

4 2004-2012: TE as an *Equalizer* for Harmonizing the Society

Overall, China achieved rapid economic growth from 1992 to 2004, with the annual Gross Domestic Product (GDP) growth rates ranging from 7.7% to 14.2% (World Bank, 2017). The trend of economic growth even continued thereafter. However, Chinese society was also becoming increasingly unequal. People living in rural regions, working in lower-rank professions, and from ethnic minority groups benefited much less from the national development than their counterparts in urban regions, those working in high-paying professions, and those in the mainstream Han group (Whyte, 2010). For instance, China's Gini coefficient—a commonly used indicator of a society's degree of inequality—was very low in the 1980s when the economic reform just started. The low Gini coefficient indicates that the nation was poor, but the income distribution was relatively even among the residents. However, the Gini coefficient steadily climbed to very high levels (in the range of 0.53–0.55) in 2005, as estimated by many researchers (Xie & Zhou, 2014). Similarly, primary and secondary school students' access to quality teachers were also becoming increasingly unequal due to the marketization process taking place in education and the society (Xue & Li, 2015; Y. Zhou & Wang, 2016).

Table 2
The equality-oriented teacher education policies

Starting year	Policy	Interventions	Targeted part of teacher preparation pipeline	Number of participants
2006	Special Teaching Position (STP)	Alternative hiring	Initial recruitment	over 500,000 (as of 2016)
2007	Free Teacher Education (FTE)	Material and employment incentives	Pre-service preparation	over 100,000 (as of 2015)
2010	National Professional Development Plan (NPDP)	Professional support	In-service development	over 1,000,000 (as of 2015)

Note: The data sources of participant numbers: J. Liu (2017) for STP; China Education Book (2007-2015) for FTE; and Ministry of Education (2015) for NPDP.

In order to tackle the widening social inequalities, the Chinese government started a new national development agenda in 2004 called, "Constructing a Harmonious Society." This agenda aimed to harmonize the emerging "disharmonies" (i.e., the growing inequalities) through equalizing public services across different regions and populations (B. Wu, 2006). Education as an important public resource, especially access to quality teachers, was again placed at the center of the reform agenda during this period. While the teacher education system continued to aim at preparing enough quality teachers, the question of how to distribute teachers more equally across different regions and student populations became a top priority during this time. To address this issue, the Chinese government formulated and enacted three equality-oriented teacher polices (Table 2).

In 2006, the Chinese government started implementing the *Tegang* policy, roughly translated as Special Teaching Position (STP). The goal of STP was to use alternative hiring routes to staff China's most under-resourced rural schools. Effectively, STP deregulates the entry barriers into teaching by making those who graduate from non-teacher education programs, but who hold a bachelor's degree or higher, eligible to apply as teachers. STP initially hires teachers on a three-year fixed-term contract. By the end of the third year, STP teachers with satisfactory performance reviews are eligible for renewing their contacts to become tenure-stream educators (Ministry of Education, 2006). This policy was developed during a time when teaching and teacher education were marginalized during the massification of higher education beginning in 1998. First, STP was viewed as a solution to increasing unemployment issues for college graduates. Second, teaching as an occupation had lost its appeal for job seekers because of the low incomes and increasingly demanding environments, especially for schools located in underdeveloped rural regions where very few teachers were willing to go and teach. As of 2016, over 500,000 STP teachers have been recruited and placed into more than 30,000 rural schools located in the most underdeveloped rural regions of China, significantly alleviating the teacher shortages facing those schools. Furthermore, according to a national survey conducted by China Education Daily in 2015, over 90% of STP teachers chose to stay in the teaching profession after their first three years of teaching (J. Liu, 2017).

The second policy that aimed to equalize the teaching workforce is the Free Teacher

Education program (FTE). Starting in 2007, six national normal universities[5] were tasked to prepare highly qualified teachers for Chinese schools, especially those located in underdeveloped provinces and regions. The central idea of FTE was to use incentives to attract high-performing high school graduates, with a focus on those who were in need of financial support for college education, to join teacher education programs (Ministry of Education, 2007). During the massification process of higher education, many teacher education institutions started to offer non-teacher education programs, which led to a steady loss of quality candidates to what students saw as more promising majors and departments. The national government attempted to use the FTE policy and its administrative power over the six most prominent normal universities to refocus teacher education institutions on preparing teachers. According to its design, FTE participants can receive a generous package of benefits, including a waiver of tuition and free housing, a monthly stipend, and a guaranteed civil servant teaching position (equivalent to a tenure-track teaching position in other contexts) after they graduate. Upon completion of study, FTE graduates must return to their home provinces and commit to teaching for at least ten years. If the graduates default on their promise, they are liable for refunding all educational costs, paying a penalty, and being blacklisted in a Credit Record Archives established by the educational authorities (Wang & Gao, 2013). As of 2015, over 100,000 high school graduates have been recruited into FTE programs, and over 95% of FTE graduates went on to teach in their home provinces after graduation (Liao & Yuan, 2017). However, because of the conflict between FTE's value of educational equality and the participating teachers' intrinsic motivation for individual mobility, many FTE teachers have suffered from severe professional disorientation or even burnout (Liao & Yuan, 2017; Wang & Gao, 2013).

The third policy initiative, *Guopei*, or roughly translated as the National Professional Development Plan (NPDP), was another policy that aimed to enhance the quality of the rural teaching workforce. The implementation of NPDP started in 2010. NPDP provides diverse, tailored, and recursive professional development programs to in-service rural school teachers. Typical NPDP programs include several days of intensive face-to-face trainings on relevant topics (e.g., use of technology in teaching), semester-long online training, and one year-long off-job professional learning in normal universities or colleges (Ministry of Education, 2010). As of 2015, over one million primary and secondary school teachers have participated in NPDP programs. Over 95% of the participating teachers come from rural schools (Ministry of Education, 2015).

Briefly, under the influence of the national development discourse around social equality since 2004, China's teacher education system has been serving as an equalizer for harmonizing the society. Particularly, the three policies—FTE, STP, and NPDP—respectively target at the pre-service preparation, initial recruitment, and in-service development of the teacher preparation pipeline with the shared goal of equalizing students' access to quality teachers. While STP and NPDP seem to have helped enhance the quantity and quality of teachers working in high-need rural schools, the impact of FTE on the teaching workforce is mixed. More time and additional empirical evidence are still needed for concluding whether,

[5]These are: Beijing Normal University, East China Normal University, Central China Normal University, Northeast Normal University, Shaanxi Normal University, and Southwest University. They are regarded as the leading teacher education institutions in China.

and to what extent, the three teacher policies have contributed to China's broader agenda of narrowing social inequalities.

5 Since 2012: TE as a *Window* for Envisioning a Global Agenda

The inauguration of the sitting president Xi Jinping in 2012 marked the beginning of a new national development stage. Different from his predecessors, Xi and his leadership team have outlined a more globally-oriented agenda for national development. For instance, the Belt and Road Initiative, which is developed and led by China, aims to strengthen the connectivity and cooperation between Eurasian countries. It also intends to increase China's power in influencing global affairs (Swaine, 2015). Similarly, in the field of education, a growing number of Confucius Institutions are dedicated to enhancing China's soft power in the world of politics (Pan, 2013). Both the population of Chinese students studying abroad and international students coming to study in China have expanded in recent decades. Taken together, these new trends demonstrate China's ambitious agenda of becoming a globally influential power. To construct this ambitious agenda on the ground entails the efforts from almost every sector of the society, including teacher education. As a response to the new direction of national development, the teacher education system has lately been undertaking three major reforms. These are: expanding preparation goals, innovating preparation approaches, and setting professional standards.

The first recent reform is expanding the preparation goals. In the past, China's teacher education system was primarily dedicated to preparing educators for schools in China. However, as China continues to unfold its global agenda, certain teacher education institutions and programs have started preparing teachers for schools outside China. A manifestation of this trend is the sharp growth in the Teaching Chinese as a Foreign Language (TCFL) programs. Chinese is becoming a popular language around the world. As a result, the need for Chinese teachers is also rapidly increasing (Y. Wu, 2016). In order to address the shortage of Chinese language teachers, a growing number of teacher education institutions have started preparing Chinese language teachers for "others" schools.

China's teacher education system has also been exploring how to prepare globally-minded educators. Because of the ongoing trend of globalization, the communication and collaboration between Chinese schools and schools in other countries are becoming more frequent and intensive. Benefiting from their strong international partnerships, some leading teacher education institutions in China have started exploring innovative approaches to preparing globally minded and competent teachers. For instance, Beijing Normal University and Michigan State University have formed a partnership of exchanging teacher education students. This partnership explores how to use short-term study abroad programs to enhance future educators' global mindedness and their competency for teaching in global contexts (Liao, Glew, & Song, 2017). Similarly, starting in 2009, East China Normal University has been sending 20-30 teacher education students per year to study for one month in several prestigious oversea universities, such as Columbia University, University College London, and National University of Ireland. The purpose of this program is to broaden participating students' horizons and help them become excellent teachers in global contexts (Cao & Yan, 2014). While at present only a few well-resourced and pioneering institutions

are experimenting with how to prepare globally competent educators, more institutions and programs are expected to be joining them in the near future.

Another reform is the standardization movement. Sponsored by the Ministry of Education, a research panel at Beijing Normal University conducted a comparative study of teacher education standards in several developed countries, such as the United States, United Kingdom, Japan, Germany, and Australia (Zhu & Li, 2011, p. 24-42). The research panel concluded that, as suggested by international experiences, establishing professional standards is crucial for ensuring the quality of teaching and teacher education (J. Zhou, 2014; Zhu & Li, 2011). This research provides conceptual and empirical support to the publication of two national standards. The first is the "Teacher Education Curriculum Standards" (Ministry of Education, 2011), and the other is the "Professional Standards for Preschool, Elementary and Secondary School Teachers" (Ministry of Education, 2012). The two standards introduce several new concepts to the teacher education system. These are, "learner-centered, practice-oriented and teacher lifelong learning" (J. Zhou, 2014). While the actual impact of the two standards on teaching and teacher education is still unclear, the standardization movement is another illustration of how China's teacher education system dynamically interacts with the national and global discourse around development, quality, and excellence.

To summarize, as China is aiming to step further into the center of the global stage, it also asks more from teacher education in order to support this ambitious agenda. The teacher education system has been quickly responding to this call with several new initiatives, such as starting to prepare Chinese language educators for the schools of other countries, exploring innovative teacher preparation approaches through international partnerships, and using professional standards to control the quality of teaching and teacher education. These reforms have opened up several windows for envisioning a broader and more ambitious future of Chinse education and society. However, since these reforms are still at the beginning stages of implementation, it is too early to conclude whether, to what extent, and in what ways these teacher education reforms have shaped China's most recent national development agenda centering on global engagement.

6 Conclusion

Drawing on various forms and sources of literature, this chapter provides a narrative of the relationships between teacher education reform and the national development in China over the past four decades. We conclude that teacher education reform and national development interactively influence each other. One the one hand, the discourse on national development shape the goals, structures, and practices of the teacher education system. On the other hand, the achievements of the teacher education reforms have contributed to the development of China from a broken, poor society to an increasingly prosperous and influential member on the global platform. This Chinese experience resonates with the widely held assertion that teacher education is pivotal for a nation and its continuous development (Darling-Hammond, 2010). Furthermore, this chapter proposes four metaphorical roles (i.e., cornerstone, engine, equalizer, and window) about the specific ways in which teacher education can support national development. Future studies on China's teacher education can refine these roles and fill them with concrete meanings and connotations. These roles

could also be used as a conceptual reference for exploring the relationships between teacher education and national development in other national contexts.

While China's teacher education system and the nation as a whole have significantly developed since 1978, the changing domestic and global circumstances are posing new challenges, such as how to reform education to be more learner-centered (Liao & Hu, 2017), how to make education and the society more equitable (Li, 1999), and how to move beyond the nation-state logic of development in the post-modern era where the national, social, and cultural boundaries are becoming increasingly blurred (Y. Liu & Fang, 2009). These questions are beyond the scope of this chapter, but should be worth exploring in future studies.

Appendix A
The numbers of teacher education institutions

Year	Secondary-level teacher schools (*zhongshi*, 中师)	Post-secondary-level institutions		
		Total	Normal colleges (*shizhuan*, 师专)	Normal universities (*shida*, 师大)
1978	1064	157	N/A	N/A
1979	1053	161	N/A	N/A
1980	1017	172	N/A	N/A
1981	962	186	N/A	N/A
1982	908	194	133	61
1983	861	210	148	62
1984	1008	242	178	64
1985	1028	253	188	65
1986	1041	257	190	67
1987	1059	260	191	69
1988	1065	262	191	71
1989	1044	256	183	73
1990	1026	257	182	75
1991	948	257	181	76
1992	919	253	176	77
1993	918	251	173	78
1994	894	241	164	77
1995	897	236	161	75
1996	893	232	157	75
1997	892	232	156	76
1998	875	229	154	75
1999	815	227	140	87
2000	683	221	114	107
2001	570	210	101	109
2002	430	203	85	118
2003	317	188	75	113
2004	282	195	70	125
2005	244	182	58	96
2006	199	145	51	94
2007	196	170	45	125
2008	179	188	N/A	N/A
2009	190	103	N/A	N/A
2010	141	143	N/A	N/A
2011	132	144	N/A	N/A

Notes: 1) N/A = the data is not available. 2) Ministry of Education of China stopped publishing the numbers of teacher education institutions in 2012.

Appendix B
Educational attainment of primary, middle and high school teachers (1978-2016)

	Teachers' educational attainments	1978	1992	2004	2012	2016
Primary schools	Bachelor's degree and above	5,225,524	8,641	259,045	1,819,577	2,918,921
	College diploma (associate degree)	0	164,525	2,485,580	2,922,865	2,502,616
	Secondary education diploma and below	0	5,353,325	2,884,235	843,034	367,608
Middle schools	Bachelor's degree and above	2,440,700	200,432	1,012,759	2,510,234	2,876,442
	College diploma (associate degree)	0	1,226,315	2,247,998	963,243	602,922
	Secondary education diploma and below	0	1,138,240	216,027	30,886	8,425
High schools	Bachelor's degree and above	741,299	283,003	947,700	1,538,237	1,697,308
	College diploma (associate degree)	0	256,743	238,183	55,542	35,338
	Secondary education diploma and below	0	36,399	4,798	1,256	813

7 References

Bramall, C. (2009). Out of the darkness: Chinese transition paths. *Modern China*, *35*(4), 439-449. doi: 10.1177/0097700409335427

Cao, J., & Yan, W. (2014, July 7). *Preparing excellent future educators: East china normal university's innovative approaches for preparing teachers. (in Chinese).* Guangming Daily. Retrieved from http://epaper.gmw.cn/gmrb/html/2014-07/07/nw.D110000gmrb_20140707_8-06.htm?div=-1

Chan, S. (1999). The Chinese Learner—A Question of Style. *Education+ Training*, *41*(6/7), 294-305.

Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, *61*(1-2), 35-47. doi: 10.1177/0022487109348024

Lee, J. C.-K., & Song, H. (2016). Teacher education in the greater China region: Status, issues and prospects. In J. C.-K. Lee & C. Day (Eds.), *Quality and change in teacher education* (p. 39-57). Gewerbestrasse: Springer.

Li, D. (1999). Modernization and teacher education in China. *Teaching and Teacher Education*, *15*(2), 179–92.

Liao, W., Glew, M., & Song, H. (2017). Principles of designing the 'global and future educators program'. *Teacher's Journal (Zhongguo Jiaoshi) [Chinese]*(5), 15-19.

Liao, W., & Hu, S. (2017). Chinese teachers' perceptions of academically oriented teacher preparation. *Journal of Education for Teaching*, *43*(5), 628-633. doi: 10.1080/02607476.2017.1355084

Liao, W., & Yuan, R. (2017). Understand an emerging "failure" of an equality-oriented teacher policy in China: A job search perspective. *International Journal of Educational Research*, *81*, 71 - 82. doi: https://doi.org/10.1016/j.ijer.2016.11.002

Liu, J. (2017). A review, reflection and prospect of the implementation of the specially contracted teachers plan over the past 10 years (in Chinese). *Modern Education Management*(2), 628-633.

Liu, Y., & Fang, Y. (2009). Basic education reform in China: globalization with Chinese characteristics. *Asia Pacific Journal of Education*, *29*(4), 407-412. doi: 10.1080/02188790903312714

McCandless, B. (2012). The use and misuse of metaphor in education and education reform. *Education*, *132*(3), 538-547.

Ministry of Education. (1986). *People's Republic of China Law on Compulsory Education.* Beijing: Ministry of Education. Retrieved from http://www.npc.gov.cn/wxzl/

gongbao/2000-12/06/content_5004469.htm

Ministry of Education. (2006). *The Plan of Implementing the Special Teaching Position Programs in Compulsory Education Rural Schools.* Beijing: Ministry of Education. Retrieved from http://www.moe.gov.cn/srcsite/A10/s7058/200605/t20060515_81624.html

Ministry of Education. (2007). *The Guidelines for Implementing Free Teacher Education Programs at the Ministry of Education Affiliated Normal Universities (Trial).* Beijing: Ministry of Education. Retrieved from http://www.gov.cn/zwgk/2007-05/14/content_614039.htm

Ministry of Education. (2010). *The Notification of Implementing the National Professional Development Plan for Primary and Secondary Teachers.* Beijing: Ministry of Education. Retrieved from http://www.gov.cn/zwgk/2010-06/30/content_1642031.htm

Ministry of Education. (2011). *Teacher Education Curriculum Standards (Trial).* Beijing: Ministry of Education. Retrieved from http://jsjy.110161.com/upload/file/20170605/20170605153100_3576.pdf

Ministry of Education. (2012). *Professional Standards for Preschool, Elementary, and Secondary School Teachers (Trial).* Beijing: Ministry of Education. Retrieved from http://www.gov.cn/zwgk/2012-09/14/content_2224534.htm

Ministry of Education. (2015). *The Achievements of the National Professional Development Plan after 5-Year Implementation.* Beijing: Ministry of Education. Retrieved from http://www.moe.gov.cn/jyb_xwfb/s3165/201511/t20151117_219522.html

Paine, L. (1995). Teacher education in search of a metaphor: Defining the relationship between teachers, teaching and the state in China. In B. Lindsay & M. Ginsburg (Eds.), *The political dimension in teacher education: Comparative perspectives on policy formation, socialization and society* (p. 76-98). London: Falmer Press.

Pan, S. (2013). Confucius institute project: China's cultural diplomacy and soft power projection. *Asian Education and Development Studies*, *2*(1), 22-33. doi: 10.1108/20463161311297608

Pettis, M. (2014). *The four stages of Chinese growth.* Carnegie Endowment for International Peace. Retrieved from http://carnegieendowment.org/chinafinancialmarkets/55947

Shi, Z. (2001). *Knowledge transformation and education reform.* Beijing: Educational Science Publishing House.

Strong, M. (2011). *The highly qualified teacher: What is teacher quality and how do we*

measure it? New York: Teachers College Press.

Swaine, M. D. (2015). Xi jinping on chinese foreign relations: The governance of China and Chinese commentary. *China Leadership Monitor*(48), 1-13.

Wang, D., & Gao, M. (2013). Educational equality or social mobility: The value conflict between preservice teachers and the free teacher education program in China. *Teaching and Teacher Education*, *32*, 66 - 74. doi: https://doi.org/10.1016/j.tate.2013.01.008

Whyte, M. K. (2010). *One country, two societies: Rural-urban inequality in contemporary China.* Harvard University Press.

Wong, J., & Zheng, Y. (2001). *The nanxun legacy and China's development in the post-Deng era.* Singapore: World Scientific.

World Bank. (2017). *The World Bank GDP Growth Dataset.* World Bank. Washington, D.C.. Retrieved from https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=CN

Wu, B. (2006, October 20). *The guidelines for constructing a socialistic harmonious society (in Chinese).* People's Daily. Retrieved from http://cpc.people.com.cn/GB/64093/64094/4937731.html

Wu, L. (2013). Cultural revolution. In D. A. Snow, D. D. Porta, B. Klandermans, & D. McAdam (Eds.), *The wiley-blackwell encyclopedia of social and political movements* (p. 305-311). Oxford: Wiley.

Wu, Y. (2016). On the dynamic development and national differences of the need of Chinese teachers as a second language. *Educational Research (Chinese)*(11), 144-149.

Xie, Y., & Zhou, X. (2014). Income inequality in today's China. *Proceedings of the National Academy of Sciences.* doi: 10.1073/pnas.1403158111

Xue, E., & Li, T. (2015). Policy evaluation of urban and rural balanced allocation of compulsory education teaching staff. *Educational Research (Chinese)*(8), 65-73.

Yang, R. (2004). Toward massification: Higher education development in the People's Republic of China since 1949. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (p. 311-374). Dordrecht: Springer.

Zhou, J. (2014). Teacher education changes in China: 1974–2014. *Journal of Education for Teaching*, *40*(5), 507–523.

Zhou, J., & Reed, L. (2005). Chinese government documents on teacher education since the 1980s. *Journal of Education for Teaching*, *31*(3), 201-213. doi: 10.1080/02607470500169030

Zhou, Y., & Wang, D. (2016). Understanding the constraints on the supply of public education to the migrant population in China: Evidence from Shanghai. *Journal of Contemporary China*, *100*(25), 563-578. doi: 10.1080/10670564.2015.1132957

Zhu, X., & Han, X. (2006). Reconstruction of the teacher education system in China. *International Education Journal*, *7*(1), 66–73.

Zhu, X., & Hu, Y. (2009). *China's education reform in the past three decades: The volume on teacher education (in Chinese)*. Beijing: Beijing Normal University Press.

Zhu, X., & Li, Q. (2011). *The research on teacher education standards system (in Chinese)*. Beijing Normal University Press.