Research on the Countermeasures Based on TTPM Theory for the Improvement of the Basic Education Teachers Training Performance

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Abstract

Many elements of the basic education teachers' training performance are embedded in the training interaction and sharing, so the enhancement of the training performance needs a whole process management and control. Based on TTPM theory, this paper has put forward four measures that must be pay attention to during the management of the basic education teachers' training performance, providing a theoretical basis for the improvement of the training performance.

Keywords: TTPM theory, Teachers training performance, Measures for improvement

Era of knowledge economy is not only knowledge quick-update era that needs continuous learning, but also a competitive era that needs unceasing innovation.   Innovation is the basis of a nation's sustainable development. Our nation needs to cultivate innovative talents constantly to improve the quality of teachers. However, China's overall development level of basic education is low, especially the junior high school teachers in rural areas. Their teaching concept is out of date and knowledge structure is irrational. Moreover, most of them are old and lack of new teaching concept and method. In such a background, according to the seventeenth congress of the CPC' requirement of" strengthening the construction of teacher group, focusing on improving the quality of teachers in rural areas" and the spirit of" national medium and long term educational reform and development plan" ,the ministry of education and the ministry of finance has implemented the national "training plan"(national primary and secondary teacher training plan) since 2010.Through the implementation of the national training plan ,we have got a number of "seed" teachers, who play a key and model role in promoting quality education and teacher training. Teacher training has entered a period of rapid development.

However, the basic education teacher training is a kind of soft service, which is difficult to be revealed directly. And quantitative assessment method is still subjective in index system and weight determining, resulting in many trained teachers and training management department skeptical about the effectiveness of the training. Those skeptics generally has the tendency of excessively pursuing "training effect" that can be showed. They also do not realize that there are many training performance embedded in the training interaction and sharing, neglecting the total training management and control. Therefore, we should take the whole process approach to training performance management.

Total training performance management refers to a comprehensive system that integrates the related personnel, tools, and every link of the whole training process in the training management, letting the "customers" become more and more satisfied. so, total training performance management requires training institution or individual(such as local

education authorities, schools, teachers)and training institution(such as the ministry of education, provincial department of education and university)constantly optimize their training process, improve the training efficiency of communication, and implement the spirit of total quality management, introduce the system of "total training performance management, thus ensuring the training performance to achieve a satisfactory level.

Total training performance level has two categories of assessment index, that is, the quality of management and service during the training and participants' satisfaction level during the training. The former includes not only the quality of the training result, but also the quality of the entire training service management and control; the latter includes both the satisfaction level of the training department, trainee teachers and the satisfaction level of the training institution, trainer and serviceman. In order to achieve a higher level of training performance, training implementation body must conduct total training for performance management through the total training performance management system.

In order to learn more about the TTPM, our research group index on related teacher training document from domestic and foreign databases(mainly including Wei Pu Chinese Science and Technology, Wang Fang data resource system, Elsevier, EBSCO, Cell Press Data Base, SCI,EI Village etc) and find that the research of teacher training mainly focuses on training model, training environment(Internet/Medium environment),influencing factors, theory research and case study, etc, while there are few research documents about total training performance management. Du Fang Fang, from East China Normal University, has counted the influencing factors of performance management in her dissertation" research of the mixed learning model of primary and middle school teachers' educational technology ability training".

On the basis of the related theories of the existing total training performance management, to enhance training performance, countermeasures must focus on the following three aspects:

1. Implement Process Management and Control of the Training System; Enhance the Training Performance in the Process Management

TTPM is a typical management of the whole process. According to the time order of the training, the whole training is divided into training preparation phase (from collection of the related information to the convey of the training task), training implementation phase (from the convey of the training task to the complete of the training), and after-training service phase (provide service after the training). At the same time, the training process is divided into three systems: qualification selection system, implementation system and the value-added service system. Controlling the training performance through these three sub-systems, thus providing a basis for the overall enhancement of the training performance.

1.1 Construct the Training Qualification Selection System; Control the Performance before the Training

Under the supervision of the government department, the training market mainly includes the training programmer's supply-and-demand market that is composed of trainees and training institutions and trainer supply-and-demand market that is composed of training institutions and experts team. These two kinds of markets must be selected and assessed before the training.

1.1.1Make a Qualification Assessment on the Basic Condition of the Training Institution

At present, this assessment is made by the authority of the ministry of education and provincial department of education. The main problem is that there is no law or regulation to normalize the assessment of the qualification of the training institution. There are a lot of "three shortage institutions", which are short of teachers, curriculum system and lack of basic security service. And even, some "three no institution" assume relevant training tasks. Therefore, the training institution must be screened to ensure that they meet the requirements of the training performance level. Meanwhile, it is also necessary to assess whether the soft equipment and hard equipment of the training institution meet the needs of the training.

1.1.2 Make an Assessment on the Learning Ability of the Trained Teachers

It is usually carried out by the local education authority and their affiliated schools. Because different person has different knowledge background and teaching experience, plus the different understanding towards the training, the trained teacher should be investigated and assessed before the training, receiving training according to their aptitude. The assessment of the trained teachers includes their present skills, awareness and training attitudes and learning styles, etc.

1.1.3 Make an Assessment on the Qualification of the Expert Teams

This assessment is conducted by the training institution. The skill level and knowledge structure of the experts has largely determined the training qualification, so an assessment on the experts' research fields and teaching skill is a must.

1.2 Construct the Executive System, Control the Performance in the Training

Colleges and universities are not only the main executors of the training program, but also the provider of training experts and related experimental facilities. Basic education schools provide front-line trainers and training practice bases. Once the authorities issue the training mission, the training enters the pre-research and training implementation phase. whether the location of the training is beneficial for trainees' autonomous learning and for the training teachers' teaching guidance; whether the information transmission technology is based on the Internet or CD-ROM; whether the multimedia facilities is good; whether the time control of the training information is synchronized. Whether the training strategy is base on the case studies; if there are group training; whether it provides laboratory.

1.3 Build Training Value-Added Service System, Control the After-Training Performance

Since the basic education teachers' training time is relatively short, and long training courses of "national training", "provincial training" generally last only three months, it is difficult for those trained teachers to digest the theoretical training contents. Also, some trainers cannot give a satisfactory answer because of the complexity of some questions. To perfect answers so as to extend the classroom training effect, some relevant value-added service work is needed after the training, such as a visit to the training base; experts make comments and give advice, exchange of experience after the training, etc.

2. Use a Variety of Training Tool and Integrate All Sorts of Training Resources to Improve Training Performance

In the implementation of training system's process management and control, it involves tools like sample analysis table, training needs survey, training content designation survey, training staff attendance sheet. Training spot management and control schedule, training performance analysis report, after- class effect questionnaire, training performance assessment, etc. While the teaching tools in the process include teaching material(PPT, textbook),teaching cases, on-site training aids(projector, white board, whiteboard pen, etc).At the same time, it is good to integrate the training resources, and pay attention to the informal learning of the trained teachers. Informal learning refers to all other forms of learning except the formal learning that takes place in school. For example, online chat and exchange between the trainees in the walk are informal learning opportunities. Once the trainees join a network community, they will provide their own experience for each other and internalize the learning group's behavior into their own cognitive structure unconsciously, thus promoting their cognitive ability. In fact, the informal learning networks which are often ignored during the teacher training are playing the role of affecting the training group spirit all the time. So, the construction of the network learning community must make full use of informal learning channels, pay attention to cultivate trainees' explorative sense and ability in the atmosphere of group cooperation.

3. Promote the Trainee Teachers' Involvement in the Whole Training, Enhance Training Performance

Trainee teachers are not only the recipients of the training, but also the evaluator of the TTPM. The trainee teachers' interaction in the whole process can be divided into three phases: involvement before the training, involvement in the training and involvement after the training. The specific contents are as follows.

3.1 Construct "Blended Learning" Training Environment

According to the characteristics of the basic education teacher training, this paper defines blending learning as a learning model that combine internet learning with face-to-face learning, integrate self-learning with cooperative learning, use medium to transmit knowledge and skill to ensure a good learning effect. It is designed to solve the problems of basic education training, which includes large training population, wide dispersion, mutual levels, the limit of the Internet training .Training environment of blended learning is builded on the basis of blended learning. It includes not only the face-to-face mutual learning and instruction among trainers, among trainees, between trainers and trainees in class, but also non face-to-face online mutual learning and instruction after class. And the effect of this kind of "mutual learning and instruction" requires the careful organization of the training institutes, and the platform support of the collaboration technologies, P2P technology, and online learning community.

In the "blended learning" environment, to determine its specific training model ,a specific analysis on students' characteristics, the normative of the development, learning contents and training business is a must: first, trainees'

characteristics. Such as the dispersion degree of trainees' location, the size of the training population, trainees' skill level and motivation intensity etc. Second, the characteristic of the training content. Such as the consistency degree of the training content, the quantity of the training content, the difficulty degree of the training content, the field involved in the training content and the complexity of the training content. Third, training business requirements. Such as the complexity degree of the training management, requirements for obtaining a certificate and the intensity of the eternal support, etc.

In the innovation process of the training model, it is important to identify the key factors of "blended learning" correctly, because it will directly affect the training effect. Through the previous relevant research, the project team has come to the five "modules" of the key factors: whether the location of the training is beneficial for trainees' autonomous learning and for the training teachers' teaching guidance; whether the information transmission technology is based on the Internet or CD-ROM; whether the multimedia facilities is good; whether the time control of the training information is synchronized. Whether the training strategy is base on the case studies; if there are group training; whether it provides laboratory.

3.2 Participate the Survey before Training; Ensure the Pertinence of the Training

Filling in the training needs survey and training contents designation questionnaire is to make it clear what kind of training the trained teachers expect to receive, what training topic they want to learn, what is their expectation towards the training effect, as well as the dispersion degree of the trained teachers' location, trainees scale, trainees' skill level and the intensity of their learning motivation. The training authorities should grasp this basic information before the training, so as to have a good knowledge of the consistency level of the training contents, the difficulty degree of it, the fields involved in the contents, and the complexity of the training contents, etc. The training program design (including the training content, training team, training time, training site, and training mode, etc) must meet the needs of the trainees and change.

3.3 Participate in the Interactive Discussion; Ensure the Doubts to be Eliminated

The trainers' playing the role of imparting knowledge is far from enough. They should also be the trainee's autonomous learning partners, collaborators and the guider in solving problem. In the learning group, the trainees are in the core position of the training, so trainers should organize the training according to the trainees' needs. Their relationships are as the figure. Meanwhile, because the trainee's learning is not confined to the time and space, they can choose their learning time and place flexibly. But this also sets a higher requirements for the trainees, and it needs not only the support of a better self-learning of the trainees, but also the trainers' strong control and management over the trainees. So, trainers must change their role. Through the support of the trainer, personal appeal and creating group learning atmosphere, the trainer actively guide the trainee's autonomous learning, thus enhancing the training effect.

3.4 Participate in the Interactive Discussion after Training; Ensure the Extension of the Training Performance

Basic education training mode is not a model that uses individual competition as their evaluation orientation as previous one, but a mode that encourages trainees help and supervise each other, exchange with each other during the network learning community, correcting the learning attitude and motivation of the trainees, arousing their learning interest. Inspiration enables the trainees to be positive and active in joining the learning process, promoting the expected training effect finally. The specific ways are target incentive, economic incentive, development incentive, and negative reinforcement. In order to promote the effective running of training incentive mechanism, it is a must to establish a training information transmission channel, establish a fair, just and open appraisal system, and establish a modern human resources management system. Therefore, the network learning for trainees must use an appropriate incentive mechanism, and constantly promote the mutual supervision between the trainees, improving the training effect.

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