

Characterizing reform and change of teacher education in China in the new era

Zhu Yiming¹ and Fang YanPing²

¹East China Normal University, ²Nanyang Technological University, Singapore

Starting with a brief overview of the history of teacher education development in China, this paper aims to shed light on a few major positive characteristics in the reform and change of teacher education in China occurred in the past decade. These include changing role of the central government, innovations in curriculum and instruction in pre-service teacher education and strengthening of in-service teacher development. Challenges and issues faced by the reform and development of teacher education in China will be discussed in the final part of the paper together with a brief discussion on directions for the future.

Key words: China, Pre- and In-service Teacher Education, Reform and Innovation, Role of the Central Government, Curriculum and Instruction

Introduction

Teacher education in China emerged as the country was driving for modernization at the turning of the last century. For more than a hundred years, it has witnessed growths as it endeavored to meet the educational demands of different times; it has also undergone stagnations or even breakdowns in the middle of historical turmoil. Its unique position in supporting the world's largest schooling system as well as the challenges it has faced while doing so, particularly at the beginning of a new century, are important sources of knowledge building in teacher education worldwide. Nevertheless, there has been very limited research so far examining the history, growth patterns, and practices of teacher education in China. In this paper, we aim to contribute to the filling of this gap by depicting a few key features of reform and innovations in the past decade or so. We cast these features in positive lights to showcase the ambitious efforts made by the Chinese government and the teacher education institutions in keeping abreast with new trends and practices globally.

To help readers make sense of the reform and change efforts, we start with a brief historical overview of teacher education in China in terms of its growth and structure as it takes upon the missions set by national development during each important historical stage. We then illustrate, with concrete cases, the changing role of the central government from direct control to guidance based on legislation and expert consultation. Coming up next, we cite examples to demonstrate innovations

in curriculum development and instructional practices in restructuring pre-service teacher education and strengthening its in-service teacher development. We conclude by discussing a few major issues and challenges faced by the reform and development of teacher education in China towards the new era and pointing out the important position held by China's teacher education in building knowledge of theory and practice of teacher education globally.

Characterizing the reform and change in teacher education

1. *Historical overview of changes in the development of teacher education in China*

The founding of teacher education in China dates back to 1897 with the establishing of Nanyang Gongxue (a Higher Public School) in Shanghai (predecessor of Jiaotong University) and then Jinshi Daxuetang, the Imperial University of Peking (predecessor of Beijing University) in 1898, with teacher training sections. In 1904, a formal independent system for teacher education was set up. Although the higher learning followed the famous line of "Chinese learning for fundamental principles and Western learning for practical use," the basic institutional management, such as student recruitment, curricular content, length of study and goals of training was modeled after Japanese teacher education system, which in turn, was based in a large part on the French model of teacher training. (Gopinathan et al, 2008) The institutions were tiered on two levels – the intermediate and advanced schools geared towards training teachers for primary and junior secondary education. These institutions were later turned into normal schools and normal universities.

By 1920s, with tremendous changes in the entire Chinese society for modernization, the teacher education system turned to learn and borrow from the West, mainly the U.S. This had a lot to do with the return of overseas students who were sent by the government to study in the U.S. In 1922, the public school system was changed to a 6-3-3 model similar to the U.S. model (with 6 years of schooling at the primary level, 3 years at junior secondary and 3 year at the senior secondary). Along with this new system came the diversification of teacher education in varieties and running models, such as normal schools, specialized teacher training colleges, normal colleges and normal universities serving the purposes of different levels of schooling. Thus, a relatively complete teacher education system was formed.

With the founding of the People's Republic of China in 1949, the development of teacher education entered a new stage. A new direction for social change was to learn from the socialist Soviet Union, with no exception for teacher education. (Cheng & Zhu, 2002). To meet the huge demand to popularize education, the Soviet model and experience was borrowed to further consolidate a clearly defined three-tier teacher training system while keeping the independent teacher education institutions that had existed before. The most dramatic change was that all the teacher education institutions became public ownership under the administration of the central government, including the writing and issuing of teaching programs, content and various institutional norms. Newly trained beginning teachers were assigned teaching posts by the government in a uniform manner. Under a highly centralized and planned system, teacher education in China has, for a long time, been run as "self contained or closed" system (Wang, 2007, p.3-5).

Thirty years later in 1979, with China's opening to the outside world, the educational enterprise embraced a lively new age of reform and development. Law

for Compulsory Education was issued in 1986, which legally mandated the building of an adequately trained, supplied and stable teaching force. This indicated a turning point in which the development of teacher education in China was attached with unprecedented importance. The Chinese government stated that teacher education is a strategic measure and the “machine tool” for educational development. The government increased financial investment, consolidated the infrastructure of teacher training institutions, laid emphasis on training a more capable teaching and research staff in teacher education institutions by encouraging educational research, curriculum development and instructional reform to raise the quality of pre-service students and the quality of training. Scholarships were provided for students entering teacher education institutions and the recruited students were contracted to teach in schools that are pre-designated for them after graduation to meet the demands for teachers in different regions. In-service training for teachers was mounted in large scales and the schools for continuing education for teachers in cities and counties were either reinstated or opened. (Cheng & Zhu, 2002)

By 1995, there were 236 Normal Universities, with an enrolment of 583,000; 987 intermediate teacher training normal schools with an enrolment of 848,000. For in-service education, there were 242 colleges of education with an enrolment of 214,000 and schools of continuing education for teachers 2031 with an enrolment of 516,000. Together these institutions formed a large, closed and multi-tiered teacher training system across both pre-service and in-service programs. (China Ministry of Education, Teacher Training Department, 1997; Shi & Englert, 2008) (See Figure 1 below for a visual representation of this system.) This teacher education system has not only raised the academic qualification standards of the general teaching contingency but also ensured supply of teachers in demand. By 1980, half (49.8%) of primary school teachers possessed normal school qualifications and above; 12.7% of junior secondary school teachers possessed 3-year college qualifications and above; and 35.9 % of senior secondary school teachers possessed 4-year undergraduate qualifications and above. (China MOE Teacher Education Department, 1997)



Figure 1. Structure of Teacher Education System in China (China Ministry of Education, 2000, pp.23)

As China reached its goals for basically universalizing nine-year compulsory education in year 2000, the structure and social demand for education have changed with rapid expansion of education. The nation, the society and the primary and secondary schools have placed higher expectations on teachers and the traditional teacher training system has been regarded as falling short in keeping up with the demand. For example, teachers trained by normal schools were regarded as low standards and the normal universities as the only source of supply for trained teachers were regarded as being too uniform. Thus, raising the level of accreditation of training institutions, diversifying the education of new teachers and strengthening the in-service training have become the major calls for reform faced by China's teacher education at the turning of the new century. In the meantime, during the transition from planned to market economy, the teacher training institutions, particularly the normal universities also faced opportunity for finding alternative models for their own development. Entering the new century, teacher education system in China has broken its traditional independent system and moved to a higher education of teacher education. The intermediate normal schools quickly disappeared because of mergers or their conversion into secondary or vocational schools. "Consequently, the monopoly institutions of teacher education used to have in the past half century has been replaced and is gone forever" (Shi & Englert, 2008, pp.349). By 2009, there were only 189 normal universities or colleges. In fact, these institutions, unlike before, do not just provide teacher education programs but also run programs similar to other comprehensive universities.

Table 1 below presents the most update statistics of current development of basic education and teacher qualifications – it not only demonstrates the huge scale of basic education system in China but also remarkably improved teacher quality in general achieved in the past thirty years.

Table 1. Statistics of students and teachers of compulsory education in China in 2010

Level	Indicators	Statistical information
Primary school	School-age children net school attendance	99.7%
	Total enrolment	99.407 million
	Number of full time teachers	5.617 million
	Student-teacher ratio	17.7
	Teachers meeting required qualifications	99.5%
	Teachers having qualifications one level higher than required	78.3%
Junior secondary schools	Gross school-attendance	100.1%
	Total enrolment	52.793 million
	Number of full time teachers	3.522 million
	Student-teacher ratio	15.0
	Teachers meeting required qualifications	98.7%
	Teachers having qualifications one level higher than required	64.0%
Senior secondary schools	Gross school-attendance	82.5%
	Total enrolment	46.706 million
	Regular senior high school enrolment	24.273 million
	Regular senior high school full time teachers	1.518 million
	Regular senior high school student-teacher ratio	16.0
	Regular senior high full time teachers meeting required qualifications	94.8%

Source: Analytical Report in Brief on the Development of National Education Enterprise. Development and Planning Department, China MOE, April 2011

In 2010, the Chinese government issued its guiding document, Outline of National Mid- and Long-term Educational Reform and Development (2010-2020), leading the Chinese education into the new decade. The outline emphasizes the importance of and requirements for “strengthening the construction of the teaching force”, which spells out the vision of restructuring the teacher education system for the near future. It lays out new policies including “reinforcing teacher education, setting up an open and flexible teacher education system with normal universities and colleges as its main body, involving the participation of comprehensive universities in running teacher education programs, deepening ongoing reforms, innovating modes of training, strengthening the linkages of teaching practice (practicum), heightening moral and ethical education of teachers and knowledge and skills of teaching and raising the overall teacher education quality.” (China MOE, 2010, pp. 52)

2. *Changing role of the central government*

Under the planned economy for thirty years after its founding, the central government had played the dominating role in all areas concerning the development of teacher training, including policy making, planning the size and scale, financing as well as curriculum development and program evaluation. During the transition to market economy, the top-down administrative model met with severe challenges when the administrative power was devolved to the local governments including the educational financing. This has caused widening regional gaps that forced the government to adopt different policies according to the varying local circumstances. How to maintain a balanced development of teacher education across regions has become an imperative issue that determines the roles that the government needs to play.

The regional disparity in educational development in China has been a problem threatening a balanced and sustained social and economic development. The widening gaps between the Eastern and coastal areas and the Western remote and ethnic minority areas, between urban and rural are quite visible in terms of the quality of the teaching force and the demand for new teachers. Table 2 below indicates remarkable differences in teacher qualification structures between urban and rural schools.

Table 2. Proportion of teachers (%) of 9-year compulsory education with qualifications one level higher than required.

Regions	% of Teachers of primary schools (3-year degrees and above)			% of Teachers of junior secondary schools (Undergraduate degrees and above)		
	Urban	Rural	Total	Urban	Rural	Total
Nationwide	92.4	75.4	78.3	82.7	59.4	64.0
East China	93.3	78.0	81.7	86.6	66.0	71.5
Central China	91.6	72.7	75.3	77.5	52.8	57.1
Western China	91.4	75.6	77.5	80.4	59.4	62.5

This regional disparity has remained a focus for key policy agenda of the government throughout the past decade despite of numerous challenges. Since 1997, such measures as cost share and tuition charges have been implemented to boost the development and scale economy of higher education institutions. The scholarship subsidies that had supported pre-service education students with tuition waivers were also abolished and the government was no longer responsible for assigning the graduates to teaching jobs. This deprived the traditional normal universities and colleges of the benefit they had enjoyed both financially and in terms of labor market pressures. In the Action Plan for Revitalizing Education for the 21st Century, a major educational policy document issued in 1998, the government encouraged comprehensive universities to take part in providing teacher education programs to diversify the source of teachers and the quality of training. But the high standard key universities did not show much interest. Into the new century, the normal universities and colleges have quickened reform steps in converting and mounting non-teacher education specializations and align more with comprehensive universities to build competitiveness by diversifying sources of students and increasing the share of their graduates in the labor market. Moreover, influenced by market economy, many high quality college students do not want to take teaching as a job and even an increasing number of pre-service students are not willing to be teachers after finishing college, not to mention going to teach in Western China and village schools(Wang & Gao, in press). This threatens both teacher education programs and the general teaching contingency in terms of sources of enrolment and adequate entrants into teaching. All these have directly weakened the teacher education system at large.

To address these pressing issues, the Chinese government has been changing its roles in teacher education in the following major dimensions:

First, rebuilding the image of the importance of teacher education. Since 2007, tuition waiver has been resumed in the six key national normal universities under the direct administration and financing of the central government to attract high quality students to enroll in teacher education programs and encourage them to take teaching upon graduation. Statistics shows that in the past four years, the six universities have trained 46,000 pre-service students and by 2011, more than 90 percent of these students went to teach in Western China (Zhu, 2006). Led by the exemplary models of these normal universities, more provinces have started to adopt tuition waiving policies for entrants into pre-service programs, which has stabilized the construction of the teacher education system in many ways. In June 2011, Premier Wen Jiabao attended the graduation ceremony of students graduated under the tuition waiving policy in Beijing Normal University (http://news.xinhuanet.com/politics/2011-06/19/c_121555211.htm), which again attested to the importance attached by the government to teacher education.

Second, reform the traditional bureaucratic administrative approaches. China Ministry of Education (MOE) has gradually been reforming its administrative role and changing it from direct policy manipulation to guiding by developing professional standards. Since 2008, China MOE, in collaboration with the World Bank, initiated development of standards for primary and secondary school teachers, curriculum standards for teacher education programs, accreditation standards for teacher education institutions and quality of programs. This work has been progressing well. It is believed that a system of teacher education administered based on professional standards will be one that encourages innovations and is both

effective and sustainable in the long run. In 2002 and 2003, China MOE established consultation organs for teacher education, such as “Expert Committee for Teacher Education,” “Expert Committee for ICT in Teacher Education,” and “Expert Committee for Teacher Education Curriculum Resources.” These Committees are entrusted to conduct research, consultancy and other services on issues and problems faced by teacher education in general in order to make the policy making process both democratic and based on scientific research.

“Teacher Education Expert Committee” is commissioned to conduct investigation and research in national teacher education development based on MOE’s policies and provide consultation regarding institutional setup, provision of specializations, curriculum reform and teacher qualifications. “Expert Committee for ICT in Teacher Education” is commissioned by Teacher Education Department of China MOE to guide the information technology and the discipline of education information science, the related curriculum development and teaching. It also guides and promotes information technology and the application and spread of educational technology, research on standards related to ICT in teacher education. “Expert Committee on Teacher Education Curriculum Resources” is responsible to conduct research, plan, guide, consult on and evaluate the building of curriculum resources for teacher education. In recent years, these committees have conducted effective activities and contributed to policy making and reform for teacher education practices.

Third, piloting and innovating through projects. Since 1996, China MOE implemented “Reform Plan for Teacher Education’s Curriculum System and Pedagogical Content” through 213 projects undertaken by more than 50 normal universities and colleges. By the end of 2001, all the projects had been completed and a sizable number of excellent reform outcome emerged. In the national competition of instructional accomplishments in higher education institutions organized by MOE in the same year, 60 projects from the normal universities and colleges received awards, of which 29 fell under this “Reform Plan” launched by MOE, creating a big impact on teacher education reform in China.

In September 2003, China MOE launched “National Teacher Education Network Alliance Plan” with the 6 key normal universities under the direct administration of MOE acting as the main participating institutions. It aims to set up an expanded system of teacher education consisting of the normal universities and colleges, satellite TV network, computer and the Internet and by working together in coordination they co-construct and co-share high quality teacher education resources. The network covers both urban and rural areas of China in particular, providing good quality learning and training resources for the primary and secondary school teachers in the vast rural areas. The result showed that the work around this Plan has not only helped in-service training of various levels and types but also the pre-service education and its curriculum resources. (Paine & Fang, 2006)

In 2007, MOE also implemented another major project, which was entitled, “Undergraduate Teaching Quality and Instructional Reform”. It was targeted at different levels of work aimed at raising the quality of undergraduate education as a whole, including teacher education. From macro to more micro dimensions, the Project examined how to adjust the structure of specializations and their accreditation, development of curriculum and teaching material and how to co-share the resources; how to reform and innovate instructional practice and models of talent education; how to build a more capable higher education teaching faculty

community and how to share and publicize teaching information and teaching evaluation statistics. It also matched higher education institutions in the big cities with those in Western China to provide teaching support. Sponsored under this Project, 14,345 high quality courses were developed across China, of which 600 were in teacher education.

The above three dimensions of major work carried out by the Chinese government in recent years have demonstrated the effective shifting rather than limiting its role, from direct central administrative control to making decisions and basing the process on research, advisory services by experts and investing in big projects in order to mobilize and share resources and outcomes. The government has not only recast teacher education's original importance but also taken fundamental and innovative measures to build its capacity and resources with tangible outcome.

3. *Innovations in pre-service education*

With the increasing expectations and demand for raising the professional quality of primary and secondary teachers, particularly under the deepening of the national curriculum reform for primary and secondary education initiated by the end of last century, teacher education institutions have been made to reform and innovate in both curriculum and teaching. In fact, many of them have taken the initiative in actively coming up with their own innovations to meet the demand. The following showcases a few of the representative practices or strategies.

First, building students' social and leadership skills through extracurricular activities. While implementing the government's educational and pedagogical reform projects, the transitioning institutions of teacher education have sought to undertake their own curriculum and pedagogical reforms geared towards the demand for "future teachers". Take for example, East China Normal University, which is one of the strongest teacher education institutions. While continuing to focus on the traditional curriculum and pedagogical provisions, it has started to pay more attention to student activities beyond the traditional provisions. Since 2007, ECNU initiated a reform plan that aims to enhance the pre-service students' professional skills and cultivate high quality future teachers. Meng Xiancheng Academy, named after the first President of ECNU, has been set up to provide activity based learning opportunities for students to hone up their basic social and leadership skills and become more holistically developed future teachers who are competitive in the job market. In addition, various classes and clubs have been opened to cultivate students' good taste in art, speech making, singing in choirs and practicing journalist and communication skills. Competitions for images of future teachers were organized to encourage students to think and pursue the qualities that an excellent future teacher should possess. Such activity-based training has enriched the curriculum and classroom teaching in teacher education programs and enhanced their quality by aiming at educating well-rounded future teachers. Facing more competition in the job market, other normal universities have also started similar activities.

Second, restructuring of the teacher education provision and curriculum. For a long time in China, the teacher education programs have consisted of courses oriented towards three main areas, namely, those focusing on disciplinary knowledge, pedagogical knowledge and teaching practice respectively. How to coordinate the three areas of courses well has remained the focus of discussion around reform in teacher education curriculum and pedagogy. (Gao, 2000)

As higher professional standards are required of future teachers globally, key national normal universities have experimented with restructuring the curriculum provision for teacher education program offerings. North-East China Normal University has changed its curriculum into three broad modules: liberal arts, pedagogy in a special discipline, and teacher professional education. The liberal arts courses include humanities, social sciences, natural sciences, thinking and brain science and art-related courses. The university proposed a model of talent education of “3+0.5+0.5+2”, a so-called “program of training educationists” (http://www.china.com.cn/news/txt/2008-04/25/content_15011468.htm). The first three years offer foundational courses, followed by a year of practice and reflection (a half-year education practice and another half-year of reflective learning) with the final two years offering post-graduate study. This model, by seeking to bridge the undergraduate and post-graduate education, is oriented towards developing students’ broad academic visions, ability to solve difficult problems in teaching and conduct research on basic education and leading, by demonstration, secondary school education and teaching reform. This curriculum model explores the combination of undergraduate with postgraduate education. Similar reform initiatives have also been conducted in other normal universities, such as the 4+2 model of Beijing Normal and 3+3 model of Shanghai Normal. Current preservice education in China is provided at the tertiary education level by 3-year specialized colleges, 4-year undergraduate degree studies and post-graduate diploma or coursework.

Third, broadening teaching practice. For pre-service education in China, teaching practice has long been a target of criticisms and source of challenges. The traditional 8-week teaching practice has been criticized as being too short by students while schools find it disrupting or too busy to tend to students teachers coming for practicum. (Fang & Paine, 2000; Paine, Fang & Wilson, 2003) Financing the teaching practice also poses other challenges. In recent years, teacher education institutions have been exploring alternative solutions through experiments. Among them, Practicing as Rural Teachers, a new model developed by Southwest University provides a viable solution.

In the rural areas of Southwest China, teacher shortages have been common and classroom teaching has been of low quality (Sargent & Hannum, 2009). Beginning teachers are unwilling to work in poorly facilitated rural schools. After much piloting, in 2006, Southwest University established practicum schools in rural areas where their pre-service students are sent for teaching practice guided by the faculty field instructors. Since then these schools have become long-term stable bases for the university’s teaching practice. In the rural schools, the student teachers spend one semester to teach their own classes focusing on the following tasks: 1) Planning and observing lessons, doing trial lessons and evaluating teaching, tutoring students after class and marking student work. They teach 4-15 hours per week. 2) Taking charge of the classes they teach by managing students and organizing class activities as class directors or homeroom teachers. 3) Conducting educational research which is combined with the specifics of their disciplinary areas and observing the schools’ needs and characteristics to identify and pursue a research topic of their own interest. 4) Assisting the practicum schools’ education and teaching reform initiatives. They are encouraged to provide workshops to the school’s teaching staff related to their own subject areas, train teachers on using ICT in teaching, and develop teaching kit and repair broken facilities. 5) They also

participate in the local communities' culture, science and technology promotion activities. (<http://jwc.swu.edu.cn/article.php?articleid=946>)

This type of teaching practice helps shorten the transition needed for pre-service teachers to formally enter teaching by combining pre-service training with new teacher induction and, as a result, it strengthens both teaching practice and the induction into real school and actual classroom teaching. This practicum model shows a university taking initiatives in serving for rural schools. It enhances the school-university partnership and by supporting the reform and experiment in the rural schools, it promotes mutual development. Therefore, it has been recognized by China MOE and welcomed by rural primary and secondary schools. Such curriculum and pedagogical reforms have, in recent years, both raised pre-service teachers' academic and practical capabilities and their overall quality.

4. *Strengthening in-service teacher training.*

Large scale on-the-job training for elementary and secondary school teachers started in China at the end of 1970s when education was being resumed and rebuilt after the traumatic disruption induced by a whole decade of Cultural Revolution. Many of the teachers were not qualified enough to teach and schools were poorly staffed urgently needing a large number of new teachers. Aiming at raising the quality of in-service teachers, teacher refresher schools and district and city level colleges of education were set up across the country with the formal in charge of training preschool and primary school teachers on the job and the later responsible for training secondary school teachers on the job. Since mid-1990s, with educational development moving from quantity to quality of the teaching contingent, the notion of simultaneously stressing the development of pre- and in-service education has increasingly been recognized. So far, in-service education has become a fundamental and significant part of educational reform and development in China, with its own remarkable features. We highlight three of the major features in the following:

First, dramatic institutional transformations for in-service teacher education. As mentioned earlier in Figure 1, in-service teacher education was mainly provided by intermediate normal schools and colleges of education at municipal and district levels. For more than a decade until early 1990s, in-service education in China had been dedicated to qualification training to help the large amount of unqualified teachers meet required qualification standards while upgrading the qualifications of the teachers who met the standards. Since 1990s, with qualifications of teachers having generally been brought up to required levels and driven by the quickening educational reform and development, continued education for teachers has shifted its focus to helping teachers raise the educational qualifications and instructional quality. This led to the quick disappearance of normal schools that traditionally trained elementary school teachers and merger of the colleges of education for in-service education at the district and city levels into the normal universities.

By late 1990s and early 2000s, the Chinese government called for an intensive training for all teachers and school administrators in 3-5 years to meet the demand for national educational and curriculum reform, thus placing ever increasing emphasis on continuing education. (Guo, 2005) The new demand by teachers for their continuing education has challenged the adequacy and quality of traditional in-service provision institutions (such as refresher schools and colleges of education at city and district levels) and thus the colleges of educations at city level were merged into normal universities or colleges to become schools for adult

education. (Shi & Englert, 2008) For instance, Shanghai Municipal College of Education was merged into East China University to become its affiliated School of Adult Education, which has in effect strengthened the in-service teacher professional education. On the other end, however, the teacher refresher schools at the county level have been consolidated with new roles and functions to engage in teacher professional development related administration, research, service, development and use of educational information resources demanded by the local communities, townships and rural villages. These still independently run teacher training institutions at the county level continue to play indispensable roles in providing continuing education for teachers in the rural areas.

Second, school-based model of teacher development. In-service training courses offered in city or district colleges of education used to be the main component of on-the-job training for teachers. Time conflict of teachers at work and the weak connection of the content of training with real daily practice have been two of the major complaints of teacher participants in general. (Paine & Fang, 2006) In response, in-service teacher development in China has become increasingly school-based with schools taking ownership of the professional development for their own staff. Every school needs to work out its own teacher development plan for each semester and organize their own teacher learning programs and teaching research activities. It has to build a professional learning and training dossier for each individual teacher as a basis for staff appraisal and needs to be regularly checked for review by district education bureaus.

Among different models of school-based teacher development, the school-university partnership model in the form of professional development schools represented a new and viable exploration. Inspired by the US PDS model popular in the 1990s introduced through the Holmes Report (Ding, 2001), this partnership model is different from the PDS in that the focus was not on pre-service school-based teaching practice but on strengthening the development of in-service teachers in teaching, research and professional learning. Student teachers are inducted into teacher learning communities in schools where teaching, action research and professional learning are combined. Initiated by Beijing Capital Normal University in 2001 (Sun & Zhao, 2004; Xu, 2009; Wang, 2002) and spread to many places in China, professional development schools aim to build “teacher-centered form of in-service teacher training in which emphasis is placed upon enabling participants to increase their confidence in and experience of SBCD (school-based curriculum development)” (Xu, 2009, p. 51) In this way, school-based teacher development has combined teaching, research and teacher professional development into one entity. (Wang, 2007)

Third, online teacher development model. With rapid development of information technology and its infrastructure in China, online learning has become an important option for elementary and secondary school teachers. More recently, China MOE organized a series of online training activities, including those for principals, teacher leaders, class directors (homeroom teachers) and new curriculum training. The “National Plan for Teacher Education Network Alliance” mentioned earlier has a major task to develop high quality teacher education resources to serve for the need of online teacher continuing education. Currently, this Alliance consists of 14 members, of which 9 are normal universities including the 6 national key normal universities. In 2011, 7 of the institutions became national sites for online learning for teachers recommended by China MOE.

In the meantime, a number of websites have been specially developed to provide online teacher development for teachers, including “National Net for Teacher Continuing Education (www.teacher.com.cn), “China Teacher Research and Learning Net (www.teacherclub.com.cn), “One-century Talent Cultivation Net” (www.edu12.com.cn), “Open Distance Education Center” (www.open.com.cn) and “New Thinking Net” (www.cersp.com), among others. These network and websites have developed broad collaborative relationships with local education administrations and schools to develop and provide relevant online learning and training programs as part of the “National Level Training Plan for Elementary and Secondary School Teachers” (China MOE, 1999). In addition, local governments have also established their own teacher education websites or teacher training online platforms to provide resources and courses for teachers. China MOE has placed remarkable importance on online learning and training. Information technology has become one of the most important tools for teacher continuing education.

Conclusion and discussion: Issues and challenges facing teacher education in China

In the past decade, numerous remarkable positive changes have taken place in the teacher education system in China. A number of representative innovations and effective models have emerged. In view of the new trend of social economic development, particularly the new demand for reform and change, teacher education in China appears to have a long and arduous journey ahead. Particular attention has to be given to address the following four dimensions of the challenges.

First, challenges from a diverse society in transition. China has been experiencing a sharp social transition and rapid economic expansion with widening social stratification and recognition of multiple values and opportunities to develop people’s individuality. These diversifications have made the society to have a stronger desire to choose the type of education they want. Therefore, schools need to meet increasingly diverse demands for education. This has to start with teachers. In both pre- and in-service education, multiple perspectives of thinking and methods in education need to be part of the programs and more importantly, diverse varieties of teachers have to be produced. In reality, uniformity is found not only in the programs and variety of teachers in general but also in the goals, content, methods and evaluation. Emphasis on unity, common norms, uniformity still characterizes current teacher education in China. Therefore, building diversity and multiplicity into teacher education should constitute one of the main directions for reform and change.

Second, issues around the relationship between the government, the society and the teacher education institutions. In the National Outline of Mid- and Long-term Educational Reform and Development Plan, 2010-2020, the government clearly states the need to build up-to-date educational institutions and reform the administrative system to construct new relationships between and among the government, the society and the schools. Changes in the government roles, and removing the pure administrative dimensions of school management, involving the communities and societies in the school management and monitoring are leading initiatives of educational reform and development. Normal universities and colleges responsible for educating future teachers should be distinguished from other comprehensive institutions of higher learning; they are serving the needs of basic

education and not the needs of market and economy. In building the world's largest teaching contingent for basic education, particularly when faced with remarkable regional and urban-rural disparities, the government should play an important role to ensure sustainable provision and upgrade of teachers for basic education. To achieve this, the government needs to give priority to the change and reform of teacher education institutions and build a balanced relationship between the government, society and schools.

Third, issues around inheritance or innovation in the reform and development of teacher education. The present remarkable achievement in educational development in China has a lot to do with an independently established teacher education system. But when teacher shortage is no longer a problem, this independent system has been increasingly questioned. Breaking this independent system by removing higher education institutions of teacher education or in other words, where these institutions are heading to, will be a focus of attention in the coming decade. With time, intermediate normal schools or colleges disappeared and the normal universities and colleges have been moving towards comprehensive universities. While the six key normal universities directly administered by MOE are trying to become research-intensive universities, there is not remarkable follow-up outcome from the comprehensive universities in partaking teacher education encouraged by the government. This situation leaves one to wonder whether the overall capacity of teacher education in China has been enhanced or weakened.

This is not an issue to be dealt with here in this paper. The point is that any reform and change in teacher education in China needs to respect the foundations already laid and seek innovations and development by building upon the current system instead of simply deconstructing and rebuilding. Whether to remove or merge the independent institutions of teacher education or convert them into comprehensive ones is not in and of itself an issue. What is fundamental is how to keep and pass on the culture, traditions and experience during the institutional transitions. Time may well have come to summarize and learn from the tradition and history of teacher education in China to extract and build on successful experience.

Fourth, issues of reform and development of teacher education in China in the context of globalization. Teacher education in China started from learning and borrowing from models and experiences of other countries. Continuing with reform and open to the outside world is still a highlighting feature of social development and national construction. Facing the modernization, the world and the future remains the guiding principle for educational reform and development. Systemic development and institutional innovations still need to feed on the learning and borrowing from those advanced experiences and research in teacher education internationally. Nevertheless, reform and development should reflect the uniqueness, creativity and advancement of China's own teacher education. As a big rising modern country, China also needs to take upon itself the responsibility, obligation and capacity to provide best practice and cases of success to teacher education globally, for instance, in the area of policy making, curriculum development, models of pre- and in-service teacher development and so on. Teacher education in China should develop in dynamic interaction with international practices, which, perhaps, is the new direction for reform and development.

References

- Chen, Y., & Zhu, Y. (2003). *Teacher Education Research*. East China Normal University Press.
- China MOE, Development and Planning Department. (2011). Analytical Report on the Development of National Education Enterprise. April 2011 (Internal circulation).
- China MOE. (2010). Outline of National Mid- and Long-term Educational Reform and Development (2010-2020). People's Education Press.
- China MOE, International Collaboration and Exchange Department (2000). Teacher Education in China (for foreign media and publicity).
- China MOE. (1999). Deepen education reform and promote quality education in an overall manner. Beijing: Higher Education Press, pp. 343
- China MOE, Teacher Education Department. (1997). Compilation of Documents from the First Five National Normal Education Working Meetings. North-East China Normal University Press, p. 183.
- Ding, B. (2001). On reform and innovation in American teacher education – Professional development schools and what we can learn. *Beijing Capital Normal University Bulletin* (Social science edition). Volume 1, 2001.
- Fang, Y.P., & Paine, L.W. (2000). Challenges and dilemmas in a period of reform: Pre-service mathematics teacher education in Shanghai, China. *Mathematics Educator*, 5(1/2) 32-67.
- Gao, D. (2000). (Ed.) *Research and Practice in the Curriculum of Normal Universities and Colleges*. Tianjin People's Press.
- Gopinathan, S., Tan, S., Fang, Y.P., Ponnusamy, L. D, Ramos, C., & Chao, E. (2008). *Transforming Teacher Education: Redefining Professionals for 21st Century Schools*. Singapore: National Institute of Education.
- Guo, S. (2005). Exploring Current Issues in Teacher Education in China. *The Alberta Journal of Educational Research* Vol. 51, No. 1, 69-84
- Paine, L.W., & Fang, Y.P. (2006). Reform as hybrid model of teaching and teacher development in China. *International Journal for Education Research*, 45(4-5), 279-289.
- Paine, L.W., Fang, Y.P., & Wilson, S. (2003). Entering a culture of teaching: Teacher induction in Shanghai. In E. Britton, L. Paine, D. Pimm, & S. Raizen, *Comprehensive teacher induction: Systems for early career learning* (pp. 20-82). Dordrecht: Kluwer Academic Publishers.
- Sargent, T., & Hannum, E. (2009). Doing More with Less: Teacher Professional Learning Communities in Resource-Constrained Primary Schools in Rural China. Retrieved in October, 2011 at http://repository.upenn.edu/gansu_papers/14.
- Shi, X., & Englert, P.A.J. (2008). Reform of Teacher Education in China, *Journal of Education for Teaching*, Volume 34, Issue 4, 2008, pp. 347 – 359.
- Sun, Y., & Zhao, M. (2004). Teacher professional development schools: Exploration, experience and learning. *Research in Teacher Education*, Volume 1, 2004.
- Wang, C. (2002). Basic thinking for building teacher development schools. *Teacher Training for Elementary and Secondary Education*, Vol 5, 2002.
- Wang, D., & Gao, M. (In Press). Social mobility vs. educational equality: The conflict of the Free Teacher Education Program in China.
- Wang, J. (2007). School-based teacher professional development system: one elementary school's practice and its theoretical significance. In Zhou N.Z (Ed.), *Teacher education reform and teacher professional development: International vision and local practice*. East China Normal University Press.

- Wang, J. (2007). Teacher education in China: Current situation, issues and future trends. In Zhou N.Z (Ed.), *Teacher education reform and teacher professional development: International vision and local practice*. East China Normal University Press.
- Xie, A. (2006). Institutional innovation and systematic construction of teacher education in the transformational period. *Frontier of Education in China*. Volum 2, 2006, pp. 201-211.
- Xu, Y. (2009). School-based teacher development through a school-university collaborative project: a case study of a recent initiative in China. *Journal of Curriculum Studies*, Volume 41, Number1, pp. 49 – 66.
- Zhu, Y. (2006). Research on reforms in personnel management regulations for elementary and secondary school teachers. In Ma, Li (Ed.) *National secondary and elementary teacher contingency – Current situation, forecast and countermeasures*. People's Education Press, pp. 151-154.
- Zhu, X., & Han, X. (2006). Reconstruction of the teacher education system in China. *International Education Journal*, Voume 7, No. 1, 2006, pp. 66-73.