

# Implementing Problem-Based Learning in Principal Training: The First Pilot Program in China

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**Abstract:** In designing and implementing the pilot program of serving principal training, the author of this paper learned the experience from what E. Bridges and P. Hallinger did but didn't imitate fully, rather, created several new strategies because Chinese principals faced different situation from their American counterparts. The pilot program introduced and implemented the Problem-Based Learning (PBL) approach. The outcome of this pilot program shows: (1) PBL is a promising approach to serving principal training in China in casting off the traditional "chalk and talk" lecture approach. (2) The actual learning of trainees will happen prior to the classroom sessions if a trainer lets trainees participate the process of problem identification in pre-training stage. (3) PBL approach is much welcome and strong supported by local government and policymakers when the focal problem is related to implementation of current local policy.

**Key words:** problem-based learning principal training pilot program

## 1. Introduction

Although principal training in China can be traced back to the 1950s, few principals got chance to learn professional knowledge and skills through any training programs until early 1990s (Li and Feng, 2001). In December 1989, the State Education Commission (renamed the Ministry of Education in 1998) issued *On Strengthening the Training for Principals of Elementary and Secondary Schools Nationwide*. It demands educational officials and training institutions at all levels to provide opportunity for every school principal to be trained. As found elsewhere around the world, it is a popular way to train school principals, who have a similar knowledge base through professional training program, to meet the professional qualifications and requirements (Feng, 2003a). This is the very beginning of modern and professional principal training in China.

Chinese training institutions and the researchers in the field of leadership development have developed quite a few professional programs since implementation of the #035 document in early 1990s. In the past 15 years, however, most of the programs didn't cast off the traditional "instructor-centered" and "chalk and talk" lecture approach in principal training though China's principal training kept improving (Li, 2003). In fact, some of the programs, such as the Research Training Program and Advanced Research Training Program developed by East China Normal University, closely tie to the approach of "learner-centered" in some degree (TAO, SMEC, 1998). Yet, one of the obstacles, just as Feng and Tomlinson point out, in implementing these programs there is a

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shortage of qualified trainers or tutors to organize the research activities and to guide the research process. Because only the faculty members from a few top universities in teacher & school leadership education (e.g. East China Normal University and Beijing Normal University) are qualified as the trainers in such programs (Feng and Tomlinson, 2002). Obviously, these programs can only serve a very small group of selected principals comparing with nearly one million principals and vice principals in 326,300 elementary, middle and high schools in China today (Ministry of Education, 2004). Therefore, the absolutely dominant approach in Chinese principal training is still the “chalk and talk” lecture approach.

In 2002, the National Symposium on Principal Training sponsored and organized by Ministry of Education brought together in words and ideas of scholars and government officials from national, provincial, regional, and local levels to discuss the possible ways and strategies to improve the effectiveness of principal training in China. At this symposium, one of the consensuses was that the traditional “instructor-centered” and “chalk and talk” lecture approach should be changed (Feng, 2004, p314). This consensus really likes a momentum to drive the researchers in the field to make their efforts to find “learner-centered” or other new approaches for principal training. Also in 2002, the Chinese edition *Implementing Problem-Based Learning in Leadership Development* authored by American professors E. Bridges and P. Hallinger was published in Shanghai, China. It just likes a gust making a closed window opened and let people see a new landscape in the field of principal training because PBL is one of the innovative and “learner-centered” approaches. As Hallinger writes:

One innovation of the 1990s in professional education generally, as well as in school leadership was problem-based learning (PBL). This approach to professional education eschews the traditional organization of the management curricula by academic discipline. Instead, PBL requires learners to understand and apply research, theory and craft knowledge to the major problems faced by practitioners.

PBL places the academic disciplines and formal knowledge based on the service of the profession and provides an active means of instruction that respects and builds upon the prior knowledge of learners (Quoted in Feng, 2002c, pp183-184).

For Chinese education sector, indeed, it seems a new and helpful “learner-centered” approach but can it be moved fully from America to China? The Chinese principals, after all, faced different situation and challenges from their American counterparts. For this sake, it might need a further study and revising in the light of the real condition of China. To do this, the author of this paper (also the translator of *Implementing Problem-Based Learning in Leadership Development*) collaborated with a local district education bureau, Putuo District Education Bureau (PDEB) in Shanghai developed and implemented a pilot program of serving principal training which introduced and implemented the Problem-Based Learning (PBL) approach. This pilot program is not only as a practical exploration but also as a research project (FFB011127) funded by Ministry of Education.

## 2. Underlying Assumptions

Basically, the author of this paper (also, the designer/developer of the pilot program) adopts the assumptions underlying the PBL approach developed by Bridges and Hallinger:

... PBL proponents assume that learning involves both knowing and doing. Knowledge and the ability to use that knowledge are of equal importance. Program designers also assume that students bring knowledge to each learning experience. Moreover, PBL adherents assume that students are more likely to learn new knowledge when the following conditions are met: (1) their prior knowledge is activated and they are encouraged to incorporate new knowledge into their preexisting knowledge; (2) they are given numerous opportunities to apply it; and (3) they encode the new knowledge in a context that resembles the

context in which it will subsequently be used. ... Finally, PBL instructors assume that evaluation can play a major role in fostering the ability to apply knowledge if evaluation serves learning (that is, if it is formative) and is based on performance of tasks that correspond to the professional tasks students will face after completing their training (Bridges & Hallinger, 1995,p5).

Given the real condition of Chinese schooling, the author of this paper adds another two assumptions:

**2.1 PBL Approach is Much Welcomed and Strong Supported by Local Government and Policymakers When the Focal Problem is Related to the Implementation of Current Local Policies**

In Chinese educational system, an educational administrative department of local government called “district (in a city) / county (in a rural area) education bureau” plays both roles of policymaker and executive unit in education (Feng, 2003b). If a local education bureau takes negative attitude towards PBL approach, any training institutions and trainers will be hardly to implement this new approach because a PBL approach needs much more resources allocated and controlled by government (e.g. having additional funds to purchase/use multi-media equipments and installations, arranging the interview with busy officials in an education bureau, visiting the schools where the principals would reject visitors from their neighboring schools or be unwilling to let their counterparts see what’s happening behind their classroom doors, etc.) than any traditional ones. To get the positive attitude and potential support from the local education bureaus, a designer of a training program with PBL approach should try to have the program connected with the emerging problems in implementation of current local policies. On the other hand, the trainees as serving principals will also have much interest in identifying and solving the problems they need to address when they implement the current local policies.

**2.2 The Actual Learning of Trainees will Happen Prior to the Classroom Sessions if A Trainer Lets Trainees Participate the Process of Problem Identification**

As Bridges and Hallinger set, one of the professional development goals for principals through the PBL approach is to develop problem-solving skills--- the skills in finding, framing, analyzing, and solving problems (Bridges & Hallinger, 1995, p7). The author of this paper who’s designer of the pilot program believes that it is necessary for trainees to get chance to personally participate in the process of finding, framing, and analyzing the focal problem which they will required to solve because some research findings indicate that principals don’t recognize existing problems in school management at times (Feng, 2002a, 2002b, 2003c). Therefore, we might have trainees involved in a part of work prior to classroom sessions. Or to be more exact, the focal problem is not provided by the program designer/trainer but identified by the outcome of the cooperative work between trainers and trainees.

### **3. Process and Stages**

To improve the quality of learning and teaching in Foreign Language, ICT, and Project Learning, the PDEB issued in 2002 three mandatory documents on further reform in the three learning areas (PDEB, 2002a, 2002b, 2002c). These three documents are just the policy reflecting on the foremost priority of PDEB from 2002 to 2005. Both PDEB officials and school principals of Putuo District were not sure in 2002 what problems they would meet and how to address these problems in turning the vision of three documents into reality. For this reason, developing trainees’ ability to identify, and solve the emerging and potential problems in implementing these three documents became the most important goal and core task of the pilot training program.

Based on the rationale of the PBL approach developed by Bridges and Hallinger and the assumptions described

above, the author of this paper developed the process and stages of the pilot program (see the figure 1) after discussion several times with the superintendents and other officials of PDEB. To implement the pilot program with PBL approach, PDEB also decided to organize a semester-long institute that would meet once a week. The 30 participants/trainees who were all serving principals were from 30 elementary, middle, and high schools of Putuo District (there are altogether 150 schools in the district) and a trainer team was organized, too. The author of this paper would act as major trainer while a few instructors from local training institution as assistants in the trainer team.

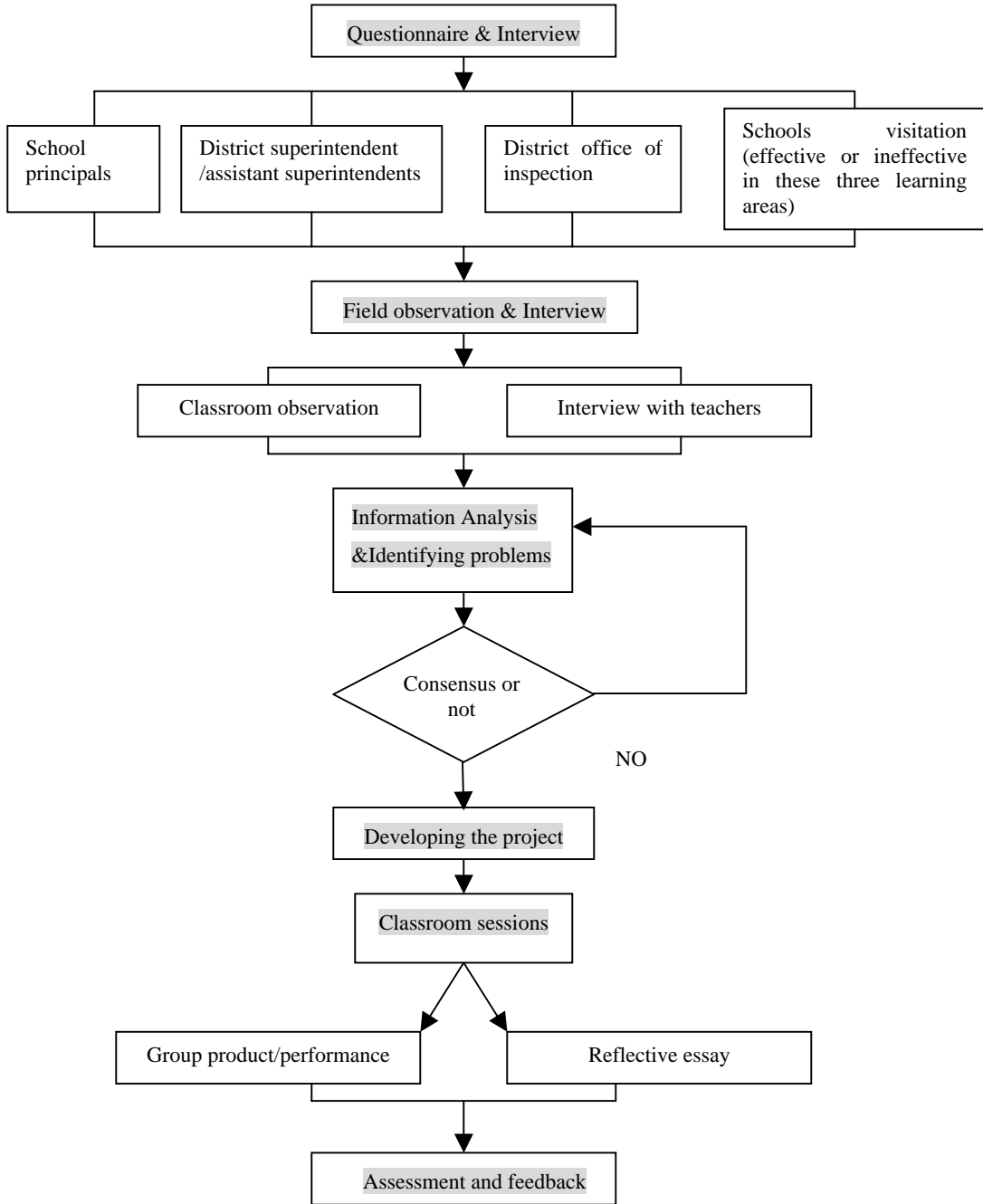


Figure 1. The Training Process and Major Stages of the Pilot Program with PBL Approach

### **Stage 1: Questionnaire & Interview**

The process of the pilot program began with questionnaire and interview. The trainees were divided into 6 small groups to make a survey of three documents implementation in all schools in the district through a questionnaire, to interview the district superintendent and assistant superintendents, to visit the district office of inspection, and to interview the principals who were working at the schools either with high achievements or with low achievements in the three learning areas of Foreign Language, ICT, and Project Learning. Trainees shared the collected information between groups and narrowed the found issues and problems after their discussion.

Through this stage, the trainees got to understand PDEB leaders' original intention and real expectations of issuing the three documents. They saw the whole picture of the district, various challenges that school leaders met, and the cognitive gap between school level and district level in implementing the three documents. They also got the knowledge and experience to make a survey, to interview with their superiors, and to share their ideas one another.

### **Stage 2: Field Observation & Interview**

Trainees widely visited classrooms of schools in the district under the arrangement of PDEB. The purpose of school visitation was to know what really happened in classrooms in implementing the three documents and to find or examine existing, emerging, and potential problems in the process of teaching and learning by field observations. Through interviewing teachers, they tried to understand how the teachers felt about the new requirements and expectations for the teacher performance according to the three documents, what/how difficulties the teachers met in implementing the three documents, and even to interpret what was the very meaning behind a teacher's words (e.g. what did the teacher mean when he/she said, "I love to teach but hate my job"?)

During stage 2, trainees learned how to connect the information collected in the stage 1 by questionnaire and interviewing PDEB leaders with the specific evidences and findings in classroom observation and interviewing teachers.

### **Stage 3: Information Analysis & Identifying Problems**

In this stage, the author of this paper and his assistants discussed with trainees and guided trainees to analyze the information and the data collected from stage 1 and stage 2. After a series of evidence-based and data based findings listed, the trainer asked trainees two questions:

- (1) What are the constraints that make the required change in implementing the three documents so difficult?
- (2) Under what conditions can (and does) this change actually take place?

Trainees then tried to identify, through the second round discussion, the common problems must be addressed for all schools in implementing the three documents.

The trainees learned to consider educational issues in the social context beyond their individual schools settings. They learned the knowledge and develop the skills in finding and framing problems based on the collected information and data. Besides, they learned various ways to reach a consensus in a group by the experience in this stage.

### **Stage 4: Developing the Project**

Based on the outcomes of the first three stages, the author of this paper and his assistants developed three projects and each of the three projects was related to the issues and tasks for schools in implementing one of the three documents. Referring to Bridges & Hallinger's guidelines for developing a PBL project (Bridges & Hallinger,

1995, pp25-37), the author of this paper and his assistants developed the projects with eight major components: introduction, high-impact problem, learning objectives, resources, product specifications, guiding questions, assessment exercises, and time constraints. The trainees didn't participate in the process of the project development.

The trainees were reshuffled and assigned to three project teams prior to classroom sessions.

#### **Stage 5: Classroom Sessions**

The classroom session was major stage in which trainees of this pilot program learned much in solving the high-impact problem by making use of various resources that the trainer team provided. The trainer team, in the meantime, acted as facilitators and consultants.

The trainer team contended that it was necessary for those serving principals in the institute to understand the importance of shared values/idea and common commitments in leading their schools. As Thomas J. Sergiovanni wrote in 2002:

At the local level, idea-based leadership calls on parents, teachers, and students to join the educational administrator in accepting responsibility for what happens in the school. As idea and common commitments are shared so is leadership (Quoted in Feng, 2002c,p188).

For Sergiovanni, every individual staff needs learning to “do the right things” instead of learning how to “do the things right”. He used of Quadracci's metaphor to support his idea:

The traditional ends, ways, and means rule is compatible with “cannonball” theory of management suitable for stable environments where targets don't move. Unfortunately, as Harry Quadracci points out, we live in a “cruise missile” world. Cannons are excellent weapons for hitting fixed targets under stable conditions; one need only identify the target (ends), take careful aim calculating distance and wind (ways), and give the order to fire to a well-trained crew (means). A hit is virtually guaranteed. However, hitting moving targets is another matter. Moreover, changing one's mind to enable hitting a better target than the initial one after the cannon has been fired is impossible. Yet, in the world of schooling most of our targets are moving, and different and more desirable targets are frequently discovered during the course of our actions. Cannons won't do here. Cruise missiles, to continue Quadracci's admittedly surly metaphor, have built into them the capacity to chase shifting targets and indeed to change targets after they are launched (Sergiovanni, 2001, p59).

Another theory that the trainer team considered as essential for trainees to learn during the classroom sessions was institutional theory. This theory focuses on the constraints in the environment of organizations that limits their ability to change. E. M. Hanson points out that a school actually exists in an organizational field with various constraints. He continues:

... educational organizations, like any other type of organization, exist in what Damage and Powell call an organizational field. ... A school's organizational field includes, for example, accreditation agencies, teacher training programs, state boards of education, state legislatures, courts (local, state, and federal), universities, parent groups, and textbook producers. While fields provide a framework for locating and bounding the phenomena of interest, we must not assume that they are not problematic and unchanging (Hanson, 2003,p282).

Therefore, the trainer team intentionally selected such literature as *Moral Leadership: Getting to the Heart of School Improvement* authored by Thomas. J. Sergiovanni as well as the literatures on institutional theory in providing resources for trainees' learning.

Trainees were always encouraged to use the interaction method as a means of organizing and managing their team meeting during this stage.

As final products, each project team formulated an action plan to address the focal problem presented in each project. On the other hand, each trainee handed in a reflective essay as individual product.

### Stage 6: Assessment and Feedback

There was a reviewing meeting after the project teams submitted their action plans. On behalf of his team, one member of a project team had a brief presentation to explain the team's action plan before an assessment committee consisting of the PDEB superintendent, one PDEB official, and three professors in educational administration. All the members of the project team then answered the questions from the members of assessment committee after the presentation. The trainer team and the members of other project teams acted as the audience. The project teams would get the feedback from the assessment committee by several round of interaction at the reviewing meeting.

Also in this stage, the trainer team assessed the individual trainees products---- the reflective essays and returned the essays to individual trainees with comments as well as questions for their further consideration.

## 4. Outcome & Conclusion

The outcome of the pilot program seems positive when most of the trainees give the positive comments on this program in their reflective essays. They express in various ways and their own terms why PBL works as a "learner-centered" approach for serving principal training.

Based on the observation in the process of implementing the pilot program and the feedback from reflective essays of trainees, we can come to the conclusion that (1) PBL is a promising approach to serve principal training in China in casting off the traditional "chalk and talk" lecture approach. (2) The actual learning of trainees will happen prior to the classroom sessions if a trainer lets trainees participate the process of problem identification in pre-training stage. (3) PBL approach is much welcomed and strong supported by local government and policymakers when the focal problem is related to implementation of current local policy.

The pilot training program with PBL approach really reaches unprecedented achievements in shifting the China's serving principal training from the traditional "instructor-centered" lecture approach to "learner-centered" approach. However, Professor Philip Hallinger's advice reminds us: (1) PBL is not the silver bullet that will enhance the professional learning of school leaders. However, it does represent one useful tool for professional development (Quoted in Feng, 2002c, p184). (2) To achieve the best results PBL should be used as a part of a repertoire with other methods depending upon a program's learning goals (Hallinger, 2003). Indeed, we have very long way to go in search of excellence in implementing the PBL approach in China's principal training.

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