

# Study on Innovation of Teacher Training Model in Basic Education from the Perspective of “Blended Learning”

Huabai Bu & Shizhen Bu

Hengyang Normal University

Hengyang 421008, Hunan, China

E-mail: buhuabai@163.com

Received: August 3, 2011

Accepted: August 15, 2011

Online Published: April 18, 2012

doi:10.5539/ies.v5n3p39

URL: <http://dx.doi.org/10.5539/ies.v5n3p39>

*Foundation Item: Regular Institutions of Higher Education Teaching Reform Research Project in Hunan Province “Study on Innovation of Teacher Training Model in Basic Education --- Medium Achievement Based on the Perspective of “Blended Learning” of Project Driven. Project NO: Xiangjiaotong (2011)315, the Education Ministry Humanities and Social Sciences Fund (12YJA630004), Hunan Province Social Planning Fund (11YBB055).*

## Abstract

Gradual integration of synergetic technology, P2P technology and online learning community furnishes a new research field for innovation of teacher training model in a knowledge economy era. This article proposes the innovative model of “whole of three lines” in teacher training in basic education from the perspective of “blended learning” and specific security policies for effective running of the teacher training model of “whole of three lines”, which offers a brand-new training model for basic education teachers and offers theoretical support and methodology guidance for the government sections and training institutions to make a training decision.

**Keywords:** Blended learning, Basic education, Teacher training model, Innovation

## 1. Introduction

The knowledge economy era is not only one in which knowledge is rapidly updated and which requires one to continuously learn, but also one in which competition is fierce and which requires one to continuously innovate. Innovation is the footstone for sustainable development of a country, and China needs to persistently cultivate innovative talents and persistently enhance quality of teachers. Nevertheless, the overall level of our basic education development is low, and, especially, rural primary teacher teams have teachers not only with out-dated education concepts, aging structure and irrational knowledge structure, but also unqualified educational background and lacking in new training ideas and new training methods. According to an authority in basic education, teachers who could narrowly complete education training tasks in his area accounted for 43% of the total and there were still about 5% teachers who were even unable to finish the normal education training tasks and the education quality of teachers was quite low. Teacher training is an important approach to improve education quality and is also an important constituent for teachers’ continuing education and lifelong learning system. With approaching of popularization of the higher education, in order to adapt to the market demand of education training centered by the vocational training and promote rapid transition from the traditional continuing education centered by education with record of formal schooling to vocational technical training, professional skill training and high level management training, we have to update former continuing education training model. However, according to survey of our subject group on relevant training institutions in Hunan Province, almost all training institutions adopt the traditional training model and have not made full use of synergetic technology, P2P technology and online learning community technology on the Internet to set up a training platform. As a consequence, the training effect is bad, hardly adapting to requirement of rapid development of the knowledge economy era. Then, how to innovate the education training model in a new technological environment is an important subject that needs to be urgently resolved by the current theoretical and industrial fields. This article studies innovation problems of teacher training model from the brand-new research perspective of “blended learning”.

## 2. Analysis of the Status Quo of Studies at both Home and Abroad

Through a retrieval of literature about relevant teacher training studies in both domestic and foreign databases

(mainly including CQVIP, Wanfang Data, Elsevier, EBSCO, Cell Press, SCI, EI Village and so on), it is found that studies about teacher training are mainly focused upon the training model, training environment (internet/multi-media environment), influential factors, theoretical studies and case studies, etc., with specific number of literatures as shown in Table 1.

Insert Table 1 about here.

Reading of these literatures tells us that there is rarely any literature about teacher training model in the basic education from the perspective of “blended learning”. The concept of “blended learning” was proposed as early as in 2000 by “the US Education Technology White Book”. As a brand-new learning method or learning environment, this concept rapidly became a hot topic and difficult topic in the research fields of educational theory and training practice. According to Singh and Reed, blended learning was to apply “appropriate” learning technology, combine “positive” individual learning style and convert it to “correct” skills at a “suitable” time and to impart the skills to “suitable” persons, so as to finish an optimal learning target. An Indian company pointed out in “B-Learning White Book” that “blending learning” was a learning pattern. Correspondingly, there are some academics who hold the viewpoint that blended learning is a sort of learning environment, a blending of multiple training factors and training means.

In China, “Hun He Xue Xi” originated from the English expression “blended learning” and “blending learning”, which are translated either as “Hun He Xue Xi” or as “Rong He Shi Xue Xi”. According to Professor Li Kedong, “Blended learning is a popular technical terms which appears in the field of education, especially in the field of educational technology after people introspect reflect on Internet learning. Its main thought is to integrate in an organic way the two learning models of face-to-face learning and online learning to cut down on costs and improve profits”. “Blended learning” is blending of learning method, learning media, learning content, learning model and supporting service and learning environment of training learners”. According to Zhang Haofeng and Bu Caili, “Blended learning makes a reasonable selection and combination of all learning elements, which helps to enlarge opportunities of training learners to participate in learning, enhance the learning efficiency of training members, cut down on learning costs of training members and optimize learning effect of training members.” Through a questionnaire survey and English writing test on 170 non-English training learners, Wang Yi discovered that the model of blended learning had a positive facilitating effect on enhancing their English writing level in that the English writing motive of training learners was obviously strengthened, especially their internal motives and the training learners had high satisfaction with the blended learning.

The training model that is instructed by the government and is under unified planning and directing emphasizes unification and external demands, but pays little attention to internal demands and differences of teachers, which results from low enthusiasm of training subjects and training teachers and affects efficiency of the training and which may also lead to unfairness of teacher training between different regions, between urban and rural areas and between different schools. The model of project training is mainly to refer to the principle and method of project and project management, keep to the core of project, the target of benefit, the means of competition, the foundation of coordination and the assurance of policy and improve quality and efficiency of teacher training. Application of this model is towards generality and there have been relatively lots of literatures on the theoretical research. For example, Yang Yijun put forward specific countermeasures of the project management in education training by means of studying the project management model in education training; Huang Yaojun studied the model of continuing education school-base training among middle school teachers from the perspective of school-base training and put forward specific practice about how to enhance the effect of school-base training in middle schools; He Jian, Wang Yuqiu and et al studied the “project model” in teacher training in colleges and universities from the perspective of establishment and supervision of teacher training model as well as the policy support, supervision and evaluation of the teacher training of “project model”.

It can be seen from the above analysis that the blended environment is the realistic environment in the current training, which is not changed with change of human will. However, so far, there has not been any literature studying how teacher training goes in this blended environment. This paper will specifically study the innovative issue of teacher training model in basic education from the brand-new study perspective of blended learning.

### **3. Innovation of Teacher Training Model in Basic Education --- The Teacher Training Model of “Whole of Three Lines”**

#### *3.1 The “Blended Learning” Environment Established in the Teacher Training Model of “Whole of Three Lines”*

With regards to the features of teacher training in basic education, this paper defines the blended learning as one which combines online learning and face-to-face training for the form only in order to resolve the problems of large number of teachers in primary and middle school teacher training, extensive distribution, multiple levels and limited

network training effect, uses multiple learning methods in a combination way, such as automatic learning and coordinative learning, transmits knowledge and skills with multiple media channels and guarantees the learning models of learning effect. It is under guidance of advanced education, training theory and learning theory that it integrates face-to-face classroom training model and extracurricular online learning model in an organic way in appropriate learning environment. Training environment of “blended learning” refers to an environment that is set up through training of blended learning. This kind of “blended learning” environment not only contains face-to-face classroom interactive learning and guiding between supervisors (training teachers), between learners and between supervisors and learners, but also contains face-to-face online interactive learning and guiding outside the classroom. The effect of this sort of “interactive learning and guiding” still requires for meticulous organization of the project training institutions and calls for the platform support of integration of synergetic technology, P2P technology and online learning community.

### *3.2 Ideation of Establishing the Teacher Training Model of “Whole of Three Lines” and Critical Factors Affecting the Training Effects*

Determination of specific training model in the environment of “blended learning” can be based on a specific analysis of the three aspects of students’ characteristics, standardization of development and features of learning content and requirements of training business. In the first place, features of learners who receive training, such as, dispersity of the places where the learners are located, scale of the learners, skill levels of learners and intensity of the learning motive, etc. In the second place, the features of the training content, such as, consistency of training content, amount of training content, difficulty of training content, fields involved in training content and complexity of training content, etc. In the third place, requirements of training business, such as, complexity of training management, requirement to get a certificate and vigor of peripheral support.

In the process of innovation of the training model, it is necessary to identify the critical factors in training of “blended learning” in a correct way as they will directly affect the effect of the research training. Through a relevant study at an earlier stage, the project group has concluded the five “modules” in the critical factors, namely, whether setting of the training site is helpful for automatic learning of learners and for guidance of teaching of training teachers; whether information transmission technology is based on internet or CD-ROM and quality of multi-media facilities in the training classroom; whether control of time for information transmission is synchronous; whether the tactics adopted in the training is an empirical problem-based case; whether the training is grouped and whether laboratories are furnished.

### *3.3 Specific Content of the Teacher Training Model “Whole of Three Lines”*

“Blended market line” is combined by the training teacher market (training institution and expert team constitute the two parties of supply) and training project market (training learners and training institutions constitute the two parties of supply and demand). The core of “blended market line” is the demand condition and characteristic requirement of “training learners” and design of the training project (including training content, training team, training time, training place, training pattern and so on) has to satisfy demand and changes of “training learners”.

“Blended training line” means that universities, basic education schools and website visitors offer blended cultivation on training learners. Universities are the major contractor of the training project and suppliers of training experts and relevant experimental facilities, basic education schools mainly provide training teachers and training practice base, and network visitors mainly furnish a communication platform of mutual assistance and mutual learning for community learners, training teachers and other visitors who enter the network for online learning.

“Blended service line” refers to whole-process service (pre-training organization and coordinative management, on-training field management and post-training track service), basic assurance service and online learning service management, etc. Quality of “blended service line” is directly related with satisfaction of training learners and continuous and effective running of training follow-up training work.

The teacher training model of “whole of three lines” requires that, in the process of actual training, the three lines of “blended market line”, “blended training line” and “blended service line” has to be integrated and should not be separated. Only in this way, can the advantages of “blended learning” be made full use of and can the training model be innovated and the training effect be improved.

## **4. Assurance Policy for Effective Running F the Teacher Training Model of “Whole Three Lines”**

Hunan is a big province in education and has been willing to be a vanguard ever since the plan of “national training” was implemented by the Ministry of Education and Ministry of Finance, having assumed a large quantity of teacher training tasks and accumulated lots of training experiences. The subject group has conducted an empirical study on the project of “national training” that was implemented in Hunan and the research result showed that we have to pay

attention to policies of the following three aspects in order to guarantee the effective running of the teacher training model of “whole of three lines”.

In the environment of “blended learning”, teachers have to convert their role and take an initiative in leading automatic learning of training learners and improve their training effect through teachers’ learning support, personal infection and creation of group atmosphere.

In the environment of “blended learning”, it is far from enough that the training teachers only play the role as a knowledge initiator. Moreover, they should become a partner and cooperater of automatic learning of training learners and a director in resolving problems. Among the learning group of “blended learning”, the training learners are at a central position in the training, so training teachers ought to organize training according to demands of training learners. In the meantime, since learning of training learners in the environment of “blended learning” is not restrained by time and space, training learners are likely to better control their learning time and space. Yet, this also proposes higher requirement on training learners in that learners are required to have better automatic learning support and training teachers are required to provide vigorous guidance and management of training learners. Hence, in the environment of “blended learning”, teachers have to convert their role and take an initiative in leading automatic learning of training learners and improve their training effect through teachers’ learning support, personal infection and creation of group atmosphere.

In the environment of “blended learning”, establishment of network learning community has to make full use of informal learning channels to training the explorative awareness and capacity of training learners in the group cooperative atmosphere of “blended learning” and improve the training effect.

Informal learning refers to all other learning patterns outside formal learning in the school, such as, online chat and communication between training learners when taking a walk, etc., which are all informal learning opportunities. In the environment of “blended learning”, once training learners are added into a certain network community, they will share mutual experiences and may, by accident, internalize the behavior of the learning group into their own cognitive structure and improve their own cognitive capacity. The informal learning network that is often ignored in teacher training is playing its role all the time and affecting the spirit of the training group. Hence, in the environment of “blended learning”, establishment of network learning community has to make full use of the informal learning channel, pay attention to cultivating the explorative awareness and capacity of training learners in the group cooperative atmosphere of “blended learning” and improve the training effect.

In the environment of “blended learning”, the online learning community of learners has to apply an appropriate incentive mechanism to facilitate mutual supervision of training learners and improve the training effect.

The basic education training model based on the perspective of “blended learning” is not oriented by promoting personal competition as previously, but to encourage internal mutual assistance, supervision and communication of training learners within the network learning community, to rectify the learning attitude and learning motive of training learners, to stimulate learning interests of training learners and facilitate training learners to have enthusiasm in and take an initiative in taking part in the learning process and finally improve the anticipated training effect. The specific patterns of incentive mechanism includes target incentive, economic incentive, development incentive and negative strengthening. In order to facilitate effective running of the training incentive mechanism, we have to set up training information transmission channel, establish a fair, equitable and public assessment system and set up modern human resource management system. Thus, in the environment of “blended learning”, the network learning community of learners has to use an appropriate incentive mechanism, continue to facilitate mutual supervision of training members and improve the training effect.

## References

- He, Jian. (2010). Establishment and Supervision of the Teacher Training of “Project Model” in Colleges and Universities. *Luoyang Normal University*, (05):45-48.
- Huang, Yaojun. (2010). School-base Training Pattern Research of Teacher’s Continuing Education in Middle School. PHD thesis of Guangxi Normal University, 5.
- Tian, Fupeng & Jiao, Daoli. (2005). Practical Exploration of Blended Training Model in Colleges in the Informationization Environment. *E-education Research*, (04): 55-58.
- Wang, Yi. (2011). Influence of Blended Learning on the English Writing Proficiency of Chinese College Students. *Open Education Research*, (02): 70-73.
- Wang, Yuqiu. (2005). Policy Support and Supervision Evaluation of the Teacher Training of “Project Model”. *Exploring Education Development*, (04): 23-26.

Yang, Junyi. (2011). Primary Analysis of Project Management Model in Education Training. *Review of Economic Research*, (05):54-57.

Zhang, Haofeng & Bu, Caili. (2005). The Research of the Advantage and Application of Blending Learning. *Journal of Henan Normal University (Philosophy and Social Sciences)*, (06): 56-60.

Zhang, Zhizhen & Qi, Wenxin. (2007). Strategies to Improve the Effectiveness of Blending Learning. *Distance Education in China*, (04):21-24.

Table 1. Status quo and distribution of domestic and foreign journals, literatures and master and doctor thesis about studies of teacher training

Distribution	Model	Training environment	Influential factors	Theoretical studies	Case studies	Effect evaluation	Method tactics	Basic theory	Institute management	Summary and others
Number	56	32	33	25	12	10	30	23	10	25