Teachers’ e-Education in China: Towards a Lifelong Learning Framework for Teacher Professional Development

Zhu Zhiting
UNESCO-APEID ECNU Associate Center
East China Normal University, Shanghai, China (Zipcode: 200062)
Email: ztzhu@dec.ecnu.edu.cn; ztzhu@hotmail.com

Gu Xiaoqing
Educational Information Technology Department
East China Normal University, Shanghai, China (Zipcode: 200062)
Email: xqgu@ses.ecnu.edu.cn; guxq@hotmail.com

[Abstract] In China, continuing efforts have been made towards teacher professional development, and a lifelong learning system has been emerged especially in the area of educational technology, which has become a major component of teachers’ professional competencies, as well as the prerequisite for teachers to step into the lifelong learning system. In this paper, these consistent efforts made and their consequences regarding the development of teachers’ lifelong learning system were briefed.

[Keywords] Lifelong Learning Framework, Teachers’ e-Education, Professional Development, Educational Technology

Continuing Efforts towards Lifelong Learning for Teachers: A Brief Review

In China, substantial efforts have been made during the last two decades by MOE and local governments for promoting teacher professional development, which have led to the emergence of a lifelong learning framework with support of ICT (Information and Communication Technology).

In 1999, the Rules for K12 Teachers’ Continuing Education were published through Decree (Issue 7) of MOE, in which the lifelong learning was regarded as the right as well as the obligation for teachers [1]. According to this decree, all of K12 teachers are required to receive a round of trainings summing up 240 hours in five years, with inclusion of training on ICT operations.

In consistence with this decree, several action plans and proposals have been issued by the central government and MOE one after the other in following years, such as the Guidelines for Teacher training on ICT [2], the Proposal on Promoting Teachers’ e-Education [3], the Guidelines for Enhancing the County-Based Teacher Education Institutions [4], and the Proposal for Creating Nationwide Teacher Education...
Networking Union [5].

Following these policies, a number of nationwide actions and projects for teachers’ continuing education were carried out, especially trigged by the National Project for K12 Teachers’ Continuing Education, which started in 1999 and was aimed at providing the learning opportunities for 10 million K12 teachers overall the country.

At the same time, curriculum reforms currently taken in basic education also raise a great demand on teacher training. Under this consideration, MOE also issued Guidelines on Enhancing Teacher Training on Pedagogy of New Curricula in Basic Education in 2004 [6].

It order to take advantage of expertise of teacher education, MOE organized two expert committees: National Steering Committee of Teachers’ e-Education (NSCTeE) [7] and National Expert Committee of Curriculum Resources for Teachers’ Education (NECCRTE) [8]. NSCTeE has contributed to the establishment of Teacher Education Networking Union and the development of Educational Technology Standards for K12 Teachers (see Section 3), while the NECCRTE has supervised the development of curriculum resources for teachers’ continuing education, 527 pieces of online courses have been selected from 976 works contributed by 22 education & training institutions over the country [9].

**Teachers’ e-Education (TeE): A New Concept in Chinese language**

For the sake of facilitating teachers’ lifelong learning for and with ICT, a new concept called teacher’s e-Education (TeE) was emerged, which means providing lifelong learning opportunities for teachers with support of ICT, and also means the demands for teachers to applying ICT in their instructional practice.

As for the promotion of TeE, MOE organized a special group called NSCTeE (National Steering Committee for Teachers’ e-Education) in 2002, with a dozen of established experts in the field of educational technology and information technology education as members. The missions of the committee as stated, including the following three levels:

- Planning and guiding the development of a nationwide network of teachers’ e-Education through integrating information infrastructure and curriculum resources owned by key universities of teacher education;
- Integrating ICT into teachers’ education as for improving teacher’s competencies in pedagogical use of technologies;
- Exploring reforms and innovation in teachers’ education with the application of ICT.

There are a series of actions have been initiated to serve for the implementation of TeE, for example, the MOE issued the Proposal on Promoting Teachers’ e-Education in 2002, in which five clusters of measures were suggested [3]:

```markdown
- Planning and guiding the development of a nationwide network of teachers’ e-Education through integrating information infrastructure and curriculum resources owned by key universities of teacher education;
- Integrating ICT into teachers’ education as for improving teacher’s competencies in pedagogical use of technologies;
- Exploring reforms and innovation in teachers’ education with the application of ICT.
```
(1) Speeding up the construction of information infrastructure for TeE

- Establish the technology standards for the development of information infrastructure and learning resources;
- Encourage a part of teacher universities to construct digital learning environment as for demonstration, support the universities in west regions to upgrade their campus networks, and create e-learning colleges for teacher education based on universities of qualified conditions;
- Enhance the construction of teacher training institutions at different levels with support of ICT, especially at county level, in step with the implementation of XiaoXiaoTong project which is aimed at connecting all schools through ICT.
- Encourage and support the interactions and exchanges in terms of TeE construction between east regions and west regions;
- With the act of computer donation in teacher universities and colleges, support the implementation of ICT education in rural and poor areas.

(2) Speeding up the construction of learning resources for TeE

- Developing Satellite-TV based courses and web based courses for teachers’ education, with which to try out distance teacher-education;
- Encourage the adoption of multiple approaches to developing and integrating TeE resources as to extend the sharability of various resources;
- With support of TeE resources, construct resource center of regional teachers’ education which connected with regional teachers’ universities and colleges and school network, to provide service for teachers’ continue education;
- Establish local resources center and make assessable to schools so that all resources can serve for teachers’ professional development as well as instructional innovations.

(3) Enhancing the construction of pre-service education programs on information technology education and education technology

- Create programs on ICT education and educational technology in teacher universities and expanding the capacity of enrollments;
• Provide common courses of ICT and educational technology for pre-service teacher students.

• Improve professional competencies in using ICT and educational technology through a round of training for junior faculty members working in teacher colleges/universities in 5 years.

• Include training on ICT and educational technology as important components for teachers’ continuing education with first focus on the training of leading-teachers.

• Offer enhanced trainings on ICT education to the subject teachers of ICT, aimed at improving their ICT proficiencies and pedagogical competencies.

(4) Exploring new models of teachers’ education and instructional management in the context of e-Education through research-based efforts

• Carry out researches on approaches and models in ICT-supported educational reforms and instructional innovations as well as new forms of teacher education such as modern distance learning.

• Encourage various applications of ICT for teachers to improve their work performance and instructional achievements.

• Explore effective models of using ICT to improve educational administration, instructional management and learning evaluation.

• Facilitate the ICT integrating into curricula, with which to promote the abilities of teachers for and with ICT applied in education.

(5) Enhancing the leadership, management and evaluation in the process of TeE

• Create directive groups/offices dedicated to TeE affairs at different levels of administration, and also for teacher colleges/universities.

• Make encouraging policies and assessment mechanisms towards the development of TeE.

• Care for securities and qualities of information resources for teacher education by taking technical and human measures.

• Carry out regular assessment/evaluation onto TeE related projects, made by MOE-appointed experts.

Meanwhile, considerable amount of actions and projects have been initiated by local governments towards TeE. For example, regional teachers’ education center has been set up in HeBei province [10]; in GanSu province, there have been 49 online courses
available dedicated to teachers’ continuing education; and in Sinkiang, an autonomous province of largest territory in China, there have been 10 thousand teachers accessing over 50 online courses in trilingual of Mandarin, Uigur and Kazak in 2005 [11].

**Teacher Education Networking Union: Building up a TeE platform**

According to the rules for K12 teachers’ continuing education, it is the right as well as the obligation for 10 million K12 teachers to step into the lifelong learning system, as a realistic option for using ICT to facilitate teachers’ lifelong learning, the Teacher Education Networking Union (TENU) was established in 2003 under the leadership of MOE, with the purpose to provided a lifelong learning platform for 10 million teachers in China.

Initiated by several key universities such as Beijing Normal University, East China Normal University, Northeast Normal University, Central China Normal University, Southwest Normal University and etc., the union is now comprised of 12 organizational members is taken by MOE as a kernel TeE platform for teachers’ lifelong learning [12]. Consequently, a number of provincial TENUs have been brought up. It is expected that very provinces will establish their TENU soon. In this way, a countrywide TeE platform for teachers’ lifelong learning will be set up in China, up linked to the kernel platform and down linked to county training centers and schools.

The term *networking* wherein has the implications of establishing a network technologically (by means of satellite communication and cable links), geographically (linking rural/undeveloped areas to cities/developed areas) and organizationally (connecting universities, district training centers and schools).

Based upon the TeE platform, plenty of learning opportunities will become available to the whole population of K12 teachers. The TENU usually organize blended learning experiences for teachers, taking distance education as the primary method and complemented with face-to-face education.

**Educational Technology Standards for Teachers: A New Action Promoting Teacher Professional Development**

Educational technology has become an important element constituting teachers’ professional expertise. Early in 2000, the Basic Education Department of MOE issued a proposal which advance the demand on pedagogical use of ICT in all K12 schools. To reach this goal, K12 teachers certainly should learn how to use ICT and how to apply ICT in their teaching and lifelong learning.

In 2004, MOE published the Educational Technology Standards for Primary and Secondary Teachers [13], which represent the first officially published standards regarding teachers’ professional development in China.

To implement this standard, a series of actions are followed. The MOE has just initiated a national program on educational technology capacity building for primary and secondary teachers, aimed at setting up a body of training, assessment and
authentication of teachers’ proficiencies of educational technology [14].

This project will be firstly tried out in selected regions including Liaoning, Jiangsu, Henan, Guangxi, Chongqing, Yunnan and Ningxia provinces, with the experiences taken from the test period, the teachers lifelong learning system for educational technology will be built up till 2007, and which will be completed and standardized perfectly till 2010, with the teacher training, assessment and authorization as the main function.

Conclusions

As a nation with great population, China is faced with the tremendous challenges on providing lifelong learning opportunities for over 10 million teachers across the country. As a realistic solution, taking Teacher Education Networking Union as a platform, a countrywide framework for teachers’ e-Education is emerging in China. Meanwhile, as to be successful in e-Education as lifelong learning, teachers also should develop their capacities in ICT application, and also bring their students into era of e-Education. With this consideration in mind, educational technology has become a critical element for teachers’ continuing learning as well as their professional development.

References


