

The Role of Chinese Normal Universities in the Professional Development of Teachers

By

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Abstract

The major purpose of the study was to analyze the role of the normal universities in China in the field of teacher professional development. In order to achieve this purpose, the following two questions guided this research:

- 1) What efforts are normal universities in China making in continuing teacher education?
- 2) What are the factors that support or inhibit normal universities in these endeavors?

The research includes case studies of four Chinese normal universities as well as a comparison to the work of universities in Ontario, Canada. In-depth interviews were utilized as the major data collecting method, and document review was used as a supplementary method. The participants included university administrators, university teacher educators and government administrators.

The study outlined the current state of normal universities' work in the field of

in-service teacher education by reviewing the larger policy context around teacher development in China and how it contributes to the development of this work. In addition, the study identified key issues and major challenges normal universities face in taking part in in-service teacher education system.

The study found that government policy on in-service teacher education in China is currently dominating the work of provincial governments and normal universities. The training programs delivered by normal universities are often university-based, intensive teacher learning and result from contracts between universities and either central or provincial governments. Normal universities often feel poorly prepared in terms of institutional structure, promotion standards, and the number of well-qualified teacher training experts. Although willing to take an important position in the overall in-service teacher training system, normal universities lack confidence that they will be given consistent policy and financial support and are unclear about the direction of in-service teacher education reform in the future.

Key findings of this study can be used to inform the role that Chinese Normal Universities might play in in-service teacher education that could lead to higher quality teaching and learning both at the university and school levels.

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Chapter 1: Introduction

Teacher education has long been a centre of attention in the educational world and serves as a major policy lever. In recent years, teacher professional development as an important part of teacher education (Doyle, 1990) has been recognized as one of the most effective means to enhance teachers' professional skills and attitudes, create better schools (Borko & Putnam, 1995) and ultimately improve the learning process as well as student outcomes (Darling-Hammond, 1997; Guskey, 2000). France (1990) has pointed out that effective teacher education is key to teachers' ability to face educational change and handle various socioeconomic conditions inside and outside school. Furthermore, pre-service education provides an important foundation for teachers' professional learning but more professional learning is required throughout a teacher's career as different professional needs emerge and contextual circumstances shift.

In Ontario, professional education has been viewed as one important way to implement major educational reform since the mid 80s (Fullan & Connelly, 1987). The report of the Teacher Education Council of Ontario task force on teacher in-service training (1992) addressed the fact that continuing professional education "is one of the most important elements in the response to pressures exerted on schools to meet the new challenges facing society" (p.3). In China, the Ministry of Education has entrusted educational institutions to draw up clearer standards for further improving teacher professional learning (Fang & Zhu, 2007).

The current formulation of policy and design of teacher preparation and continuing professional development programs embraces the concept of life-long learning and views teacher learning as a continuum rather than consisting of different phases (Craig, Kraft and du Plessis, 1998; Day, 1999; Feiman-Nemser, 2001; Villegas-Reimers, 2003).

Whatever is done in any one phase should be informed and will be influenced by what has been learnt before and what is likely to be learnt later...In other words, when designing opportunities to foster teacher learning and development at any phase, one must keep long-term professional goals in sight while remaining cognizant of what happened in the past. (Schwille, et al., 2007, p.29)

As a result, teacher education in many countries has shifted from a degree-oriented perspective towards a development-oriented perspective (Yan, 2005). During this transformative process, the need for a reconceptualization of the roles of different institutions has become evident and an exploration of the role of the university in professional development is a good starting point for this reconceptualization. The university, as the legitimate provider of initial teacher education today, will no doubt play a key role in this transformative process.

Leithwood, Jantzi and Steinbach (2004) have argued that universities should take on a new role by forming close partnerships with schools and their teacher graduates and helping them identify as well as understand different issues in education at the same time as learning from school teachers to produce advanced programs and materials for teacher training.

This trend of educational change has given rise to a lot of new questions. What do universities need to alter in terms of their approaches to continuing teacher education? What needs to be improved, what needs to be added, and what needs to be removed in

order to achieve a more comprehensive role? How do universities foster a better alignment between initial and continuing teacher education? Should universities become more field-centered in supporting continuing teacher education? To what extent will this conflict with the independent and theory-driven university tradition? And to what extent can we resolve this conflict and turn it into an opportunity for change?

In fact, thinking about the contribution that universities could make to this field is not new. As early as the 1940s, the Commission on Teacher Education of the American Council (Prall & Cushman, 1944) had called for teacher education institutions, especially universities, to get involved in in-service teacher training programs. Rogers (1945) commented that “wide awake schools of education are finding work to do far beyond the bounds of college campuses. Their cooperation with school staff in studying school needs and supplying consultants is a substantial contribution to in-service education” (p.19). In Canada, Fullan (1979) pointed out 30 years ago that universities should regard “greater involvement in in-service as a priority” (p.46).

In the 1970s, Jeffers and McDaniels brought out the idea of a consortium which includes “one or more colleges or universities, one or more school organizations, and one or more professional associations functioning through representatives with authority to act within parameters for their agencies in carrying out specific requirements” (p.26). Johnston (1971) went further to state that universities should take responsibility for coordinating various kinds of continuing teacher education

programs and activities because of their interests. In 1987, Michael Fullan and Michael Connelly authored a paper on Ontario teacher education commissioned by the Teacher Education Review group. The paper made several suggestions including rethinking the role of faculties of education in continuing teacher education.

In recent years, policy makers in many countries have begun to revisit this idea and look for new strategies to bridge the gap and align pre-service teacher education with teacher continuing development. One of the major considerations to achieve this policy goal is to develop and extend the role of universities in teacher education and training. In June, 1999, the third national education conference in China stressed the quality of teacher education and continuing development and clearly pointed out that universities should take more responsibilities in this regard (Zhou & Reed, 2005). As a response to this policy initiative, the principal of Beijing Normal University, Zhong Bingli, in the book, “Study on Transformation of Teacher Education” (Zhong, 1999), emphasized that the key reason for the disparity between our reform ideal and reality lay in the lack of quality teaching. In the near future, the qualifications and degree level of elementary and middle school teachers, he said, must be increased.

Universities should study the trend of the integration of initial teacher education and continuing professional development and not limit their work only to teacher preparation. Continuing teacher learning and development also provides a golden opportunity for universities’ future development (Zhou & Reed, 2005). In 2006, the first forum on teacher training in China was named as “establishing closer connections between universities and schools” (Zhao, et al., 2007, p.37, original in

Chinese).

Nevertheless, much research related to this topic so far has focused on specific examples such as a case-based approach or reflective strategies used in teacher professional learning in schools (Sato, 1992). Systematic discussions concerning the role of universities in teacher development are rarely found in the literature.

Rationale of the study

The reasons for the university to extend its role and take more responsibility for the professional training of teachers can be briefly elaborated as follows.

The call for a better alignment between initial and continuing teacher education

The situation in both China and Ontario has been that colleges and universities are mainly responsible for initial teacher education and local authorities and individual schools are responsible for various in-service activities (Belanger, 1976; Li, 1999; Cui, 2001). There is increasing consensus in the literature that initial teacher education and continuing teacher education cannot be developed further without paying attention to the connections between them. Comprehensive in-service teacher education should include acknowledgment of teachers' prior academic knowledge and explicit understanding about the job while effective pre-service programs should put more emphasis on practical experiences and benefits that students could get from experienced teachers (Amedeker, 2005; Su et al., 2002).

Ethical responsibility

Continuing teacher education falls within the range of teaching and adult learning and research which are the ultimate goals of university education. Participating in continuing teacher education could make university-designed teacher education programs more responsive to the needs of local schools. Furthermore, a university has the expertise needed to ensure the quality of the delivery. Therefore, universities have “an ethical responsibility to assist in fulfilling the purpose of in-service education” (Bottoms, 1975, p.40).

Knowledge exploration

The ever-accelerating generation of educational knowledge suggests that teaching is becoming more and more complex and qualified teachers need to adjust their pedagogical practices for different purposes, student needs and external forces (Gambhir, et al., 2008). The university as the main knowledge producer in education has the resources and expertise relevant to this complexity (Darling-Hammond, 1999). Thus, the university needs to get closer to the profession it serves so as to realize the full potential of the research knowledge base.

Research questions

A thorough investigation of universities’ capacity to provide richer professional development for teachers is crucial to the success of educational reform in the future.

Determining this capacity requires an understanding of the multiple ways in which universities could fit into and share the responsibilities in this field, and of current efforts being made and the factors which foster or constrain these efforts. This study has mainly focused on China, as I had most of my education experience in China before coming to Canada to pursue my graduate studies. Also my own interest in teacher education and the higher education system eventually led me to choose the topic of teacher professional education and to frame my study from this particular perspective. Moreover, my own background made the focus on China a better way to organize the study, and my fluency in Chinese allowed me to read materials, conduct interviews and give feedback to Chinese participants in their first language. Of course, the circumstance of teacher education as well as the teaching and learning strategies it embraces has changed a lot over time. My memory of my own teachers in primary and secondary schools might, in certain degree, become the bias I brought into my study. In order to counteract this bias, I paid a few informal visit to some of my previous teachers before collecting any data and listened to their stories around the changes happened in their work, particularly around in-service teacher training.

This study explored how Chinese normal universities could contribute to teacher professional development and addressed two research questions:

1. What efforts are normal universities in China making in continuing teacher education?
2. What are the factors that support or inhibit normal universities in these endeavors?

Specifically, the study was organized around the following topics:

- The overall organization of teacher professional development
- The current responsibilities of universities in providing teacher professional development;
- The limitations and barriers perceived by administrators in universities to extending and enriching the contribution to the field of teacher professional development;
- The potential of the university to contribute to the field of teacher professional development in the future

This study did not discuss initial teacher education in depth unless it related to continuing teacher education. The focus on Chinese normal universities was due to the important historical features of Chinese normal universities. In the early 1950s, the Chinese higher education system underwent a reorganization process which was largely inspired by the Soviet experience of running higher education institutions. It was not until the end of 1970s, after the introduction of the Four Modernizations policy, that the Chinese government started gradually to move away from the Soviet model for its higher education system (Hayhoe, 1984). In 1985, the central government stated its strategic goal for reforming higher education and suggested the following:

- Eliminating excessive government control over institutions of higher education;
- Reform of enrolment planning and job assignment for graduates from

colleges and universities;

- Reform of the People's grant-in-aid system;
- Changing the 'irrational distribution' of disciplines in and between institutions of higher education (Lin & Yang, 1987).

Nevertheless, to this day, the Chinese higher education system still carries some characteristic features from the Soviet model of the 1950s. Higher education institutions are administered by different levels of governments and through different arrangements. Major institutions can be divided into three categories: comprehensive universities, specialized universities and research institutes mainly concentrating on research. Normal universities belong to the second category and are designated to prepare students for teaching positions at different levels (Lin & Yang, 1987).

In the 1990s, as China's higher education expanded to a mass system, many normal universities wished to rename themselves as comprehensive universities. Some of them did so, while most were required by national government policy to keep the title of "normal university" (Hayhoe, et al., 2011, p.199). However, it should be clarified that some but not all comprehensive universities also have established faculties of education in recent years so that their mission for education overlaps with that of normal universities.

Purposes of the study

It is the intent of this study:

1. to contribute to the thinking about the role of the university in China in the field

of teacher professional development as well as major challenges and concerns in this area;

2. to identify promising new approaches currently adopted by Chinese normal universities to make greater contributions to continuing teacher education in the era of education reform;
3. to shed light on the possibilities of multiple strategies and offer insights to university administrators and faculty members, as well as policy-makers, and develop recommendations for improvement and further research.

Significance of the study

The Chinese teacher education system is currently being transformed from a closed, separated system to an open, integrated one. Normal universities have extended their responsibility from educating secondary school teachers to educating almost all levels of teachers. The job of teacher education has also been taken on by other comprehensive universities outside the old teacher education system (Hayhoe & Li, 2010). The continuation of normal universities in China shows that education as a field has always been given very high status while universities in the West tend to give higher status to specialized knowledge areas such as medicine and law.

Hayhoe (2002) summarized the main contrasts between universities and normal colleges. The university is mainly theory-oriented, divided into specialized disciplines of knowledge, with value neutral approaches to knowledge and a relatively

impersonal environment that respects academic freedom, autonomy, deep understanding and long-term change. On the other hand, the normal college is primarily practice-oriented, fosters integrated learning areas, and fosters morally directive approaches to knowledge with strong mentorship ties between teachers and students. It puts more emphasis on action-oriented and field-based knowledge, and usually is subject to greater state control and accountability requirements than universities.

The reason that I believe normal universities could possibly inherit important values from normal colleges is because those values actually embody traditional academic values in China very well. Teachers in China have always been given a very high and respected social status. Teaching and learning is perceived as an interactive process with an emphasis on the integration of knowledge and practice. Teachers and students tend to enter into strong caring relationships (Hayhoe & Li, 2010).

The call for universities, especially normal universities in China, to support in-service teacher education is quite recent. Therefore various issues concerning this trend of educational change are unfamiliar even to people in the field. The value of this study lies in its effort to investigate the existing situation regarding Chinese normal universities' involvement in in-service teacher education and build a knowledge base for further exploration and improvement. Despite the focus on the Chinese normal universities, there are two levels of a comparative analysis embedded in the study as well.

First, the study used Ontario as a comparative element to help analyze and

understand the case of China. China and Canada represent two different cultural systems, having different social and administrative educational features. Comparative elements of the case of Ontario can provide alternative views about teacher education in general and the participation of universities in particular. This comparison could also reflect issues currently existing in both Western and Eastern teacher education systems.

Chinese researchers have long been interested in developed countries' teacher education reforms, hoping to learn from their valuable experience and adapt it to the Chinese context. The British concept of school-based teacher development and the American model of the Professional Development School (PDS) were already introduced to China early this decade (Zhu, 2001). Comparative analysis of continuing teacher education abroad will undoubtedly be a significant factor in shaping the future of teacher education in China.

Second, comparison between universities and schools underpins the study. The university has been perceived as the ivory tower, having much higher status than schools and differing in its functions. Their very different historical development makes it hard for universities to be effective in continuing teacher development. This somewhat conflicting situation means that the topic of this study is surrounded by various concerns and opinions.

The study selected four Chinese normal universities for data collection and analysis. They are Beijing Normal University, Hebei Normal University, Qufu Normal University and Shanxi Normal University. It was hoped that comparison of the work

of the four normal universities might uncover similar tendencies in their types and choices of in-service teacher education and shed some new light on the current practices of teacher professional education in China.

Definitions of terms

Teacher education has come to be regarded as consisting of three phases, including initial teacher education (pre-service teacher education), induction training and in-service education (James, 1972). Very often in the literature continuing professional development is equated to in-service education. Edelfelt and Lawrence (1975) defined continuing professional development “as any professional development activity that a teacher undertakes singly or with other teachers after receiving her or his initial teaching certificate and after beginning professional practice” (p.1). Similarly, Lowenthal (1981) referred to continuing professional education as “education and training beyond the basic professional degree for license...as training undertaken after completion of that specialized study [to] help professionals apply knowledge and skills they already had or once knew” (p. 519). Linking to continuing professional education’s purpose, Bolam (1982) developed its definition as:

Those education and training activities engaged in by primary and secondary-school teachers and principals, following their initial professional certification, and intended mainly or exclusively to improve their professional knowledge, skills, and attitudes in order that they can educate children more effectively (p.3)

Professional development may take place at any time-either as full-time or as

part-time study-during the professional life of the teacher. It could be systematically planned work over a certain period of time leading to an advanced certificate, diploma, or higher degree; it could also well be study mandated or pursued irregularly without an organizational recognition (Johnston, 1971). It can be initiated by the teacher or the school system, and can also be something that teachers do individually on their own and following their own interests.

From the perspective of learning outcomes, Guskey (2002) has defined teacher professional development as “systematic efforts to bring about change in the classroom practices of teachers, in their attitude and beliefs, and in the learning outcomes of students” (p. 381). Bennett and Fox (1993) took a functionalist perspective and defined continuing professional education as “a technical process to help professionals provide better service to clients” (p.264). Boddard (1992) described teacher professional development as an essential aspect of quality. “It interrelates the needs of the individual teacher with the challenges of the job. The motivation of teachers to remain learners...throughout their career underpins professional accountability and ensures responsibility” (pp. 80-81).

Sometimes researchers make a clear distinction between in-service education and professional development. For instance, Orrange and Van Ryn (1975) defined in-service education from what he called a “narrow but entirely workable” perspective:

...in-service education is that portion of professional development that should be publicly supported and includes a program of systematically designed activities planned to increase the competencies—knowledge, skills, and attitudes—needed by school personnel in the performance of their assigned responsibilities. (p.42)

There are also debates and preferences among the concepts of learning, development, and training. For instance, Hargreaves (1995) perceived professional learning as a better expression than professional development, because it emphasizes individual learning including informal and formal forms. In fact, research has repeatedly proven that teachers' involvement in deciding and even designing professional learning places extra value on the learning process and has a better chance to foster change (Guskey, 1986).

However, in many definitions, these terms and concepts are interchangeable (e.g. Edelfelt & Johnson, 1975) and all cover a wide range of forms and characteristics of provision (Ontario Ministry of Education, 1994). In this study, the term “continuing teacher education” is synonymous with “in-service teacher education”, “staff development” or “teacher professional development” or “training”.

Chapter 2: Literature Review

This chapter briefly synthesizes the important literature in the field of teacher professional education including teacher knowledge and teacher learning as well as the purposes and effective features of teacher professional education. The conceptual framework of the study is also presented in this chapter.

Teacher knowledge and teacher learning

Teacher knowledge

Any study about teacher education in general and teacher professional development in particular cannot avoid discussion around teacher knowledge and teacher learning. These issues are imperative and fundamental (Rowe, 2007) for exploring what Borko (2004) called “serious unsolved problem[s]” in current professional development research. However, discussions related to these issues are always problematic in the literature. Wilson and Berne (1999) maintained that what constitutes teacher knowledge needs to be “identified, conceptualized and assessed” (p. 203) in order to gain a background understanding for what constitutes effective teacher learning that is most likely to bring about sustainable educational change.

Schon (1984) argued that professional knowledge includes two aspects. One

aspect refers “non-problematically to instrumental problems” (p.39) while the other aspect is related to the ability of “thinking like a [professional educator]...students will learn relevant facts and operations but will also learn the forms of inquiry by which competent practitioners reason their way, in problematic instance, to [a] clear connection between general knowledge and particular cases” (p. 39). Munby (1996) held the view that “for learning to teach, [the] important thing one needs to know cannot be told by anyone else; only the experience of being a teacher provides this knowledge” (p. 133). Along the same lines, many researchers have approached these issues by distinguishing teacher tacit knowledge from teacher explicit knowledge. Schon (1995) theorized tacit knowledge as “implicit in our pattern of action and in our feel for the stuff with which we are dealing” (p. 29). However, to refine and strengthen teacher tacit knowledge does not mean that only teachers’ own knowledge counts. It requires teachers “systemically inquiring into practice, consulting outside expertise, reflecting on what they had learned from experience, and engaging in searching conversations with one another” (Wood, 2007, p.290).

Darling-Hammond (1999) approached the issue by discussing what kind of knowledge teachers need. First, teachers need to learn more deeply about the subject they teach. Second, teachers need to learn more about learning. “Teachers need to think about what it means to learn different kinds of material for different purposes and how to decide which kinds of learning are most necessary in different contexts” (p.92). In addition, teachers need to learn teaching pedagogies as well as what kind of pedagogy is suitable for what students. Also, teachers need to learn about curriculum

and new technologies that are used in education in general and instruction in particular. Lastly, teachers need to be able to reflect on and analyze their learning and practice. Shulman (1987) emphasized the importance of teacher pedagogical content knowledge and described it as a “special amalgam of content that is uniquely the province of teachers” (p. 8).

Connelly and Clandinin (2000) have tended to solve this problem by distinguishing knowledge for teachers from teacher knowledge and have explained that knowledge for teachers refers to knowledge taught to teachers while teacher knowledge refers to what teachers know from their previous life experience. Fenstermacher (1994) provided a slightly different definition for teacher knowledge that included the knowledge and skills formally taught and informal knowledge relevant to teaching and learning. In this view, teacher knowledge refers to “everything that a teacher brings to bear on any particular situation” (Xu & Connelly, 2008, p.219). Cochran-Smith and Lytle (1999) theorized teacher knowledge into three different conceptualizations “knowledge-for-practice”, “knowledge-in-practice” and “knowledge-of-practice”.

Knowledge-for-practice is usually viewed as formal knowledge that is produced primarily by university researchers and educators. Research knowledge is a legitimate knowledge source for teacher education and training. Based upon this perspective, knowledge circulating among teachers falls under the category of “experience” or is considered intuitive (Huberman, 1996). Even after these experiences are written into school rules and policies, in fact, they are seldom considered to be a legitimate

knowledge source for they are not promoted to a more evidence-based, or theory-based level. Even if researchers start with practical concerns and teacher personal experiences in mind, different ways of framing the problems, various semantic frameworks and all the complexity involved in academic research will soon swamp the initial intention and research will drift far away from practitioners. Shulman (1987) questioned more than two decades ago the authenticity of teacher personal and practical experiences after they are codified into academic literature. A common criticism concerning this perspective is that teachers do not share the academic researchers' enthusiasm for rigorous research while academic researchers are not able to provide straightforward answers to questions that are of concern to teachers (Habermas, 1971).

The perspective of knowledge-in-practice gives more weight to what we called personal experiences or intuitive knowledge earlier because it assumes that "teaching is, to a great extent, an uncertain and spontaneous craft situated and constructed in response to the particularities of everyday life in school and classrooms" (Cochran-smith & Lytle, 1999, p. 262). This differs from the perspective of knowledge for practice in that what a teacher needs to learn should not be primarily decided by university researchers and educators because a large part of it is generated by the teachers themselves.

The third perspective, knowledge-of-practice, is different from the two previous perspectives in that it suggests that a clear distinction between knowledge and practice in teacher learning is fundamentally problematic because knowledge production and

knowledge use happen simultaneously (Cochran-smith & Lytle, 1999). Very often researchers have tended to support one of these perspectives while negating others. For example, Munby, Russell and Martin (2001) have argued that what teachers know as people from their life and teaching experience matters more than what they are taught in terms of the success of teacher development efforts or educational reform in general.

Teacher learning

Building on the exploration around teacher knowledge, teacher learning has become increasingly important in the discussion of effective initial teacher education and continuing teacher education. More and more researchers favor the word “development” over “training”, signaling this trend. Yet, there has been little progress concerning a shared understanding about the crucial elements in effective teacher learning, or about the relationship between effective teacher learning, school improvement and various professional activities (Zhong, 2007).

Lange and Burroughs-Lange (1994) summarized four characteristics of meaningful teacher learning:

- individual perception of professional challenge: resolving issues relating to the teachers’ value in respect of the teaching/learning context affected their degree of willingness to accept responsibility for dealing personally and professionally with the challenging experience;
- gaining an understanding of the nature of a professional challenge: in understanding the nature of the challenges presented by experiences in their professional lives, the teachers created meaning through their observations of children’s reactions to their learning, focusing on their professional behaviours, interacting with colleagues and with management personnel, and other resources outside the school environment;

- having access to resources for resolving challenges and for extending professional learning: including the teachers' own experiences; elements in the school context; and system initiatives at the regional, state, and national level;
- adopting strategies for resolving uncertainty which in many cases lead to professional growth: those [strategies] could be considered either holding approaches which deferred or avoided resolution or active approaches which tackled the difficulty by reference to available sources...and thereby resulted in professional growth. (p. 622-626)

Ball and Cohen (1999) offer suggestions for how to achieve a richer kind of

learning in professional development based on three assumptions:

- Development is centered around the critical activities of teaching and learning-planning lessons, evaluating student work, developing curriculum-rather than in abstractions and generalities;
- Teacher knowledge grows from investigations of practice through cases, questions, analysis, and criticism; and
- Learning is built on substantial professional discourse that fosters analysis and communication about practices and values in ways that build collegiality and standards of practice. (p. 95).

Furthermore, they emphasized that effective teacher learning should have a seamless connection between initial teacher education and continuing teacher education. Miller and Silvernail (1994) perceived effective teacher learning as a process of “rub between theory and practice” and argued that it cannot occur only in university classrooms or school classrooms.

In spite of different approaches to the issue, one concept is commonly praised in the literature: collaboration including mentoring, team teaching, and consultation (Knezevic & Scholl, 1996; Smylie, 1995; Talbert & Mclaughlin, 1993). Welch (1998) stated that “collaboration is one of many bandwagons in the parade of educational reform rhetoric” (p.26). Darling-Hammond (2003) maintained that “teachers learn best by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see” (p. 2). The

promotion of collaboration among teachers is built on the assumption that what teachers know from their work is fundamentally different from what the outside professional developers say. Because of its immediate relevance to teacher knowledge, collaboration could foster more effective up-take of new information (Hargreaves, 1997; Head & Taylor, 1997; King & Newmann, 2000; Kwakman, 2003). It could further form a shared culture in the school and a tightly connected learning community (Borko & Putman, 2000) which offers continuous support and communication (McLaughlin, 1993). Collaboration is not only beneficial for new teachers who learn from experienced teachers but also for the experienced teachers who can change their teaching norms and accept new information.

However, collaboration among teachers also has limitations. For example, a group of teachers may form an isolated unit in the school and result in a “balkanized workplace” (Hargreaves, 1993, p. 69). This is also why teacher collegiality may lead to little or no challenge to existing practices (Katz, Earl, & Jaafar, 2009).

Research on teacher collaboration has explored different forms of collaborative work (Little, 1990). Each form represents different potentials to improve teacher learning. Although the benefits of teacher collaboration have been repeatedly verified in the literature (Borko & Putnam, 1995), organizing and supporting this collaboration remains challenging. Effective teaching and learning will not happen if we only rely on schools and teachers themselves. King and Newmann (2000) argued that “[if] professional development focuses only on the individual learning of teachers, we should not expect substantial achievement gains in the student body as a whole” (p.

578). Similarly, Timperley (2008) pointed out:

In fact, without a thorough understanding of the theory, teachers, are apt to believe they are teaching in ways consistent with the promoted practice when in fact the relationship between theory and practice is actually very superficial. (p.11)

Therefore, the role of external expertise in the process becomes important. Many relevant issues need to be taken into consideration. For example, what is the role of the university in promoting ongoing teacher learning at school? Does the collaboration among teachers necessarily have to exclude outside experts and researchers? According to Welch (1998), effective teacher collaboration must have the support of theoretical constructs and explanations of various communication and problem solving abilities which require more than simply the help teachers get from each other. Support from external expertise could provide theoretical guidance so as to help teachers better analyze and reflect on what they learn from their work and grasp a more comprehensive understanding of educational issues. As Timperley (2008) asserted:

expertise external to the group of participating teachers is necessary to challenge existing assumptions and develop the kinds of new knowledge and skills associated with positive outcomes for students...substantive new learning requires teachers to understand new content, learn new skills, and think about their existing practice in new ways. (p.20)

In the literature, in-service teacher training activities provided by outside experts such as university professors are usually considered to be unattached to classroom teaching (Lieberman, 1996) while school-based teacher collaboration is believed to be more relevant and context-specific (Sprinthall, Reiman, & Thies-Sprinthall, 1996). The promotion of teacher professionalization and a research knowledge base requires rethinking the way to transform, balance and take advantage of both sides so as to

meet the demands of teacher learning in this rapidly changing time. External expertise will be effective only when it involves teachers' discussion and understanding about what is meaningful in their particular working contexts (Timperley, 2008).

Summary of teacher knowledge and teacher learning

The discussion about what constitutes teacher knowledge and how to foster high quality teacher learning is fundamental to any type of teacher professional development. Most of the tension seems to center around the dichotomy between theory and practice. As a matter of fact, this tension started when teacher education was first moved into universities, since the university by its very nature privileges theoretical knowledge.

Schwille, et al. (2007) has commented that teacher education research consists mostly of studies of "making sense of connections" (p.120), among which the theory-practice connection is of particular importance. There is no question that the teacher professionalization process requires a broad acquisition of theoretical knowledge (Korthagen & Kessels, 1999). Yet, to perceive teacher education as being only theory application leads to a disconnection between theory and practice. On the other hand, simple adoption of practices without attending to the questions of the inter-relationship between knowledge of teaching and practice, and between the university and the teaching profession, is more likely to run the risk of formalism and fail to foster the educational change we desire in the long term (Wang, 2008).

Belanger (1976) summarized some fundamental debates in teacher education

related to practice and theory as follows:

First, there continues to be a question in the minds of many university academics if “education” is a discipline, in the sense of the existence of a well-defined object open to scholarly inquiry. A second classical problem of teacher education concerns the normal school framework which emphasizes predominantly pedagogical skills. The third great problem of university-based teacher education also concerns a division, but this time a division in faculty structure. There continues to exist, as already pointed out, a division between professors of education and the rest of the academic community (p. 17).

Purposes of teacher PD and effective features of teacher PD

Purposes

Elmore (2002) asserted that the major purpose of any professional development activities should not only concentrate on individual enhancement, but more importantly on the improvement of schools and the whole education system. More specifically, an OECD (1982) report summarized five major purposes of continuing professional development:

1. improving the job performance skills of the whole school staff or of groups of staff (e.g. a school-focused INSET program);
2. improving the job performance skills of an individual teacher (e.g. an induction program for a beginning teacher);
3. extending the experience of an individual teacher for career development or promotion purposes (e.g. a leadership training course);
4. developing the professional knowledge and understanding of an individual teacher (e.g. a master’s degree in educational studies);

5. extending the personal or general education of an individual (e.g. a master's degree course not in education or a subject related to teaching);

Furthermore, the report discussed these five purposes in relation to the tension between “meeting the requirements and goals of the organizational system and of satisfying the needs for self-fulfillment of the individual member of an organization” (p.11). The first purpose listed is considered to be most likely to fulfill the needs of the system as a whole and at the same time least likely to represent individual needs. Of course, any kind of continuing professional development could have multiple purposes. Personal education is generally viewed as an incidental outcome of continuing teacher education in a general sense. Organizers are usually more concerned with the purpose of improving the teaching skills of individual teachers and the school as a whole. In terms of individual teachers, seeking promotion and more knowledge are often the top priorities.

Effective professional development

A large number of studies have shown that effective professional development enhances the quality of education (Darling-Hammond, 2000; Hixson & Tinzmann, 1990; Sander & Rivers, 1997). The characteristics of effective professional learning programs for teachers are clearly identified and widely discussed in the literature. Generally speaking, they are job-embedded, on-going, in-depth, content-focused, collaborative and encourage reflective thinking (Guskey & Huberman, 1995; Loucks-Horsley, Hewson, Love, & Stiles, 1998).

One of the best-known models, the Eisenhower model (Garet et al. 2001),

identified three core features of effective professional development including: focus on content, active learning, and coherence, and three structural features of effective professional development including: collective participation, form of the activity and duration of the activity. According to Darling-Hammond (1999), features shared by successful professional development strategies are:

- Experiential, engaging teachers in concrete tasks of teaching, assessment, and observation that illuminate the process of learning and development;
- Grounded in participants' questions, inquiry, and experimentation as well as profession-wide research;
- Collaborative, involving a sharing of knowledge among educators;
- Connected to and derived from teachers' work with their students as well as to examinations of subject matter and teaching methods;
- Sustained and intensive, supported by modeling, coaching, and problem solving around specific problems of practice; and connected to other aspects of school change (p.99)

Newmann, King, and Youngs (2000) outlined the conditions for effective professional development, which they suggested should:

- Concentrate on instruction and student outcomes in teachers' specific schools;
- Provide opportunities for collegial inquiry, help, and feedback;
- Connect teachers to external expertise while also respecting teachers' discretion and creativity; and
- Be sustained and continuous rather than short-term and episodic. (p.232)

Current professional education programs and activities for teachers seldom embody all of these features in practice, because "there is less disagreement about what constitutes a good professional development program than there is about how to actually implement one" (MacNeil, 2004, p.4). Criticism about the current situation of professional development is ongoing. One major criticism is that current programs usually treat teachers as technicians who can master a new set of skills and implement them afterwards. These programs are in conflict with the current assumption about teaching that it is complex and should be responsive to various student needs.

Teachers cannot be expected to implement directly what the program developers have said. Effective teaching is built on teachers' individual values, beliefs and knowledge (Timperley, 2008). Therefore, professional learning organizers should consider teachers' personal experience and their working contexts so as to enhance their understanding about new research-based professional knowledge.

The concept of school-based in-service teacher education initiated in England in the late 1970s has gained popularity in many countries including China (Tang & Absalom, 1989) and Canada (Fullan, 1980). Researchers naturally have combined it with the call for more teacher participation in curriculum development and decision-making processes (Bolam, 1976). Research in many countries embracing this concept has begun emerge. Craig (2006), through working with teachers, has documented a nuanced picture of school-based teacher development. Wu (2006) in Zhejiang University in China has illustrated his philosophical interpretation of practitioner research based on a teacher-initiated project from the perspective of Tao.

However, to carry out school-based programs and activities requires external support because the range of resources available inside schools is quite limited. Pauline Perry, in her keynote speech at the International Workshop on Strategies for School-focused In-service in the US in 1977, emphasized that “all school-focused training need not be, indeed should not be, school-based” and suggested that “all strategies employed by trainers and teachers in partnership to direct training programs in such a way as to meet the identified needs of schools and which raise the standards of teaching and learning in schools can be construed as school-focused” (Tang &

Alsalom, 1989, p.7). Therefore, while we should acknowledge that the local school is an ideal environment for teacher education, we should not ignore the fact that programs carried on outside of school sites also have the same potential. For example, universities may offer a series of workshops and lectures to different groups of teachers from different schools. University educators visiting the teachers in schools afterwards would add a school-based component to their support. Similarly, teachers from the same school who participate as a cohort in university courses would to some extent make the program school-based because the issues they discussed in class would mostly likely come from the school (Tang & Alsalom, 1989).

Another response to the criticism about overemphasizing technical skills and knowledge is changes in hiring in universities. For instance, there are already complementary recruitment models in Canadian universities to hire program leaders and experienced school teachers to emphasize the practical concerns of teacher education. Research (Gambhir, et al., 2008) shows there is a fast-growing number of this kind of instructor. It should be no surprise that at the same time, this gives rise to concerns about research findings being effectively disseminated through the university programs and worries that such changes in graduate programs may lead to very local, narrow and even unscholarly programs.

Summary of teacher PD and effective features of teacher PD

“Effectiveness” is a problematic concept itself in the literature. As Day and Letch (2007) stated, “effectiveness is not easy to assess” (p. 714). In theory, the purpose of

teacher learning, and the relationship between teacher learning, student outcome and school improvement, as well as specific contextual issues (Borko, 2004) all require serious consideration when deciding the range of evaluation criteria (Viczo, 2009). In other words, the purpose of professional development directly determines our expectations of different professional development programs and activities, which in turn serve as operational criteria for judging effectiveness.

Furthermore, one way to think of the potential role of the university in providing effective professional education for teachers is to ask whether there are some kinds of teacher development that are best suited to the nature and role of the university. What are the types of activities for which universities' support is crucial to enhance the effectiveness of the system as a whole? More importantly, what changes do these purposes require universities to make and to what extent are these changes practical?

Conceptual framework

The role of university

The discussion about the role of the university in education is based on the fundamental assumptions that:

- The university is ideally placed for providing teachers with the latest advances in research;
- A career in a complex professional field can be divided into a period of preparation, followed by application of what is learned in the practice of the profession;
- Not only are teacher preparation and practice separated in time, but they are only very weakly linked in space; that is, it is assumed one learns about teaching in the

university, and then one applies what one has learned in a very different institution-the school (Belanger, 1976, p. 17).

With the fast generation of new knowledge, the principal functions of universities have also changed accordingly from “preservation, transmission, knowledge advancement” (Millet, 1962, p.54) to “the up-bringing of human power or human resources having professional knowledge and scientific skill for the enhancement of the life quality of an individual and for the establishment of a welfare society and nation” (Lee, 2008, p.6). Related studies “consistently...indicate the extent to which the environment of higher education is changing and how such changes are redefining the character and role of institutions of higher education (Nesbit, et al., 2007, p.38). These changes offer “great opportunities to reassess the academic and professional beliefs, values, attitudes, and practices that have traditionally been embodied in institutions of higher education” (Nesbit, et al., 2007 p.38)

These changes require universities to extend their role in many ways. At the same time, many countries have begun to connect universities with the promotion of economic competitiveness. Haughey (1998) and Einsiedel (1998) have argued that the field of continuing professional education and career development will become a new focus of the service of universities. In fact, universities today are already considered the most important venue for promoting life-long learning and face more pressure to extend their role in the area of continuing education (Einsiedel, 1998).

Universities vary greatly in terms of size, purpose, structure and location as much as schools do. Therefore, to generalize and compare the role of universities related to continuing professional development is challenging (Howey, 1980). Nevertheless, it is

reasonable to believe that there are many potential roles that universities could play in advancing continuing professional development as a whole. The literature has identified at least three ways for universities to provide assistance.

First of all, since universities are the main providers of initial teacher education, this education's curriculum and focus have great implications for what is needed later in continuing professional development (Howey, 1980). Thus, universities have an advantage in continuing professional development and the responsibility to assist in it by establishing a closer link between initial teacher education and continuing teacher education. McNally has proposed five potential roles for universities after initial teacher education:

- research and development relating to induction,
- contributions to induction programs,
- as expert contributors to local versions of induction programs,
- providing support and training for those who support new teachers,
- involvement in the assessment of new teachers (O'Brien & Christie, 2008, p.151).

Secondly, there are many roles of a cooperative nature an institution of higher education can assume. Fullan (1979) offered a Canadian example. A central university faculty of education established a partnership with a school district to set up an in-service master's program in curriculum management and implementation. The format and activities in the program were highly flexible and individualized and had school-based workshops and lectures to integrate research knowledge with technical teaching skills. In cases like this, the university not only cooperates with schools but more importantly cooperates with teachers over what they consider to be important issues.

Thirdly, as a one-to-one university-school partnership is not realistic for all

schools, universities could use their resources and expertise to prepare teacher leaders in school-based professional development relating to various aspects of educational change including curriculum, instructional design, assessment process, school organizational change, etc. Graduate programs could be an appropriate candidate for this purpose.

However, in order to achieve all the potential roles they could play, universities need to make some major changes. Zeichner (2006) has argued that higher education institutions need to “take teacher education seriously as an institutional responsibility or do not do it” (p.326).

In the discussion of relevant roles for various providers, one of the biggest challenges is the coherence between different institutions providing continuing professional education including the government, teacher organizations, universities, school districts, and also the school itself. To what extent do we need coherence and to what extent do we need a clear differentiation in terms of roles and responsibilities for continuing training and how can we balance these two concerns while extending the potential of the university in this field? We need coherence and integration to address broad and collective goals. We also need differentiation to allow flexible options for individualized teacher learning.

Conceptual frame of the study

The conceptual framework I developed for this study includes three major aspects: forms of university participation, formal structures, and barriers. These three aspects

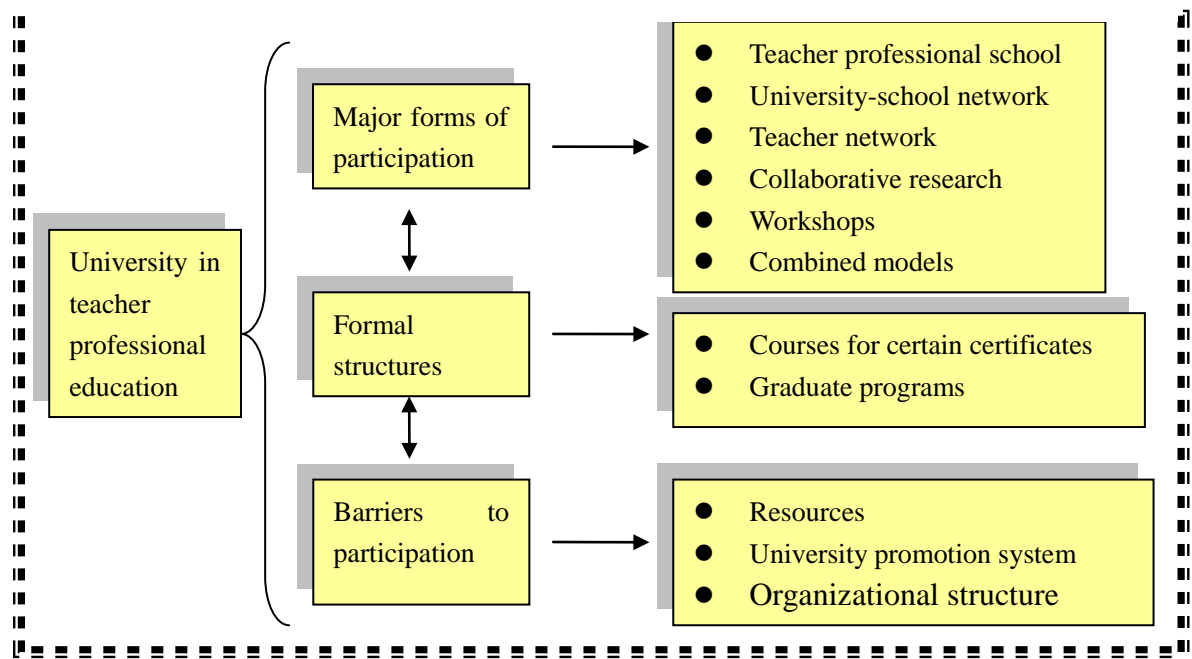
of the university role in professional learning provided guidance for the data collection, but more importantly, interact in a systemic way to offer a fuller picture of the issue of continuing professional development for teachers in the chosen universities.

The conceptual design is based on the understanding that faculty members may get involved in teacher professional education to various degrees while the university as an institution may change programs for in-service teachers depending on government policy and financial concerns. Moreover, the fact that at present universities play a minor role in teacher professional education in China means that the incentives and barriers are necessary elements that explain why or how well a relevant activity can be carried out. In approaching the study based on this conceptualization, my intent was to gain insight into university efforts in terms of whether there is an overarching design and plan for providing teacher professional education.

In addition, this framework also provides a way to examine the differences and similarities between universities within one country and draw a final comparison between those in the two countries examined by this study.

The importance of these areas for understanding the topic of teacher professional development is discussed in detail in the following literature review section.

Figure 1 Visual representation of the conceptual framework



Different forms of university participation in teacher professional development

Over the last twenty years, we have witnessed increasing diversity in the format and structure of teacher development in many countries (Sorensen, et al., 2005). For the purpose of this study, it is important to know what the possibilities are for universities' participation. There have been many efforts in the literature to offer ideas on this issue (Joyce & Showers, 1980). For instance, Villegas-Reimers (2003) provided a comprehensive review of teacher professional development in which he identified organizational partnership models and small group or individual models. Wang (2008) in China researched teacher development in the rural school areas of Beijing and came up with four main models: the teacher-individual model, the partnership between schools and universities model, the school-based educational research model and the co-operation with urban schools model (p.50). The list

provided here is developed based on a review of seminal works in university education and teacher education. It centers on the role of universities in either providing or supporting teacher professional learning. It is worth noting the forms are not mutually exclusive and in fact, overlap in a lot of ways as discussed below. The term “form” is used to emphasize that these are various means of provision rather than fixed structures.

- Professional development school
- University-school network
- Teacher network
- Action/collaborative research
- Workshops/seminars

Professional development school (PDS)

A professional development school approach originated in the US during the first part of the twentieth century when teacher preparation institutions began to show increased interest in working with schools to bring about educational change (Stallings, et al., 1995). It was first proposed by the Holmes Group—“a national consortium of nearly 100 research universities across the United States” (Fullan, et. al.1998, p. 9). In its report on Tomorrow’s Teachers (Holmes Group, 1986), the Holmes Group clearly pointed out one of the goals of teacher education reform is to “connect our own institutions to schools” (p.4). The report emphasized that “Universities must join with schools to make schools better places for teachers and

students” (Fullan, et. al., 1998, p.13).

Villegas-Reimers (2003) added emphasis on collaboration and stated that “PDSs are partnerships between teachers, administrators and university faculty members created in order to improve teaching and learning on the part of their respective students, and also in order to unite educational theory and practice” (p.71).

PDS can cover a wide range of activities and projects related to professional learning. The Holmes Group (1990) outlined six principles for designing PDSs in its report “Tomorrow’s schools” as follows:

1. Teaching and learning for understanding;
2. Creating a learning community;
3. Teaching and learning for understanding for everybody’s children;
4. Continuing learning by teachers, teacher educators, and administrators;
5. Thoughtful, long-term inquiry into teaching and learning;
6. Inventing a new institution (p.7).

Research (Nihlen, 1992; Wimsatt, 1996) has shown that PDSs have a very positive impact on teacher professional development. Because of their strong connections with universities, they can keep teachers informed of new research and theories in teaching and learning. In addition, teacher professional development is also supported by the chances to become a mentor teachers or clinical faculty member in a university (Nihlen, 1992; Wimsatt, 1996). Meantime, university faculty also can benefit from this design (Larkin, 2000)

Universities play a significant role in the PDS model. In order for universities to

take up this model successfully, they also need further “restructuring and reculturing” (Fullan, et. al 1998, p. 24) and this is often neglected in the literature “largely because universities are used to studying others, not themselves” (p. 25).

Although the concept of the teacher development school started in the U.S, Chinese researchers have also devoted great attention to adapting it to the Chinese context. For instance, Zhu (2008) elaborated that teacher development schools in China would play an important role in building university-elementary and secondary school communities. They “could adopt a beneficial external strategy for [their] improvement and enrich the school values” (original in Chinese, p. 24).

In sum, the PDS is an important approach for all university-school collaboration in general (Darling-Hammond, 1994; O’Hair & Odell, 1994), but there has not been a widespread adoption of this approach (Teitel, 1999). Teitel (1999) pointed out one reason for “the absence of widespread consideration or discussion of the ideas associated with the PDS has been the lack of many mechanisms or forums for serious exchange to take place” (p.315).

To sustain an active PDS requires stable financial support and shared commitment from both the university and school sides which makes it a challenge to do on a large scale. However, even with a small number of specific cases, because the nature of partners, projects, and other details vary greatly from place to place, it is hard to generalize the characteristics of the PDS implementation process. As White et al. (1997) pointed out, “we know little of the needs, initial effort, capacities and demands influencing changing roles and relationships...Research on the changing

roles and relationships of partners is still in the formative stages” (p.54). In other words, neither school nor university organizational structures are supportive of the PDS approach. Usually it is the individual faculty member who puts in extra time and energy for its development (Teitel, 1999). There also have been concerns that a PDS may divert energy and resource from the mission of participating schools (Kirschenbaum & Reagan, 2001). So, “in some ways,...it is harder to maintain a PDS than to start one up” (Teitel, 1999 , p. 430).

University-school network

This form of participation refers to other types of partnerships existing between universities and schools in addition to the PDS model. These partnerships are network relations which “connect practitioners who share common interests and concerns about education” (Miller, 2001, p.102). Miller (2001) addressed four key objectives of this approach:

1. To establish firm bases in two distinct cultures, school and university;
2. To cross institutional boundaries in order to respond to needs in the field;
3. To ensure inclusive decision-making;
4. To create new venues for educator development (p.105).

Similar to the PDS, many studies have shown the positive impact of these networks on teacher professional development. The networks include partnerships between schools and universities in one area, in different areas or even across national boundaries (Villegas-Reimers, 2003). Yet, more research is needed in terms of the key

features involved in these partnerships (Gengarelly & Abrams, 2009).

As an example, the University of New Hampshire worked with local schools in the form of a partnership to increase scientific literacy. In this project, university researchers collaborated with school science teachers and served as knowledge resources. Studies have shown that school teachers were greatly influenced by their university partners and improved their attitudes toward new practices in the classroom (Gengarelly & Abrams, 2009).

In Canada, the 'Learning Consortium' was established in 1988 between four school districts in Toronto and the faculty of education at the University of Toronto and the Ontario Institute for Studies in Education (OISE). The goal of this partnership was to "improve the quality of education in schools and universities by focusing on teacher development, school improvement and the restructuring of local school districts" (Watson & Fullan, 1992, p. 222). The Faculty of Education at the University of Toronto offers regular support to the Consortium. Institutions involved contributed resources and appointed representatives to make decisions (Watson & Fullan, 1992).

In 2003, the Chinese Ministry of Education established the Union of National Teacher Education Network involving major national universities (Fang & Zhu, 2007). In 2004, the Ministry of Education initiated a National Project to train more than 12 million teachers (including primary and secondary teachers) through Teachers Educational Technology Competence Development (Chinese Ministry of Education, 2005). The learning activities are delivered through a satellite TV network and the Internet and include online courses, online tutorial sessions, and online learning

material for individualized and cooperative learning (McCracken, 2005; Manlove et al. 2006; Oh & Jonassen, 2007). University researchers and teacher educators included in the university-school network play a key role in designing and organizing the materials.

As many other examples have shown in the literature, universities can be major players in collaborative efforts both pre-service and in-service teacher learning as well as in efforts to align these two aspects (Rouk, 1999; Stallings & Kowalski, 1990). Yet, there are also disagreements about and serious problems with university-school collaborations. Watkins (1989) quoted Ann Lieberman's description of this approach as "little projects that do little things—maybe even important things—but they are not part of the institutional fabric" (p. A1). Stephens & Boldt (2004) believe,

[I]t is difficult because, until the collaboration has begun and problems arise, partners cannot know what particular challenges each partnership will face. We cannot know ahead of time how best to address those challenges, nor can we know what kinds of solutions will be practically and politically possible. (p. 703)

The reality is most of these partnerships are motivated and planned by individual faculty members (e.g. Christensen et al., 1996; Matczynski, Lasley, & Williams, 1997). They need to take more time to develop deeper relationships with school members in order for any meaningful initiatives to happen (Teitel, 1999). Teitel (1999) stated that "each partnership has developed its own agreements, customized to meet the needs of the school and the situation" (p. 317).

In addition, compared to graduate programs or other credit-based courses, it seems more difficult for researchers to form an effective evaluation framework for this type of effort. Some faculty members expressed that "after operating their

[collaborating] programs for some years and generally feeling positive about the results, they desired a more objective method of measuring outcomes” (Kirschenbaum, & Reagan, 2001, p.494).

Teacher networks

Teacher networks are considered an alternative approach compared to formal partnerships between universities and schools. They include an “independent university role that focuses on extending and enhancing pre-service teacher preparation” (Hines, et al, 2003, p.300). They are usually free from institutional control and yet are intensive and continuous. They are able to respond to different situations and therefore provide space for a more realistic approach to teacher learning (Korthagen & Kessels, 1999). Moreover, teacher networks can select a clear focus of professional activity and establish a sense of professional identity for teachers. They also provide more opportunities for teacher cooperation and teacher leadership. They can successfully blend all the different needs of teachers rather than separate them (Lieberman & McLaughlin, 1999).

The New Teachers’ Network (NTN), a university-based teacher network at Hofstra University, is an excellent example of this model. It was formed on the basis of relationships developed during pre-service education and extended into in-service teacher training. The network built a safe platform for teachers to engage in discussions and offered university support for beginning teachers in urban and suburban minority communities through interconnections between the university and

classrooms, regular support meetings, conferences, and mentoring, as well as other professional activities (Hines, et al, 2003).

In spite all the support and flexibility teacher networks offer, they are not without problems. Lieberman and McLaughlin (1999) have talked about several challenging issues. The autonomy of teacher networks poses challenges for continuously evaluating their performance and improvement. “Without procedures for ongoing outside review, networks can fall prey to the myopia of familiar practices and the misdirection of unchallenged assumptions” (p. 675). This may also lead to vague responsibilities for the various members involved and unclear ownership of the network as it grows. Second, the power of networks may divert teachers’ time and energy from their own schools to the networks themselves and even create a sense of otherness for in their workplaces. Another challenge concerns the stability of the networks. “How can the resources be sustained? Who will pay for them? Whose priorities do they represent? If teachers learn new ways of working with students, how can their efforts continue to be supported” (p. 676)?

Collaborative research/action research

Collaborative research is receiving great attention because there is a consensus in the literature that teachers as researchers represent a great step for moving teaching toward a research-based profession (Hargreaves, 1996).

It is an alternative professional development strategy that “actively involves teachers in professional reflection, validates educators as producers of knowledge, and

recognizes their role in professional development and decision making” (Burbank & Kauchak, 2003, p.499). In collaborative research groups of teachers and researchers work together on a research study. This gives the teachers an opportunity to improve their understanding about teaching and practice in a more systematic and consistent manner (Clif and Say, 1988). In this form of professional development, researchers should go beyond strict methodological parameters, attend to the concerns and questions of practitioners in education and use their concerns in the research knowledge development (Richardson, 2001). O’Hanlon (1996) outlined three reasons why collaborative research could be a very effective PD strategy: “it is inquiry-based, and allows teachers to investigate their own worlds; it is aimed at the improvement of teaching and learning in schools; and it leads to deliberate and planned action to improve conditions for teaching and learning (Villegas-Reimers, 2003, p.108).

Davies (1993) studied action research from the teachers’ perspective and concluded:

There was a lot of value. It widened my experience and gave me deeper insights-a greater knowledge of my colleagues and what makes things tick. It was psychologically useful...It made me reassess myself-I had to come to terms with myself. I had to go from being a qualified teacher who knew it all to someone plunged into a new situation in an environment I usually thought of as safe. I had to reorganize myself and change my thinking. (p.148)

In order to creating lasting change within the classroom, this strategy needs to rest upon a foundation of co-dependence rather than research teams that direct teachers to change. Yet, the related key features of collaborative research require further study (Gengarelly & Abrams, 2009).

This form of participation has been criticized in that it happens predominantly at the individual level and does not address the curriculum of learning to teach; therefore

is difficult to implement an institutional level and carry out on a large scale (Clif & Say, 1988). Finding time for research in a busy school day is another challenge facing teachers (McGee, 1998). Another one of its weaknesses is that the research knowledge that stems from this collaboration is likely to be regarded as the work of researchers, and so not be easily accessible to other teachers. In addition, with the current reward system in universities and academic hierarchies of knowledge, carrying out research with teachers usually is a relatively low priority (Timperley & Alton-Lee, 2008). Also, in most cases, this approach depends greatly on already-established connections between individual schools and universities. In other words, schools that are already frequently involved in university programs either through training or recruitment have better access to this type of opportunity.

Workshops/lectures

Workshops are one-time or short-term intensive learning opportunities that help teachers to acquire specific knowledge or skills (Richards & Farrell, 2005). Single lectures or workshops may be organized as a self-contained program or they may also be part of a larger program. Usually a workshop as a complete activity is used in training different groups of people who may or may not be interested. This is perhaps the most traditional way of providing professional development for teachers (Villegas-Reimers, 2003). In this form, universities provide knowledge and expertise to teachers (Silber, 1985). This form has been heavily criticized by teachers because the workshops are usually “‘one-shot’ experiences, completely unrelated to the needs

of teachers and providing no follow-up” (Villegas-Reimers, 2003, p.93). A large body of research in teacher education views this approach as unsuccessful because of its distance from the school culture in which teaching happens (Baron, 2008). Sparks (2004) believes that workshops are ineffective because they usually deliver the wisdom of the experts or address the interests of school administrators instead of addressing the questions that are most relevant to teachers. In spite of all the harsh criticisms about the workshop approach in the literature (Sandholtz, 2002), workshops are still the most common form of teacher professional development at present (Richard, et al., 2001). Eun (2008) has pointed out that in workshops there could be “abundant opportunities for teachers to share their experiences, knowledge and skills, as well as problems, difficulties, and possible solutions” (p.142).

In addition, workshops or similar events can have the advantage of being held on a regular basis during a school year. If they are carefully designed based on effective professional development ideas, these type of programs can be as effective as other means for improving teacher learning (Fishman, et al., 2004; Schneider et al., 2005; Tilleman & Imants, 1995) when integrated into different models and combined with other PD strategies (e.g. Zeegers, 1995; Ball, 2000). Eun (2008) summarized both the advantages and disadvantages of this type of professional training:

The most noteworthy benefit of this type of professional development is that it is highly cost-effective, efficient, and is capable of reaching a large number of participants in a single session. The most obvious disadvantage is that they offer little opportunities for choice or individualization. (p.140)

Combined models

Most of the literature focuses on one form of participation (such as mentoring), so

there is no convincing evidence pertaining to which forms are more effective or cost-efficient. Universities could adopt the forms in various combinations and the nature of these combinations might change across contexts which in turn would influence how different approaches could relate to each other for better effectiveness (Cochran-Smith & Lytle, 1993; Guskey, 1985; Stein, Smith, & Silver, 1999). For examples, a master's program designed based on a partnership between a university and a school in central Florida reported successfully contributing to teacher learning over a three-year period (Crawford, et al, 2008). A teacher network could also employ workshops, seminars, and collective teaching activities (Hines, et al, 2003).

To say that universities should redesign the service they deliver is not to negate the importance of formal graduate studies. Rather it is to propose a more balanced and comprehensive approach in terms of the job-related needs of practicing teachers, convenience and accessibility of support, etc. Various partnerships and collaborative efforts could help universities to relate advanced research knowledge to the needs of teachers in local schools and therefore generate a greater likelihood that their research findings are disseminated in a more effective manner. This approach could frame graduate programs in ways that are more congruent with the direction of education improvement.

Of course, the geographical proximity of universities will also to a large degree decide which approach is appropriate (O'Brien & Christie, 2008). Fortunately, the online technology-based distance education today provides significant assistance to this effort. Both developed and developing countries have invested in

distance-education programs to support teacher professional development (Villegas-Reimers, 2003). Distance education is cost-effective for implementing a large-scale standard teacher training activity. In particular, it is considered an ideal approach for delivering teacher training to remote or isolated areas. China, for instance, has already implemented distance education for teachers in western rural areas with the intent of improving “access, equity, and quality in professional development” (Robinson, 2008, p. 1). In Uganda, a distance B.Ed. program for teacher education is based on the materials developed by the University of Nairobi (Villegas-Reimers, 2003). In the UK, more than half of the universities offer postgraduate courses through distance education (Weinberger, 2000). For quite a long time, Chinese education researchers focused primarily on broad conceptual elements in distance learning (Zhou, 2002; Zhou, 2005; Zhang; 2006; Feng, 2007). Only recently have there been more efforts committed to exploring how to support distance learning in different school contexts (Liu, 2007; Zhang & Su, 2007).

Moreover, these forms of participation could also be adapted in both formal and informal ways. For instance, a formally designed university program could be well supported by an informal network in which teacher mentors in schools and university educators or researchers in addition to the teacher participants themselves communicate and discuss a variety of relevant issues. Bonk and Graham (2006) called this kind of combination “blended learning”. The previous example of a university-based program sponsored by the Gatsby Charitable Foundation in England is one of these combinations, in which beginner teachers first took part in a series of

well-designed professional courses and workshops focusing on motivation and well-being that was accompanied by an informal support network among mentors and teachers in different schools and university faculty.

There is a lot of overlap between the different approaches. Formal approaches such as graduate programs, and short-term or long-term certified courses have the support of and are recognized by the authorities but lack flexibility. In contrast, more personalized approaches like teacher research and networks are favored for their quick and potentially frequent connections with teachers' practical concerns but usually do not have enough funding and reorganization support. As in some of the examples shown earlier, formal graduate programs and accredited courses could embrace an element of action research to address practical concerns within current academic structures. Short-term workshops and seminars could be part of informal, individualized teacher network efforts. Schools could try to fit their local professional learning into a broader university program so that it could lead to an advanced degree or certificate while universities could seek to align their teacher learning programs with the objectives set up by governments for teacher qualification or promotion standards.

Academic structure in universities for teacher professional development

It is clear from the examples above that various forms of participation adopted by universities are often imbedded into a formal academic structure such as a graduate

program. Among many choices offered to teachers for professional development, formal university programs and courses that may lead to various teacher qualifications, certificates or diplomas take great importance. Because formal courses vary significantly among universities, the following will focus only on graduate programs which are a more organized structure in universities for teacher professional education.

Graduate studies offered by universities to teachers provide formal degrees and credentials, including the master's degree, the doctorate of education and the doctorate of philosophy as well as various teaching credentials (Katsinas & Kempner, 2005). Providing graduate studies is the most common way that universities contribute to teacher professional development, presumably because to provide credentials is a core function of the university, not just to offer learning, but to organize that learning in ways that carry formal recognition such as degrees.

Within graduate programs, the role of university faculty members becomes one of community members who bring their expertise in order to facilitate teachers' engagement in the programs. Research findings indicate that this approach has some key elements of effective PD programs as follows (Crawford, et al., 2008, p.92):

- Long-term framework: effective models have ongoing components that can be measured in years of involvement. Long-term frameworks allow time for learning, implementation, reflection, and modifications in content and pedagogy.
- Research-based strategies: teachers judge the effectiveness of professional development on the learning of their students in response to implemented changes in pedagogy. Therefore, the inclusion of a wide repertoire of research-based strategies is an important element in programs.
- Professional community: participants benefit both professionally and affectively from having the support of like-minded colleagues. Professional communities provide not only a safe haven, but also a forum in which teachers can engage in

inquiry and seek informed opinions about the challenges that arise in the classroom.

- Personal engagement: reflective practitioners need to be actively involved in the learning process. Therefore, effective programs invite engaged reflection, personal and collective inquiry, and opportunities for hands-on application of the concepts presented.

The difficulty here is that participants usually come from different subject areas and various levels of experience. It is quite challenging to determine how to make thoughtful and informed choices about the best ways for university faculty to invest their time and energy in graduate programs so as to best address concerns in teacher professional development (Crawford, et al., 2008). Moreover, graduate programs are university-governed and university-based and their admission requirements generally reflect “the traditional academic expectation of the university” (Sorensen et. al 2006, p.375) so these programs inevitably run the risk of privileging theoretical knowledge over professional knowledge (Pring, 1996). One can even say that graduate programs are not intended or designed by universities or individual faculty members as professional development programs.

In addition, issues such as admission criteria can also be barriers in this regard. For example, in Japan the Ministry of Education has encouraged the establishment of more graduate programs in universities for in-service teachers. Yet, research has revealed that these new programs often require full-time status so are actually not accessible to many teachers (Shimahara, 1998). Another criticism of certification or graduate programs in universities is their role in helping individuals achieve higher salary levels and degrees which may be divorced from concerns about the teacher’s job in school so the payoff in terms of changes in the teacher’s work may be small.

There are already calls for efforts in the field to overcome these limitations by intentionally absorbing more input from other stakeholders and creating more opportunities for teachers to collaborate with colleagues on issues that are relevant to school improvement. There have also been responses to these calls. York University, for example, set up a Masters in Education program in partnership with the North York Board of Education in Ontario, focusing only on urban education (Ontario Ministry of Education, 1994). In 1994, the Government of Alberta granted permission to the University of Calgary to set up a Master of Continuing Education degree program. The program uses computer-mediated communication and is “the first part-time, professional graduate program in Canada specializing in organizational learning and being offered by a faculty of continuing education” (Garrison & Kirby, 2006, p.8). Moreover, in some countries such as Germany, Belgium and Luxembourg, graduate programs to some extent have already been integrated with pre-service teacher education where student teachers are required to take graduate programs in specific subjects on top of undergraduate degrees for student teachers (Darling-Hammond, 1999). In France, all education students now need to complete a graduate program connected to local schools through the University Institutes for the Preparation of Teachers (Darling-Hammond, 1999).

Barriers to universities ’ involvement

There are some major barriers at present that prevent universities from further

realizing their potential roles. For example, the culture gap between universities and schools and the way the incentive system in the university is structured have a big impact on how well universities can achieve their expected roles. Ross et al. (1999) commented on the school reward system:

The rewards for P-12 faculty are different from rewards for university faculty. For P-12 rewards include time to do the work and clear evidence that their efforts are benefiting children. P-12 faculty derives satisfaction from positive experiences with children and from a sense of independence in creating a positive experience for children. (p.210)

In contrast, in terms of university reward system, Ross et al. (1999) stated:

For the university faculty, the reward structure communicates the priorities of the university. Unfortunately, the reward structure of most universities emphasizes productivity defined largely as “self-determined scholarly work.” Scholars are those whose work looks like that of their colleagues in liberal arts and sciences. This definition of research rewards individual initiative, hardly a match with collaborative work. (p.3)

Therefore, the reward system in universities does not encourage faculty involvement in professional development.

The complex organizational nature of universities makes it tough to align different disciplines and people from different units around particular needs of professional learning delivery because “universities are places where excellence has been strongly connected to specialization...research and graduate programs flourish by focusing on very specialized issues, and rewards within the institution reinforce these tendencies” (Selman, 2005, p.25).

There are also operational difficulties in terms of time, personnel and resources if we are determined to realize some form of participation favored in the literature. For instance, to getting experienced teachers in schools involved in the training process and establishing partnerships between them and university professors is considered to

be a very promising and effective approach to both teacher education and teacher professional development. Yet, to implement this strategy on a large scale, universities would need to train a large number of mentors for this collaboration to take place. Also, it would be crucial to update the supervisory skills and knowledge of university lecturers. In order to guarantee the quality of the program, there would be a need to set up certain standards for supervisors, mentors and teacher-trainees. These new tasks would mean not only extra workload for teacher mentors and university supervisors, but also more financial pressure for university administration.

Summary of the conceptual framework

As we can see, there are serious tensions and gaps between what universities are expected to achieve in teacher professional education and what universities are currently equipped to do. To promote the role of universities in teacher professional education will inevitably “mitigate the bureaucratic impulses of institutions” (Selman, 2005, p.26) so as to distribute institutional resources in a fairer way.

Chapter summary

As the literature shows, the field of teacher professional development is filled with tensions between dichotomous notions such as: tacit teacher knowledge vs. explicit teacher knowledge, teacher’ autonomy of PD vs. expert-driven PD,

school-based PD vs. university-based PD, teacher personal learning needs vs. the goal of system wide educational changes, etc. The call for universities to play a bigger role in the field of teacher continuing education is accompanied by complex issues regarding the degree of authority given to the university. This reflects a dynamic relationship between the academy and the profession, revolving around the struggles surrounding the perception of knowledge that impacts the role of the universities that provide and construct such training.

To this day the university, to a large degree, builds and maintains its high status in relation to the teaching profession on its authority as a producer of knowledge, particularly research knowledge about teaching and learning. The relationships between the knowledge teachers need to learn through training and the knowledge they learn through teaching practice, and between the university and the teaching profession are explicit and distinctive. However, professional training should not be designed to provide teachers with knowledge that is produced solely by university researchers or solely by teachers themselves. While acknowledging the necessity and legitimacy of both of external expertise and teachers' ownership and autonomy, future training activities and programs should emphasize the idea that "through inquiry, teachers across the professional life span—from very new to very experienced—make problematic their own knowledge and practice as well as the knowledge and practice of others and thus stand in a different relationship to knowledge" (O'Brien & Christie, 2008, p.273)

The discussion about various forms of university participation currently in the

literature should not be seen as arguments about which model is better or best, as they are not mutually exclusive and often work in various combinations. Currently there is abundant uncertainty about shaping the authority of universities as knowledge producers and about the relationships between universities and the teaching profession. A new vision of the role of universities in the field of teacher professional learning should be shared and supported by all these perspectives. In a deeper sense, Clifton and Long (1984) argued that:

...excellent academic work requires, to a very high degree, the same activities as excellent teaching. That is, both require the ability to express and communicate ideas, the ability to logically organize ideas, and a certain degree of playfulness and flexibility with ideas. (p.15)

After all, the desire for more university participation in continuing professional development is by no means just an attempt to close the gap between theoretical knowledge and teaching practice. More importantly, is how we use this thinking to help us answer questions related to changing the university itself, such as: how do we adjust the current scholarship in universities? What kinds of changes do universities need in order for this adjustment to happen? Otherwise, efforts to change the status quo may simply reflect Seixas and Brandes' (1997) suggestion that, ironically, many innovative approaches espoused by educational researchers which embody the concepts of egalitarianism, representation and the voice of teachers implicitly undercut the authority of the university-based scholars who are delivering these messages.

Chapter 3: Methodology and Procedures

This chapter outlines the methodology used to conduct this study. An overall research design is followed by the description of a revised conceptual framework including: sample selection, document review, interviews, data validation and analysis. Limitations are also discussed. In reality, the study process was not carried out in a straightforward manner; some of the steps described ran in parallel or overlapped each other at times.

Research Design

This project is qualitative in nature. Krathwohl (1998) has written that “qualitative procedures are ideal for complex phenomenon...[and] are extremely useful for exploration-to find out how to understand a phenomenon” (p.229). Creswell addressed when it is appropriate to use this research approach:

We conduct qualitative research because we want to understand the contexts or settings in which participants in a study address a problem or issue.... We also use qualitative research because quantitative methods and the statistical analyses simply do not fit the problem. (2007, p. 40)

The study employed a multiple descriptive case study design (Merriam, 1998).

Merriam (1998) explained that case study design is different from other research designs because it comprises “intensive descriptions and analyses of a single unit or

bounded system” (p.19). Conrad & Serlin (2006) further explained:

[In case studies] researchers draw on multiple sources-documents, interviews, observations, artifacts and the like-focusing sharply on context to describe the case, generate themes, and make assertions. Case studies may be either unique (intrinsic) or representative from a broad issue (instrumental) and can be selected based on purposeful sampling-choosing cases because they are interesting...as opposed to drawing a random sample. (p.45)

Similarly, Yin (2003) emphasized the importance of case studies as a means to investigate multifaceted relationships that cannot be explored by quantitative methods. Multiple case studies allow for cross-case analyses categorized by common themes. Nevertheless, a case study does not necessarily need a large number of cases. Using multiple case studies is the most appropriate way to develop the level of understanding necessary to determine the extent to which and the manner by which normal universities engage in in-service teacher education and what elements influence their choice of participation and degree of engagement in the field of in-service teacher education in China. Internal and external forces that shape the working efforts of the institutions were explored in this study.

Sample selection

Four Chinese normal universities—Beijing Normal University, Shanxi Normal University, Hebei Normal University and Qufu Normal University-and one Ontario universities – OISE - were selected for the study. Purposefulness and convenience are both reflected in the choice of these institutions based on their reputation in teacher education and their accessibility to the researcher. Of the four universities in China,

Beijing Normal University is a national normal university which operates directly under the Ministry of Education and is a key-point teacher education institution in China. Institutions under the MOE administration are expected to assume the role of exemplary teaching and research institutions. Other provincial-or local-level institutions are generally viewed basically as teaching institutions (Lin & Yang, 1987). Shanxi Normal University, Qufu Normal University and Hebei Normal University belong to this second tier and are all administered and supported by provincial governments. This parallel feature of teacher education institutions adds another layer of comparison when we explore issues related to Chinese normal universities. The similarities and differences between the four studied institutions could provide beneficial insights for current in-service teacher education in China. Moreover, the three normal universities are key ones in the three provinces in which they are located. The travel distance and accessibility of the four universities also contributed to the sample selection.

Education in Canada is a decentralized system and is the full responsibility of the provincial governments. Therefore, the study's use of one province as a comparative component is appropriate. The choice of Ontario was made because my graduate study experience has taken place in this province and therefore I have a better sense of its education system overall compared to other provinces in Canada. I believe this helped me greatly in thinking about and exploring deeply the comparative component of the study. OISE in the province of Ontario is a good comparative case because it is

the largest faculty of education in Canada and is well renowned for the high quality of its teacher education graduate and continuing education programs.

Figure 2: Geographical location of the four provinces



Table 1 Comparison of basic information of the selected universities

	Province	Programs	Faculty	Student
Beijing Normal	Beijing	57 bachelor programs; 162 master's programs; 100 Ph.D. programs; 18 rotating post-doctoral posts.	1734 full-time faculty members	21,000 full-time students
Hebei Normal	Hebei	81 bachelor degree programs; 91 master's programs; 24 doctoral programs; 4	1492 teaching faculty	54,315 undergraduate students; 2788 graduate

		post-doctoral-research stations.		students
Qufu Normal	Shandong	61 bachelor degree programs; 77 master's programs; 6 doctoral programs; 1 post-doctoral program.	1393 teaching faculty	24983 undergraduate students; 2037 graduate students
Shanxi Normal	Shanxi	47 bachelor degree programs; 32 master's programs; 4 doctoral programs.	900 full-time teaching faculty	15,000 undergraduate students; 900 graduate students

Within each university, a purposive and nonprobabilistic sample was chosen for interview, since a random sample would not provide a group of people who were convenient, available, and suited to the intent of the study (Patton, 1990). Besides, a random sample from all the university administrators in China and Ontario could not guarantee that those selected would be willing to participate in this study and that they would have enough experience and knowledge concerning the university's participation in teacher continuing education. The continuing education department is the key unit in Chinese normal universities that has taken on most of the professional education work historically. Therefore, administrators from these units of selected institutions were the most appropriate people to speak to regarding their institution's involvement in continuing teacher education. Faculty members were only included when they were recommended or identified as key people who were heavily involved

in teacher professional education work. The third group of participants (people from the governments) was added after the revision of the conceptual framework.

One of the biggest challenges of collecting data for this study was to find appropriate respondents and programs in the selected universities. I did on average two interviews in each institution. My original intent was to do more than two, as I spent weeks on university campuses, collecting relevant information and talking to different people. Normal universities contain units that are strongly connected to teacher education and other units that have little or no connection to teacher education. The latter are usually new programs developed as these universities become more comprehensive in character. Schools and colleges carrying out teacher education work mainly provide pre-service teacher education. Historically, it is the continuing education department in the institution that takes responsibility for continuing teacher education.

Therefore, to find people who are familiar with this work, including university administrators and teacher educators, was quite challenging. Take what happened in Shanxi normal university. After I introduced my study, the first response I got from people usually was “that is a quite interesting topic” or “tell me again what you want to do, because we don’t do much in-service training here”.

A better situation was when I was able to obtain information about different projects such as a principal training class which the Physical Education Department of Qufu Normal University did for the Qufu municipal government. However I found this kind of information less interesting, as one-time projects here and there did not

contribute much to the information I already had.

The continuing education department was the first unit I contacted for each institution, because they were the people who were most likely to offer me a better discussion. If the administrators in those departments were not aware of this work, I considered that as part of the findings of the study, which meant the information I could get about that institution was really limited. At the same time, I tried to locate people who were academically involved. Usually these were experts in the field and were willing to participate in my project. The problem is, within one institution, a training program could potentially be the responsibility of different units including the continuing education department, the school of education, the graduate school of education, etc. Because the pool of experts in this field is very small, the same group of people would get contacted and asked to participate in the training no matter which part of the university sponsored it.

This was also true across institutions. I started my study from Hebei Normal University. In order to locate more participants, I contacted two different people and asked whether they could recommend potential participants for me. Surprisingly, I got the same names. This is also why the group of educators who are currently involved in in-service teacher education are often overwhelmed by the training work coming from different places.

In the recruitment process, I used two methods to locate participants. First, I sent an e-mail version of an invitation to participate in the study to the potential participants. I also asked these participants to help identify other potential participants.

The final selection process was based upon three basic criteria. First, the participants had to be willing to take a certain amount of time to participate in this study during the data collection period. Second, they had to be willing to share their experience about working with in-service teachers, local schools or continuing teacher education programs. Most importantly, they needed to possess a certain amount of experience in teaching and administering teacher continuing education at the university to ensure that they were familiar enough with this concept to respond at a deeper level.

Participants could be divided into two categories. One was administrators, mainly directors or vice-directors of continuing education departments in the selected universities and people in governmental organizations. The second was university teacher educators who were heavily involved in the work of continuing teacher education in one way or another. This selection ensured that the data reflected issues in the administrative arena as well as in the actual teaching process.

Besides university faculty, more participants were also identified from the Hebei Education Department and the Shandong Education Department in China and the Ontario Ministry of Education, and the Ontario College of Teachers in Canada so as to include more information about the overall teacher professional education systems in which universities were situated and in order to make the discussion more comprehensive and complete. The identification of appropriate people in the above organizations was done based on recommendations by my supervisor and some participants from the normal universities.

Data collection

Creswell (2003) has listed four types of data that researchers use for qualitative data collection: observations, interviews, documents and audiovisual materials. Yin (1994) identified six sources of qualitative data for case study including documentation, archival records, interviews, direct observation, participant observation and physical artifacts. This study drew heavily upon interviews with people from the five universities and people in the governments, complemented by available document data from various sources. Data collection began by finding documentary evidence from institutional websites and other documents to construct a picture of what each university does in the field (specific programs or activities related to my conceptual framework). Documents such as policy documents about recent national teacher education reforms, brochures, and application packages were reviewed for information concerning the institutions' engagement and focus. Audio-visual materials such as institutional websites were reviewed to glean the same information. This was supplemented by interviews. Fifteen semi-structured interviews were conducted between August 16, 2010 and May 3, 2011. This type of interview design allows the participants to talk about their viewpoints and experience in their own institutions while giving flexibility to the researcher to pursue themes or issues that emerge in the interviews. The conceptual framework was shown to the participants prior to interviewing, so they could comment specifically on whether they found the framework helpful and complete. This also helped them answer the questions in ways that spoke to the framework. Twelve interviews were conducted in

China including eight in Chinese normal universities (Hebei Normal University, Qufu Normal University, Shanxi Normal University and Beijing Normal University), three in provincial education departments (Hebei Education Department, Shanxi Education Department, Shandong Education Department) and one in the Chinese Ministry of Education. Three interviews were conducted in Ontario, Canada with people at OISE, the Ontario College of Teachers and the Ministry of Education of Ontario. Eleven interviews were conducted in-person and audio-recorded by the researcher while 4 were telephone interviews recorded only by note-taking as required by the participants. All participants were administrators of or people heavily involved in continuing teacher education in China or Ontario. The following table listed all the participants by role and institutions.

Table 2: Role and institutions of all the participants in the study

	Role	Institution
Interviews in China (all the names of the participants listed are pseudonyms)		
Zhang	Director of school education and continuing education	Hebei Normal University
Li	Professor of School of Education Study	Hebei Normal University
Wang	Professor of School of Education Study	Hebei Normal University
Li	Deputy Director of Basic Education office	Hebei Education Department
Wei	Deputy Director of School of continuing education	Beijing Normal University

	and teacher training	
Jia	College of Chemistry	Beijing Normal University
Lu	Deputy director Teacher Education Department	Ministry of Education
Liu	Director of School of Adult Education and Continuing Education	Qufu Normal University
Zhao	Professor of School of Education Study	Qufu Normal University
Mei	Director of Basic Education Office	Shandong Education Department
Lu	Professor of School of Teacher Education	Shanxi Normal University
Wen	Deputy director of Basic Education Office	Shanxi Education Department
Interviews in Ontario (all the names of the participants listed are pseudonyms)		
Mike	Director of Teaching Policy and Standards Branch	Ministry of Education
John	Registrar and Chief Executive Officer	Ontario College of Teachers
Alice	Director of Continuing Education	Ontario Institute for Studies in Education

Each interview lasted from 40 to 60 minutes. A detailed report on each interview was produced after the interview and shared with each respondent for their comments or edits. Data recording included reflective and descriptive notes kept by the researcher, audio-taped interview information and transcription (Creswell, 2003).

The research journal is a very important source of data and a good way to record the thinking process during the entire study (Rossman & Ralis, 1998). It is a document that represents doubts, progress, and surprises, as well as all other sorts of feelings on the part of the researcher when conducting a study. This helps sharpen the researcher's ideas into a more organized framework which is easier to analyze later (Creswell, 2005). In regard to the format of the research journal, it is very flexible. It can be long or short; it can be specific or abstract. The content of my research journal included my reflection upon the books I read, the connections between the courses I have taken and the research, thoughts inspired by conversations with other people which were related to the topic, and discussion with my supervisor. Generally speaking, I used a research journal to document all of my activities and important thoughts during this study.

All the interviews in China were conducted in Chinese and translated by myself afterwards. The translation process was divided into three steps. First, the interviews were transcribed in Chinese and major ideas were highlighted on the transcription. Second, those ideas emerging from each interview were translated into English. The rest of the conversation was then translated. In this process, the order of some issues might be rearranged so as to present a better flow of ideas in English. Some key terminology involved was first left blank and added to the translation later. I tried to find whether there were already well-established translations in Chinese academic journals or other publications to ensure the accuracy of the translation. Finally, useful quotes from each conversation were highlighted in colour.

Data analysis and interpretation

Qualitative data analysis is mainly an inductive process (Porter, 1996). As Creswell (2005) noted, an inductive interpretation and analysis of data beginning with small details and then connecting them into larger themes, is the principle process. But the opposite can also occur when researchers look for the details to support a potential theme. Also, in a qualitative study, data collection and analysis are closely linked with each other. Merriam (1998) noted:

Data collection and analysis is a simultaneous activity in qualitative research. Analysis begins with the first interview, the first observation, the first document read. Emerging insights, hunches, and tentative hypotheses direct the next phase of data collection, which in turn leads to the refinement or reformulation of questions, and so on. It is an interactive process throughout that allows the investigator to produce believable and trustworthy results. (p. 151)

Therefore, data collection and analysis should not be separated. The transcription process itself is a significant element of data analysis.

In qualitative research, most data analysis is done using the words of the participants (Miles and Huberman, 1994). Those words “can be assembled, subclustered, broken into semiotic segments” and “organized to permit the researcher to contrast, compare, analyze, and bestow patterns upon them” (p. 7). Data analysis in qualitative research is an ongoing process. Also coding is an organizational process that sorts collected data into categories or themes.

In this study, the researcher adopted the coding process to develop categories and themes for further analysis. Codes identifying units of meaning and themes were analyzed across the four cases. In addition, visual presentations were also adopted to

convey descriptive information about each case. Data interpretation covered both the understanding of the words of the participants and the personal interpretation of the researcher.

Establishing Validity

Creswell (2003) has stated that “reliability and generalizability play a minor role in qualitative inquiry” (p.195). In qualitative research, the validation of the findings indicates the “accuracy of the findings” (p.196). Creswell (2003) has proposed eight practices to ensure the validity of quantitative research findings:

1. triangulate different data sources of information;
2. use member-checking to determine the accuracy of the qualitative findings;
3. use rich, thick description to convey the meanings;
4. clarify the bias the researcher brings to the study;
5. include negative or discrepant information that runs counter to the themes;
6. spend prolonged time in the field;
7. use peer debriefing to enhance the accuracy of the account;
8. use an external auditor to review the entire project (p.196).

Yin (1994) provided four criteria to ensure the quality of case study research.

They are construct validity, internal validity, external validity and reliability.

Construct validity can be achieved when evidence from multiple sources is used and analyzed in the study (Yin, 1994). Internal validity can be achieved through rich and thick descriptions which add more credibility to the narrative (Creswell, 2003).

External validity can be established by forming certain generalizability of the findings in case studies (Yin, 1994). Also the conceptual framework of the study should have a certain transferability. As well, developing a case study database to deal with

documentation can be used to establish the reliability of a study (Yin, 1994). Data triangulation was implemented in this study to establish the trustworthiness and dependability of the data. Different sources were used for collecting the data, and “to the extent that the various sources provide similar information, the data can be said to be corroborated through data triangulation” (Pan, 2008, p.187).

Limitations of the research

The limitations of a multiple case study include the need to be cautious when extrapolating lessons beyond the cases researched. The generalizability of findings is decreased by the procedure of purposeful sampling.

First, China is a large country with great diversity. Provinces vary in their regulation making and implementation. And imbalance of economic development exists among regions. Four institutions in this study are all located in the northeast of China, so the study needs to be cautious in drawing general conclusions about in-service teacher education in China.

Second, the selection of the four institutions took into account travel distance and accessibility to researcher, while also considering the status and reputation of the institutions in the current system. With one national institution and three provincial institutions, the selection is limited in number yet manageable and sufficient for one study.

Third, the participants may not be able to represent an accurate picture of every

aspect of the work done by different schools or colleges within the selected institutions, as there are no well-established communication channels for in-service work done by different colleges and schools within institutions. In addition, the possibility of participants withholding information due to its sensitivity at present also needs to be taken into consideration.

Fourth, the focus on programs set up especially for in-service teachers in primary and secondary schools itself has limitations as teachers also enroll in other kinds of programs that may contribute considerably to their professional growth.

In addition, teacher educators in normal universities can participate in the work of continuing teacher education in many ways but the study only focused on institutional practices and individual behavior is included only when it is part of an institutional initiative. The enormous size of the Chinese teacher education and training system makes it difficult to grasp the full dimensions of the challenges facing teacher education reform.

Nevertheless, due to the centralized feature of the Chinese education system and the similar situations of provincial normal universities and national normal universities, the findings of this study, to a large extent, could have implications for the system as a whole.

Right now, the administration of teacher education in China takes place at four levels: the MOE, the Provincial Education Departments, the Municipal and County level education offices, and the Urban and Commune Education Committees. Since the universities selected for this study are at the national and provincial levels, the

relevant policy analysis and data collection are concentrated only at these levels.

Another important limitation of the study is the possibility that participants withheld information and opinions from the researcher due to the sensitivity of the topic.

Regardless of the limitations of its research, this study represents the first known attempt to examine from an institutional perspective how and why Chinese normal universities are engaged in the field of continuing teacher education. It is the researcher's hope that the study will stimulate more thinking and interest in promoting the role of higher education institutions in the work of continuing teacher education.

Ethical Considerations

I planned and conducted all research activities according to the guidelines set out by the University of Toronto Research Ethics Committee. In order to make sure that all the participants were properly informed, they were asked to provide before the interview a signed Letter of Invitation and Informed Consent Form. These written disclosures protect the welfare and dignity of the research participants. The disclosures included the nature of the research, the purpose of the research, the methods of data collection and data analysis, and assurances of confidentiality, as well as details of the use of the participants' responses and comments as data for the study. These documents were signed by the participants and the researcher before the interviews took place. Both the researcher and the participants retained copies of each document for future reference.

To ensure the confidentiality of the data, all paper data, audiotapes, and electronic data were stored in a secure location known only to myself. In terms of the final disposal, all data will be destroyed 3 years after the completion of the study. In order to prevent any physical or emotional harm to the participants, they were made aware of their right to withdraw from the research at any time without explanation. To ensure the trustworthiness of the data and to provide knowledge of the findings to participants, I supplied them with detailed reports about their interviews as well as the interpretation and summary of the data analysis. The participants were provided with opportunities not only to correct or clarify any information regarding the report itself, but also to comment on my initial analysis. A final summary report of the study was mailed or e-mailed to interested participants. The study only mentioned the names of the institutions and preserved participant anonymity when directly quoting from the interview conversations.

Modifications to the original intent

The conceptual framework for the study was developed from a review of relevant literature on teacher professional education and institutions of higher education. The literature reviewed important aspects of the major types of teacher professional education that universities could offer, and elements impacting institutional reform. The framework was an attempt to capture the current state of the work and build up a firm knowledge base for further exploration of this kind. The data collection process was intended to cover three aspects highlighted in the conceptual framework: major

forms of participation, formal structures, and barriers to participation. This framework was built on the expectation that universities might have a range of initiatives in this area, as the North American literature discusses.

The topic of the study is in many ways unexplored. In my review I mostly found studies that focused on one particular project which involves a university and a group of teachers, or a university and school boards, or a university and a particular school. The discussion of these studies was often on how the project design helps teacher learning, or on to what degree teachers changed after participation, or on how the project or cooperation influenced the school culture in which meaningful teacher learning takes place. In those cases, the literature of teacher learning and teacher knowledge could be well connected to the purpose of the discussion.

For this study, there is not much literature that directly addresses the topic. In fact, one of the challenges I faced at the very beginning was how to put together a literature review for this project. Should I devote part of the space to the literature of teacher learning and other aspects related to teacher education in general? I decided to do so because this knowledge is fundamental to any topic concerning teacher education and training.

I framed the study from the perspective of universities. I wanted to find out is not how the participation of universities influences schools or teachers' learning, but rather the ways in which universities need to change and how they might possibly change under the current situation. It may therefore appear that the knowledge about teacher learning and education in general doesn't well inform the research questions

and was not directly reflected in the conceptual framework.

However, this literature contributes to our thinking about the core issues underlying this study. If we favour and encourage university participation in in-service teacher education, ultimately we will have to go back to the discussion around teacher learning and the nature of teacher knowledge, which is already a very contested field. The promotion of teacher action research through establishing close cooperation between universities and schools will ultimately influence the focus of researchers involved in this work. As teacher education in university becomes more field-centered in the future, it will change the dynamic relation between universities and the teaching profession and contribute to the discussion about research and practice in rich and meaningful ways. For example, how should we view the value of the knowledge in teacher education generated by different stakeholders? How could we explain the process of development in universities from promoting the delivery of different kinds of in-service training to the impact on the knowledge the university produces? And how does the change of the nature of this knowledge in turn influence the institution delivering training programs?

These are important issues to be addressed in the future. They are relevant to this study but cannot be taken up fully because of the formative nature of this study.

The purpose of this study is to draw a big picture from the perspective of Chinese normal universities and find out what the current situation is regarding this work as well as the rationale behind it. Thus, elements of structure and participation, also barriers, are the key points to draw this picture.

Accordingly, the conceptual framework has three major sections. The first and the second parts of the framework are all about the actual programs that universities operate at present. The reason why I added the discussion of policy context after early data collection was mainly for the reasons explained in what follows.

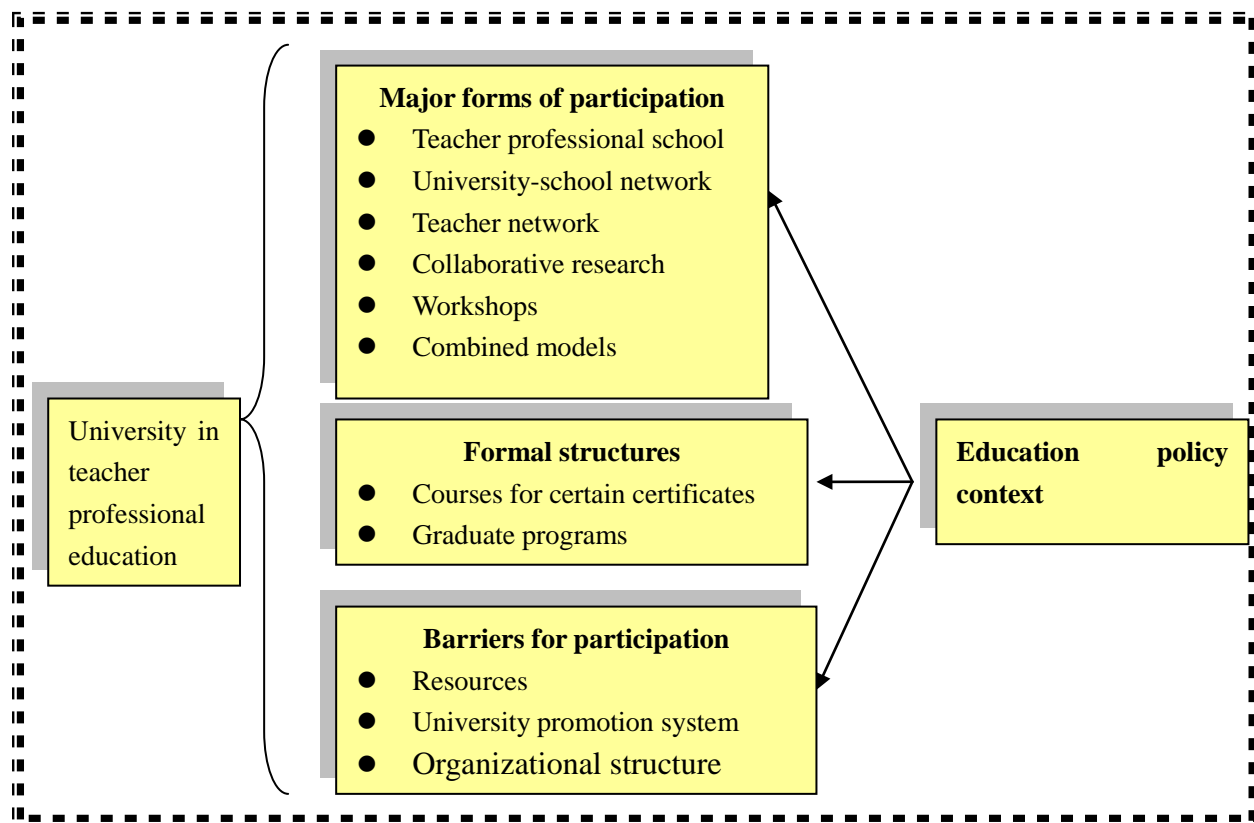
First, the early conversations I had with the university administrators had much to do with policy. The later data collection also proved the point that current work carried out as institutional practices correspond with the government policy very well. Detailed information about particular programs did not come out often in the interviews with the participants, as this kind of description will not tell us much about the big picture: what normal universities did and why they did it. Moreover, some of the “to-be-implemented” policy initiatives will also have a great impact on normal universities’ involvement in in-service teacher education in China. For example, the MED programs enrolling teachers who graduated from state sponsored tuition free programs will be implemented by six national normal universities in the year 2012, which will further change the discussions about funding patterns, enrollment planning, the percentage of on-campus teaching, etc. Therefore, the study was shifted more towards a policy study. Only if we have a clear grasp of major policy initiatives behind the current programs can we have a better understanding about the purpose of different programs, the connections and incentives behind them as well as where they were situated in the overall transformation of the teacher education system in China.

In fact, the early data collection revealed there is not much data available in China on the major forms of universities’ participation in in-service teacher education.

Mostly because the universities' participation is still at an early stage, there is not yet a systematic evaluation of the effectiveness of particular kinds of training programs hosted by the universities. Moreover, university-initiated programs constitute a very small percentage of the total. Among the current programs most are funded by the government. The form of the training programs including the length of the programs and the training locations are predetermined by the government, leaving very limited space for universities to improvise.

Furthermore, it is not apparent based only on the framework how the factors relating to universities' in-service teacher training programs align with each other as well as what are the key influences that drive an institution to commit to in-service teacher education in China. The centralization of the Chinese education system determines the power of government policies over every aspect of educational change and institutional reform. The work of normal universities in in-service teacher education is no exception. Differing from what I originally expected, each conversation I had yielded information concerning relevant policy change as well as system evolution rather than a lot of information about specific in-service teacher training programs, which proves that the national policy context serves as deciding driver and at the same time the background to in-service teacher education in China. Therefore, building on my previous intent, the element of the policy context was added to this study's conceptual framework. The visual representation below shows the revised conceptual framework.

Figure 3: Revised visual representation of the conceptual framework



In order to set up the policy context for the normal universities selected for this study, evidence about relevant documents and policies is first organized and presented in the following chapter.

Chapter summary

This chapter introduced the overall design of the study and the revised conceptual framework for the data collection and the resulting analysis. In reality, the study progressed not on a linear way as presented in this chapter but rather in a parallel and interactive manner. Usually, interview questions were reviewed after the analysis of

previous interviews and available documents. Necessary changes were then made for the following interviews so that the conversation could be more specific and informative. The decision to revise the original conceptual framework also manifested this feature.

Chapter 4: Policy context for the university's participation in continuing teacher education

The data collected and presented in chapters four and five only includes degree and non-degree education programs set up especially for in-service teachers in primary and secondary schools. This standard itself has limitations as the vice-director of the Continuing Education Department of Beijing Normal University pointed out, “With the establishment of the open teacher education system, graduates from non-teaching majors have entered into the teaching profession and are well received by many schools. More and more in-service teachers are taking master’s programs in other fields such as computer science” (Interview conducted in November, 2010). Also, teacher educators in normal universities can participate in the work of continuing teacher education in many varied ways but the study only focused on institutional practices and individual behavior is included only when it is part of an institutional initiative.

An important feature of the interview findings is that the work of normal universities in in-service teacher education is embedded in as well as deeply influenced by a series of educational policies set out by the government and by the overall transformation of the teacher training system. These must be described first in order to form a better foundation for the later discussions about what these normal universities do in terms of teacher continuing education-where this work is today, and where it could (or should) be in the future.

The data are organized into three parts: the overall system of continuing teacher

education in China and Ontario, major policies indirectly influencing teacher education, and policies directly influencing in-service teacher education. The first section presents findings regarding the contextual background of the Chinese and Ontario teacher education systems so that the current place of universities can be properly located. It is comprised of four elements: system overview, historical background, the governance and structure of the continuing education system and the role of the university in the current system. The second section presents findings about major policy initiatives and actions taken by normal universities in China indirectly influencing teacher education. This part introduces some examples from the wave of exploration of alternative means of teacher education and training that occurred after the implementation of the policy of charging no tuition for normal students in 2007. Then, the policy concerning the national curriculum in China as well as its influence on universities' role in continuing teacher education is briefly addressed. The third part of this chapter elaborates on policy initiatives particularly referring to in-service teacher education in China. The organization of the third part is set up for clarifying the formal structures of current in-service teacher education in Chinese normal universities. This part is further divided into degree-based teacher training policies and non-degree based teacher training policies.

The overall system of continuing teacher education in China and Ontario

The Chinese teacher education system

System overview

At present, China has the largest teaching force in the world. 16.92 million teachers were employed in 2008 in 580 thousand schools with 320.99 million registered students (2010, MOE website). The number of students admitted to universities has multiplied several times since the implementation of the mass higher education policy in China and has reached 20 million. At present, there are 2,305 universities in China, among which there are 656 private universities (<http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4960/201012/113595.html>). All normal universities including national ones and provincial ones are publicly funded. Generally speaking, they enjoy priority for public funding from the central and local governments and have a better reputation and administration than private universities. Many national education policies are either delivered directly from the Ministry of Education to major universities or through provincial departments of education to provincial or local universities. 75 universities including 5 normal universities are under the direct management of the Ministry. Other universities are under the administration of the provinces or municipalities where they are located (2010, MOE website).

Education in China is a centralized system controlled by the national government through various educational laws, policies, and teaching requirement for schools, colleges and universities in general. Under the leadership of the Ministry of Education of the central government, the provinces use a prescribed national curriculum and the national competitive examination system has a huge impact on teaching and learning in schools (Tang & Absalom, 1998, p.125). Starting in the mid-1980s, the central

government began a process of decentralization, giving more decision-making power to local governments and more autonomy to higher education institutions. Also teacher education institutions were given special attention in this regard. As Gao Yi pointed out in the 1980 national conference on teacher education:

Training institutions should be localized. They should be oriented to their own provinces and their own regions. They should train teachers for their local use, forming a network of teacher training suitable for educational development in their own areas (Lo, 1984, p. 88).

The system of decentralization was first confirmed in 1987. The key issue of the decentralization decision was the division of responsibilities between the central government and the provincial governments as well as the provincial governments and the lower level education departments. Different levels of government assumed much more responsibility for financing and administering basic education affairs. The responsibilities of the national-level government for education include teacher training, recruitment and assessment, and developing guidance and research regarding teaching matters (Lewin, et al., 1994). Of course, although the pattern of decentralization across China followed the same policy guidance of the central government, its implementation differed based on local conditions (Lewin, et al., 1994).

As a result, the Chinese education system has increasingly favored regional autonomy. Decentralization in textbooks, school management, and the entrance examination system is being implemented across the country. In 1993, the State Council issued the “Program for China’s educational reform and development” (State Education Commission, 1994; Cui, 1993). This document identified the overly

centralized administrative and financial structure as one of the major problems in the education system and clearly stated that:

The system to run schools will also witness great changes with the government monopoly to be broken... At present basic education must be achieved mainly through local government schools (Cui, 1993, p.16).

Since then, the provincial governments have been given enough space for gradually taking more responsibility for basic education and teacher education and training, and they have also become the primary providers of education funding and support. The 1993 document specified six funding channels for precollegiate education:

- 1) Urban and rural educational surcharges levied by local governments;
- 2) Contributions from industry and social organizations;
- 3) Donated funds from community organizations and individuals;
- 4) Tuition fees from students;
- 5) Income from school-run enterprises;
- 6) Central authorities (State Education Commission, 1994, p.11).

This financial and management power shift was actually first evident in higher education, and then extended into the precollegiate level (Hawkins et al., 1999). This change was a direct result of the broader economic reform and the central government's transformation away from its role as sole provider of social services including education (Mok, 1997), which directly determined the fiscal nature of this decentralization process (Bray, 1999). Tao and Zou (1998) found that "a higher degree of fiscal decentralization of government spending is associated with lower provincial economic growth over the past 15 years" (p. 221).

The provincial governments were entrusted more power over higher education affairs. One of the most prominent education issues is resource allocation and investment patterns. These have fundamentally changed since 1985 from a single narrow source to more diversified sources. This financial reform has included two strategies: financial decentralization and financial diversification. A main shift in this reform was the transfer of responsibility for educational affairs from the central government to different levels of government. To be more specific, different levels of education are administered by different levels of governments. As a result, each provincial government is responsible for the provision of higher education within the province and basic education matters. The central government only directly finances and manages some national-level higher education institutions.

This funding reform was embedded in the larger financial system reform that occurred at the end of the 1970s. Before that, the lower-level governments submitted all their tax revenue to the higher-level government and the higher-level government would distribute money to the lower level governments. This practice was called *tong shou tong zhi* (complete collection and complete distribution). After the reform, the practice of *feng zhou chi fan* (eating from separate pots) took place. Accordingly, each level of government takes responsibility for its own finances. This change to a large degree successfully mobilized additional resources in the developed provinces for education development. However, this led to much larger disparities in education investment between provinces and inevitably left the less-developed areas in even more difficult because “variation in provincial resources has a strong effect on the

benefits of fiscal decentralization” (Cheng, 1997,p. 450).

To summarize, to this day, five different educational finance systems have been put in place:

- Central government control of the financial system with management at three levels (1949-1955)
- Central government-controlled financial system with management by provincial and central governments (1956-1957)
- Dependence on provincial governments (1958-1971)
- Central government provision of earmarked special funds for education (1972-1979)
- Local budget allocation by usage and special grants from the central government (1980-) (Lewin, et al., 1994, p.22)

The following table gathers the currently available statistics (2007-2008)

regarding the fiscal investment in education.

Table 3: Fiscal investment in education

Region/province	Education budget (billion yuan)			Percentage of the overall provincial budget (%)		
	Year 2007	Year 2008	Percentage of growth%	Year 2007	Year 2008	Percentage of growth %
Total	8094.34	10212.97	26.17	16.26	16.32	0.06
City of Beijing	315.97	381.28	20.67	19.16	19.46	0.3
City of Tianjin	113.88	147.17	29.23	16.89	16.96	0.07
Hebei province	302.68	406.33	34.24	20.09	21.59	1.5
Shanxi province	189.21	251.4	32.87	18.02	19.12	1.1
Mongolia autonomous region	159.59	215.81	35.23	14.75	14.84	0.09
Liaoning province	295.04	360.68	22.25	16.72	16.75	0.03
Jinlin province	154.68	208.23	34.62	17.5	17.64	0.14

Heilongjiang province	196.48	255.4	29.99	16.55	16.56	0.01
City of Shanghai	318.21	358.86	12.77	14.59	13.83	-0.76
Jiangsu province	507.43	618.94	21.98	19.87	19.06	-0.81
Zhejiang province	411.73	471.55	14.53	22.79	21.35	-1.44
Anhui province	239.53	312.31	30.38	19.26	18.96	-0.3
Fujian province	216.72	269.41	24.31	23.8	23.68	-0.12
Jiangxi province	183.76	220.23	19.85	20.3	18.2	-2.1
Shandong province	458.21	555.84	21.31	20.26	20.55	0.29
Henan province	406.47	496.01	22.03	21.73	21.74	0.01
Hubei province	223.59	272.5	21.87	17.5	16.51	-0.99
Hunan province	260.93	338.99	29.92	19.23	19.2	-0.03
Guangdong province	659.75	797.98	20.95	20.88	21.12	0.24
Guangxi autonomous region	200.65	258.72	28.94	20.35	19.95	-0.4
Henan province	50.3	62.07	23.4	20.51	17.34	-3.17
City of Chongqing	146.72	180.07	22.73	19.1	17.72	-1.38
Sichuan province	340.83	476.45	39.79	19.37	16.16	-3.21
Guizhou province	163.31	226.19	38.5	20.53	21.46	0.93
Yunnan province	217.5	279.7	28.6	19.16	19.02	-0.14
Tibet autonomous region	40.6	47.83	17.81	14.74	12.57	-2.17
Shanxi province	180.55	264.58	46.54	17.13	18.52	1.39
Gansu province	133.19	194.23	45.83	19.72	20.06	0.34
Qinghai province	40.13	54.48	35.76	14.22	14.98	0.76
Ningxia autonomous region	52.43	56.65	8.05	21.68	17.45	-4.23
Xinjiang autonomous region	151.57	210.44	38.84	19.06	19.86	0.8

(source: <http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4958/list.html>)

Using the year 2008 as an example, the fiscal investment of Shandong province was higher than that of the other three provinces (or regions). Yet, because of the much larger population of Shandong, the average educational budget was lower than the national average and it ranked 23rd in the year 2008. Among the three provinces and the national capital, Hebei province took first place in terms of the overall percentage of its yearly educational budget as a portion of its total budget. Under the guidance of the Hebei Education Department, the work done by Hebei Normal University really has stepped ahead in many aspects to promote in-service teacher education work. For example, the university was among the first group of universities exploring alternative ways to connect in-service teacher education and student teacher internships and it established new offices particularly for arranging work of this kind. (We will return to this in detail later.)

The impact of the inequality that exists in teacher training investment is reflected in various indicators in education. One study points out that there are clear disparities in the quality of teachers among provinces (World Bank, 1999). Cheng and Zhang (2000) studied higher education institutions and stressed that there are huge disparities in higher education institutions between national level universities (key universities) and other universities as well as between the Eastern provinces and Western provinces in the country. In order to lessen the downside of the financial reform on education development in less developed provinces, the central government has often turned to technical solutions such as grant funding to the provincial government or targeted assistance to rural areas (Tsang, 1983).

Although there are no exact statistics available for this study, we need to be clear that investment in education does not necessarily mean investment in teacher continuing education. As a matter of fact, for quite a long time, in-service teacher education has not been listed among the top priorities of many provincial governments. This was further confirmed by the interviews with people in Hebei Normal University and Hebei Education Department, and could also to a large degree explain why the central government has pushed this work so hard in recent years.

The most recent national education development guidelines (2010-2020) stated that the central government should further transfer authority over educational issues to lower level governments, and foster a regional approach and multiple methods of educational funding. The central government needs to continue monitoring the reform process, provide guidelines and suggestions and offer funding directly to the rural and less developed regions.

Historical background of the Chinese teacher education system

At the time of the founding of the People's Republic of China in 1949, the number of elementary and middle school teachers was seriously insufficient and the teaching quality was extremely low. A large number of short-term teacher education classes were organized to train new teachers. At that time, in-service teacher training was almost non-existent. Teachers usually taught themselves to improve their teaching knowledge and skills (Cui, 2001). The situation of the Chinese teaching force did not improve at all for quite some time due to the unstable political environment. In

particular, during the period of the Cultural Revolution, most forms of teacher education and training completely stopped. It was predicted that by the end of the 1980s, China would need more than two million elementary and secondary teachers (Paine, 1992, p. 185).

The Chinese government has highlighted the status of education in its overall national development since Deng's opening up policy in the 1970s. Educational reform, to a large degree, has been aligned with the emerging trend of modernization ever since (China Education Yearbook Editorial Dept, 1987). Educational development since 1978 has been guided by a series of national policies including the 1985 policy for systemic education reform, the Outline of Educational Reform and Development in 1993 and the Action Plan for Educational Development in 1999. Since the 1980s, the Chinese education system has been undergoing major transformation including the universalization of nine-year compulsory education by the year of 2000; reform in secondary education and vocational education; and admission and management reform of the higher education sector and the development of 100 key universities across the country (Tsang, 2000). In the mid 1990s, the central government started to lay more emphasis on education development in poor areas with increased government funding.

Teacher education is the area that will be most affected by national education objectives in the foreseeable future and it is being organized to fulfill the major purposes of modern education in China (Meyer, Nagel, & Snyder, 1993). By the late 1980s and early 1990s, China had formed a relatively stable network for pre-service

teacher education. This includes six types of normal institutions which can be divided into three levels offering pre-service teacher education. The first level is normal universities and vocational normal universities. They deliver a four-year program with an undergraduate degree. The graduates from this level are assigned to high school teaching positions. The second level includes normal colleges. They usually provide teaching diplomas, and in some cases undergraduate degrees, and are responsible for training middle school teachers. The length of the programs offered varies from 2-3 years. The last level is made up of normal schools, special education normal schools and preschool normal schools that offer 1-2 year programs. The students graduating from this level have only teaching certificates and can only teach in primary schools or preschools (Li, 1999).

In 1994, the total number of normal institutions for pre-service teacher education was 1202, out of which around 200 were universities (Yearbook of Chinese Education Statistics, 1994). After years of concerted effort, the problem of the shortage of teachers has been greatly reduced. According to Chinese educational statistics, the number of elementary and secondary school teachers has increased significantly.

At the same time, in-service teacher professional development has also witnessed tremendous improvement since 1978. Because of the impact of the Cultural Revolution, the graduates of normal institutions often spent most of their time in school attending political activities. As a result, the actual quality of the graduates was greatly compromised. Thus, providing continuing education for in-service teachers was another major task that the government needed to tackle (Li, 1999). Starting in

the 1980s, teacher educators in China adopted the name “teacher continuing education”. At the same time, the goal of a nationwide formal teacher in-service education system was established. In 1985, the government issued “the central government decision on educational system reform” and clearly stated that “[the state] must carry on earnest training and the inspection of in-service teachers, take the development of normal education and in-service teacher training and advancement as a strategic measure in educational change”. Due to the strong push from the government, large-scale teacher training took place. To summarize, two important interlocking measures were adopted: establishing a network for in-service teacher training and upgrading the qualification level of teachers.

The network of in-service teacher education is also a three-level system including provincial teacher training colleges, regional and municipal teacher training colleges, and county-level teacher training schools (Li, 1999). Because of the shortage of teachers and the low quality of practicing teachers after the war, in-service education focused only on basic training. Different levels of in-service teacher education were organized corresponding to the type or level of school teachers and types of qualification awarded on graduation. For instance, rural primary school teachers attended training courses at town teacher training centres and secondary school teachers attended provincial level teacher colleges. At the 1978 National Education Conference, Deng Xiaoping marked a new direction for educational reform and change. He called attention to four areas;

- Raising the quality of education;

- Restoring order and discipline in schools;
- Reforming education to meet the needs of national economic development;
- Raising the quality and status of teachers (Lo, 1984).

As the recognition of the key position of teachers in the success of educational reform increased, the Chinese government issued relevant policies and regulations to improve the status of teaching as a profession (Li et al., 1998). The Education Laws of the People's Republic of China aimed to protect the legal rights of teachers, and increase the salary and benefits of the teaching profession. A more recent Law for Teachers in the People's Republic of China (Ministry of Education in China, 1993a) clearly stipulates that teachers' salaries should be the same as or higher than the average salary of other government employees and the local governments should make providing better housing and benefits to teachers a high priority (Shao, 1995). Later in the same year, the "Outline for Education Reform and Development in China" (Ministry of Education of China, 1993b) was issued. The document emphasized that "[teachers] hold the 21st century international competition... a strong nation lies in its education, and a strong education system lies in its teachers" (p.8). It was this document that set out the goal that by the end of the 1990s, the vast majority of primary and secondary school teachers should have appropriate academic degree standards. In response, many local governments organized some major degree enhancement programs. For example, in the mid 1990s, the Shandong Education Department organized two major degree enhancement programs in the form of correspondence education. The continuing education department of Qufu Normal

University was heavily involved in the material preparation and hosted some key lectures. Director Liu of Qufu Normal University continued, “after these two major programs, the degree enhancement activities were coming to an end” (Interview in October, 2010).

As the open teacher education system develops, the routes into teaching will certainly become more diverse. As a result, there is an urgent need for more comprehensive and systematic specification and reinforcement of the standards for entering the teaching profession. A teacher certification system was initiated in 1995 and started to be implemented around 2000. In 1995, the system of teacher certification and licensure was proposed in the Stipulations of Teacher Qualification Certification (Ministry of Education of China, 1995). According to this system, the central government is responsible for making national teacher certification policies and monitoring their implementation in different provinces. Different levels of local governments including county-level governments look after detailed organization and implementation. Governments hold the power to issue teacher certification and make relevant regulations and procedures. Higher teacher education institutions also have been entrusted by the governments with the licensing power of teacher certification. Higher institutions must set up teacher certification evaluation committees evaluating applications based on the requirements set up by provincial governments. In 2000, detailed guidelines with procedures were issued to guide different levels of government in implementing the teacher certification system. The current types of teacher certifications include kindergarten teacher certification, primary school

teacher certification, junior high school teacher certification, senior high school teacher certification, vocational school teacher certification and higher education teacher certification. The management of teacher certification is still changing, and how or whether it will relate to in-service teacher training is not yet clear.

In-service teacher education not only updates teachers with the new knowledge and skills required by the new reform initiatives, but also for less developed provinces and especially for rural areas, in-service teacher training serves a remedial function as teachers there often have fewer years of formal training. The new era of teacher education in China needs clearer regulations and power allocation among governments and higher education institutions. Governments at different levels are taking various measures to enhance the social and economic status of teachers such as praising and rewarding model teachers annually at the provincial or national level (Dan & Zhang, 1991).

In 2004 the Ministry of Education launched the 2003-2007 New Action Plan to “Revitalize Education in which drafting standards for accreditation of teacher education institutions, curriculum of teacher education and quality of teacher education were outlined” (Zhu and Han, 2006, p. 70). A five-year training plan has been issued for the last two decades to guide the overall teacher training for the whole nation. During the last Five-Year training plan (2003-2007), 1000 rural backbone teachers were trained together with one million K-12 school teachers. 2000 school teachers upgraded their educational degree level. Right now, the fifth round of the Five-Year teacher training plan is in progress (2008-2013). In this training round,

there are four major priorities: first, the selection of 100 universities including comprehensive universities and normal universities to set up national-level teacher training bases; second, the development of post-graduate teacher training; third, the launch of a national primary and secondary school teacher project with an emphasis on the middle and western parts of China; fourth, the improvement of the e-teacher training network.

Governance and structure of continuing teacher education

Generally speaking, for a very long time, pre-service education and in-service training in China have been carried by two independent systems. Normal universities and colleges as introduced earlier are mainly for pre-service teacher education. The structure of in-service teacher education comprises three levels, including: provincial teacher training schools, regional and municipal teacher training schools, and county-level teacher training schools governed by provincial and local governments (Li, 1999). They are included in adult education institutions (Gu & Shan, 2004) and not connected to universities. In recent years, it appears that some provincial teacher training schools were merged into universities such as the Shanghai teacher training school which was absorbed into East China Normal University. Based on numbers provided by Chinese Educational Statistics, in 1994, there were a total of 231 in-service teacher training institutions from the county level to the municipal level and the provincial level.

There is a diversity of teacher development approaches that currently exists in

local schools. Some approaches are traditional while others are designed according to the needs of individual schools. A few common approaches are partnerships between experienced teachers and new teachers; collective lesson preparation with grade teams or teaching teams; teaching competitions among schools; and short-term workshops, academic lectures and so on (Clark, 1999). Before the 1990s, in-service teacher training predominantly consisted of qualification-upgrading training for those teachers who had not met the national qualification standards (Fang & Zhu, 2007). Accordingly, the key responsibility for all the in-service teacher training institutions is to provide supplementary normal education and upgrade the qualifications of in-service teachers (Guan, 2003) to meet the benchmark set up by the government as follows.

China has established requirements and standards for primary and high school teachers:

- 1) primary school teachers should have normal school certification;
- 2) junior high school teachers should be graduates of normal colleges;
- 3) senior high school teachers should have an educational background that includes normal universities (State Education Commission, 1995, p.58).

As a result of all the policy encouragement from the government, the qualification level of regular Chinese teachers has been greatly improved (Li, 1999). “Within 14 years—from 1978 to 1992, the qualification rate of primary school teachers increased from 43 percent to 82.7 percent, and for junior high school teachers increased from 9.8 percent to 55.6 percent” (State Education Commission, 1994, p. 58). Based on the Chinese statistics of 1989 and 2006, the qualification rate for high school teachers with undergraduate degrees increased from 43.3% to 85.08%.

In the late 1990s, the Chinese government gradually realized that the problems in teacher qualification were not limited to ensuring teachers had appropriate degrees.

Using degrees as a standard for judging whether a teacher is qualified or not is problematic (Paine, 1991). As Paine (1992) has pointed out the problem is how can we build a teaching profession sustainable in numbers as well as teaching expertise. Acquiring an academic degree is only a starting point for a successful teaching career. The quality of teachers and their teaching needs continuous development as the needs of students are changing fast. This is a real problem not only for teachers themselves but more importantly, for the Chinese education enterprise as a whole. Paine (1992) argued that:

the shortage of qualified teachers is not the greatest or most important challenge facing the modernization effort in education. That shortage is a resource problem, solvable with technical solutions, many of which China has already undertaken. A more fundamental obstacle to educational modernization is the practice of teaching in China today (p. 28)

Thus, gradually the policy emphasis shifted from upgrading teacher qualifications in the 1980s to creating mechanisms for assuring the quality of teacher learning in the late 1990s (Paine & Fang, 2007). In-service training for degree supplementation purposes is diminishing while the concepts of life-long learning and teacher professional development increasingly have gained popularity. In 1998, the Ministry issued guidelines for the Development for Continuing Education for Primary and Secondary School Teachers. All teachers (including those in primary and secondary schools) are required to participate in teacher professional learning every five years for at least 240 hours (Fang & Zhu, 2007). Yet, the training bears no direct relationship with teacher salaries or benefits.

The role of universities in the current system

The higher education system in China followed the Soviet higher education system in the early 1950s. The MOE was responsible for making standard teaching plans and curriculum. The central government required that all higher education institutions implement the centrally-made policies regarding curriculum, teaching plans, finances, and personnel matters as well as construction. The grouping of institutions was based on a division of knowledge fields. Major types of institutions included universities of science and technology, agricultural universities, medical universities, normal universities, etc. There were also comprehensive universities which brought art and science majors together, which were conceived as institutions devoted to pure science and arts disciplines only (Zhao, 1986). Within every group, there were national-level universities and provincial-level universities. The central government directly administered 14 comprehensive universities of which there were one or two in each major region. The Ministry also directly administered six major normal universities which were responsible for higher teacher training in six major administrative regions. The rest of the teacher training universities were led by provincial governments with the expectation that they would lead provincial teacher education efforts. After the decentralization efforts that began in the late 1970s, while the general features of the system have remained in place, there has been more freedom for each province to develop its own method of teacher training based on the support received from its provincial government (Hayhoe, 1989).

National-level universities enjoy much higher prestige than provincial-level ones.

Faculty members dominate various teaching and learning committees that set standards and guidelines for the country. This multi-level system means that universities in different categories and at different levels face different challenges in educational reform. Major criticisms of the educational system have concentration on the issues of overspecialization and the limited research activities of universities (Hayhoe, 1989).

The division of pre-service and in-service teacher education creates the problem of a lack of transition and continuity in teacher education. For teachers, learning and teaching are clearly separated which becomes a serious barrier for enhancing teacher quality (Cui, 2001). As the negative side of the separated teacher education system has emerged, the government has started a process of redesigning the system including the role of the universities in general.

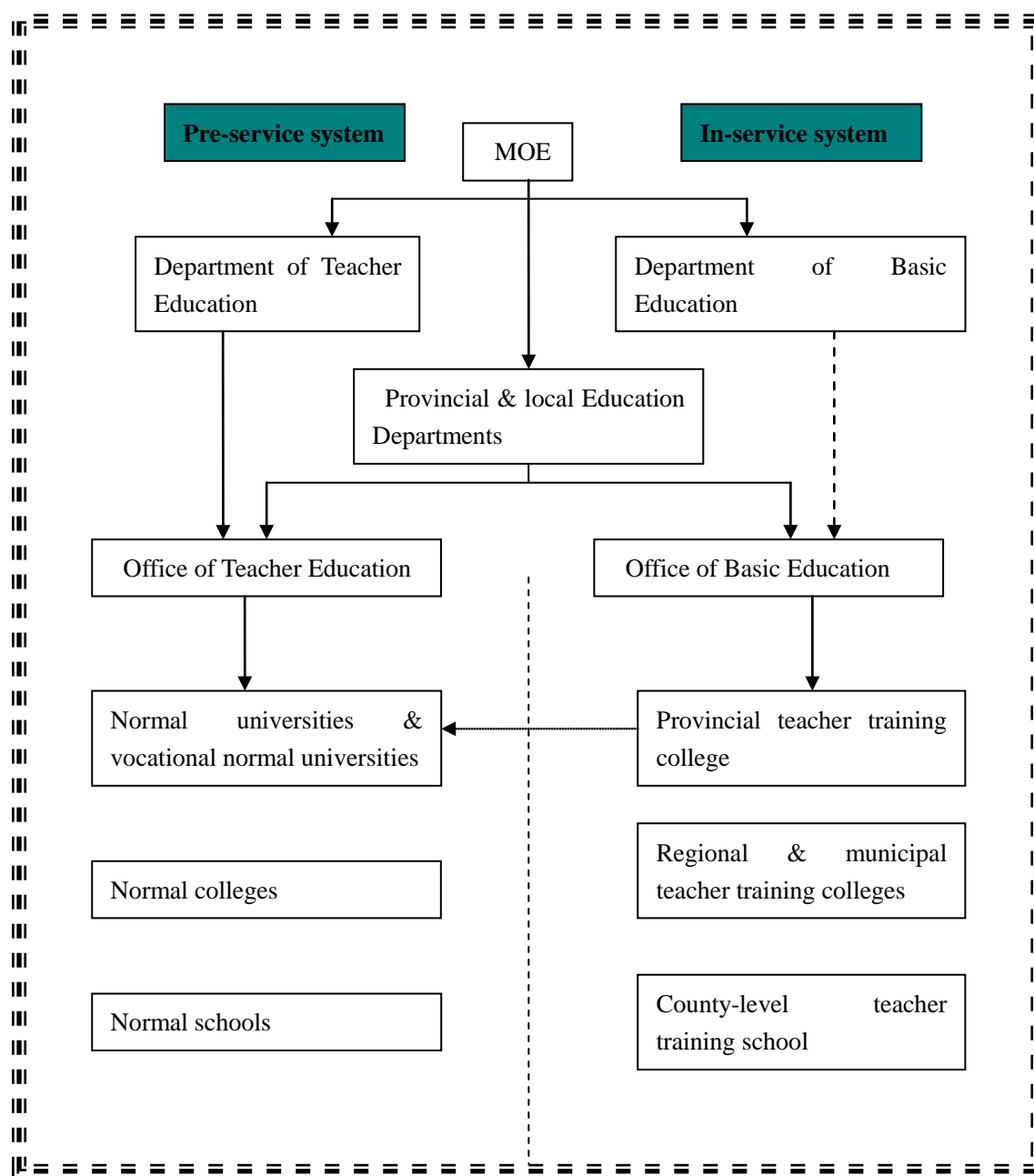
Meanwhile, because of the impact of market economy globalization, the Chinese government has also determined to move Chinese teaching toward becoming an all-graduate profession (The MOE, 2002). In 1999, the Ministry of Education initiated a project entitled “Project Gardener Crossing the New Century”. The project proposed to improve teachers’ credentials. Its goal was that by 2010, all primary school teachers should have diplomas from professional teachers colleges, while high school teachers should have degrees from four-year normal universities or a master’s degree. As a result, starting in the late 1990s, normal universities and comprehensive universities began to offer M.Ed programs for in-service teachers. However, the numbers involved are still relatively small. By the end of 2003, there were 6,970 teacher students

enrolled in these programs (Feng, 2003).

The changing nature of the economy has put the concept of the market into the preparing and training of teachers. This reform is not only changing the dynamics between previously relatively independent teacher preparation and training systems, but also serves as a large motivation for universities to develop new degrees, programs and training ideas. At the same time, the government intends to grant more decision-making power to individual universities in terms of their delivery of teacher learning programs. Structural change of in-service teacher education in China would be an excellent national experiment in the ways by which the centralized administration system can work with individual institution initiatives.

The following diagram shows the pre-service and in-service teacher education systems in China and the changing relationships between them.

Figure 4: Teacher education system in China



The left side of the diagram shows the system of pre-service teacher education in China. The right side shows the structure of in-service teacher education.

Pre-service teacher education has been under significant restructuring since the mid-1990s. The Fifth National Meeting on Teacher Education in 1996 envisioned a new teacher education system with normal universities and colleges as the main

providers and also the diverse participation of comprehensive universities (The State Commission of Education, 1994). This change itself revealed an emerging trend towards viewing the field as a potential market. The meeting encouraged comprehensive universities to establish teacher education departments and also suggested restructuring the three-level teacher institution system into a two-level system through expanding the number of higher institutions and gradually reducing the number of normal schools (Zhou & Reed, 2005). It suggested that all elementary and secondary school teachers would receive their degrees from higher education institutions. As a result of these suggestions, in many regions, normal schools and colleges have either been upgraded or absorbed by higher level institutions (Hayhoe, 2002). As this transition goes on, while these three levels of teacher education institutions still coexist today in many provinces of China, more and more elementary teachers and middle school teachers will be prepared by normal or comprehensive universities.

At the same time, in-service teacher education system had also increasingly expanded in recent years with the three levels remaining relatively stable.

Yet, it needs to be pointed out that the concept of “establishing an open teacher education system” in this reform context does not refer to including comprehensive universities in the work of training new teacher candidates, as comprehensive universities do not participate in pre-service teacher education as many of us expected would happen at the beginning of this reform process. Rather, the word “open”, as used by many participants in this study, actually indicates that teacher candidates in

China are not constrained within normal universities anymore. Students at comprehensive universities and in non-teaching majors at normal universities can also become teachers after taking required courses in education and passing the teacher certification examination which is currently designed by provincial governments. Ideally, the government would encourage comprehensive universities also to contribute to pre-service teacher education. In reality, the only comprehensive universities offering pre-service teacher education are those formed through merging with or absorbing nearby normal colleges or schools. Comprehensive universities, especially national-level comprehensive universities with newly-formed Faculties of Education only provide graduate programs which have no connection with pre-service teacher education. Take Peking University for example. The university established its Graduate School of Education in 2000. The school offers three master's programs including higher education, economics and administration of education, and educational technology. It also offers three doctoral programs, which are higher education, economics and administration of education, and education theory. The school does not provide undergraduate degrees or graduate degrees associated with pre-service teacher education. Therefore, within the pre-service teacher education system, the top level still, to a large degree, only comprises normal universities.

Meanwhile, the old system itself needs a major structural reform. The expectation of this structural reform is that the two subsystems (pre-service and in-service) are gradually being integrated with each other (Li, 2006). Indeed, more and more universities have started to get involved in the integration process and begun to

provide continuing teacher education. For example, in 2003, the Ministry of Education launched a project called “National Teacher Education Networking Consortium” (Ministry of Education, 2003b). This project is an internet-based national education project designed to take advantage of the resources of higher normal institutions through collaboration between the distance education system and regular universities to create national, regional and local teacher education networking (Ministry of Education, 2005). It is expected to provide both pre-service and in-service teacher education, thus allowing plenty of space for structural integration (The MOE, 2003a).

Nevertheless, the pre-service teacher education system and the teacher continuing education system still to a large degree remain independent because they are under different administrative branches of the Ministry. The pre-service system is under the Office of Teacher Education while the in-service system is administered by the Office of Basic Education. A general feature of the continuing education work done by the universities at present is that they only take part in non-regular teacher continuing education programs. (The training carried out by the in-service teacher education system is usually called ‘regular teacher training programs; training outside this frame is usually called ‘non-regular teacher training programs’). As for regular in-service training, the requirements set by the MOE in 1998 concerning hours of professional learning for primary and secondary schools remains a major policy guide for the provincial governments. Following this general guidance, provincial and local governments are responsible for making detailed regulations and work arrangements.

The local policies related to regular teacher continuing education work are very much diversified and thus the quality of the work varies from place to place. Teacher continuing education under this umbrella is usually called ‘regular in-service teacher education’ because it requires teachers to accumulate learning credits. This regular in-service teacher education work is carried out within the in-service teacher education system displayed in the right-hand part of the diagram above. Technically, its head office is the Department of Basic Education in the MOE. Yet, because the relevant decision-making power in fact belongs to the provincial and local education departments and the funding of this work also comes from the provincial and local governments, the MOE does not lead this work in a real sense at present.

The Ontario teacher education system

System overview (Canada)

The overall features of the Canadian education system contrast sharply with the centralized system in China. Canada has no federal system of education. Each province in Canada takes full responsibility for its education. Teacher education has different structures and practices in different provinces. Provincial authorities develop and supervise school curriculum. Teachers in Canada are organized into provincial associations (Connelly & Clandinin, 2001)

Compared to China, Canada avoids “establishing a hierarchy of institutions in terms of quality or according favored treatment to the front runners” (Leslie, 1980, p.61). Therefore, unlike the distinctive stratification of universities in China (national universities vs. provincial universities; normal universities vs. comprehensive

universities and other specialized universities), universities in Canada do not have the same diversified feature (Skolnik, 1986).

System overview (Ontario)

Ontario is a geographically and demographically diverse province with a school population of 12 million. It has 72 school boards. It has a diverse post-secondary education system. There are 18 universities and 25 colleges in total. Public universities receive most of their funding from the Ontario government but they also get significant funds from tuition fees and from research grants. District school boards administer specific programs and activities under the Ontario Ministry of Education. Teachers are considered to have a critical impact on student learning and are central to the success of the government's educational policies.

Historical background of the teacher education system in Ontario

Before the Second World War, the teacher education system in Ontario, and in Canada in general, had a similar structure to what China has now and what it had before 1949. Elementary school teachers were usually trained in normal schools while secondary school teachers were trained in either a university, a training college or a superior normal school. Differing from China, the institutional structure in Ontario is divided based on religious affiliation (Protestant or Catholic) and language (English or French). While the elementary teacher training program at this time emphasized

mainly professional courses, the secondary teacher training paid more attention to knowledge of academic subjects. After 1945, there were also policies to up-grade the education level of school teachers. Consequently, normal schools and colleges were absorbed into universities. 12 universities offer teacher education in Ontario (Belanger, 1976).

Professional education has been viewed as one important way to implement major educational reform since 1997. For instance, the report of the Teacher Education Council of Ontario task force on teacher in-service training (1992) stated that continuing professional education “is one of the most important elements in the response to pressures exerted on schools to meet the new challenges facing society” (p.3). Also, the Ontario College of Teachers (1999) has stated that professional education is an essential component of professional behavior in Ontario.

Governance and structure of teacher continuing education

At present, professional activities or learning are intended to be located within a “professional growth” paradigm instead of the traditional “deficit” paradigm (Broad & Evans, 2006). Continuing professional development is still largely done quite independently by various stakeholders (Howey, 1980). There is no mandatory PD requirement for teachers in Ontario from the Ministry of Education (though there was one briefly from 2000 until 2004). Local school boards are the major providers of continuing teacher education. The provision varies according to the different sizes of the boards and the resources available to them. The boards set aside time during the

week for workshops, inviting outside speakers, etc. (Belanger, 1976). PD days are specified by Ministry regulations and collective agreements. Local schools and school boards may create their mandatory PD sessions based on their priorities.

The Ontario College of Teachers (OCT) establishes standards for teaching and teacher learning in relation to student outcomes and works collaboratively with different providers including district school boards, faculties of education and professional associations to carry out a continuum of professional education for teachers (Ontario Ministry of Education, 2004). The OCT was established in 1997 and is responsible for setting standards and regulations, managing teaching certificates, accrediting teacher education courses and programs, and monitoring the provision of professional education for teachers. The OCT operates independently under the Ontario College of Teachers Act of the legislature. It has had significant impact on building a standard-based professional learning system in Ontario (The Ontario College of Teachers, 2004).

Subject councils (such as provincial associations of teachers of history) also provide member teachers with a variety of professional development opportunities (Ontario Ministry of Education, 1994). As well, TVOntario also contributes to professional development through its programs. Regional offices of the Ministry of Education and Training also deliver PD support particularly for small and isolated areas (Ontario Ministry of Education, 1994).

The Ministry of Education structures training programs concerning new curriculum, new teaching skills, and experimental programs and provides

job-embedded professional learning supports for Ontario teachers. The Ministry regulates a different provincial professional support system from the period of induction onwards. New teacher induction programs are provided for all beginning teachers. The school boards are responsible for providing orientation and mentoring support during this period. At the same time, a professional appraisal process has been started to complement the induction experience, which comprises an annual learning plan that teachers draw up for themselves. As a next stage, the province offers what is called a “teacher learning and leadership program” which is a funding opportunity for advanced self-directed, job-embedded professional learning. The induction and the later professional appraisal process are mandatory while the last stage is intended for more experienced teachers. The Ministry funds about 80 projects a year involving about 500 teachers a year.

There are a number of training opportunities such as symposia, colloquia and workshops, and lectures offered by professional teacher organizations. There are also teacher exchange opportunities between Canada and the U.S., Europe and other places. Moreover, there is also a wide range of informal activities which is difficult to study in a systematic way but which may have a huge impact on an individual teachers’ career. Belanger (1976) concluded that “in Canada there is an astonishing amount of internal [professional education] activity through a variety of mechanisms. Due to the complexity of this whole area, and the lack of research attempting somehow to assess its influence on teachers, it is perhaps best to pass on immediately to the more ‘formal’ types of University related [activities]” (p.12). Livingstone (1999) conducted

a large-scale survey about informal learning activities in Canada and He believes that there are a huge number of informal learning activities that exist in adult life and that they are hard to recognize sometimes because of their embedded tacit nature.

The role of the university in the current system

Universities in Ontario participate in teacher continuing education through providing graduate programs, Additional Qualification courses, and informal learning opportunities.

OISE and other faculties of education are the providers of graduate programs including the M.A and M.Ed. degrees which are also an important form of continuing teacher education in Ontario. Ph.D programs are available at OISE, York, the University of Ottawa and the University of Western Ontario. There is also a joint Ph.D. program between Brock, Windsor and Lakehead (Ontario Ministry of Education, 1994).

Additional Qualification (AQ) courses are unique to Ontario and also are the most popular type of continuing education for teachers in the province. The completion of any AQ course will be added to a teacher's certificate of qualification in registration. In some cases, AQ courses allow teachers to teach new subjects or teach in a new division. Some courses are formal requirements for teachers' salary increases and promotion. The Ontario College of Teachers is responsible for accrediting and approving all of these courses, which probably number over 300 in different groups. The OCT develops course guidelines detailing the courses' content.

Then if institutions (mainly universities with faculties of education) are interested in offering a course, they have to submit to the OCT a course outline that matches the relevant guidelines and receive approval from the OCT. The approval stays in effect for a period of years before the accreditation must be renewed.

In addition to formal courses and programs, universities in Ontario are also involved in in-service teacher education throughout various school-based projects. For example, “Inquiry into Practice Series” initiated by the Initial Teacher Education at OISE has been carrying out research projects that addresses various issues in teacher development and school reform. Also, over the past five years, Comparative, International & Development Education Centre hosted various lectures and collected useful resources from OISE faculty members for pre-service and in-service teachers.

A very obvious difference in the structure of universities between China and Canada is that China still retains its normal universities in the higher educational system, even though many of the normal universities have restructured themselves into virtual comprehensive universities by the addition of diverse professional and academic programs that are not related to teacher education.

A further marked contrast between China and Ontario lies in the institutional context in which continuing teacher development is delivered. In China, the Education Department has operated a relatively centralized system. The centralized nature of the higher education system means that new policies can be relatively rapidly implemented through professional education with the support of universities. At the same time, however, the providers may be too concentrated in a few

institutions and to a certain degree lack diversity in approaches and the flexibility to vary according to different local needs. In Canada, the independence of different institutions sometimes makes changing the teacher education process more difficult.

In sum, the current provision of teacher professional development in Ontario is much richer compared to that of China. However, there seems to be no firm control or systematic organization in Ontario. Ontario and China are both seeking a systemic framework for continuing teacher education but are doing so in different ways. The Chinese government is reviewing its teacher education system to rethink and reallocate responsibilities, and to give more decision-making power to higher education institutions. Canada, on the other hand, largely avoids major bureaucratic rules while looking for ways to coordinate among providers to counterbalance the flexibility of the system.

Major policies indirectly influencing teacher education

No tuition for normal students and innovative methods of teacher training

The policy of waiving tuition fees for teacher education students started in 2007. The Chinese government has given various kinds of special treatment to teacher education from the very beginning. Since the higher education reform in 1997, normal universities had been gradually transferring tuition fees to the student. This new policy of waiving tuition was intended particularly to encourage qualified students to enroll in teacher education programs so as to enhance the quality of the teaching force beginning with the pre-service period. Six normal universities directly under the

Ministry of Education, including Beijing Normal University, East China Normal University, Northeast Normal University, Central China Normal University, Shanxi Normal University, and Southwest University (previously Southwest Normal University) were chosen to experiment with this new policy and admit students funded by the central government. These students are required to sign a contract with local governments before entering the program and promise to remain in the teaching profession for at least ten years after graduation. As well, they are usually not allowed to apply for full-time graduate programs during this period.

Since this policy was implemented, a wave of exploration and innovation in alternative means of teacher education and training has emerged across China. In particular, the issue of how better to combine the free normal teacher education program with the purpose of serving basic education in a mutually beneficial way has drawn considerable attention from university administrators and teacher educators. Beijing Normal University has set up the “Beijing region teacher education experimenting base”, the “Western region teacher education innovating base”, the “Northeast teacher education experimenting base” and the “University cooperative experimenting base”, etc. These teacher education bases are intended to facilitate the connection of free normal students with local schools and embed more practical elements in the programs as well as provide in-service training for local school teachers. Huazhong Normal University also has built similar teacher education bases with the aim of effectively integrating pre-service and in-service teacher education. Huazhong Normal University has built a multifunctional education base called a

“teacher education and service experimenting base” and has signed similar contracts with up to 30 education bases. Within the bases, two-way online communicative channels for improving classroom teaching are supported by the university. Shaanxi Normal University has formed partnerships with Tibet, Shaanxi, Qinghai, Xinjiang and Gansu provincial governments to establish similar education bases. Southwest University also has formed working relationships with Guangxi, Chongqing, Sichuan and Tibet provincial (regional) governments regarding education service in general and teacher education in particular.

In December 2007, building upon previous experience, Northeast Normal University signed contacts with three northeast provincial governments (Heilongjiang province, Jilin province and Liaoning province) to launch the “excellent teachers and educators training project”. A number of counties were chosen for the “creative teacher education labs”. Those labs serve as locations for experimentation while offering better services to local schools. Within this framework, provincial and local governments are responsible for finalizing the participating schools in their administrative areas, helping Northeast normal university set up connections and the describing the scope of future work including coordinating student practicum, etc. Northeast normal university plays the key role in all the arrangements. Its responsibilities include five aspects. First, the university provides free academic seminars and open lessons during the practicum period. Second, it organizes one-week teacher training programs for the teachers whose places are taken by student candidates. Third, it absorbs local school teachers into basic education

research projects. Fourth, it organizes free on-campus training programs for a number of teachers every year from participating schools. Fifth and finally, it recommends excellent teacher candidates to the participating schools. Up to this point, the university has signed similar contracts with 105 schools in 23 cities (or counties) in the northeast region.

Curriculum reform

Quite often approaches to teacher education and especially the content of continuing teacher education are justified by the changing nature of curriculum and instruction. For the past decade, educational reform in general has aimed at promoting a conceptual shift in the minds of teachers, moving teaching practice from traditional to innovative classroom strategies. The curriculum embracing this concept supports the development of students' own learning and thinking capabilities (Mohammed, Harlechn-Jones & Khan, 2007).

A lot of training took place when the new Ontario curriculum came out around 2000. Every number of years, curriculum policy documents are reviewed, changed and updated. This edition introduced many new initiatives pertaining to the environment, inclusiveness, special education and finally technology education. When new initiatives are introduced all teachers have to be retrained (Interview with staff of the Ministry of Education of Ontario, April, 2011).

In the past, the Chinese curriculum, in keeping with the national examination system, laid most emphasis on academic or subject discipline knowledge

accompanied by a direct mode of teaching. The overall design of the curriculum was very rigid with little space for teachers and students to develop their own ways of teaching and learning. The Ministry of Education issued an Outline of Basic Education Curriculum Reform in 1997 and a new round of curriculum reform came into full application in 2005. In an era of revolutionized teaching and learning in the classroom through encouraging communication, reflection and individual thinking, the new curriculum reform emphasizes holistic teaching and learning design. It requires a fundamental change in teaching style that helps develop a student's ability to learn and think. It promotes interdisciplinary study and innovative teaching methods and emphasizes the students' holistic development. This change posed a serious challenge to in-service teachers who were trained for the traditional curriculum.

Traditionally, in China, it is believed that "if a teacher knows more, he or she will teach better and this view still persists among teacher trainers as well as teachers themselves" (p.220). Burnaby and Sun (1999) studied teacher training in China and revealed that teacher learning focused more on content knowledge than methodology knowledge.

In response to this new round of curriculum reform, teacher continuing education policy has made it a rule for in-service teachers to "receive training before teaching the new curriculum" (Ministry of Education of China, 2001a). In 2003, a total investment of 17 million yuan was devoted to the training of "backbone teachers" with the intent that they could play the role of teacher trainers afterwards (Su, 2003,

p.1). Given the unevenly developed enormous teaching force in China and considering the economic disparity across the country, in the same year, the central government also allocates 500 million yuan for teacher training in 382 poor counties in 15 provinces and autonomous regions (Paine & Fang, 2006). During the process of implementing these new training activities, the perception that teaching itself is problematic has made the job of teacher education extremely challenging, as Professor Li from Hebei Normal University explained:

This curriculum reform not only requires us (teacher educators and teachers) to review the actual content, but more importantly, to change our expectations for teacher education (including pre-service and in-service), as we can no longer focus on helping teachers ensure certainty and predictability in their daily teaching, but must foster teachers' ability to handle the opposite, uncertainty and unpredictability in their work. Accordingly, teacher training and research is a central element of the curriculum implementation process. Usually, the lower level training is conducted by teacher training schools or colleges. In order to improve the training quality, a new teacher training system is required and normal universities are called upon in this daunting task. (Interview in Hebei Normal University in October, 2010)

The implementation of the new curriculum requires a significant amount of new knowledge and teaching skills. Compared to the regular teacher training institutes normal universities are much more up-to-date with advanced knowledge in the field of education. In addition, normal universities, especially national level normal universities were heavily involved in the curriculum design and writing. Local schools would no doubt need their help during the initial implementation period. Therefore, the Ministry of Education in China encouraged universities which provide pre-service teacher education also to participate in teacher continuing education and make the new curriculum their central concern in pre and in-service program design and

delivery (MOE, 2001).

The overall teacher education system is inevitably geared towards the reform-oriented direction in China, influenced by the implementation of the new curriculum. An excellent example of this change is the Keli (Exemplary Lesson Development), a new approach of in-service teacher education explored by a group of senior teacher educators in China in 2003. (Gu & Wong, 2003). This model was initially developed due to the release of the new National Mathematics Curriculum Standards (NMCS) which constituted part of the overall basic curriculum reform. The model acknowledges the fact that not only does adopting the new curriculum present a formidable task for teachers to implement, but also allows for mathematics educators to help teachers accomplish the desired task.

The Keli approach includes lesson planning, lesson delivery, post-lesson reflection, and lesson-re-delivery (Huang & Bao, 2006). First, a group consisting of teachers from local schools and researchers from universities is established. Through discussion, relevant content relating to a research question in the new curriculum is selected for developing an exemplary lesson. After the lesson delivery, a feedback meeting is held with the same group to comment on the lesson and provide suggestions for revision, during which a major purpose is to “find the gap between the teacher’s existing experiences and the innovative design” (p. 281) suggested by the new curriculum standards. Third, the revised lesson is delivered to different classes within the same school. This process will be observed by the group members followed by a second reflection meeting. Last, a further revised model focusing on how to

promote student learning under the new curriculum design is introduced to teachers in different schools (Huang & Bao, 2006). However, to organize and maintain a practice community consisting of teachers, teacher educators and researchers is not easy to accomplish. The study of the project confirmed that teacher experts and educational researchers take an important role in and have huge potential for fostering teachers' professional learning and changes in classroom practice (Huang & Bao, 2006).

This approach promotes school-based in-service training in China, while at the same time it proves that university educators and researchers play a key role in supporting a process for training mentor teachers and designing learning materials. However, how universities play their role in making school-based education work remains an intensely debated subject in the current Chinese literature (Xu, 2009) as the insensitivity of the approach poses great challenges when applied in a large number of schools across the country.

Major policies directly influencing in-service teacher education in China

In January 2011, the MOE issued “working suggestions on strengthening basic education in-service teacher training”. The overall objective of continuing teacher education is, through the national teacher training program, gradually to form a diversified training web, and provide training programs of different levels, different types, and different working positions. The above-mentioned document highlighted two proposals.

First, in the next five years, the MOE seeks to provide in-service teacher training

for more than 10 million teachers. The average training time is to be no less than 360 hours per person over the five year period. The MOE also proposes to support 1 million backbone teachers to participate in national-level teacher training programs; send 10 thousand teachers overseas for advanced studies; and organize 2 million teachers to enroll in degree enhancement studies.

Second, new teachers need to receive no less than 120 hours' training before formally taking a teaching position. By 2012, in-service teachers should reach the degree requirements set up by the MOE and the percentage of teachers who have master's degrees needs to be greatly increased.

This most recent policy initiative predicts a huge demand in the field of in-service teacher education which presents unprecedented opportunities for normal universities in China. Tracing backwards, Chinese normal universities started to get involved in the field of continuing teacher education in the early 1980s. Throughout the years, the intensity and role they played in this work changed according to policy calls from the central government. In general, I have summarized the process into three phases as shown in the following chart.

If degree supplementation education could be seen as the first phase involving normal universities in continuing teacher education, the second phase started when normal universities were required to offer in-service Master of Education programs for teachers in the mid 90s as mentioned previously. Zhou and Reed (2005) have held that policies related to teachers in the 1980s were focused on repairing teacher education. The second wave in the 1990s and the third wave that has come afterwards

have addressed the issue of the quality of teachers and student learning outcomes. The third phase of normal universities' participation in in-service teacher education began with the implementation of the new basic curriculum in 2002. Teacher professional training in this phase has consisted of short-term, non-degree training programs, mostly focusing on the implementation of the new basic curriculum. The most important symbol of this third phase is the 'National Teacher Training Program' launched by the MOE in 2010.

Table 4: The development of universities' involvement in the field of continuing teacher education in China

Timeline	Nature of the policy	Role of the university
First phase (early 1980s—around 2000)	Degree-supplementation education	Normal universities provide undergraduate education programs through the means of correspondence education; the work is usually carried out by the continuing education departments within the universities
Second phase (1996—present)	Master of Education programs for in-service teachers	Normal universities approved by the MOE can open M.Ed. programs enrolling in-service teachers
Third phase (2010-present)	Short-term teacher training programs formally organized by the Ministry of Education (MOE)	Participating universities, mostly normal universities, form a contract-based relationship with either the provincial education department or the MOE to provide short-term in-service training programs. The form of delivery and content of programs are based on the requirement of the government.

Figure 5: Visual summary of formal structures of in-service teacher education relevant to normal universities

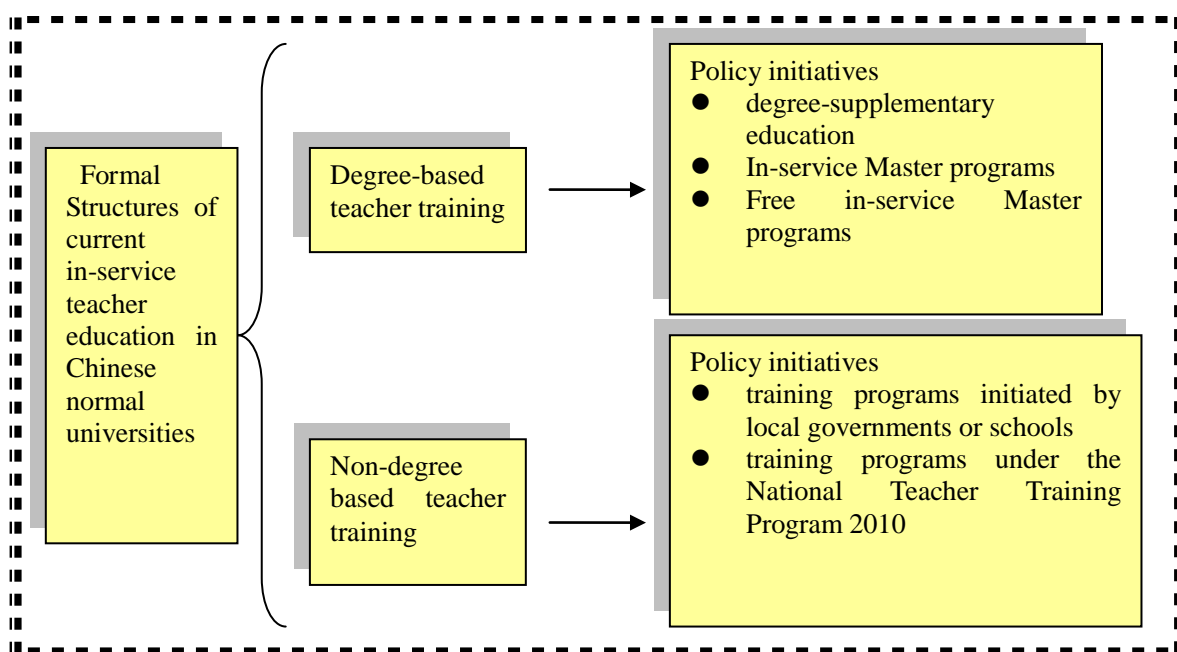


Figure 5 summarized the identified teacher training by the study, the following two sections will introduce degree-based teacher training and non-degree based teacher training in detail.

Degree-based in-service continuing teacher education in China

As Paine (1984) noted, after the effort of universalizing basic education, China faced the challenge of providing a large number of qualified teachers. About half of active teachers were not able to meet the benchmark set up by the central government regarding degree levels in the early 1980s. Thus, upgrading the degree level of in-service teachers while training more teacher candidates were the major tasks falling on the shoulders of different levels of governments. In 1983, for example, the Chinese State of Education Committee launched a “Senior Middle School Teachers Training Program” with the aim of improving teacher quality in remote areas. This two-year program was delivered by normal institutes and graduates were awarded B.A. degrees at the end of their studies (Hu & Ou, 2000). The work of teacher degree supplementation education was more likely to be prioritized by the provincial

governments for two reasons. First, for individual teachers, their education degree level was closely associated with their salary and they were willing to pay their own way. Second, the provincial education departments also benefited financially as well as politically from this work, as they collected fees from participating teachers based on the course credits. In other words, not only did the number of teachers who were able to meet the required benchmarks set up by the MOE increase, but the provincial governments could also collect tuition fees from participating teachers.

Normal universities as teacher education institutions in China served as the main providers of degree supplementation education organized by the provincial governments. For instance, as I learned in an interview with Director Liu of Qufu Normal University, in the years 1995 and 1998, the Shandong Education Department organized two major degree supplementation programs and entrusted Shandong Normal University and Qufu Normal University with the curriculum design and delivery. The university trained more than 5000 school teachers for undergraduate degrees during this time.

However, this degree supplementation education period came to an end around the year 2000. This reality in the Chinese education system created various problems as well as opportunities for Chinese normal universities. Director Liu elaborated on some of the problems he has encountered in the past ten years:

Although we still took on some work of degree-supplementation education occasionally, it is obvious that the major attention of the government is moving away from this work. As a result, our workload is decreasing dramatically in the past few years. This directly influences our status (continuing education department) in the university. (Interview in October, 2010)

In contrast, Director Wei of Beijing Normal University talked about this impact on his department in a more optimistic way:

It is well agreed among educators in China that the work of degree-supplementation education almost finished its course around the year

2000. As a normal university directly administered under the MOE, we carried out degree-supplementary work through setting up correspondence education stations nationwide. This work was usually organized specifically for high school teachers who did not hold an undergraduate degree. Even though this work is no longer on our job list today, the experience of building an educational highway across the country remains extremely valuable to us. One round of teacher professional education ends, a new round of professional training will arrive due to the requirements of contemporary education system. When it comes, our experience will come in handy and we will be more competitive compared to other teacher education institutions. (Interview in November, 2010)

What is worth pointing out is the degree supplementation work was done by the continuing education departments of normal universities and the other schools within those universities were not involved. When considering this work in the broader scope of normal universities' involvement in continuing teacher education, it is often seen only as a start by many university educators. In April 1996, the national government decided to start Master of Education Programs especially for in-service teachers. This move represented the first step in building degree-based in-service teacher education in normal universities and symbolized normal universities' formal involvement in the field of continuing teacher education. In 1997, the MOE approved 16 Chinese normal universities as experimental institutions for in-service MED programs. In 1998, the MOE added another 13 normal universities to the list including three of the provincial normal universities studied in this project -Shanxi Normal University, Hebei Normal University and Qufu Normal University. In 2003, another 12 normal universities received approval from the MOE. Now there are 41 Chinese normal universities offering Master of Education programs for in-service teachers. These programs usually combine on-campus and distance education and take place during winter or summer vacation time.

During this period, many normal universities have increased the number of disciplines which can offer the programs. In 2010, 22 normal universities in China were slated to offer Master of Education programs in new disciplines

(<http://www.edm.edu.cn/>).

In 2004, the MOE launched a free Master of Education program for teachers in rural areas. The program required participating teachers to serve in rural schools for at least three years before applying to the program. The study mostly took a distance learning approach so that teachers could remain in their teaching posts. After experimenting with the program for 6 years, the MOE decided to further extend it to include rural schools in the eastern part of China.

In 2010, the MOE issued another policy initiative offering free Master of Education Programs for teachers who graduated as tuition-free normal students. Starting in 2012, Beijing Normal University, Northeast Normal University, Shaanxi Normal University, Huazhong Normal University, and Southwest University (previously Southwest Normal University) will start to enroll students of this kind from schools. After completing a year of teaching, free normal graduates can apply to this program. The degree will take two to three years and the learning will take place during summer and winter holidays. The program will adopt mainly a face-to-face approach and requires national normal universities to cooperate with local governments and schools to finish the learning process. The program design is intended to reflect the practical needs of teachers and to have different training plans for teachers from different regions.

There are three main differences between degree supplementation education and in-service Master of Education programs. First, the main responsibility for degree supplementation education lies with the provincial governments. Normal universities are the implementing institutions, although local governments can choose to use other institutions or platforms to complete the job. If local governments assign this task to normal universities, it is their continuing education departments (or adult education

departments) that are the hosting institutes. Second, degree supplementation education programs are undergraduate-level programs and do not require entrance examinations. Moreover, degree supplementation education takes the form of correspondence education which is not as formal as in-service Master of Education programs provided by normal universities.

Non-degree-based in-service teacher training

Non-degree teacher training was, for quite a long time, a low priority for provincial education departments. Their major task for the last 20 years or so has been degree supplementation education. Due to economic constraints for in-service teacher training, to guarantee a consistent and on-going training system is an extremely demanding task. Professor Lu of Shanxi Normal University expressed this in the following way:

Teacher education reform is very expensive including in-service teacher training. And even when you invest a large amount of money, it is unlikely to see immediate results. When you cut the investments, it probably won't show any impact right away either. Therefore, if the job is not put as a high priority on the agenda, provinces with limited budgets are unlikely to spend the money on something that takes a long time to see any positive results. Right now, a considerable number of teachers in rural areas have very little formal education, and school-based approaches are not quite suited when it is hard to find experienced and well trained teachers. External help from normal universities seems more crucial. (Interview in Shanxi Normal University on March, 2011)

With the significant increase of in-service teachers' degree levels and various teaching challenges caused by the recent curriculum reform, continuing teacher education (especially non-degree teacher education) is gaining more attention from the national policy-makers. In 1999, the Ministry of Education launched a teacher training project called the "Trans-Century Gardener Project" which aimed to improve the quality of all school teachers in China (Li, 1999). In the same year, the MOE also issued the Rules for K-12 Teachers' Continuing Education, in which teacher lifelong

learning was stated as a right and an obligation. Despite various training initiatives, the research (Liu & Teddlie, 2003) on teacher training after the implementation of the new curriculum has shown that in general teachers in both rural and urban areas did not receive adequate professional training regarding the new curriculum.

As a response to this problem, starting in 2010, the Chinese government launched a “National Teacher Training Program” and made a special fiscal commitment to enhancing the quality of teachers in China, particularly in rural areas. The central government is planning to allocate 50 million for basic education teacher professional training and 0.5 billion for teacher professional training in Western rural areas annually. From 2010 to 2012, 30 thousand backbone teacher nationwide will receive university-based teacher training and 900 thousand teacher will receive distance training under the national teacher training framework. It is expected that the significant increase in fiscal commitments starting in this year will greatly promote the actual activities of non-degree teacher continuing education. The MOE intends to establish a coherent and effective approach through the implementation of this policy initiative.

Under this policy framework, training projects can be generally divided into two groups: national training programs which are organized by the Ministry of Education and provincial level training programs organized by provincial governments (Zhang, 2005), both of which are funded by the central government. Universities carrying out the national-level projects get funding directly from the central government. Universities responsible for the provincial projects also get their funding from the central government. However, money flows first to the provincial Ministry of Education and then to the university, as it is up to the provincial government to decide what kind of projects they want to deliver.

Despite the lack of accurate data on current investments in major training programs, we can still get a sense of the areas in which money is spent on national-level teacher training programs using the following table found on the MOE website. This table only constitutes part of the whole training schedule. Yet, it reflects two major features of national-level training programs. First, the MOE determines the training priorities. Second, the number of teachers who can participate is very limited. Due to these very limited opportunities, most of the national training opportunities have been given to “backbone” teachers in specific subject areas in different provinces, with the hope that they could serve as change agents and teacher trainers in their schools.

The “backbone teacher” is a unique concept in Chinese education and is most frequently found in Chinese research and policy documents. In Chinese elementary and secondary schools, there are many teacher groups including lesson planning groups, teacher research groups, grade-level teacher groups, etc. Usually these groups have a “head”. The backbone teacher is not a formal title like the group head and therefore cannot be found on any organizational chart. Nevertheless, every teacher in a group knows very well who the backbone teachers are. The literal translation of “backbone teacher” is “gugan jiaoshi”. It is an informal yet widely-used way of categorizing teachers (Paine, 1990).

Implicit in the naming of this type is a broader conception of schools as being places where teachers are connected. Also implicit is an ideal of expertise. A backbone teacher represents the ideal of the good teacher-good in their classroom teaching, but also good in that their teaching helps to foster good teaching among other teachers and affects the overall quality of the school. The idea of backbone teachers implies a collective orientation to teachers, one that is relational. At the same time, the term implies another dimension on which teachers can be differentiated. (Paine, 1990, p.52)

Backbone teachers are those who contribute greatly to their teacher groups and decide how their teacher group as a whole could improve its teaching and learning.

They are the resource people for the group and also the first people in the group whenever a new program or research idea is initiated. Therefore, it is quite easy for us to understand why training the backbone teachers is the goal of the most national-level programs in the “National Teacher Training Programs”.

Table 5: Quota allocations (people) taking part in national-level training programs organized by the MOE

Province	Project 1 (Primary Chinese literature)	Middle school Chinese literature	High school Chinese literature	In total
Beijing	2	3	4	9
Tianjing	2	3	4	9
Hebei		3		3
Shanxi	2			2
Neimenggu	2			2
liaoning	2	3	4	9
Jilin		2		2
Heilongjiang		2		2
Shanghai	3	2	4	9
Jiangsu	3	3	8	14
Zhejiang	3	3	6	12
Anhui	2			2
Fujian	3	3	4	10
Jiangxi	2			2
Shandong	3	3	8	14
Henan		3		3
Hubei	2			2
Hunan		3		3
Guangdong	3	3	8	14
Guangxi		2		2
Hainan	2			2
Chongqing	2			2
Sichuan		3		3
Guizhou	2			2
Yunnan	2			2
Xizang	2			2

Shanxi		2		2
Gansu	2			2
Qinghai		2		2
Ningxia	2			2
Xinjiang		2		2
Xinjiang Regional formation	2			2
In total	50	50	50	150

(Source: <http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4644/index.html>)

In addition, the MOE selects the education institutions for national level programs. The institutions mainly consist of national-level universities mixed with provincial universities. Secondary schools serve as hosting institutions only in very rare cases.

The provincial education department is in charge of decision-making regarding provincial and local-level training programs including selecting education institutions and deciding the subject of the training, the length of the programs, who participates and the procedures for recommendations, evaluation and feedback standards, etc. The MOE recommends training subjects and hosting institutions to provincial governments for provincial-level training programs. As for the initial stage of this work, how the training program is carried out and the degree of implementation varies from province to province. The MOE is collecting and sharing information nationwide as well as reflecting on current methods through a website especially set up for the National Teacher Training Program.

The power each university has under this national policy framework is actually very limited. Take the institution selection process as an example. Both Shanxi and Shandong provinces are taking the old job assignment approach. The continuing education departments of Shanxi Normal University and Qufu Normal University have been waiting for the recommendation of the university administrators or the

education department before taking any action. Hebei Education Department takes a different approach, which is like a bidding procedure. The government will inform qualified educational institutions within a province first of the project opportunities available that year. Then it is up to the institutions to take the initiative and bid for different projects. For Hebei Normal University, this job rests with the continuing education department. As I was informed by the department director, they have been practicing this bidding approach for three years so far, long before the National Teacher Training Program was instituted. Only higher education institutions or training colleges within the provinces are allowed to apply. The applying institution needs to submit a project plan including training courses. In principal, both national- and provincial-level universities could carry out national-level programs. In the application process, the provincial universities are inevitably less competitive than national normal universities as well as some national comprehensive universities such as Peking university when applying for national training programs organized by the Ministry of Education. As a result, provincial universities, mainly normal universities, usually host provincial-level programs.

The national teacher training program is a huge umbrella which covers a wide variety of training programs carried out in different forms. The department of teacher education in the MOE is taking charge of this large national initiative. Within the national-level training projects, some projects follow a certain application procedure. It requires a university to apply as an institution. In other words, various subject colleges in the universities are not qualified to apply directly for programs in this category. In the cases selected for this study, the university will ask its continuing education department (or a similar department) to take on this job on behalf of the university. This occurs at Beijing Normal University and Hebei Normal University,

while Qufu Normal University and Shanxi Normal University are slightly different. Parts of the national-level programs are assigned directly to certain institutes, either independent institutions or institutes within universities. The programs of this type are considered either new or challenging and in need of the most experienced experts in the field to take the lead in the initial experiment phase.

The programs which allow universities to apply in a competitive manner are programs which the government believes many education institutions are potentially capable of delivering.

The Chemistry Education Research Institute at Beijing Normal University, which I visited, received funding for a chemistry distance education program from the MOE last year. The institute is taking a leading position in the field of chemistry education in China and distance chemistry education is just beginning. Thus, this assignment has been given to this particular institute as it is undoubtedly the best qualified. However, it is worth pointing out that the MOE contracted the institute not because of its name or its reputation. Rather, this occurred because of the name of the leading educators in the institute. Often, a program is entrusted to a particular expert and the expert holds the power to select his/her own research team. A similar requirement is attached to most of the other programs under the umbrella of “the National Teacher Training Program”. For regular programs, the hosting institution still needs to invite the leading experts in the field.

The central government is determined to develop and adopt distance education as an important form of in-service teacher education in the future, mostly because distance education could potentially train a large number of in-service teachers at the same time at a relatively low cost. As Professor Jia of Beijing Normal University told me, Shandong Education Department asked the Chemistry Education Institute to

design and deliver a 10-day online training program which included the entire teaching force of Shandong province. Even though the government has started to use online platforms to organize and facilitate learning material and resources, this field is yet to be explored when it comes to in-service teacher training. At least, according to the university representatives interviewed, provincial universities have not really gotten involved yet in this developing process. National universities such as Beijing Normal University are currently taking the lead in the early stage of design because of their strong teams of subject experts.

Regarding the way “The National Teacher Training Program” is organized, educators in normal universities have expressed both their concerns and expectations. Professor Jia of Beijing Normal University expressed this in the following way, as the professor expressed,

For non-degree and contract-based in-service teacher education, it is hard for universities to deliver systematic follow-up support after the training. Government grants signal a large attempt to prioritize this work, yet the evidence for the effectiveness of this investment is far from conclusive. Although the work of in-service teacher training is greatly extended due to the large amount of funding from the central government, the overall offering of professional education is still fragmentary rather than coherent. Nevertheless, it can be expected that new types of regulatory procedures will be developed for noncredit and non-degree based in-service teacher education.

As early as 1960s, Asher (1967) had grouped in-service programs into three broad categories: a) the centralized approach, b) the decentralized approach, and c) the centrally coordinated approach. Asher suggested that in “the centralized approach, the central office dominates the in-service activities and gives little attention to the psychology of change, thereby ignoring a body of research which suggests that individuals are more likely to change when they work on problems significant to them and when they share in the problem-solving decision” (Asher, 1967, p.13). In contrast, the decentralized approach is likely to receive more positive results in student

achievement. The 2010 National Teacher Training Program reflects the general features of centralization and decentralization in China's educational system today. On the one hand, it continues to stress the guiding role of the MOE, and provides somewhat specific requirements for many training programs. On the other hand, the policy emphasizes the diversification of training approaches and encourages innovations in content design. The provincial-level programs are left to the discretion of the provincial education departments. Whether the provincial administrators and policy-makers perceive this as a priority determines the actual intensity and quality of the delivery.

In sum, through offering in-service teacher education programs and participating in non-degree training programs after the implementation of the new curriculum, normal universities have gradually deepened their involvement in the field of in-service teacher education. Since a lot of non-degree training programs are contract-based and could potentially be funded by different stakeholders, normal colleges within the pre-service teacher education system and comprehensive universities also have opportunities to participate and benefit from this work. Therefore, pre-service teacher education providers and in-service teacher education providers are gradually overlapping with each other. Yet, to say that the pre-service teacher education system is increasingly integrated with in-service teacher education system is not entirely accurate. As we will explain later, the overlapping of these two systems only happens in very rare cases.

Chapter summary

This chapter introduced major policy initiatives which have exerted significant impact directly or indirectly on the current situation of in-service teacher education in China. These policy developments provide a better understanding of the involvement of normal universities in this work as well as a glimpse of how it is becoming increasingly important.

The MOE hopes to make the national teacher training program a policy incentive for provincial governments. It is expected that the overarching organization of the “national teacher training program” will serve as an exemplary teacher training framework to help provincial as well as local governments explore new training methods, training curriculum and, to the greatest degree possible personalize in-service teacher training in the future. At the same time, the Ministry hopes to continue to encourage universities, especially normal universities, to get involved in the work of in-service teacher training and to establish interactive connections with local schools to promote teacher professional education. The “Working Suggestions on Strengthening Basic Education In-Service Teacher Training” (2011, MOE website) clearly point out that normal universities should be the major players in the field of continuing teacher education; more county-level teacher training organizations need to be built to serve as bridges between universities and local schools. The policy further emphasizes the need for further regulating continuing teacher training at the provincial level and exploring possible ways of bridging non-degree and degree teacher training programs. In-service teacher training credits should be recognized by and therefore transferable to other training institutions in the system. A market for in-service teacher training under the guidance of the government should be gradually established to foster fair competition among teacher training institution including

universities.

Chapter 5 The current efforts of normal universities in continuing teacher education

This chapter conveys most of the finding of the study. First of all, the four normal universities and their respective provinces or region are introduced. Second, data related to the work of provincial Education Departments are presented so that a comparison can be made in terms of provincial policies for continuing teacher education and opportunities that could possibly be offered to normal universities in the field. Third, findings about the current efforts and problems of the four normal universities are presented. Last, data collected from Ontario Institute for Studies in Education (OISE), Ministry of Education in Ontario and Ontario College of Teachers are presented for purposes of comparison.

The relationship between universities and the government in China ensures that universities do not possess any control over the important decisions made about in-service teacher training but they act as cooperative and advisory associates of various levels of government. The involvement of universities unavoidably complicates the connections and relationships within the training system. Normal universities have been working closely with both national and provincial governments to explore different ways of promoting teacher training. This coordination is only possible when both sides-university and governments-place a high priority on the job.

Take Zhejiang province for example. In 2005, the provincial government launched a “Rural Teachers Ability Improvement Project”. By the end of 2007, the project provided 820 thousand training courses for over 210 thousand rural teachers including 1000 provincial backbone teachers and 10,000 municipal backbone teachers. To continue the training in rural areas, in 2008, the government initiated the “Leading Goose Project” and planned to train 35 thousand rural backbone teachers and school

principals in 4862 rural schools over 3 years. In 2006, Zhejiang province decided to organize one hundred teacher education experts and experienced school teachers to go to the rural schools, offering guidance and follow-up help regarding the teachers' questions and concerns. From 2008 to 2010, the Zhejiang provincial government relied on higher teacher education institutions to set up 10 provincial teacher education bases, out of which 3 were key bases. The purpose of these bases is to form a sustainable communication channel between universities and local schools. Cooperation on the training of teacher candidate will gradually extend to in-service teacher training using various means such as action research, subject-based consultancy, etc (MOE, 2006). The experiment of establishing education bases enjoys several features which are not always found elsewhere, as this concept is intended to tie universities with schools into a stable partnership. Thus, the length of time is one of the advantages education bases have compared to others. Another is that schools could enjoy longer relationships with university educators. The second is to be likely to be more effective in understanding the need of in-service teacher training as perceived by school teachers who have grass-roots teaching experience. Under the supervision of a normal university, teacher education bases will serve as channels for information exchange and retrieval. And there will be a better chance of jointly deciding the training programs based on teachers' preferences and the development trend of the subject discipline. The Zhejiang provincial government invested 72 million yuan (about 11 million US dollars) in total in the year 2010. The funding was connected with the number of teacher candidates and the type of education base. Institutions with more than 5000 pre-service teacher students could get funding of 2 million yuan (about 300 thousand US dollars). Institutions with less than 3000 students could get funding of 1.5 million yuan (about 230,000 US dollars). A regular

base could receive funding of 1.5 million yuan (about 230,000 US dollars) and a key base could receive funding of 3.5 million yuan (about 530,000 US dollars). Other funding was provided on the basis of various projects including international communication, educational technology, continuing teacher training, etc. The Zhejiang provincial government organized an evaluation committee to conduct a two-phase educational base assessment. Funding is provided based on the evaluation results. Each participating university needs to provide a written report on its activities every year.

The data presented in this chapter illustrates the work of the four selected normal universities for the study: Beijing Normal University (in the national capital), Hebei Normal University (in Hebei province), Qufu Normal University (in Shandong province) and Shanxi Normal University (in Shanxi province). The four universities selected for the study vary greatly in their work in the field of continuing teacher education. Nevertheless, there are still certain similarities shared by the work of normal universities in the field of in-service teacher education. In this chapter, I outline the structure and situation of these four normal universities as well as the provinces and regions in which they are situated as a way to illustrate the unique features of Chinese in-service teacher education and the difficulties faced by Chinese teacher educators.

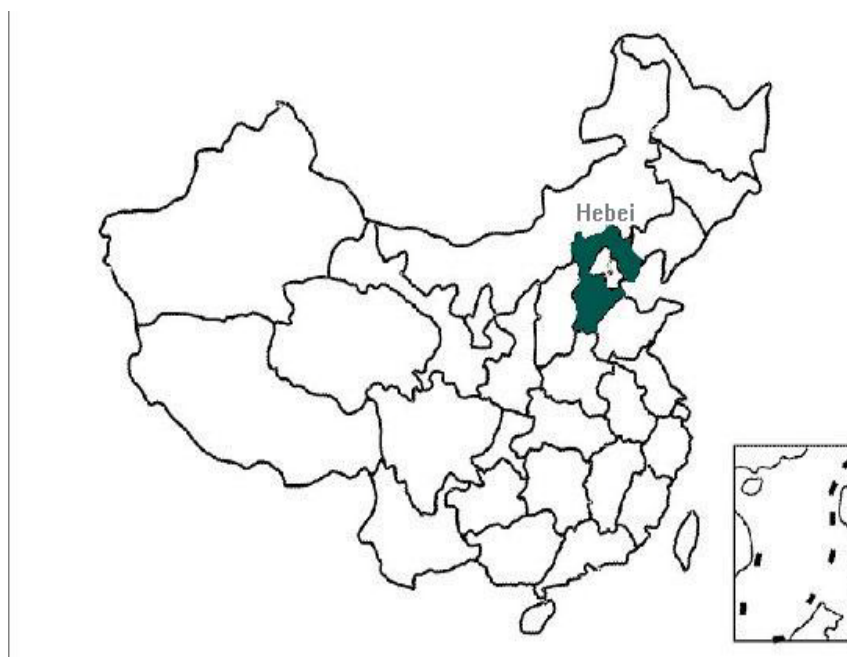
Introduction to the four universities

Hebei Normal University

Hebei Normal University is located in the capital city of Hebei province, Shijiazhuang. Hebei province, which surrounds both the capital, Beijing, and Tianjin municipality, and embraces the Bohai Sea, is an important coastal province in North

China with a total area of 187.7 thousand square kilometers and a population of 67.69 million. Culturally and economically, Hebei is the most advanced province in northern China. There are 11 municipalities directly under the jurisdiction of the provincial government including 136 counties or county-level cities. Shijiazhuang City is its provincial capital. Hebei Province has carried out the strategy of "Opening Up the Two Rings to Drive the Economy"(Beijing-Tianjin-Hebei Economic Zone and Bohai Sea Economic Zone), made great efforts to improve its investment environment, and actively developed economic and technological cooperation and trade exchanges. Since the 1990s, its economic growth rate has exceeded the national average growth rate for 14 consecutive years. Hebei has actively been carrying out the strategy of "Rejuvenating Education with Science and Technology", constantly improving the status of science and technology education in its economy and social development. A more complete education system has come into being, characterized by diploma education for basic education, ordinary higher education, vocational & technological education, higher education for adults. The system includes various kinds of training as well. A number of the education system's science and research results have been made at an advanced level when compared to others throughout China, and their contribution ratio to the economy has improved continuously. There are three normal institutions under the provincial government: Hebei Normal University, Langfang Teacher's College and Tangshan Teacher's College.

Figure 6: Location of Hebei province on the map of China



Hebei Normal University has a history of more than a hundred years and is one of the key universities in the province. The university originated from the Shuntian School established in Beijing in 1902 and the Beiyang Women's Normal School established in Tianjin in 1906. Under the approval of the Hebei provincial government, the former Hebei Teachers University, Hebei Teachers College, the Hebei Education Institute (established in 1952) and the Hebei Vocational and Technological College merged into one institution, which was named Hebei Normal University, on June 18th, 1996. The new Hebei Normal University is thus an early-established, large-scale university in China. There are 2957 staff members in the Hebei Normal University including 304 professors and 550 associate professors. It has 22 schools and departments covering 81 areas of study. Major schools and colleges are listed in the following table.

Table 6: Major schools and colleges of Hebei Normal University

School of law
School of history
School of literature
School of foreign language studies
School of information technology
School of tourism
School of music
School of mass media
School of art and design
School of education study
School of physics and engineering
School of chemistry
School of life science
School of environmental resources studies
School of adult education and continuing education
School of software study
School of economics

(Source: <http://www.hebtu.edu.cn/>)

Qufu Normal University in Shandong province

Shandong is a province located on the eastern coast of China. It borders the Bohai Sea to the north, Hebei to the northwest, Henan to the west, Jiangsu to the south, and the Yellow Sea to the southeast; it also shares a very short border with Anhui, between Henan and Jiangsu. Shandong has played a major role in Chinese history from the beginning of Chinese civilization along the lower reaches of the Yellow River and has served as a pivotal cultural and religious site for Taoism, Chinese Buddhism, and Confucianism. The city of Qufu is the birthplace of Confucius, and was later established as the center of Confucianism. Shandong's location at the intersection of ancient as well as modern north-south and east-west trading routes has helped to establish it as an economic center. After a period of political instability and economic hardship that began in the late 19th century, Shandong has emerged as one of the most populous (94 million in 2008) and most affluent provinces in China. Qufu Normal University and Yantai Normal College operate under its provincial government.

Figure 7: Location of Shandong province on the map of China



Qufu Normal University is one of the key universities in Shandong Province and has a history of more than 52 years. It is located in Qufu, the hometown of Confucius-the great philosopher, educator and the creator of Confucianism. The university uses Confucius' words in its motto: "To retain curiosity in learning, to teach and never become weary".

The university has 61 four-year specialties covering ten branches of learning including liberal arts, science, industry, law etc. It has one independent college (Xing Tan Independent College), 29 schools and departments, 28 research institutes, 14 provincial key programs, three provincial key laboratories and one social science research base. The Ministry of Education Basic Education Curriculum Research Center, the Shandong Confucius Research Base and the Shandong Physical Educational Social Science Research Base are also set up on its campus. There are 1393 faculty members of whom 219 are professors and 267 are associate professors. The following table (Table 7) lists the major subject-based schools or colleges at Qufu

Normal University.

Table 7: Major schools and colleges of Qufu Normal University

School of arts
School of history and literature
School of Marxism studies
School of foreign language
School of education studies
School of science
School of physics
School of chemistry
School of life science
School of geography and tourism
School of physics education
School of adult education and continuing education
School of public management
School of economics
Law school
School of translation
School of capital science
School of management
School of technology and communication
School of arts
School of music
Institute of foreign language research

(source: <http://www.qfnu.edu.cn/>)

Shanxi Normal University

Shanxi is located in the northern part of China, west of the Haihang Mountains.

It borders Hebei to the east, Henan to the south, Shaanxi to the west, and Inner Mongolia to the north. The province spans more than 150,000 square km and has a population of 33 million. Shanxi Province jurisdiction includes 11 prefecture-level cities; 23 city areas, 11 county-level cities, and 85 counties. The capital of the province is Taiyuan City. For centuries Shanxi served as a center of trade and banking. Shanxi is the richest province in Zhongyuan or Central China. Coal mining is

important in Shanxi's economy. Its normal universities include Shanxi Normal University, Taiyuan Normal University and Xinzhou Teachers' University.

Figure 8: Location of Shanxi province on the map of China



Shanxi Normal University is one of the five oldest universities in Shanxi Province, located in the ancient city of Linfen, one of the birthplaces of the Chinese race and the home of the legendary monarch King Yao. In 1958, Shanxi Normal University started as a teacher training school, which was responsible for training teachers in the south of Shanxi province. In 1964, it officially became Shanxi Teachers College by merging with various departments of Shanxi University. In 1984, it was upgraded to a provincial normal university through the endorsement of the State Education Commission of China. In 1999, the Shanxi Normal University Sports College and the Shanxi Vocational Teachers College also became part of Shanxi Normal University. Altogether it offers forty-seven undergraduate majors, forty-one master's programs, and four doctoral programs. The university is striving to become one of the best normal universities in China by strengthening its specialization in

teacher education and training with an added local flavor.

Major schools and colleges in Shanxi Normal University are listed in the following table (Table 8).

Table 8: Major schools and colleges of Shanxi Normal University

The institute of literature
Policy and law institute
The institute of history and tourist culture
School of foreign languages
Institute of economic management
Institute of management
Institute of education and psychology
Research institute of traditional opera and historical relics
Institute of music
Institute of art
Institute of math and computer science
Physics and information engineering institute
Life and science institute
City and environmental science institute
Biology technology and engineering institute
Physical education institute
School of teacher education
Adult education department

(Source: <http://www.sxnu.edu.cn/>)

Beijing Normal University

Beijing is located at the northern end of the North China Plain. Its southeast local regions are connected with Tianjin. The rest of it is surrounded by Hebei province.

The city area is 16,411 square kilometers. The city's permanent population is 16.95 million people.

Figure 9: Location of Beijing on the map of China



Beijing Normal University has a history almost as long as the history of Chinese modern education. The university has grown out of the Faculty of Education of Capital Metropolitan University, established in 1902, which was the first teacher training institution in Chinese higher education. The status of Beijing Normal University is different from the other three provincial-level normal universities examined in this study. Six national-level normal universities, including Beijing Normal University, are directly affiliated with the MOE. To a large degree, they serve the same function as the MOE in the field of teacher education. They are leaders in major national programs and set standards through educational experiments as well as offer policy consultancy to the MOE. In the 1980s, Beijing Normal University mainly focused on training staff members for other teacher education institutions rather than purely on pre-service teacher education. For example, in 1985, only 36 out of 1000 graduates were assigned to secondary schools.

The work of continuing teacher education currently takes place in various

departments. The following table shows major schools and colleges in Beijing Normal University.

Table 9: Major schools and colleges of Beijing Normal University

College of chemistry
College of Chinese language and culture
College of education administration
College of information science and technology
College of life sciences
College of resource science & technology
College of water science
School of arts and communication
School of Chinese language and literature
School of continuing education and teacher training
School of economics and business administration
School of education
School of educational technology
School of environment
School of foreign languages and literature
School of geography
School of global change and earth system science
School of history
School of law
School of management
School of mathematical sciences
School of philosophy and sociology
School of physical education and sports science
School of political science and international studies
School of psychology
Department of astronomy
Department of material science and engineering
Department of physics
Capital institute of basic education research
Capital institute of education economy
Institute of ancient books studies
Institute of Beijing cultural development research
Institute of Chinese Information processing
Institute of cognitive neuroscience and learning
College for criminal law science
Institute of Economics and research management
Institute of higher education
Institute of low energy nuclear science
Institute of Marxism studies
Institute of medicine
Institute of social development and public policy
Universities' institute for proteomics, Ministry of Education

(Source: <http://www.bnu.edu.cn/yxsx/index.htm>)

The organizational structure is quite complicated in these four normal universities, but in terms of in-service teacher training work, only a few units are involved. The majority of schools and colleges have their own training offices, and have the authority to organize contract-based training programs. They don't necessarily have to inform the university or continuing education unit. Schools and colleges with a mission for teacher education have started to offer contract-based teacher training programs to different stakeholders. Yet the number of such programs is quite small, as the main job of normal universities is pre-service teacher education. The continuing education units are where the work of teacher continuing education has been carried out historically. They usually do not have teaching personnel themselves and are parallel with other colleges and schools in the institution on the organizational map.

Current work of provincial governments

The following section presents the data collected concerning Hebei and Shandong and Shanxi provinces so as to better understand and analyze the work of normal universities in these areas.

Based on 2010 statistics, Hebei province has a teaching force of around 800 thousand. The provincial education department regulates regular in-service teacher training and is responsible for funding. Every teacher is supposed to participate in no less than 360 hours of in-service training every five years. This training is organized by local governments and carried out mainly by teacher training schools at different levels. Yet, provincial teacher training centers are mostly affiliated with provincial universities and colleges. Municipal-level teacher training is administered by municipal education offices. Most of the county-level teacher training in 2010 failed to be adequately supplied due to a lack of funding (Interview in the Hebei Education

Department in May, 2011).


In recent years, with more attention being paid to in-service teacher education by the MOE and with the launch of the “National Teacher Training Program” in 2010, the central government has allocated special funds to support formal teacher training programs. The provincial education departments are in charge of making specific training plans for provincial-level training programs within each province. Normal universities are the main hosting institutions for programs within this funding framework.

In order to ensure the quality of the MOE-funded programs, the Hebei Education Department had adopted a bidding procedure for program applications sent by teacher education institutions which includes:

- make the training programs available to qualified teacher education institutions within the province;
- providing guidance for specific programs;
- asking qualified teacher education institutions to make detailed program plans and send in an application package;
- organizing a team of experts to evaluate application packages and make selections;
- asking selected institutions to sign a contract with the Provincial Education Department regarding the programs;
- carrying out program evaluation for future reference.

Only teacher education institutions in the province are allowed to compete for teacher training projects. As explained by the director of continuing education department of Hebei Normal University and confirmed by interviews conducted later at other universities, this situation differs from province to province, as the provincial

governments may also allow institutions outside the province to organize and deliver training programs for them. Even though the contract signing is, to some extent, symbolic in nature, the process itself still carries an important message signaling the changes in government-university relationships. This shows that the governments have begun to adopt more selective measures, and to view themselves as buying training services from the universities for in-service teachers.

In Shandong province, there are around 700 thousand primary and secondary school teachers in the teaching force. Regular teacher training is delivered through a three-level system. Provincial teacher training institutes are now mostly affiliated with provincial universities or colleges. Municipal-level teacher training institutions vary from city to city. Some have already been absorbed or integrated into nearby colleges or universities, while some are part of the municipal research institute or research office under the Municipal Education Office. In Weifang City in Shandong province, a market mechanism has been introduced into the field. The Municipal Education Office set up 6 teacher training institutes with menus for training services. At the county level, there were previously 117 teacher training schools. Yet, there are only around 40 left now due to a lack of funding support and poor management (Interview in the Shandong Education Department in March, 2011). 

At the time of my study, Shandong province was in the midst of soliciting information from the public and drafting its 12th educational development plan. I was very fortunate to be able to interview one of the key designers and writers in the province, Professor Zhao from the School of Education of Qufu Normal University. Starting next year, one of the central tasks planned by the provincial government is to establish about 20 educational bases which could combine the function of pre-service and in-service teacher education in the province. One of the major features of this

work is that it will rely on the current higher education institutions, especially provincial normal universities. Among these educational bases, 3 to 5 key bases will be the centres of teacher training, educational research, advanced educational information, and educational communication. Under these bases, the plan is to establish about 100 county-level teacher training institutes. Those institutes will be designed to share some major tasks of the educational bases, and better bridge the gap between higher institutions and local schools.

Higher education institutions (especially provincial normal universities) will play a key role in this design. Yet, these efforts will require major structural change within the universities. First, this plan requires each normal university to establish a *teacher education department*. This department would be responsible for various jobs relevant to teacher education and training including pedagogical research, promotion, evaluation, and teacher management. It would absorb teacher educators who are in the field of subject pedagogical teaching from different subject departments. The department chairship would be taken on by the vice-president of the university. The main advantage of this change is believed to be the ability to combine and share teacher education and training resources within the institutions and avoid dispersing resources and overlapping management work.

Second, teacher education universities with sound foundations and teaching forces could apply to become teacher education research centres and offer research-based suggestions for major educational policies to provincial decision-makers in the future. The plan is to form 5 research centres of this kind in the province in the following 5 years to take on the responsibilities of connecting school teaching with teacher research, and basic education with teacher education, and extending the impact of education research in the field of basic education.

The third part of the plan is to establish a teacher training lab in the universities and further equip the universities with advanced education technology in order for them to serve as information platforms where information and innovative teaching methods could be tested and shared with numerous school teachers.

Fourth, universities in the province will also be asked to devote energy to the training of teacher educators. Participating universities need to organize a strong team made up of subject experts, pedagogical teaching experts and researchers. Their work needs to go beyond the university campus and go into the local schools. Through listening and discussing lessons with teachers, lesson demonstration, etc. they will offer teacher training and at the same time improve the ability of teacher educators in this regard.

The last aspect of the plan is to form 20 backbone teacher development centers which will rely on institutional resources. Through both long-term and short-term training programs (combining both degree-based and non-degree-based approaches), these platforms are intended to train a group of model teachers who could act as role models in their schools and coordinate teachers in future training work.

Based upon the draft of the 12th educational development plan of Shandong province, normal universities are required to make their own work plans along with suggestions for the 12th plan and submit them to the Shandong Provincial Education Department by the end of June 2011. The provincial government will organize experts to evaluate institutional plans, solicit feedback from the public and then provide the final version. The overall financial investment in the proposed efforts is expected to be 9 million yuan (around 1.4 million US dollars).

In the 12th development plan of Shandong province, promoting continuing teacher education is one of the key tasks. In total, Shandong province plans to provide

training to 32 thousand rural teachers and 100 thousand high school teachers in the next 5 years with a training time of no less than 300 hours per person. The annual fiscal investment is estimated to be 50 million yuan (around 7.6 million US dollars). The Provincial Education Department intends to take bids with the intent of encouraging institutions to improve the quality of their delivery further in a competitive environment.

In Shanxi, there are about 350 thousand primary and secondary school teachers in the teaching force. In 1998, the provincial education department issued the “Shanxi Teacher Continuing Education Regulations”, which formally require every teacher to receive 360 hours of in-service training over a five year period. The provincial government intends to add up to 720 hours in the next 12th year plan. Regular in-service teacher training is funded by the provincial department, schools and teachers themselves. The provincial department provides funding of 100 yuan (about 18 US dollars) for every teacher per training session. Schools pay for transportation, training fees and accommodations. The rest is paid by individual teachers. The previous three levels of in-service teacher training system have merged into two levels. The provincial and municipal teacher training schools are mostly integrated into provincial universities. There is only one municipal teacher training school left as well as three provincial teacher training centers: a secondary school teacher training center, a primary school teacher training center and an early childhood teacher training center. County-level teacher training schools continue to operate independently so far. The provincial secondary teacher training center is now affiliated with normal colleges and universities. Therefore, normal universities will certainly be involved one way or another. However, it is still too early to tell whether it would be possible to formally institutionalize normal universities’ work in the field of in-service teacher education.

Hebei and Shandong provinces differ in their processes of thinking and planning the future work of teacher continuing education. Yet, there were three similarities that were found in the interviews. First, special attention has been given to how to offer in-service teacher training to rural teachers and this was mentioned by the study participants from governments. Hebei province is actively encouraging teacher education institutions to provide more support to the training of rural teachers through innovative means. The current approach, called “Replacing the Teaching Post for Short-Term Training” (which I will introduce in detail later), which was pioneered by Hebei Normal University, is considered a successful example. Shandong province has clearly made it one of its goals to train a certain number of rural teachers in the next five years through setting up teacher education and training bases within the province.

Second, normal universities in these three provinces are located in the centre of the future development of in-service education. It seems that the Hebei Education Department is taking better advantage of the National Teacher Training Program compared to the other two provinces. Much more energy is being devoted to making sure that institutions delivering the national teacher training programs become more accountable to the government about their use of funding. Starting at the beginning of this year, the provincial government of Hebei decided to divide the funding for every program into two parts. The first part will be transferred to the institutions at the beginning of the training programs. The rest of the funding will be withheld until an evaluation is conducted among the participating teachers through an online platform and approved by the province. “The results of the evaluation will be taken into consideration in the future applications,” said Mr Lin of the Hebei education department:

This is only a preliminary measure for a comprehensive quality assurance system, but it could put some pressure on the universities side so that they will take more

initiatives in research and communication with teachers when making detailed plans in the application and the delivery process. (Interview in May, 2011)

In Shandong, the role normal universities are expected to play seems more obvious in the government draft plan for the next five years. Key consultation will taking place between universities and the government. It will be extremely demanding for normal universities, as there is no sign of active preparation found at Qufu Normal University. This provincial requirement is quite abrupt for the universities. Professor Zhao illustrated this point:

This whole plan does not only require normal universities to come up with an working plan, we need to realize that our faculty members need to be fully informed of this change and there are also some significant institutional changes that need to be considered for this work in the future. To be frank, our universities are not well prepared. (Interview in October, 2010)

Third, there is no clear connection between continuing teacher education and teacher certification as well as benefits. In the previous in-service teacher training system, there was a considerable complexity and confusion even on the part of the provincial administrators. It seems that the integration of pre-service and in-service teacher education institutions is the path the provinces are taking right now. However, no clear guidelines or regulations have been put forward.

The role of normal universities as well as their current efforts

The continuing education department of Hebei Normal University is in charge of the application process on behalf of the university. The department is led by a team of administrators in the university. Before applying, the department will organize a team of experts to provide academic suggestions for the application package based on the requirements of the provincial education department. Upon receiving the job, the department is responsible for communications with various other departments

according to the training subjects and levels, and also for the negotiations in terms of how much is paid to various departments and participating professors, etc. The current programs hosted by the university are all contract-based short-term residency programs of one to two months. The programs usually take place in the summer or winter vacation period, mostly because it is much easier for universities to accommodate incoming teachers and university educators are more available during this time. According to an interview with Director Zhang of Hebei Normal University, I drew up the following chart (Figure 10) which summarizes the current administrative structure of Hebei Normal University for continuing teacher education.

Within this administrative and operational structure, the relationship between the Provincial Education Department and higher education institutions is a determining factor, as the provincial government has a major role in shaping policies and practices in the area of teacher education. The university has a special role as mediator between the provincial government and local schools. The university president, the director of the continuing education department and chairs from various departments work as a team when allocating the tasks for the different training programs. Various experts from relevant departments form an expert group providing suggestions about the content of the training curriculum.

Non-degree teacher professional training at Hebei Normal University has followed this administrative framework for a few years. With the help of the director, I was able to get a copy of the training plans for the years 2008 and 2009. The writing of the training plans for both years was led by the continuing education department and they took relatively the same format. Each plan includes the subject, grade level, and targeted teachers. Each program's training plan was made up of specific content, materials, implementation methods, a description of the teacher educators, training

objectives, schedule, requirements for completing the training, etc. In 2008, the university hosted 17 in-service teacher training programs, among which 9 were backbone teacher training programs and 8 were rural teacher training programs. In 2009, the university hosted 27 training program in total. In addition to the training for backbone teachers and rural teachers, the university organized 12 high school teacher training programs and 1 high school principal training program. The make-up of the team of teacher educators remained relatively the same. Training programs usually lasted one month and took place on the university campus during the summer vacation. The accommodations were arranged by the university based on the funding standards of the province.

In addition to the contract-based program introduced above, there has been another important initiative explored by Hebei Normal University called “Replacing the Teaching Posts for Short-Term Training”. In order to respond to the call of the government for the integration of pre-service and in-service teacher education as well as to provide more support to rural schools in China. Hebei Normal University started a new approach which combines student internship and continuing education for rural teachers. The university has encouraged students to fulfill their teaching internship at the end of their study by taking a full teaching position in rural schools for a period of six months. Meanwhile, the rural teachers replaced by the students are invited to the campus of the university to receive professional training. This idea has been used for four years, has received positive feedback from students and teachers in rural schools and has gradually become a new working policy not only at Hebei Normal University but also in other provinces of China.

Since 2006, the university has organized 1941 teacher candidates from 18 majors to carry out three-to six-month practicum. Students have been assigned to 19 counties

in 11 cities. The number of students has been increasing each year. This effort received praise and support from the Hebei Education Department, and the government has helped the university build connections with local schools and has provided financial support. A new administrative office has been set up especially for relevant arrangements including organizing a team of teacher educators to follow up on the internship, answering questions and providing suggestions for local teachers.

The university is very proud of this initiative, said the director:

On one hand, students get a better understanding about the meaning and the importance of education development. The harsh conditions in rural schools and the passion of school teachers for teaching deeply influence their perspectives on many issues they learned in university classrooms. And many of them have already decided to take a teaching job in rural schools after graduation. On the other hand, because of the lack of teachers and funding in rural areas, teachers seldom have the chance to engage in their own professional learning. This new experiment not only provides rural teachers with these opportunities, moreover, they can have face-to-face interactions with university teacher educators and more communication among themselves.

Outside the formal structure in the chart, the university also launched an Experimental School Project as a university initiative. A group of teacher educators work on a volunteer basis. Each professor is responsible for several schools in one area, mostly in rural areas. These schools are called “Professor A’ Experimental Schools”. The university is responsible for making the initial connections. The subsequent work is completely up to individual professors in terms of how often and in what way they carry out which kind of teacher training. Two professors interviewed were recommended by the director and they are both heavily involved in this work. They impressed me first and foremost with their passion for teaching and in-service teacher education and a firmly held belief that education is a public affair so the fundamental goal of normal universities is to serve the public education enterprise in the best possible way. Just this kind of passion, to a large degree, makes up for the lack of funding and resources. Similarly, what impressed the participating professors

most is the passion school teachers have for their work.

In spite of the information about the policy planning of Shandong Provincial Department, the actual work of Qufu Normal University providing in-service teacher education has not yet formally started, probably because the provincial work plan has not been finalized yet. Regarding the possible changes in the university, Professor Zhao said:

Shandong Education Department intends to establish *teacher education departments* in all provincial normal universities in the following five years. And one of the central tasks of this department is to take charge of or facilitate continuing teacher education work hosted by the university, which is currently carried out by the continuing education department at our university. Therefore, the fate of the continuing education department is a big question mark.

Currently, three types of institutes at Beijing Normal University are involved in in-service teacher education. They are the School of Education, the Chemistry Education Research Institute under the College of Chemistry and similar subject education research institutes in other colleges or schools, as well as the School of Continuing Education and Teacher Training.

The School of Education is composed of four departments, eight institutes and two centers, namely:

- Department of education
- Department of education economics and management
- Department of early childhood education
- Department of special education
- Institute of international and comparative education
- Institute of education sciences
- Institute of education history and culture
- Institute of education laws and policies
- Institute of higher education

- Institute of teacher's education
- Institute of school counseling
- Institute of school improvement
- Center for education survey and data analysis
- Center for special education research

The School of Education is mainly responsible for pre-service teacher education. It offers courses concerning educational research and theory, etc. For non-degree teacher training programs funded by different stakeholders, the School of Education is also qualified to apply as an institute.

The School of Continuing Education and Training is a joint administrative and educational institute. Under the school are five major offices:

- Office of training
- Office of research
- Office of student work
- Office of teaching
- Office of Party work

The school naturally has focused their work on teacher training. The aim from the beginning was to provide superior professional courses for teacher qualifications through the means of night schools and setting up correspondence education centres across the country. The school itself does not have any teaching personnel. Its responsibilities cover a wide range of continuing education work and have diversified educational forms including correspondence education, Night College, networked education, traditional face-to-face learning, and academic education at the bachelor's level. The major supporting institutes in the School of Continuing Education are

- College faculty development and exchange center (Beijing)

- Directory center of the state teachers qualification accreditation
- Secretariat of young core teachers from universities
- Secretariat of the Confederation of National Teacher Education Network
- Key construction base of the national vocational education teachers training

The main responsibilities of the school have changed over time. Regarding teacher continuing education, until 2000 a considerable amount of energy was devoted to degree supplementation programs in the form of correspondence education.

National-level normal universities like Beijing Normal University operate directly under the Ministry of Education. Therefore, the school needs to get approval from the MOE regarding the number of teachers it plans to train every year.

In implementing the 2010 national teacher training program, national-level normal universities received most of the national-level training projects either through the form of assignment or application. Many researchers and professors were heavily involved in the writing of the new basic education curriculum and are among the strongest advocates for moral education or technology education. Therefore, they have a very clear sense of what teachers lack if not exactly how to help them. In comparison, in provincial-level normal universities, except for a few well-established professors, very few faculty members have opportunities to participate in major educational policy making. In order to do the job well, teacher educators in provincial normal universities need first to familiarize themselves with new policies and guidelines.

After the year 2000, the continuing education department of Beijing Normal University devoted most of its energy to running night colleges. The night colleges offer various undergraduate degree programs and are open to everyone. This still remains one of the main jobs for the department. As for their work concerning teacher

training, the school also receives training tasks from different levels of government nationwide. The school is the only unit of the university which is qualified to apply for national-level training programs under the 2010 National Teacher Training Program. Director Wei sees the school's work as building up an educational highway with different exits representing different subject departments and other associates. The department retains the decision-making power in terms of which assignment should go through which exit based on the nature and purpose of training program. Compared to other subject departments, multiple communication channels and the flexibility of its working approach are its advantages.

Colleges and institutes in the university which include normal education usually have the same organizational structure and function. Take the College of Chemistry for example. Under the college, there is the Chemistry Education Research Institute. One of the major tasks of this institute is to prepare normal students who are specializing in chemistry education. It offers pre-service and in-service teacher education. Right now, many disciplinary schools or colleges have their own Master of Education programs which can enroll in-service teachers and these kinds of Master of Education programs are growing every year. The institute has received different contract-based teacher training projects including national-level teacher training projects through the MOE, training programs from provincial-or local-level governments, and training initiatives in cooperation with local schools. For example, Shandong Provincial Education Department signed a contract with the institute regarding an intensive in-service distance education program in 1999. According to the contract, the institute is responsible for the content design and related issues rather than the building of the online platform.

Because of their expertise, the institute also received an in-service training

program of an exploratory nature directly from the MOE regarding the topic of distance teacher training in the subject of chemistry in China.

In addition, the institute also initiated a school-based in-service teacher training program that has lasted for three years so far. More than 20 schools have signed contracts with the institute. Because the program is contract-based, the length, content and actual form of training depends on the needs of different schools. Professor Jia commented on this initiative:

Different from other school-based training program, in our case, it is the school which reaches out to us with their own concern in mind. As far as I know, other institutes or schools in our university, which have connections with local schools, are usually based on their need for research. (Interview in November, 2010)

Problems emerging from the universities' participation

In the framework of Hebei province, it seems that each university can choose whether or not to apply for certain projects. The projects can bring financial benefits to the institution and teacher educators, but the government investment is still far from sufficient and the financial benefits the university can get from hosting are actually very limited. The director of Hebei Normal University said:

The provincial government has specific requirements in terms of how the money should be spent, how much is for each teacher, how much is for accommodations, how much is for learning materials, etc. It is very unlikely for us to spend the money doing something different from what the government requires, so the financial benefit of this work is very limited. (Interview in October, 2010)

From a financial perspective, the participation in these kinds of projects seems to be a burden to the universities. As the major teacher education institution in the province, Hebei Normal University is obligated to apply whenever this kind of job is available. Especially when this job is prioritized by the government, the university needs to show its support and cooperation. Yet, it is inaccurate to say that the university is forced to apply for the job because teacher education institutions do want

the job with the hope that their status in the system could be further promoted. As the market for in-service teacher education matures, they could harvest more rewards.

The director explained the complicated feeling they have towards this job at present:

On one hand, the university administrators view this job as a priority because the provincial government is pushing this job higher on the agenda. The university itself is investing a lot of money for the job, as the money our participating professors get is very much symbolic in my opinion. Some departments and educators would rather do something else if they are only in this for the money. The university is making a lot of efforts to do the job for the sake of supporting the policy initiative and better serving the field of basic education in the province. Of course, we do the job also with the hope of getting a strong reputation in the field and laying a good foundation for future opportunities. (Interview in October, 2010)

More contradictory feelings were found in the case of Shanxi Normal University.

Before visiting the university, I contacted the director of its Adult Education Department and got a response a week later saying they are not engaged in the work of continuing teacher education: most of the work they do is adult education with the public. However, the university has newly established a *teacher education department* and the director helped me contact the vice-chair of the new department. When I met with this department's vice-chair, he recommended a young professor for me to talk to because he was not fully aware of specific teacher training jobs in which the department was currently involved and the department chair who was responsible for this job had quit two months before.

I started the interview with Professor Lu (a young female professor) with much anticipation, as establishing a teacher education department is the future plan for many normal universities, including Qufu Normal University which I had just visited. Their work may well be more organized and integrated with the current institutional resources. Yet, what I learned from the interview struck me as a huge disappointment. According to Professor Lu, the new department has experienced a lot of difficulties since its creation. To realize the purpose of a teacher education department,

experienced teacher educators in different subject fields of teaching pedagogy need first to be brought together. However, senior pedagogical teaching professors in various subject departments refused to come because they are unsure of the future of this new department and are already well-positioned in their current departments. Only a group of young educators like Professor Lu were willing to come.

The teacher education department was formed to take on three jobs. One was to provide various pedagogical teaching courses to students from different subject departments. The second was to organize and facilitate internship training for the students. The third was to be responsible for in-service teacher training programs hosted by the university. However, in reality, without a strong team of teacher educators, the other departments were reluctant to send their students to the new entity and neither would they hand over the power of managing the internships. For in-service teacher education, the work of the department has not followed the initial plan either.

Under the heavy influence of the 2010 National Teacher Training Program and the exemplary efforts of Hebei Normal University, Shanxi Normal University set up a teacher training office (an administrative office, an independent office outside the new department introduced previously) to manage all the relevant work from the National Teacher Training Program including the “Replacing Teaching Posts for Short-Term Training” projects.

With the first two tasks unfulfilled, the previous vice-chair of the new department took initiative himself, through personal relationships, and received several teacher training projects from the provincial ministry. However, due to conflicts about the work arrangement between the department and the new administrative office, the university later decided to let the teacher training office take

over the training projects and assign tasks to the teacher education department. As a result, the power of the department was further decreased and became even more passive. The chair quit his job in anger.

During the interview, a teacher from a rural school came into the office to ask for a favor. Somehow, he joined our talk. To my surprise, he was not a subject teacher but the safety guard at his school. The school sent him to the training program hosted by Shanxi Normal University because there would be not enough teachers to teach if they came for the training. Although opportunities are precious for rural teachers at his school, they were unable to come to the university campus and stay there for a month.

Professor Lu of Shanxi Normal University nodded with understanding, and explained:

This kind of situation does exist in the current programs. The university, as a hosting institution, does not have relevant regulations to follow when dealing with the problem. The problems could be eased by distance training programs, yet our university hasn't built up a distance training platform. (Interview in March, 2011)

The MOE has a list of institutions recommended for distance training programs (see below). Shanxi Provincial Department entrusted the continuing education department of Peking University to deliver its distance training programs among the 2010 national training programs. Originally, Peking University contracted Shanxi Normal University for the training of local online teacher educators to share some of the work of the training program. However, this cooperation was stopped due to some financial complexities and Peking University decided to take the whole job on its own.

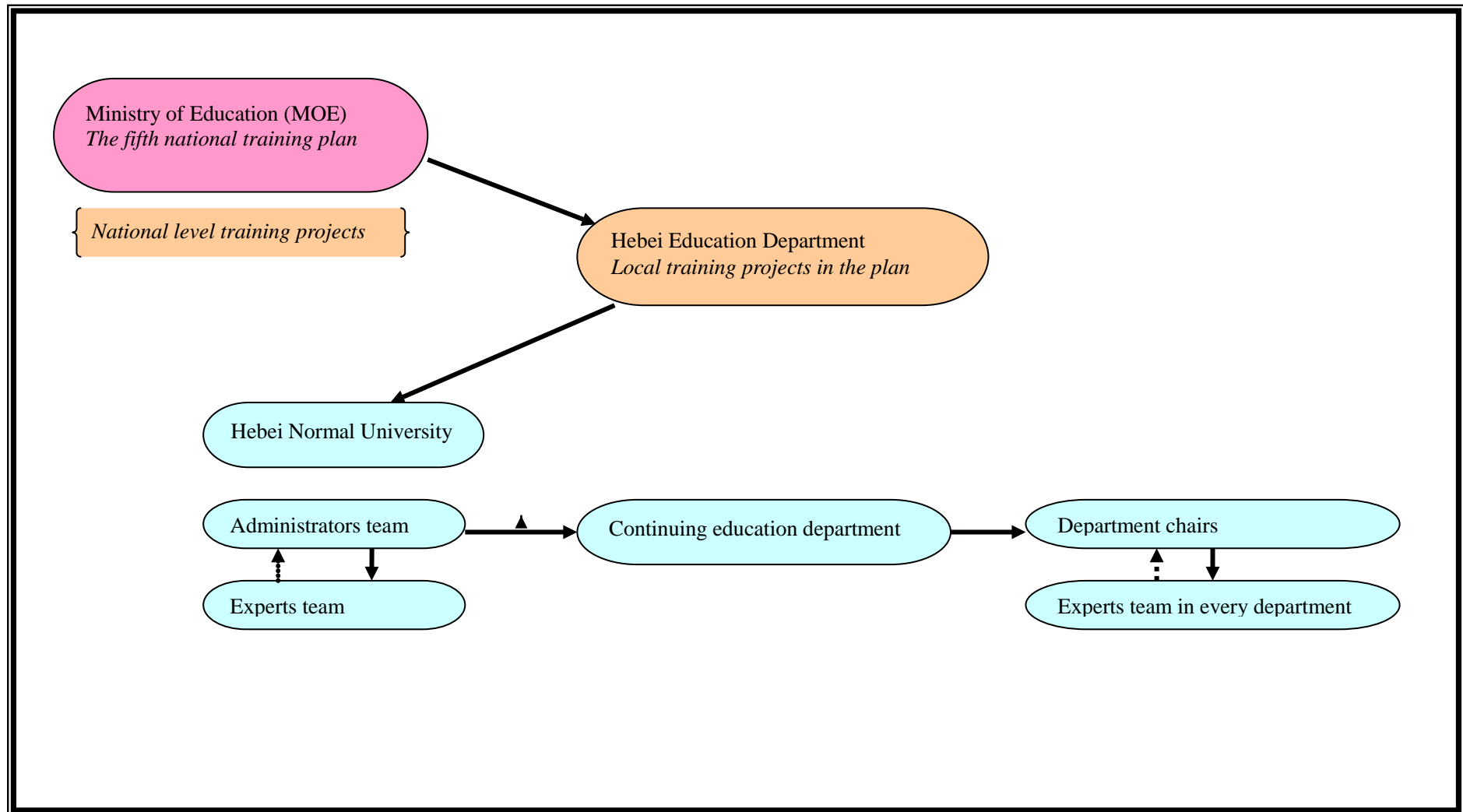
Table 10 Member institutions of Chinese on-line teacher education

Name of the organization	Website	Hosting institution
Teacher continuing education school	www.sne.bnu.edu.cn www.bnude.cn	Beijing Normal University
Distance education school	Js jy. dec. ecnu. edu. cn; Js jy. ecnudec. com	East China Normal University
Distance education school	www.sne.snnu.edu.cn	Shanxi Normal University
Distance education school	jspx6.fjtu.com.cn Jspx.fjtu.com.cn	Fujian Normal University
Distance education school	www.gdou.com teacher.gdou.com	South China Normal University
National center for educational technology	www.51elearning.org.cn	National Center For Educational Technology
Internet Education school	train.pkudl.cn	Peking University

(Source: <http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4644/index.html>)

In addition to the recommended institutions, some provinces with relatively advanced online education platforms were also recommended including the teacher education networks in Shanghai, Anhui, Hunan, etc. They are either supported by a provincial technology centre or by an education institution.

Figure 10: Administrative structure of Hebei Normal University



Thinking comparatively about the relevant work at OISE, University of Toronto

Provinces in Canada take full responsibility for their education matters. Ontario has a strong teacher education and training system. The AQ system, government funded teacher training initiatives and other aspects of in-service teacher education could well serve as a comparative element and provide an alternative perspective for understanding issues embedded in Chinese in-service teacher education. Therefore, the following section presents teacher training work in Ontario with data collected from the Ontario Institute for Studies in Education (OISE), the Ministry of Education in Ontario and the Ontario College of Teachers.

The Ontario Institute for Studies in Education (OISE) of the University of Toronto is located in Toronto, Ontario. OISE was originally an independent graduate study and research institution but merged with the University of Toronto in 1996. There had been a Faculty of Education in various forms at the University of Toronto (FEUT) carrying the responsibilities of pre-and in-service teacher education long before the merger. Continuing Education was also an active component in FEUT. The continuing education unit now at OISE evolved out of the Continuing Education Unit at FEUT and was created by the founding dean after the merger. OISE is a leading institution in teaching, educational research and other relevant issues. OISE offers extensive graduate programs in education, pre-service teacher education programs and advanced continuing education programs in Ontario for teachers, educators and administrators. Teacher education including in-service teacher education is the priority and mandate of OISE.

The Continuing Education Unit offers a variety of teacher professional training programs, all of which are non-degree programs. The most significant part is the offering of Additional Qualification (AQ) courses. AQ courses can qualify teachers in

Ontario to teach in other subjects. There are two kinds: Additional Basic Qualifications and Additional Qualifications. Additional Basic Qualifications allow participating teachers to add to what they are already qualified to teach; Additional Qualifications help participating teachers to further expand their skills within the subjects that they already qualified to teach. ABQs are further organized into different divisions, for example, primary, junior, intermediate and senior. AQ courses are offered as one session, three sessions, principal qualification courses, or honours specialist courses (general or tech studies). More specifically, one-session AQ courses add an additional qualification to the Certificate of Qualification. Three-session AQ courses lead to a three-part Specialist notion on the Certificate of Qualification. Honours specialist AQ courses qualify participating teachers to be specialist teachers in their field.

In addition, the continuing education department also has tried to form collaborative programs. One of the most recent projects is called “Rethinking Education for the 21st century”. In partnership with the Conference of Independent Schools and OISE, this is a collaborative action research project which will last from 2010-2012.

Moreover, the department also offers a series of short-term customized programs. For instance, there are currently programs in higher education and educational leadership. These programs are offered by means of online modules organized into specific learning paths, designed for specific groups of potential learners and are not necessarily connected to a formal credential.

Last, the department also provides a variety of learning institutes and symposia which focus on different topics in education. Educators choose to attend the sessions which interest them the most.

A similar feature between Chinese normal universities and the case of OISE is that the majority of in-service teacher education work is carried out by the continuing education department, although the situation is slightly different between provincial normal universities and national normal universities in China. Nevertheless, there are obvious differences in several aspects of in the comparison between Chinese normal universities and OISE.

First of all, China runs a centralized in-service teacher education system. As mentioned in the previous chapter, the current in-service teacher education system in China can be divided into two subsystems: regular in-service teacher education and the non-regular in-service teacher education system. Normal universities only participate in non-regular in-service teacher training programs and so far continue to be the major providers in this subsystem. The hierarchical administrative relationship between normal universities and the governments (both at the central and provincial levels) leaves very little autonomy on the part of the university. The tight relationship between the government and the university does not make the intention of forming the alignment any easier. On the contrary, the administrative control the government has over the university makes the participation task-oriented and there is no valid space for teachers to express their intentions. The separate institutions for both pre-and in-service system as well as the complicated hierarchical administrative relationships within each system makes the job of elimination of ill-functioned in-service training institutions and the responsibility reallocation extremely challenging.

In Ontario, the alignment of the pre-service and in-service teacher education systems is made through the Ontario College of Teachers, an accrediting body of pre-service and in-service teacher education.

John from the Ontario College of Teachers stated:

Because we are responsible for accrediting both the initial teacher education and the ongoing teacher education, there is good alignment. We have the accreditation regulation that says what are the requirements for initial teacher education and what are the requirements for additional courses. and I think there is good consistency because we are the same group that is looking at it. you know, when you look at the content of courses, the qualification of those teaching them, we are looking for background, blend of research, classroom experience and bring them to the courses.

He continued:

And I think the other alignment feature is that many faculties that offer initial teacher education are the same ones offering ongoing teacher education so they understand what teachers are seeing in the initial program and how to extend that in the ongoing teacher education. (Interview in April, 2011)

In addition, the OCT is responsible for running the teacher certification system and every AQ course teachers take is documented and added to their certificate. Therefore, there are strong ties between the OCT, universities and school teachers. Universities are made accountable to the OCT through the accreditation procedure, and also to individual teachers. Currently there is no mandatory requirement for teachers to take AQ courses. Teachers are choosing courses and institutions on their own and for their own benefits. Some school districts also support teachers in taking AQ courses.

John elaborated:

Because AQ courses are teacher choice, teachers pay the course themselves. It is incoming-generating work for universities, if a university comes up and offer...if it doesn't fit in what teachers want to do, they won't do it. So there is a fit with what's marketable or not. (Interview in April, 2011)

The revenue sources of the continuing education department at OISE are diverse and include two components:

1. AQ courses provide a very stable revenue stream for the department. Staff in the department mostly manage these programs, which are accredited by the Ontario College of Teachers.
2. The department looks for other opportunities to be involved in teacher education

and creates networks and partnerships on a variety of different levels.

The ties between the Ministry of Education, the OCT and the universities are not as strong. These bodies run quite independently. However, this is not to say that there is no connection between the AQ system and the professional education support the Ministry offers. Mike from the Ministry of Education in Ontario touched upon this point:

I would say teachers probably do [make individual PD plans] in collaboration with their school principals during the development of their annual growth plan. So as teachers are evaluated, they would have to develop objectives, and a growth plan and sometimes part of that would be what kind of courses they would take, and some of them are AQ courses. (Interview in April, 2011)

The advanced leadership training offered by the Ministry is also believed to be an extension of AQ system, said John from the OCT:

We are trying to get at is once you done your AQs, got on the top of the salary grid, what is incentive? What kind of support can we give for other more experienced teachers? Who are the ones who can tell us what is meaningful for them. So it might not be doing an academic course. It might be looking into a specific area of practice. They want to improve and you just cannot get that course, so it is more self-directed. (Interview in April, 2011)

The Ontario approach of alignment on one hand has lessened the burden of degree-based continuing teacher education. Mike from the Ministry explained:

In Ontario, we don't have a lot of Masters of Education graduates in our teachers, because we have our AQ system. It is not competing between master's programs and AQ courses and it is another way of continuing on. And it has got plenty of incentives behind it. (Interview in April, 2011)

On the other hand, the alignment offers all teachers equal opportunities to have a comparable breadth of education exposure with the same outcomes. John from the OCT pointed out with delight:

We currently do not have a mandatory requirement. There isn't a requirement that they have certain number of courses, a number of hours each year. That said, we looked at this statistic each year, we know teachers are doing it on their own. It is about 40,000 courses that we add to certificates every year. (Interview in April, 2011)

The Ontario experience tells us that coherent and consistent teacher policies are a must for developing coherent and consistent programs and practices. Of course, there is no education system without problems. Like the present Chinese situation, an effective evaluation model is a serious concern expressed by Mike from the Education Ministry of Ontario:

One of the main issues we are facing is that we have a system where we provide professional development for teachers in all kinds of different ways. But we don't actually measure their performance, so we do have a learning model, but we don't really have an evaluation model. We do give teachers all kinds of opportunities to develop themselves and learn, we recognize them as a profession, they are a professional body. One of the questions today we are considering... what can we do that would actually look at teachers in terms of performance, how effective they are as teachers, how good they are and we can help them improve as teachers, to help struggling teachers. (Interview in April, 2011)

Furthermore, Mike from the Ministry added:

It [in-service teacher education] is a potential market. There is not necessarily competition among institutions, because our faculties are spread around the province. There are also some weaknesses of the system. Certain courses are oversupplied while some courses are hard to find anywhere... some of the AQ courses are more expensive to run, like the technology ones. You will get teachers saying I am trying to find a course but no one is offering it. It just isn't worth everyone's while. It is too expensive to run and there is not enough interest. (Interview in April, 2011)

The Chinese teaching force is not fully regulated yet. Teacher certification and accreditation has not been formed into a systematic procedure. The open teacher education system allows students from non-teaching majors to enter the teaching profession through short courses and exams. There is no common standard for all graduates who want to become teachers in different subject areas. Also, there is no formal way of recognizing non-degree-based learning.

A unique feature of the current field of in-service teacher education that has opened up for normal universities in China is that the government is the opportunity provider and the consumer at the same time. The National Teacher Training Program

that started in 2010 is a powerful policy push from the central government for the work of in-service teacher education in China. However, all the relevant regulations so far are temporary. Also, there is no clear guarantee about the continuity of this national investment itself.

Among the four normal universities in this study, there are no self-financed programs, except for the “experimental school project” in Hebei Normal University. Universities wait for the funding opportunities provided by either the central government or provincial governments. In contrast, most of the programs in the continuing education department at OISE are self-financed. They are user-paid and the program consumers include associations, government, teachers, and administrators. The department has its own e-payment and e-registration system.

Meanwhile, there are no policy measures in China that are equivalent to the Additional Qualifications in Ontario. As the certification system develops in the future, normal universities could potentially be stable participants in this work. However, there is no organization which is independent from the government like the Ontario College of Teachers in China, so the degree and form of participation seem once again to lie in the hands of the different levels of government.

Also, the way continuing education departments are related to the university is different in the two places. Continuing education departments in Chinese normal universities are directly led and monitored by the university authority. The departments have no independent financial accounts. There is no pressure for profit-making, either. Major initiatives need to be approved by the university before any action takes place. The continuing education department at OISE is relatively independent from the university authority. An important policy mandate for the department is revenue generation. As the director explained:

My unit is cost recovery, and needs to generate revenue first of all to pay all our expenses, and additional revenue for the institution. So that is a very practical part of our mandate and we do so by creating networks and partnerships on a variety of different levels. (Interview in August, 2010)

Therefore, there is greater motivation for the department to take action and seek various opportunities itself. The director continued:

We work in Chile, China, Jordan, anywhere where we can find a network, find a partner and look through the five departments here and forge partnerships internally and externally. So sometimes it is international, or other times national or provincial work. We have done projects that involved the independent schools, accessing and evaluating how teachers change their classroom practice, we have done projects that are Ministry of Education projects involving leadership development, literacy development and that kind of thing. (Interview in August, 2010)

In both countries the continuing education departments themselves do not have much content expertise, which makes the job of communication especially important. The tight administrative relationship within Chinese normal universities makes the work of forming a relatively formal communication channel easier than it is at OISE. Communication is the key area that could be improved, as identified by the OISE director:

One area where I think the improvement could be made would be in communication. But we do by using my own professional networks in the building to figure out who is specializing, who is doing work, or who has graduate students doing work in certain area. (Interview in August, 2010)

Nevertheless, due to its independent operational and financial status, the continuing education department at OISE has much more motivation and autonomy to negotiate with other departments within the university. At present, the continuing education department is trying to cooperate with the Department of Theory and Policy Studies regarding forming a connection between non-degree training and degree-based programs. As the director explained:

Some can take for instance, our principal's courses, and then apply to do a master's degree in Educational Administration. You can get credit for about two courses for the work you have done. That is new for the university. It is

groundbreaking. It has taken three years to come about... We are confident that we will move in that direction. We already worked out the agreement with the department, which is the TPS. Once the final decision is made, how to work together to satisfy theory and policy studies requirements. (Interview in August, 2010)

The customized training program is powerful evidence of this motivation, too. In addition, other stakeholders, including third party organizations in Ontario, are also allowed to participate and also are very active in the field, which forms a competitive environment for the department. As the director stated:

Universities are not the only place in Ontario where teachers receive professional development, if they are attached, employed in school district, the district either independently provides teacher professional development or receives money from provincial government... Sometimes they come through the teacher federations. The Ministry has chosen to fund organizations. Or other organizations receive membership dues like teacher associations, the principals associations. They don't have as much worry as we do about cost recovery and revenue generation. So we are in constant competition. We are always on our toes. We are constantly looking for new networks. With our Additional Qualification courses, we have to lower our prices, because we are not the only institution offering the courses. (Interview in August, 2010)

There is a much wider variety of consumers in the Ontario education system than in China. Individual teachers and schools have a considerable amount of decision-making power in the choice of training programs and training organizations. The AQ system in Ontario offers some valuable possibilities for those issues in China. A credit-transfer system could be a possibility to promote both diploma and non-diploma education. Of course, there is no absolute formula, as there are always interesting and unexpected changes. As John from the OCT stated:

Our teacher education programs continue to be university-based. We are seeing interesting things. For some faculty, they are offering a set of AQ courses that could be counted towards advanced degrees. (Interview in April, 2011)

In sum, the existence of OCT offered more balance to the power allocation of the system. And the independence of higher education institutions in the province gives more flexibility to the work of universities in terms of the means and intensity of

participating or exploring the market of in-service teacher training. Further, the financial independence of the continuing education office in OISE encourages more working enthusiasm and exerts more pressure and accountability at the same time. Stable teacher customers of in-service teacher training is the key to the continuous quality enhancement of training programs.

Chapter summary

Responsible planning should take into account changes in organizational structure and its impact on the actual policy implementers (e.g. teacher educators in universities). The organizational structure has a long-term effect on the goals and the improvement of instruction of in-service training programs. The work of teacher educators is driven and at the same time constrained by administrative structure, organizational culture, and financial incentives as well as personal ambitions etc. This chapter demonstrated the major institutional aspects relevant to the participation of the four studied normal universities in in-service teacher education.

A major difference between the three provincial normal universities and Beijing Normal University is the degree of participation of the institution in non-degree based teacher training work. Because of its reputation and national normal university identity, Beijing Normal University is more likely to get training programs and relevant work directly from the MOE, and also has many opportunities to receive training programs from provincial- and local-level governments nationwide. Besides the School of Continuing Education and Teacher Training, other departments as well as research units are also quite active in the field in various degrees. The participants in the university are well aware of different types of training programs sponsored by the National Teacher Training Program as well as where they could fit into the overall

design. Yet, among the programs they are hosting, the ones sponsored by the National Teacher Training Program only constitute part of their workload.

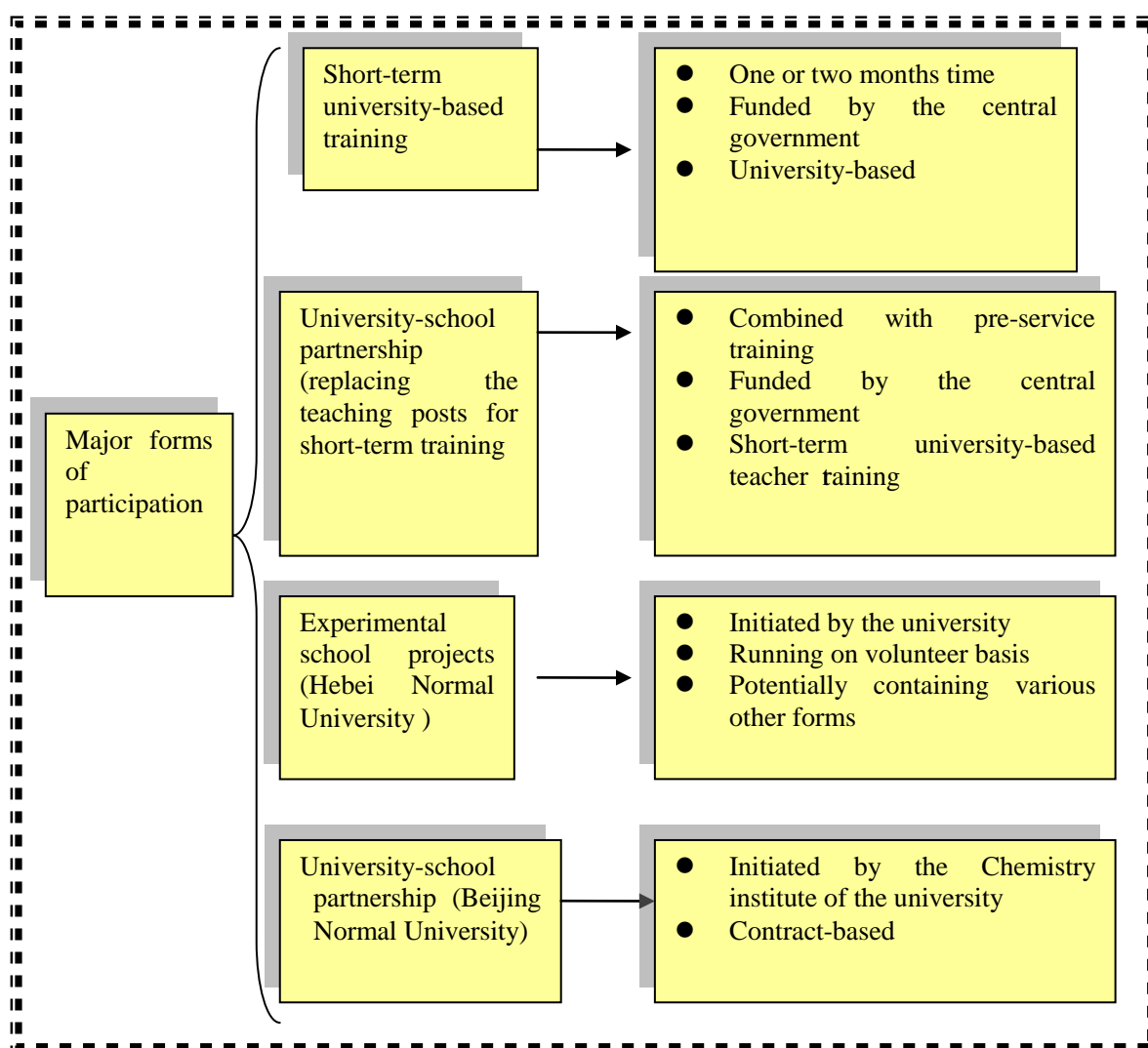
By contrast, the influence of the National Teacher Training Program seems much stronger at Hebei Normal University and Shanxi Normal University. At present, most of the work they do centers around the provincial training programs sponsored by the MOE. The continuing education department at Hebei Normal University is currently the only unit in the university which is active in the field of non-degree teacher training. The university started its exploration of various possibilities well before the National Teacher Training Programs. Its experiences have been well acknowledged and influential for other provincial normal universities including Shanxi Normal University. At Shanxi Normal University, the newly-established teacher training office is entrusted by the university to handle relevant work. Other units are not directly involved. Among the four normal universities visited, Qufu Normal University is on the low end in terms of work intensity. Surprisingly, given the on-going efforts of the Shandong Education Department, both participants I interviewed at Qufu Normal University were not aware of the National Teacher Training Program that started in 2010 and the university is not hosting related programs either.

Government-funded programs in the framework of the “National Teacher Training Programs” take two major forms of delivery. One is short-term university-based training programs, the other is the creation of university-school networks. Major programs initiated by the four universities include experimental school projects pioneered by Hebei Normal University and the contract-based training programs started by the Chemistry Institute of Beijing Normal University. These two kinds of projects may include various other forms of participation such as workshops or collaborative research. These identifiable forms of participation are summarized in

the following paradigm. University-based short-term training will be a major form of universities' participation in the foreseeable future, as Professor Jia explains:

This form of delivery won't disappear despite the criticism in the literature about university-based short-term training. First, the teaching resources available in the university are very limited and won't be able to sustain other forms of participation on a large scale at present. Moreover, this form has its advantages. Teachers can enjoy the learning resources on the university campus and have more time to concentrate on reflective thinking and more direct communication opportunities with various teacher educators.

Figure 11: Major forms of participation identified from the data



Nevertheless, the balance between the impact of the real situation in schools and the more luxurious learning environment on the university campuses needs to be born in mind as the work progresses in the future.

In-service teacher training work in Ontario has been running for many years and is well-established. AQ courses are one of the important features in Ontario teacher continuing education and are the most important work carried out by the continuing education office of OISE. The comparative part of the study has helped me in thinking about the features of the Ontario system and how the work of OISE in continuing teacher education that could potentially benefit the reform in China.

First, there is in China no accreditation body such as the Ontario College of Teachers. On one hand, the national government in China gets the guidelines, while the provincial government has supervision power. With limited funding, it is unlikely that much effort will be made to ensure the quality of the training, especially when it is not considered as a priority by provincial governments. Normal universities as delivering institutions are only responsible to the government and do not have any authority over the selection of the participants, the subject of the training programs and how the funding is allocated. The tight administrative relationship between universities and the government in China means that universities do not have any control over the important decisions made about in-service teacher training. Rather, they act as cooperative and advisory associates of various levels of governments. The centralized administrative structure ensures that government policy receives support from the universities and will very quickly get to the bottom of the system. On the other hand, this tight relationship leaves universities limited room to maneuver and does not necessarily contribute to the quality of the training programs. It is understandable that administrators in Chinese universities feel uncertain about this work and hesitate to give any predictions. In the future, a policy emphasis on encouraging higher education institutions needs to be further regulated by law in order to ensure the continuity of the work ,and to specify the rights and responsibilities of

participating universities in the field.

There are no obvious incentives for teachers in China to continuously pursue in-service training. Unlike the AQ system in Ontario, teachers in China seem to be left outside of the major national teacher training initiatives. The connection between universities and governments are far more important than the connection between universities and teachers or schools. On one hand, the fact that governments are consumers of this service shows that there is not yet a market in the real sense for universities to explore. The need will disappear as soon as the government funding stops. On the other hand, under the current situation, universities are less likely to make efforts to communicate with teachers and less interested in knowing how the participating teachers feel rather than how to satisfy the requirements of the government.

Chapter 6: Discussion

The preceding chapters provided a description and preliminary explanations of the national policies and universities' commitment to the work of in-service teacher education.

In this chapter, I will provide cross-case analysis as well as attempt to answer the two research questions as outlined in Chapter 3. The multiple case study approach of inquiry employed by the study allowed me to “study two or more subjects, settings, or depositories of data” (Bogdan & Biklen, 2003, p.62). Hebei Normal University, Qufu Normal University, Shanxi Normal University and Beijing Normal University were purposefully selected for the study in order to give a better chance to understand the problems and answer the research questions. The two sections of the discussion were organized according to the two research questions. Major themes emerging from the data were grouped together under each question including organizing a group of competent people who can effectively foster a new initiative, exploring new approaches for teacher training, and reforming administrative structures, funding, lack of experienced teacher educators, Chinese educational structure. The third part of the discussion summarized major points emerging from the data concerning the potential contribution normal universities could make by participating in continuing teacher education including better fulfillment of the responsibilities of teacher education institutions, potential impacts on educational research, a better alignment between pre-service and in-service teacher education.

What efforts are universities in China making in continuing teacher education?

Normal universities face strategic choices and institutional reorientation with the changing of the overall teacher education system. Attention to three major issues

emerging from the interviews would help to integrate the work of in-service teacher education into the overall work of these institutions. These are: organizing a group of competent people who can effectively foster new initiatives, exploring new approaches to teacher training, and reforming administrative structures.

Organizing a group of competent people who can effectively foster a new initiative

Organizing a strong team of teacher educators for the work of continuing teacher education is a most effective strategy. The Experimental School Project launched by Hebei Normal University gathered the most experienced and dedicated teacher educators to promote the work of in-service training in formal as well as informal ways. The initiative was formally brought out by the university as an institutional program while most of the actual delivery was done by individual educators as personal behaviors. This project helped university educators build communication channels with local schools and teachers through which they developed a more comprehensive understanding about the needs and feelings of school teachers.

Professor Wang of Hebei Normal University expressed it the following words:

Although I have been in the field of academic research for more than 30 years, I feel I started from the beginning in learning together with the teachers. I felt their pain and passion during this transition. They need help from people like us to overcome the pain with them. I harvested more than I expected. Teachers gave me their trust, they acknowledged my work and called me for advice when they needed. And this work has greatly influenced my research interests and perceptions. Sometimes, principals from other schools also contacted me and invited me to visit their school. This work took up almost my entire free time in the past two years, but when you feel their enthusiasm and sincerity, it is really hard to say no. (Interview in October, 2010)

Nevertheless, teacher educators who are actively involved in this work need adequate time and resources to ensure the quality of their work in the future. Their work needs to be formally recognized by the internal reward and promotion system. Working on a volunteer basis makes it hard to guarantee the continuity of the work.

Exploring new approaches to teacher training

The approach of “Replacing Teaching Posts for Short-Term Training” explored by Hebei Normal University could potentially better engage student teachers in the practical environment of teaching. More importantly, it provides valuable opportunities for teachers in rural schools with a period of time during which they can enjoy more learning resources, communicate with university educators and engage in reflective thinking. This approach could avoid the situation encountered at Shanxi Normal University in which the school safeguard was sent to a professional training program instead of teachers.

However, this practice is still in the early stages of development. There are many issues that need to be considered if it continues to be implemented and becomes a regular project of the university. First of all, because school teachers can only be released from their jobs when the school permits, receptive schools need to be reassured that the temporary change of teachers will not influence the teaching quality, and on the contrary, would be likely to increase teaching quality in schools. This challenges the way in which student internships usually work.

A second implication is that teacher educators from the university need to take more responsibility and better think through their role of supervising student teachers. As well to ensuring of the quality of the professional training rural teachers receive during this period, there needs to be an effective method to find out what the teachers’ professional needs are and to design the training programs accordingly. This task also seriously challenges the university to better mobilize and organize its teaching resources.

Third, it is unlikely that universities alone could implement this idea on a large

scale. It requires a lot of resources including teaching resources and accommodations for teachers in training on university campuses. Currently, Hebei Normal University is delivering the training programs and provides accommodation free of charge. There needs to be funding provided by the government. In 2010, this innovative approach received appraisal from the MOE and has been introduced as a special pattern for in-service teacher training to other provinces with allocated funding.

Reforming administrative structures

Devore (1974) pointed out years ago that

If it is desirable to change traditional in-service teacher education programs, the organizational structures must be altered to promote the proposed changes. Introducing new programs into old organizational structures interjects the element of failure from the beginning. (p. 140)

This study shows that participating in in-service teacher training work requires changes in the internal administration of normal universities. At present, their internal organization still reflects the Soviet influence. Departments are organized under university authority. Usually, a department has several specializations. Faculty members belong to specific teaching and research units.

To fully participate in and benefit from the work of in-service teacher training, normal universities need to go through far-reaching and difficult changes in their institutional arrangement and in the practice of teaching. Yet, it is hard to disentangle cause and effect in this process, as institutional change is a must in the current teacher education system reform and the work of continuing teacher education is an inseparable part of the system reform itself.

Many normal universities have already committed to the establishment of teacher education departments to be responsible for facilitating and consolidating teacher education resources within the institution for both pre-service and in-service teacher

education work. This department is usually led by university administrators. The specific job range varies from university to university and can be divided into two categories in general. One is to establish an actual new department which combines the function of education and management. Education usually refers to the teaching and training of teacher candidates. Management usually includes the relationship with other departments, course design and practicum arrangements, etc. Universities including Nanjing Normal University, Shenyang Normal University, and Zhejiang Normal University have all adopted this approach. A second strategy is to form a management institute such as Beijing Normal University, Northeast Normal University, and Hangzhou Normal University have done. For example, at Beijing Normal University, the Teacher Education School is led by a vice-president of the university, and the vice-chairs of the school are the deans of major faculties in the university. This design maintains the original institutional structure, through it changes the resource management and allocation path to improve the efficiency and appropriateness of resource use.

The detailed functions of the newly-established departments in normal universities are listed in the following table.

Table 11: Types of new established departments in normal universities

University	Department name	Function
Beijing Normal University	Teacher education school	The school is a management department and in charge of all teacher education resources in the institution, overall teacher education plan, courses design and practicum management, etc.
Northeast normal university	Teacher education research institute	① in charge of teacher education resources in the institution; ② pedagogical research and project application; ③ management of teacher educators who are in the field of subject teaching pedagogy and relevant research grant application; ④ development of a strong team of educators of subject teaching pedagogy.
Hangzhou normal university	Teacher education management department (与教务处并列)	① in charge of teacher education resources in the institution; ② teacher education course design; ③ practicum arrangement and management; ④ project application; ⑤ establishment, facilitation and strengthening of the relationships with local schools.

Nanjing normal university	Teacher education school	①teacher candidate education and management; ②starting in 2010, the school is in charge of the enrollment and fostering of all teacher candidates in 13 departments; ③responsible for designing and regulating teacher education courses and arrangement and facilitation of the relationship between various departments and the teacher education school.
Shenyang normal university	Teacher professional development school	①education of teacher candidates; ②drafting the overall teacher education plan in the institution
Zhejiang normal university	Teacher education school	①education of teacher candidate; ② drafting the overall teacher education plan in the institution

(Source: interview with professor Lu of Qufu Normal University)

As part of this structural reform, the rearrangement of the relationship between schools of education and other schools is not an easy task to accomplish. On the one hand, if every potentially interested agency in the universities is tightly organized and has a review of the function of every training job, the process will definitely be slowed down. On the other hand, it is a necessity to involve those who are in power in any educational task and institutional change.

From the visits made to each institution and interviews with faculty members and department heads, it is clear that institutions vary in the plan and responsibility for institutional internal reform responding to teacher education reform. Beijing Normal University and Hebei Normal University have trusted their continuing education departments to be responsible for the work related to the “national teacher training program”. Shanxi Normal University has assigned this job to its teaching affairs office. It is certain that institutions are seeking to create their own model of internal administration in order to facilitate and utilize teaching and learning resources. However, there are no strong indicators showing that institutions are committed to and fully confident about this change. For one thing, as Professor Jia of Beijing Normal University put it:

Although in-service teacher training is being emphasized by the MOE in the recent years and National Teacher Training Program has been providing funding to provinces to promote this work, the policy mostly serves as a non-regular type

of teacher training and doesn't connect to the current in-service teacher training system.(Interview in November, 2010)

In other words, there is no guarantee that this funding chain will continue. From the universities' perspective, all this work is temporary. They are unlikely to make significant institutional changes until they are better assured that there will be a steady flow of funding. In addition, provincial normal universities are directly administered by the provincial governments. The interviews and later discussions revealed that the provincial governments are also waiting for signals from the MOE. Mostly because "in-service teacher training was the least emphasized area for quite some time, we want to make sure that every step forward is consistent with the direction of national policy call" (quoted from an interview with Mr. Mei of the Shandong Provincial Education Department).

Director Zhang of Hebei Normal University said:

To appropriately rearrange the power relationships between teacher education departments and other subject departments is key to the success of this change. Otherwise, the reform will remain superficial and the actual work will stay unchanged. Yet, for administrators and university faculties to abandon longheld conventions about how the work was supposed to be done is not easy, also for our faculty members to see the job of in-service teacher education as an integral part of universities' work needs more time. (Interview in October, 2010)

Universities consist of complex patterns of interaction, coordination and ordered behavior (Mayhew, 1974).The rights and responsibilities of different units in the administrative structure need to be clearly regulated. Otherwise, some units may find themselves trapped by the complex interactions of institutional administration. What happened with the newly formed teacher education school in Shanxi province serves as an example in this regard.

What are the factors that support or inhibit universities in these endeavors?

Regarding this question, three major themes stand out from the data: the issue of

funding, training for university teacher educators and the impact of decentralization on teacher education. It is hard to distinguish the element of support from the obstacles. Their impact on the ultimate success of the work is dependent on how and to what degree they will change in the future.

Funding

The study shows that when the government puts more emphasis on this work and really sees this as one of its priorities, normal universities will organize and deliver more training programs. Director Zhang from Hebei Normal University said:

The current changes of funding channels for continuing teacher education at the provincial level has a significant impact on normal universities. Previous work concerning in-service teacher education was primarily funded by the provincial government on regular in-service teacher education and the involvement of universities was very limited. With the implementation of the National Teacher Training Program, a new funding channel. MOE-Hebei Education Department-teacher training institutions is formed. Normal universities are becoming very important participants in the work. So it is reasonable to believe that the continuity and improvement of this work very much depends on whether the funding will last and how the funding channel evolves in the future. (Interview in October, 2010)

In addition, at present, the government also exerts a powerful impact over how the universities run their business of in-service teacher training programs. Even though it was commonly agreed among the interviewees that the field of continuing teacher education is an alternative path for normal universities to gain more operating resources, the operating autonomy of normal universities is constrained by the conditions attached to the government training grants. The financial benefits normal universities can get from this work are actually very small. As Director Zhang continued:

The funding we receive from the government comes with very specific requirements. For examples, how much goes to the campus accommodation for coming teachers; how much needs to be spent on inviting external experts on the topic of training and so on. The space left for the university to maneuver is very

small. (Interview in October, 2010)

Professor Jia commented on the influence of funding on the quality of the program delivery:

The training will for sure increase this year when MOE funded training programs are available, but the quality of implementation is hard to guarantee. Administrators in the central office in the MOE can design and initiate a system-wide change, but since it has to rely on the provincial level to implement the change, there either have to be laws and regulations ensuring the implementation or a general acceptance by provincial decision-makers, school leaders as well as teachers. To enhance the overall quality of teachers needs to be a planned and system-wide educational effort which involves all teachers in the classrooms. The funding source could be further diversified, for instance, by requiring a small percentage from teachers so they would pay more attention to what they really want from various training program which in turn enhances the quality of the programs. (Interview in November, 2010)

The changing nature of Chinese normal universities under the overall market-driven higher education system reform makes the relationship between government funding and university autonomy quite complicated as well as confusing. In particular, the normal universities' efforts to diversify their funding bases by means of stepping into the field of in-service teacher education may not necessarily in turn increase the autonomy of normal universities in the field of teacher education under the current system in China. The in-service teacher education programs currently offered by Chinese normal universities, including degree-based and non-degree-based programs, are all initiated and tightly controlled by the government. The government is the sole provider for this market. Further, funding from government comes with very clear and specific conditions in terms of the training content, length of time, number of teachers, etc. Thus, until the universities are willing to become more active, the funding from the government has a decisive power over how far normal universities will get in the field of in-service teacher education.

Lack of experienced teacher educators

The success of universities' provision of high quality training programs depends on having well-qualified teacher educators. The work requires working knowledge of elements such as classroom teaching and at the same time requires university teacher educators to better attend to educational policies themselves. They need to be informed of why school teachers are coming to the university in the first place and what kind of new knowledge they need to master. In other words, the teacher educators need a better understanding of the changing direction advocated in the national policies. This poses a challenge to many educators in the universities. Especially for educators who specialize in subject content areas, careful policy analysis is not part of the work they usually do. Professor Zhao of Qufu Normal University explained:

To fully meet these new expectations the reform policy has for normal universities, teacher educators need more time to work with their colleagues at local schools, and critically examine their own teaching methods and reflect on how their expertise can better help school teachers solve their problems in teaching and learning. Yet, at present, we are lacking this knowledge and skills. (Interview in October, 2010)

Professor Lu from Shanxi Normal University elaborated on his feelings about this issue:

I can feel the frustration that teachers have during this transformation including how to create situations for more communication, or appropriately arrange the content of the textbook. Teachers need practical suggestions for lesson design and managing learning opportunities. It won't be hard for our teacher educators to give a lecture or write a report, but it will be very challenging for us to give immediate feedback concerning everyday teaching in school. We also need to start a new learning process, acquire relevant skills to communicate with teachers and even students; it is also a formidable task for us to help teachers to do so. (Interview in March, 2011)

The majority of teacher educators have very few experiences of working with in-service teachers. They feel quite distant from the environment in which teachers actually have to work and from various classroom-level questions about implementing the curriculum. Therefore, for teacher educators in universities to develop a passion

for helping in-service teachers update their knowledge and solve practical problems, the teacher educators also need to go through a deep and comprehensive journey of learning as well as a new round of knowledge management.

Professor Li reflected on the difficulties involved in this work:

Our major task in the work of teacher continuing education is to help teachers learn how to play their roles in their daily teaching practice according to the new curriculum requirement. However, in the meantime, the whole process is also a professional development process for teacher educators too. I used to spend a whole day with teachers in one school figuring out their problems in teaching new curriculum. Schools varied greatly from one to another, especially schools in rural and urban areas. Therefore, teachers will face different questions. Even with similar problems, I cannot simply copy my methods used from one school to another. After summarizing and reflecting on my experience in the past few years, now I have my own way of working in schools. I usually position myself as a student and listen to one or two lessons in a school, the lesson could be in any subject. If it is a subject I am not familiar with, I would think whether I understand the content, in what way does the teacher help me understand, or why I couldn't understand. Then, I will sit down with school teachers to talk about the lessons. Last, usually I will give a lecture which combines the issues discovered in the previous conversation with my own research, new educational theories or current educational policies. I often surprised myself with the connections I was able to make between what I learned at the school site and the knowledge I specialize in. This connection would never happen if I only stay within the campus of the university. (Interview in October, 2010)

Professor Jia expressed his views in relation to a comparison between Beijing Normal University and the provincial normal universities. The quality of the team of teacher educators is the key to the success of the work. Beijing Normal University has advantages compared to many provincial normal universities. Many professors are heavily involved in the initial discussion of many educational policies and the actual writing of the new curriculum. Therefore, their participation in the in-service teacher training would be more likely to help teachers understand their questions on a deeper level. Yet, the average teacher educator in many provincial normal universities has not worked in the field of basic education in a real sense for a long time. The first challenge facing them is how to manage self-improvement for the purpose of providing better service to teachers. Moreover, there is a serious lack of experienced

teacher educators for further promoting the work of in-service teacher education. No matter what the nature of the training programs, it is actually the same group of teacher educators doing the work.

Professor Jia of Beijing Normal University elaborated:

Take myself for example; I am the leading expert for programs directly assigned by the MOE, while at the same time, if the continuing education department receives training programs they will still contact me if the subject of chemistry is included. It is the same for many experienced teacher educators in other disciplines. (Interview in November, 2010)

She paused and added:

We are doing all the work on top of our regular daily work. Therefore our workload is doubled or even tripled compared with previously. For the leading educators in provincial normal universities, it is the same situation. (Interview in November, 2010)

It seems that the work of providing the training needed for preparing teacher educators in this aspect has not been adequately emphasized. In fact, training has seldom been carried out for university teacher educators in China since the formation of the teacher education system. Professor Zhao stressed:

At present, the field of training for teacher educators is almost empty. And if we want to realize our future plan and effectively extend the work of normal universities into the local schools, even school classrooms, making sure our teacher educators are fully prepared is the most fundamental challenge facing us right now. Now, our faculty members can do well in giving lectures, conducting research, but to be able to respond to what teachers really need, we still have a long way to go. (Interview in October, 2010)

During my data collection, the people with whom I spoke who were familiar with this work could easily identify the key names within and outside their own institutions, as the number of “the university experts” is very small. To fulfill the expectation of normal universities’ contribution to the field of in-service teacher education, the key and foundational issue is to have a large group of highly qualified and competent teacher educators who are able to take on the job. How to expand this team of teacher educators and provide the training and help they need requires further consideration.

The Chinese educational structure

The current system of in-service teacher education in China is still largely a vertical structure. This structure allows policy mandates from the higher-level government to reach school teachers in an efficient manner at the same time as it facilitates the introduction of any urgent educational issues (e.g. new curriculum). In the four provinces included in this study, the form adopted for the training programs is more or less the same. This follows the model in which the national government maintains the power to decide the general norms for the overall system. This power includes approval of national and regional curricula, appraisal of the whole system, and direct funding to less-developed areas.

Professor Jia of Beijing Normal University commented:

A vertical educational structure can gather a sufficient amount of resources for the most urgent educational issues in a relatively short period of time. It can help better facilitate exemplary efforts and the sharing of experiences among provinces about the potential ways in which normal universities could contribute to in-service teacher education. Without the strong push from the central government, normal universities would not be convinced to do this work. (Interview in November, 2010)

Efforts towards education decentralization in China actually date back to the late 1970s when provincial governments were granted the power of running primary and middle schools and hiring teachers (Xin, 1984). However, this initial effort does not compare with the complexity of the decentralization policy today. Hanson (1998, p.112) has provided a decentralization definition especially for the case of China: “Decentralization is defined as the transfer of decision-making authority, responsibility, and tasks from higher to lower organizational levels or between organizations”.

The decentralization in China adopts no extreme position. The work of continuing

teacher education is closely connected with the pattern of decentralization China has adopted in its centralized education system. In spite of the importance and necessity of the work to be done by normal universities, the study revealed that the progress these four universities are making varies greatly. This is mostly due to the administrative power that provincial governments hold over this work. Compared with the three provincial universities, Beijing Normal University is directly under the MOE. It has more opportunities to get first-hand information about new national policy initiatives as well as to receive more resources from the central government. Hebei Normal University is among the first normal universities in China to start the work of in-service teacher education due to the early exploration of the Hebei Education Department on this issue. This is shown by the relatively well-developed application procedure the provincial government set up for various training programs and the innovative approach of “Replacing the Teaching Posts for Short-Term Training” introduced earlier. Qufu Normal University has barely started this work in any real sense, and Shandong Education Department is currently in the process of collecting information and drafting its overall working plan. The amount of work Shanxi Normal University is doing lies somewhere in the middle between Hebei Normal University and Qufu Normal University. The provincial governments have the administrative power over how the work is carried out.

Financially, the universities have the power to create business to make profits and allocate state funds, etc. However, the fiscal situation and the importance attached by different provincial governments to various initiatives mostly determine the quantity as well as quality of the efforts normal universities are making. There is no great sense of actively seeking opportunities in the four normal universities. First, there is no “product” for them to advertise. Second, there is no guaranteed “market” to encourage

normal universities to devote considerable efforts to this work. Third, for the continuing education departments, there is no financial pressure since all the money goes to the collective account of the university. This unique phenomenon could be viewed from the perspective of the Chinese concept of university autonomy. The idea of university autonomy became one of the central issues in Chinese educational reform after 1985. In 1993, the central government issued “The Program of Educational Reform and Development in China”. This document further confirmed the importance of leaving considerable space for universities to take their own actions to fulfill their own needs.

The Chinese concept of university autonomy reflects the intention of combining the experience of Western universities with Chinese traditional values. Academically, Chinese universities have come to realize their independent role of pursuing knowledge. However, the long intellectual tradition in China, embedded in a close relationship between higher education and government, kept universities consistently and habitually aware of their social and political responsibilities. Therefore, in China universities could be described as relatively independent educational entities. Higher education institutions are meant to have the same status as state-owned enterprises (Gu, 1985 p.73). In other words, the independence of universities does not mean that universities are independent of the government completely. There still remains an administrative bond between the government and the universities. We can also sense these differences through the language used to describe autonomy. There are two terms that are usually used. One is “zizhiquan”, which is “autonomy as independence”. The other is “zizhuquan”, which is “autonomy as self-mastery”. Autonomy as independence has the connotation of political sovereignty and is the Western idea of autonomy (Wang & Xue, 1994). However, in the Chinese education context,

autonomy as a self-mastery is more appropriate for understanding the situation found by this study. Universities are allowed to “act upon their own and respond to social needs within the framework of government policies” (quoted from an interview with Mr Wen of the Shanxi Provincial Education Department in May, 2011).

Additionally, even though school-based approaches and the voices of teachers are gaining more attention from policy makers and Chinese researchers, local schools and teachers remain untouched by the decentralization in the Chinese education system, at least from the perspective of in-service teacher education. This reality will likely inhibit normal universities from further participation in the future and put normal universities in a very difficult position.

These difficulties are illustrated by the call for forming closer relationships between normal universities and local schools. With the recognition being placed on teacher education today, collaborative efforts between normal universities and local schools have often been viewed as a crucial strategy to improve the quality of the programs. It is believed that closer cooperation between these two is not only important in pre-service teacher education, but in in-service teacher education as well. The possibilities for remaking the world of the career teacher through in-service programs are slim without truly cooperative work on the part of both schools and colleges (Peeler & Shapiro, 1974). Director Zhang of Hebei Normal University highlighted the importance of connecting with local schools:

We cannot blindly offer training courses without knowing more from the school, because the courses won't be able to meet the needs of teachers for implementing the new syllabus. We need a master plan to coordinate different kinds of training activities systematically to accommodate teachers as well as teacher educators in the process of change while establishing both formal and informal networks for teachers who want to seek support and to discuss their concerns in the transitional period. (Interview in October, 2010)

Nevertheless, this study found very few cases in which normal universities

reached out to local schools or were being reached out to by local schools directly. This is mainly because in regard to in-service teacher education, local schools, like normal universities, rely on funding from the provincial governments. The funding invested by different levels of government usually flows directly from the governments to the program hosting institutions. Although local schools and their teachers are the ultimate consumers of all this effort, they do not have much to say in terms of the choices of training institutions. Understandably, normal universities find no incentives to form these relationships either, which explain why the only project of “Experimental Schools” devoted to forming this connection organized by Hebei Normal University, is running on a volunteer basis. This project also evidences the culture gap between schools and universities in terms of reward systems (Ross et al., 1999).

Professor Jia suggested that:

Regarding the decisions made on in-service teacher education, the power needs to be further decentralized to the lower level of the system especially adequate funding directly to schools, because with little power at hand, schools are unlikely to maintain a strong relationship with normal universities. (Interview in November, 2010)

There are two different views in the literature concerning educational structures in general. One is concerned with the vertical structure of authority, believing it to be most effective when handling large populations and allowing little opportunity for creativity and diversification (Dove, 1986). By contrast, a horizontal structure of authority favors more authentic participation. The constructivist approach as well as the horizontal structure of authority it recommends is gaining popularity among researchers and policy makers. There is little evidence, however, that a horizontal structure of authority is doing any better than a vertical structure in implementing education initiatives successfully (Cohen & Spillane, 1992). How to allow more horizontal arrangement in the vertical structure of an education system such as

China's is worth more thought. How to encourage more local innovations for continuing teacher training in this decentralizing process in China remains unanswered. Hawkins (2000) summarized "[W]hile the current leadership appears to be committed to decentralization, they remain conflicted over the need to maintain control while at the same time respond creatively to the needs of the new market economy" (p. 442). Totto (1999) stressed that the levels and degrees of decentralization always run against the centralized political system and are often followed by some recentralization to protect the control of the central office. This is an inherent paradoxical feature of state-led decentralization efforts. Hanson (1998) and Bray (1999) asserted that there is no completely decentralized education system, but that all systems have mixed features of decentralization and centralization.

In sum, it is apparent that the work of in-service teacher education has already started for normal universities. Yet, after enumerating these three aspects emerging from this study, it can be concluded that normal universities are far from ready and there is still a considerable amount of thinking to do to further facilitate this job in the near future. This is what often happens in educational reform. "The bigger the problem, the greater the urgency with which it is regarded, and therefore the faster the pace of implementation" (Allix, 2003, p.42). On the one hand, the urgency of policy initiatives will make the administrators prioritize the work. On the other hand, the big hurry of the implementation work has the danger of increasing "the number and seriousness of the problems" (p. 42).

Changing the mindset of the traditional way of working at the provincial level

The current ill-functioning regular in-service teacher education system, from a certain angle, reflects the firmly rooted mind-set of some present administrators and

teacher educators. Although the provincial government is enjoying more power over teacher training, the old hierarchy somehow remains in place. Traditionally, formal continuing teacher education was only focused on teachers who lacked the necessary academic qualifications. Although now all provinces have specified the official training hours for all the teachers in their provincial documents, the institutionalization of this requirement is not well achieved. Resource limitations have been viewed as the key barrier. In addition, Professor Li of Hebei Normal University stated:

The change of teacher training practices is closely linked with the new image of teaching practices. The concept of lifelong learning is also behind this idea of a regular teacher training system. Yet the traditional and excessive focus on degrees and diplomas still misleads how teachers and even teacher administrators see this work. That's why the lack of attention devoted to this work is another barrier to the smooth implementation, I think. (Interview in October, 2010)

Mr Li of Hebei Education Department explained his view on the issue:

For quite a long time, this (in-service teacher training) has been listed at the bottom of the work list. Previously, prefecture teacher training schools were responsible for offering degree supplementation courses. There was a political call embedded. At the end of the 1990s, especially after the mass higher education policy, teacher candidates with qualified academic degrees in the province had gone to the state of over supply. Therefore, the major workload of prefecture teacher training schools has gone. Technologically, regular in-service teacher training hours should be the responsibilities of teacher training schools. However, because of the lack of funding, for quite some time, in-service teacher training has been an empty slogan. (Interview in May, 2011)

Professor Wang of Hebei Normal University expressed a similar concern:

To lead in-service teacher training on the right track, changing the mind state of provincial policy makers and administrators is the most crucial step to take. In-service teacher training should build on the perception of lifelong learning. The themes should be designed around teaching and learning. There seems to be a mismatch between the focus of the work of in-service teacher training and the focus of the training content. (Interview in October, 2010)

Professor Wang used to research Shanghai teacher professional development and gave a brief introduction to it during the interview. In 1989, Shanghai officially promulgated the document "Shanghai Education Commission's Regulations for

Further Training of Elementary and Secondary Teachers in Shanghai”. This document enacted 240 course hours of professional training over a period of 5 years. There was a parallel standard of 540 hours aimed at high-ranking teachers or promising teachers. In these 540 hours, there needed to be 300 hours for teachers to get involved in research and publications. Completion of this program was a prerequisite for teachers who sought promotion. The document also offered definitions concerning both the receivers and providers of these two professional development programs, the former Shanghai College of Education (previously autonomous and now part of East China Normal University) and the district-level College and county Teacher Refresher Schools. As part of the contractual obligations, all teachers had to provide yearly reports of their participation, which influenced their evaluation, salary raises, and promotion, etc. This document also specified the responsibilities for running the in-service teacher professional system. The provincial government took charge of the planning and coordination work. The Shanghai Teacher Training Center worked on the specific implementation, and the district-and county-level governments were responsible for arranging training timetables and specific activities as well as evaluation.

In spite of the clear regulations, Professor Wang concluded,

In Shanghai where the entire situation has been viewed as the most favorable, study found that teachers were also rather dismissive of the regular teacher training requirements. So we could see that the failure of current regular in-service teacher education is not unique to our province. (Interview in October, 2010)

Facilitating and sharing teacher education resources

Given the enormous teaching force and very limited teacher training institutions, appropriately utilizing and sharing teacher education resources across provinces and even across the nation is the only path for China to take in the future. According to

this study, there are two trends of development at present. The first is to establish teacher education and training bases. The second is to develop distance teacher professional education centres.

Higher teacher training institutions, under the guidance of provincial governments, work with different levels of local governments to choose a group of primary and secondary schools in the same area as teacher education bases. Northeast Normal University signed contracts with Jilin, Liaoning and Heilongjiang provinces in 2007 to establish three teacher education and training bases. Zhejiang province cooperated with major teacher education institutions in the province to set up 10 bases of the same kind from 2008 to 2010. Shandong province has also included this as one part of its 12th development plan.

However, it remains to be seen how effective this experiment in multifunctional bases for teacher education is, particularly in-service teacher education, will be. To develop distance teacher training, the role of provincial normal universities and national normal universities will need to be continuously explored due to the situation found by this study. First, national normal universities are heavily involved in various education reform committees organized by the MOE, and therefore have the expertise and academic authority to develop and optimize online courses for on-the-job training. From course design to making the online courses really online and effective, there is still a long way to go. There already are some interesting initiatives around this issue. For example, the continuing education college of East China Normal University established a Xuzhou Teachers' Education Online Association to help the college to supervise the training centers in Xuzhou City. Moreover, the college also adopted the open-source platform model for teacher training (Ye, et. Al., 2009). Based on the information provided by the Chinese National Commission for UNESCO 2004,

“[S]chool networks of different scales and remote satellite signals have been established in over 10,000 rural elementary and secondary schools” (Zhu, 2004, p.17). Therefore, how to build on and make full use of what we already have needs more serious thought.

At the same time, certain issues have to be taken into thorough consideration. For example, can resources of various kinds be shared free of charge? Universities may not want to share self-funded training materials with other potential competitors. If there are not clear rules on issues such as this, associations such as online consortia will not be effective.

What is the potential contribution of universities’ participation in in-service teacher education to the transformation of Chinese teacher education?

Better fulfillment of the responsibilities of teacher education institutions

Based on the interview data, both university administrators and teacher educators agree that universities especially normal universities, have the responsibility to contribute to continuing teacher education. Professor Wang of Hebei Normal University explained:

The ultimate goal of any educational institutions is to better serve the needs of our students. For normal universities, which are primarily teacher training institutions, the ultimate goal is to better serve their students-teachers. Not only when they are at school but also, maybe more importantly, after they graduate.(Interview in October, 2010)

Professor Lu of Shanxi Normal University commented from the perspective of lifelong learning:

I completely agree that normal universities should extend their responsibility further into the field of continuing teacher education. As we praise the concept of lifelong learning in our initial teacher education curriculum, it would be contradictory if we only limit our work to pre-service teacher education. (Interview in March, 2011)

Professor Jia of Beijing Normal University elaborated on her thoughts from the perspective of educational reform:

Many of our teacher educators are heavily involved in the initial discussion of major policy design. Many of us are the actual writers for the new basic education curriculum. Therefore, to a certain degree, we are in the best position to explain to teachers what the expectations or connotations involved and this work needs to happen in the period of teacher continuing education. (Interview in November, 2010)

The department administrators interviewed also agree on further promoting this work in universities but from a different angle. Director Zhang of Hebei Normal University believes that:

The university will devote more energy and resources into teacher continuing education, because it is now a policy priority of the central government and the Hebei Education Department. It will certainly become a major responsibility as we invest more in the future. (Interview in October, 2010)

Director Liu of Qufu Normal University commented that:

This work will take an important position in the university's agenda as it could diversify the financial resources of the university. It will become a major responsibility of the normal university if the funding of such training programs becomes systematic and stable. (Interview in October, 2010)

Director Wei of Beijing Normal University commented that:

The continuing education work of normal universities includes a lot more than just teacher continuing education. In other words, continuing teacher education is only part of our entire work arrangements. Our job priority changes as the national policy changes. At present, the central government as well as many provincial governments are investing heavily in teacher continuing education. For normal universities, this is more than just taking a new responsibility. Rather, it provides a new opportunity. Of course, it will eventually be a responsibility if the current work is successfully integrated into the university structure in the future. (Interview in November, 2010)

It seems that educators who are heavily involved in teaching hold the belief that it is an ethical responsibility for them to do so. This is evidenced by the passion some of the participants exhibited during the interviews. As Professor Li from Hebei Normal University reflected and summarized her work:

It is very hard and time-consuming work for me. So far, I did most of the work on voluntary basis. But I have to admit, I quite enjoy it emotionally. (Interview in October, 2010)

When transcribing and analyzing the interview data, it was quite easy to notice sharp differences in the type of language teacher educators, universities administrators and government people used in their discussion. While teacher educators often connected this work with the actual training content (e.g. the new basic curriculum), the administrators tended to tie this work more closely to external elements such as policy and funding.

We need to ask, then, if continuing teacher education itself needs to be reformed to match the future reorganized in-service teacher education structure? What kind of new provisions could the Chinese normal universities offer in the future? To answer these questions, we must look beyond the teacher training institutions themselves and analyze the general education system with which the teacher training system is most tightly connected. Problems emerge as the push for higher education institutions participating in in-service teacher education continues. First, only including universities in occasional teacher training projects cannot guarantee the continuity and the quality of the programs in the long run. The involvement of normal universities in in-service teacher education needs to be reflected in the structural aspects of teacher education. This change will not only require structural and administrative change inside universities. More importantly, it is directly linked with other aspects in the development of the teaching profession including the teacher certification system, how to relate regular teacher training with incentive mechanisms, etc. Without the structural assurance, universities will be unlikely to devote considerable energy into the field. Relying on temporary job assignments to certain departments or individuals will disrupt the normal working state and cause great confusion among higher

education institutions.

Potential impact on educational research

Experienced educators and researchers have long criticized the weakness of educational research in universities (Allix, 2003) and called for fundamental changes including “greater emphasis on a merging of theory and practice” and “qualitative changes in the cognitive content of university course offering in education” (Mayhew, 1974, p. 24). An important theme emerging from the interview data is the potential impact of this work on current research in education and teacher education in particular. Enhancing the quality of teachers cannot be separated from research on teachers. The present state of research on teaching in China is far from sufficient. In the past ten years, Chinese teacher educators have introduced research done in developed countries about teachers’ knowledge structures, effective professional development programs, professional development schools, etc. Especially in recent years, teachers’ reflective thinking and teacher researchers are among the most frequently discussed topics in educational journals in China. Yet, the majority of articles are theory-based. A lack of empirical evidence makes it hard to address the real problems in Chinese schools. Teacher educators’ participation in various continuing education activities offers an opportunity to fill this gap. Professor Wang of Hebei Normal University reflected on his work and said:

My participation in this work changed my research interest. Now that I have more opportunities to work with school teachers, through my own observation and the questions asked by school teachers, I am able to find out what issues concern them the most and which problem is more urgent. Therefore, I design my research based on these aspects. This makes my research more practice-oriented and I get more recognition from school teachers than before. I feel that my work in teacher education is more meaningful. (Interview in October, 2010)

Professor Li of Hebei Normal University pointed out the connection between

educational research and teacher professional training:

After I got involved in the work of in-service teacher training, I realized that the current theoretical knowledge we, as university professors, hold as a privilege is far more adequate when providing guidance and help to our teachers at school. In other words, there are many aspects in which teachers desperately need help yet we hardly did any research before. And this work changed my research direction. This could be seen from my recent publications which are mostly based on work with in-service teachers. (Interview in October, 2010)

Professor Zhao of Qufu Normal University suggested that:

As university teacher educators, when we sit in the local school classrooms, we should also position ourselves as students, trying to figure out why I understand part A but not B. What can help me understand part B? Believe me, this is a very tiring but rewarding learning process. This new thinking path will provide a fresh insight into our academic work. (Interview in October, 2010)

Professor Jia of Beijing Normal University talked about different types of research work:

As normal universities form more connections with local schools, new types of academic research work may emerge. For example, school-based research or action research is believed to hold great potential in the future educational knowledge base. (Interview in November, 2010)

These remarks reveal the powerful impact this work potentially has on university research and teaching. This body of new knowledge could well fulfill what is missing in the academic knowledge map. Also “Direct involvement becomes an important methodological principle for those most affected by problems for which solutions are sought” (Allix, 2003, p.14). However, this issue was raised mostly by teacher educators while the administrators barely talked about research.

A better alignment between pre-service and in-service teacher education

One of the advantages of universities’ participation is it allows better alignment between pre-service and in-service teacher education so that they can be more consistent and avoid duplications. How to realize this alignment is a question that puzzles Chinese teacher educators. Based on this study, the alignment could be realized in two ways: the merging of the pre-service and in-service teacher education

systems and more consistent curriculum, teaching methods and so on.

As discussed in the previous chapter, pre-service teacher education and in-service teacher education are two independent systems in China. They both comprise three levels. The pre-service system includes normal universities and vocational normal universities, normal colleges and normal schools. The in-service system includes provincial teacher training colleges, regional and municipal teacher training colleges, and country-level teacher training schools governed by provincial and local governments (Li, 1999).

The question is to what degree the integration between pre-service teacher education and in-service teacher education requires the integration of these two systems. Some cases in the data show the possibility of merging pre-service institutions and in-service institutions. For example, Shanghai Teacher Training School was merged into East China Normal University in 1998. The provincial teacher training school of Liaoning was also merged into Liaoning Normal University. As to whether this kind of integration is a success or not, people in the field hold quite different views. Professor Zhao of Qufu Normal University commented on the case of East China Normal University and said:

In my opinion, this is a quite extreme way of realizing the alignment between pre-service and in-service teacher education. Normal universities tend to believe we are more advanced than teacher training schools in many aspects; therefore it is unreasonable for teacher training schools to provide further training for teachers who have graduated from normal universities. That is the logic behind the case like this. Technically, it could be a success. But in reality, they also have a lot of problems. The biggest barrier is that teacher educators in normal universities were not familiar with teacher training and many problems that could happen during the teacher training. (Interview in October, 2010)

Professional Jia of Beijing Normal University elaborated on her understanding of concerning this issue from a different angle:

Some may think the best way to integration is to start from the very top: the Office of Teacher education and the Office of Basic Education under the MOE.

Yet, it is not that simple, as the relationship between the two systems is complicated more by the changes between central government and provincial government in the decentralization reform since the mid 80s. Instead, the integration could happen, and I believe it will happen in terms of curriculum design, teaching pedagogy as well as the delivery approaches, as normal universities get further involved in the work of in-service teacher education through different means and thereby obtain a better understanding of teachers, classrooms and local schools. Also, the responsibility of establishing a better alignment between pre-service and in-service teacher education could mainly be assumed by Chinese normal universities. (Interview in November, 2010)

While a more consistent curriculum, and teaching methods might be the goal of a successful alignment, an effective integrated system would provide its fundamental guarantee.

Conclusion

The study addressed two research questions. What efforts are normal universities in China making in continuing teacher education? What are the factors that support or inhibit normal universities in these endeavors? The whole study covered four major aspects in different chapters: the overall organization of teacher professional development; the current responsibilities of universities in providing teacher professional development; the limitations and barriers perceived by administrators in universities to extending and enriching the contribution to the field of teacher professional development; and the potential of the university to contribute to the field of teacher professional development in the future. 15 interviews were conducted for the study. Participants include people from universities and governments. Documents collected include recent teacher education reform brochures, application packages, etc. The revised conceptual framework highlighted the importance of the policy context for the current teacher continuing education work as well as for the participation of normal universities. Although Chinese teacher education is moving from a closed, separated system to an open and integrated one, normal universities remain the only

higher education institutions that specialize in teacher education. Normal universities are also the focus of the current reform policy calls for in-service teacher education. The issue of how to better combine the tuition-free normal teacher education programs with the purpose of serving basic education in a mutually beneficial way has drawn considerable attention from normal university administrators and teacher educators, and has been included in the institutional vision of many normal universities. We have entered a new phase of development of in-service teacher education in China. In this process, different forms of in-service professional programs have been born, including the new in-service M.Ed program for teachers who graduated from tuition-free normal programs which will be implemented in the near future. With the significant impact of national curriculum initiated in 1997, normal universities are currently delivering many intensive and contract-based training programs funded by the government. Yet, the issues concerning how to systematize and stabilize this work remain critical and challenging for Chinese researchers today.

The key task of universities is degree education. Non-degree training has been included historically in the field of adult education and is in a marginal position in Chinese universities. In recent years, the concept of non-degree training has become increasingly important with the notion that universities need to provide life-long learning opportunities for the whole society. Many Chinese universities have taken this as a great opportunity for future development. Tsinghua university, Peking university and People's university all used their brands and teaching resources to cooperate with a lot of organizations in various fields. Compared to comprehensive universities, non-degree teacher training will be one of the most important types of non-degree adult training normal universities need to carry out. At present, relevant

policies are the main driver behind normal universities' participation in the field of in-service teacher education. The policy concerning waiving tuition fees for students in teacher education, that started in 2007, is one of the most important policies for starting this educational trend in China, as it is the beginning of many major teacher education experiments in both pre-service and in-service teacher education. It was particularly intended to encourage qualified students to enroll in these programs. Six national normal universities were the implementers of this policy.

Curriculum reform is another important policy that has a great impact on in-service teacher education. The recent curriculum reform was initiated in 1997 and came into full implementation in 2005. Ever since, the central government has made it a rule for in-service teachers to receive training before teaching the new curriculum. In addition, policies concerning establishing M.Ed. programs for in-service teachers started in the mid 90s. These programs usually combine on-campus and distance education and take place during winter or summer vacation time. The “national teacher training program” starting in 2010 made a special fiscal commitment to enhancing the quality of teachers in China, particularly in rural areas. The purpose is to send a clear policy signal, explore a direction for future in-service work and hold exemplary teacher training programs for local government to follow. The “National teacher training programs” could be seen as the first policy framework that put different kinds of programs together.

Identifying barriers as well as enhancers for Chinese normal universities to support in-service teacher education is another key purpose of this project. Funding as a very important point came out in every conversation I had with the participants. The current work of provincial governments and normal universities is largely due to the great amount of funding that central government injected into this work over the last

year. Yet, at the same time, insufficient funding overall still remains the major barrier to delivering high quality in-service training for teachers in many places. Also, the insufficient resources within the institutions prevent this work from further developing. The programs normal universities offer including in-service MED programs and non-regular teaching are all hosted during the summer or winter vacation time. On one hand, this arrangement could ease the conflicts between work and training. On the other hand, from the university's perspective, only during this time do normal universities could have classrooms, teachers and accommodations available for the training.

Moreover, as shown by many examples discussed in the study, university experts who have the experience, knowledge and passion are the key people behind this work. In fact, involving key experts is one of the requirements for government funded programs. Yet, the number of the experts is very small compared to the large teaching force in China. Experts often feel overloaded with work coming from different places. Also there are no effective incentives for educators in universities to commit to this work, as participation in in-service teacher training program is not yet formally included as part of the working responsibilities of university professors, and is not connected to their salary and the other benefits. Take the “experimental school project” in Hebei Normal University as an example. The project started formally as an institutional practice, but is running in a very informal manner. This work is running on a volunteer basis. University educators are participating in a variety of school activities and offering help. The frequency of the work is negotiated between the educators and the schools they are responsible for. They get no pay from the university for this work, and work during their spare time. So the university won't even notice if they stop working. The only way for the institution to take account of

their work is any publications they did produce during this process. This example reflects very well the inadequacy of the reward system in Chinese universities.

What the study did not include but inspired me to ask is: Given the barriers is it fair to ask the institutions to make the adjustments at present? Is the environment mature enough for this work to happen? What are the problems that universities could solve? What are the issues that need government action to make the major policy connections? The comparative element with Ontario offered valuable experience for the case of China. There is a tight connection between teacher certification, continuing education courses and teacher benefits in the Ontario system. Teachers are given a great amount of autonomy in selecting different courses from different universities based on their own needs, which positions teachers as the ultimate consumers in this market. At present, the major supporting policies of this kind do not exist in China, therefore there is not a “market” yet for universities to respond to.

Other questions this study raised is whether it is practical for universities to offer service for many schools, and whether the present university teacher educators are the most suitable candidates for this job since it is highly unlikely that we could change the reward system in a short time to accommodate this work. Is it possible to offer one-to-one help? To what extent, could strategies of distance education and teacher education bases be part of the solution to this question? In order to answer these questions, we need to continue exploring approaches identified by this project when they become more established.

The fact is that we cannot simply regulate in-service teacher education without paying attention to various other aspects of teacher education reform. High quality in-service teacher education needs to be successfully embedded in the overall teacher education system, so that different parts can reinforce each other and form a virtuous

cycle. The structure and organization of in-service teacher training in China needs to and will go through significant changes. However, many specific questions need to be given considerable thought before pushing the reform forward. The integration of in-service teacher training into qualified normal universities has a long way to go. Simply asking normal universities to participate in the field without systematically reforming other aspects of teaching will certainly fail in the end. Sorting out the relationship between the MOE and provincial education departments is fundamental for the success of the reform.

At present, it seems that the decentralization efforts allow the central government to cut off their responsibility for in-service teacher training, but the provincial governments have not really taken over. This study's interviews with people in the government show that the old hierarchical working style still deeply influences the provincial administrators. This explains all the actions the three provincial governments have taken since the implementation of the "National Teacher Training Program" and the temporary working state that the participants in normal universities are currently going through. Also in the present situation, the normal universities are less likely to take initiative to actively build networks with local schools. Compared to the teaching force of 16 million in China, the benefits of the National Teacher Training program are very limited. In fact, it is expected by the MOE that the National Teacher Training Program will be a model for provincial governments to push forward in-service teacher training (interview with MOE). Still, the responsibility of funding in-service teacher training rests with the provincial level and large scale centrally-funded in-service teacher training is unlikely to continue for years. Systematic regulations concerning university-based continuing teacher education need to be established before this program is ended by the MOE so as to achieve the hoped

for impact. Otherwise, the influence of the program will likely fade away as soon as the funding stops. Several suggestions could be considered.

First, further development of the teacher certification system and reform of in-service teacher training should be considered together to reinforce each other. Policy-driven in-service teacher training needs to be developed into part of the regular teacher training system and regulated by a teacher certification system. Power to issue advanced teacher training certification could be granted to normal universities as well as other authorized teacher training institutions.

Second, normal universities could explore different ways of linking non-degree teacher training with degree-based teacher training. For example, credits acquired in intensive university-based teacher training programs could be used as credits for part-time M.Ed programs.

In addition, channels need to be formed to promote communication and resource sharing regarding teacher professional development across the country. Research work in teacher training materials and exemplary courses needs to be promoted and shared. MOE and provincial governments should form nationwide and provincial data bases to encourage high quality resource use and sharing. The selection of higher teacher training institutions needs to be regulated and authorization procedure needs to be set up in order to build in-service teacher training into the regular work of universities.

Moreover, training for teacher educators needs to be strengthened at provincial normal universities. A teacher educator database needs to be set up at both national and provincial levels to encourage communication between different provinces and communication between national and provincial level normal universities.

Despite many unexplored and unsolved issues in the current reform, the

increasingly diverse methods and approaches of training programs signal a strong desire for regulating, standardizing and monitoring the field and will certainly lead to a growing trend of policy action in the near future.

Currently, in spite of the large investment, the actual beneficiaries of these training programs constitute only a small percentage of the teaching force. Professor Jia of Beijing Normal University predicts this type of special funding will continue at least for another 10 years, if the government wants to extend the percentage of the teaching force which participates in training and cover a decent number of in-service teachers. She also supports the view that this problem could be eased as and if distance in-service teacher education make progress. Yet, university-based in-service teacher training programs will not be replaced by other means of delivery. She continued to explain:

University-based face-to-face teacher training is a necessary training means, as more reflective and systematic learning is more likely to happen on the university campus and the university provides more resources, time and a much quieter learning atmosphere. (Interview in November, 2010)

Many educational policy analysts have contended that “policy mandates are rarely implemented the way they were intended and that this often results in the failure of education policy” (Krainer, 1999, p.215). The first year implementation of the National Teacher Training Program already poses more questions than answers for Chinese educators and policy makers. It needs to be made clear at the beginning that the purpose of this policy should be to set a standard for teacher training which provincial governments should strive to attain in the future. The program itself is a policy strategy adopted by the central government with the hope to make a policy call and provide guidance for in-service teacher training. In the long run, provincial and local governments at all levels still need to raise educational expenditure by various means.

Moreover, the national-level teacher training programs which are organized differently by the MOE are only a small percentage of all programs. Provincial educational authorities retain a considerable amount of power in the provision of teacher training. This could potentially encourage variations among different provinces, which at the same time also means the quality and the procedures under this national program vary greatly from province to province.

Ms. Lan in the MOE explained:

Usually, official documents from the MOE are often advisory in nature. Local governments could interpret them in different ways. Very often, we could find the phrase ‘if local situation allows’ (Interview in December, 2010)

This means local variations are tolerated. The provincial government holds the power of reviewing the program applications handed in by various institutions. There is no systematic needs assessment or program evaluation. The provincial governments decide which group of teachers will receive which in-service training program at which institutions at what time. The evaluations after the training programs are loosely organized from the perspective of the institutions; the training programs they receive from the government are different every time. Feedback from teacher candidates does not really mean a lot, as the chances are institutions will organize their training for a completely different group of teachers on a completely different topic next year. What the evaluation means to normal universities is probably building up their reputation with the government so that they can receive more training opportunities. Interestingly enough, from the perspective of the provincial governments, on the one hand, they hold the power of selection. On the other hand, there are limited institutions in each province from which they can choose. Therefore, competition within a province does not necessarily exert much pressure on the institutions to improve the quality of their programs. Whether the impact of a bidding

procedure promoted by the central government will remain the same at the provincial level also deserves further thought.

In conclusion, better implementation of teacher professional education in the future requires more relevant legislation, greater awareness and expectations of teachers and school administrators for continuing education work, provision of guidance for school leaders and provincial administrators, an adherence to time frames in local schools, increased funding available not only at the MOE level but also at the provincial level, a standardized operational system in schools, greater transparency in the operating procedures, and linkage between continuing education and teacher career advancement, reward and future teacher recertification processes.

Professor Lu of Shanxi Normal University put it in the following words:

I guess to say this current national approach to teacher continuing education in China is a laissez-faire approach is not fair, because the government did a huge amount of work to ensure its implementation. It's just still in a very very early stage of the whole process. There is no doubt that this change is going to be an evolutionary one, but we have to wait and see whether it is going to be a success or not. (Interview in March, 2011)

Also, the current situation of in-service teacher education in China brings to mind the question of whether we can continue to expand and use a relatively standardized model to think about the work in different provinces. Krainer (1999) suggested that the overall improvement of teaching quality is not only a function of the individual teacher's professional growth, but a function of the structure and administration of the whole region. However, because of the tentative nature of the administrative structures normal universities are trying to build up, it is challenging to provide a clear and accurate picture concerning the paths normal universities are taking and the degree to which they are involved in this work. As Professor Jia of Beijing Normal University commented:

The ways normal universities participate in in-service teacher education,

especially non-degree teacher training funded by the central government, vary from university to university due to many complicated reasons. Normal universities do not have a clear mind concerning where this work is going. Everything is in a process of changing at present. (Interview in November, 2010)

There is little sign of collaboration between different providers because most of the training programs are initiated by the government, not the various providers, and the government plays the role of soliciting information to determine priorities when planning teacher training. Normal universities will bear more competitive pressure as teacher education in China gradually evolves into an open system and they play a major role in the formation of a teacher continuing training system formally and informally. They can take on the job of integrating pre-service and in-service teacher education in China because they are more sensitive in terms of the consistency of material used in the in-service teacher training, problems addressed in pre-service programs, etc. The universities also have great potential to address the concerns of teachers given the same training subject through fresh content and ways of delivery.

The work of normal universities is characterized by their nature, structure, decision-making processes, and ability to adapt to change. Initiatives in reforming their organizational structure along with engaging in the work of in-service teacher education are in their early stages of design, and much work is still to be done. More attention needs to be given to issues such as the nature of evaluation and reward for professors, whether or not the training content is mandatory, and the role of schools as well as the interaction between schools and universities. These issues are not only crucial for large-scale teacher change, but also have important effects on teacher educators and university researchers who promote this change.

As the need to give teachers basic qualifications is being met and the new basic education curriculum is being implemented, a huge demand for in-service teacher training is already emerging. The 2010 national teacher training program is an

unprecedented move taken by the central government signaling the importance of this work in the future. A large amount of investment clashing with a huge demand is bound to trigger a big reaction. This reaction is hardly in a stable or regular state currently. Whether China will harvest success or cultivate a more efficient in-service teacher education system and whether the concerted efforts made by normal universities and the governments will have a positive impact on classroom practices remains to be seen.

Recommendations for further study

The call for normal universities to play a strong and major role in continuing teacher education in China is growing stronger. And the exploration of how to achieve this goal is gaining great importance. As an early effort to investigate the role of normal universities in in-service teacher education in China, based upon data collected from four normal universities in four provinces and regions in China, the study presents an overall picture of in-service teacher education work in relation to normal universities, identifies major issues regarding this educational change phenomenon in China and lays a foundation for further research. Future studies could be designed to expand different aspects including:

- Internal administrative and institutional reform of Chinese normal universities at present;
- The relationship between teacher certification system and in-service teacher training;
- Case studies concerning integration between teacher training institutions of different levels and how it influences the work of universities in effectively participating in teacher professional development;

- Effective online resource sharing strategies for in-service teacher education as well as the power allocation between governments and normal universities in running the databases;
 - How to build up effective evaluation procedures for in-service teacher training.
- Although the impact of the new curriculum reform was identified, what challenges the new curriculum poses to teacher educators in normal universities requires further exploring.

In addition, as most of the university-based teacher training programs are designed for backbone teachers in China, future investigators could research in depth the view and understanding of backbone teachers in Chinese primary and secondary schools.

Moreover, the enthusiasm showed by some of the participants in this study for the work of better serving basic education and their willingness to volunteer their time and energy reflect the traditional cultural spirit of Chinese teachers. Although the discussion of this point is beyond the focus of this study, it is definitely worth further research.

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Appendix A: Interview questions with university administrators and teacher educators

The study in which you are participating is focused on understanding the multiple ways in which universities could fit into and share the responsibilities in teacher professional education including potential roles, current efforts, incentives or barriers.

The concept of teacher professional education in this study is used synonymously with teacher professional development, continuing teacher education, in-service teacher education, staff development or training which covers a wide range of forms and characteristics of provision after initial teacher education.

1. Is teacher professional education a priority in your institution right now?
2. Does your institution have an overall strategy or framework for engaging in teacher professional education? Or are the various activities largely independent? Are they coordinated? Or prioritized? If so, how?
3. Are there any policy mandates/ encouragements/specific funding for your institution to participate in teacher professional education? For example from various levels of government...
4. The literature suggests several possible practices universities can do to provide teacher professional education including teacher professional schools, university-school partnerships, collaborative research, workshops, providing courses for certain certificates or graduate programs.
 - a) Is your institution involved in any type of teacher professional education at present?
 - b) What are the major programs or activities?
 - c) How many teachers are involved?
 - d) How is it organized and financed?
5. What is the purpose of different programs or activities?
6. For formal programs, what are the specific changes made to make them more relevant to in-service teachers? (e.g. specific measure taken to understand teacher's PD needs?; short courses?; making them more accessible for teachers?)
7. Besides formal programs, what are the major projects going on in your institution? How are these projects funded? Who is in charge of them?
8. Are there any personnel or departments especially responsible for organizing or reforming teacher professional education in your institution?
9. Is there a continuing education department in your institution? What are its main

responsibilities? What kind of PD work does it offer?

10. What are the connection between the continuing education department and other education departments regarding organizing and delivering PD work?
11. What is the major funding source for teacher professional education work at your institution?
12. Do you feel a lack of resources is a major barrier for your university to promote teacher professional education? How about the promotion system in your institution? What is the institutional structure in terms of how different disciplines are organized? Are there any other main difficulties your institution is facing right now in the work of teacher professional education?
13. What is the future plan/direction for your institution in the field of teacher professional education?
14. If you could get additional support from other agencies in education, what do you think that should happen?
15. What are the major changes for your institution in the field of teacher professional education in the past ten years? What are the key drivers for these changes? (Are there any measures taken to align pre-service and in-service teacher education?)
16. What are your major concerns for the university's participation in teacher professional education in the future?

End of interview

Appendix B: Interview questions with administrators in the Ontario Ministry of Education

My study looks at universities' participation in teacher professional development and related issues. The study mainly focuses on China but I want to incorporate Ontario as a comparative element. So I want to collect more information about the Ontario system for in-service teacher education.

1. Is there a formally existing provincial system for continuing teacher education? What are the major stakeholders in the system? (Ministry of Education, faculties of education, professional organizations, federations, and subject associations) What are the relationships among them? (How do they relate to the Ministry?) What is the role of the Ministry in this system?
2. What are the major policy initiatives directly or indirectly influencing in-service teacher education in Ontario in the past decade?
3. Is there any support provided for teacher professional development during a time of strong provincial pressure for an increased focus upon literacy, numeracy, and improvements in standardized test scores in elementary schools in Ontario?
4. To what extent, can school teachers choose continuing teacher education based upon their professional needs? What benefits can teachers in Ontario get from participating in-service teacher education activities?
5. What place does the university take in the system of continuing teacher education? How does it relate to the provincial Ministry of Education?
6. Are there any alignments between pre-service and in-service teacher education in Ontario? What, in your opinion, is the role of universities in forming the alignment?
7. What are the major dilemmas or conflicts in promoting teacher professional education in Ontario from a policy perspective?
8. Are there any market mechanisms used in the field of continuing teacher education? (Could you give me an example of a recent PD project funded by the Ministry? And also when it comes to project-based funding, are there any formal evaluation procedures for institutions which want to apply?)
9. How could universities better contribute to in-service teacher education? What are your expectations for universities' involvement in continuing teacher education in the future?

End of interview

Appendix C: Interview questions with administrators at the Ontario College of Teachers

My study looks at universities' participation in teacher professional development and related issues. The study mainly focuses on China but I want to incorporate Ontario as a comparative element. So I want to collect more information about the Ontario system for in-service teacher education.

1. Is there a formally existing system for in-service teacher education in Ontario? What is the role of the Ontario College of Teachers in the system of in-service teacher education? How does it relate to the Ministry of Education?
2. What are the major efforts by the College to promote in-service teacher education in Ontario in the past ten years? What are the ongoing learning opportunities that it provides to teachers?
3. Where does the funding come from for the work promoted by the Ontario College of Teachers? Does the Ministry make money available to the College?
4. To what extent can school teachers choose continuing teacher education based upon their professional needs? What benefits can teachers in Ontario get from pursuing in-service teacher education?
5. Is there any alignment between pre-service and in-service teacher education in Ontario? What is the role of the College in building this alignment? Is in-service teacher education mandatory for renewing teacher certificate in Ontario?
6. In your opinion, what are the major problems in the field of in-service teacher education in Ontario? Do you feel that maybe there is too much emphasis on conventional degrees and diplomas in the current system?
7. How could universities better contribute to in-service teacher education? What are your expectations for universities' involvement in continuing teacher education in the future?

End of interview