Analysis and Recommendations on Post-employment Teacher Training in China from the Perspective of Situated Learning Theory

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Abstract: This article elucidates three primary issues in post-employment teacher training in China from the perspective of Situated Learning Theory: the disconnect between training content and teaching practice, the predominance of unidirectional transmission in training methods, and the insufficient effective transformation of training outcomes. It analyzes the corresponding causes of these issues, which are the lack of attention to situational knowledge, the challenges in promoting the formation of communities of practice, and the obstacles to legitimate peripheral participation. Ultimately, it proposes three pathways for optimizing post-employment teacher training in China: focusing on the real issues of teaching practice, incorporating participatory training activities, and emphasizing the practical transformation after training.

Keywords: Situated Learning Theory, Post-employment Teacher Training, Teacher Training Model

1. Introduction

Post-employment teacher training is a crucial link in cultivating good teachers and improving teacher quality. In China, post-employment teacher training is mainly divided into "centralized" and "noncentralized" types. Due to economic costs, time constraints, and other reasons, short-term centralized teacher training models dominate the field of post-employment teacher training. From the perspective of training effectiveness, the outcomes of post-employment teacher training in China are limited, and there are numerous issues, such as the "disconnect between training content and teaching practice" [1], "predominance of unidirectional transmission in training methods" [2] and "insufficient effective transformation of training outcomes" [3]. To ensure the effectiveness of post-employment teacher training in China, education researchers, guided by teacher learning theories and aiming to improve the work practices of post-employment teacher training in China, have discussed the centralized post-employment teacher training model. Situated Learning Theory, as an important part of adult learning theory, due to its innovative views on learning and knowledge and its focus on the field of adult learning, has attracted considerable attention from teacher educators and has been applied to analyze and interpret issues related to "teacher training."

2. Manifestations of Problems in Post-employment Teacher Training in China from the Perspective of Situated Learning Theory

Situated Learning Theory, proposed by Lave and Wenger, targets the learning processes of adult groups and encompasses three core concepts: "situated knowledge," "communities of practice," and "legitimate peripheral participation." Under this theoretical lens, the current short-term, centralized post-employment teacher training model in China^[2], which aims to quickly impart systematic theory, methods, and skills to a number of teachers for them to apply in schools, exhibits three significant problems: the disconnect between training content and teaching practice, the predominance of unidirectional transmission in training methods, and the insufficient effective transformation of training outcomes:3. Research Findings

2.1 Disconnect Between Training Content and Teaching Practice

According to Situated Learning Theory, the essence of learning is the process of an individual's

participation in practice and interaction with others and environmental factors, as well as collaboration and interaction with groups^[4]. Brown argues that "knowledge" and "activity" are inseparable, with activity being an integral part of the learning process^[5]. Knowledge is not "packaged" and must be combined with specific real situations. Learning occurs and unfolds only under the dual conditions of "real practice" and "appropriate cultural background," and knowledge can be fully understood only in the process of its use^[5]. Therefore, learners should not only know the rules of knowledge but also understand the occasions, conditions, and specific uses of that knowledge. Currently, there is a significant "gap" between the content of post-employment teacher training in China and the teaching practices of participating teachers. Research shows that the content of many teacher training programs is significantly disconnected from the actual teaching needs of participating teachers, especially in national and provincial training programs, which tend to emphasize theory over practice^[6]. Traditional post-employment teacher training in China often provides abstract teaching theories that do not directly connect with the teaching practices of participating teachers. Short-term training often fails to offer direct assistance to teachers, thus struggling to gain their recognition.

2.2 Predominantly Unilateral Training Methods

Lave believes that "communities of practice" are an essential condition for the existence and maintenance of knowledge^[7]. These can be learning groups, vast learning networks, face-to-face physical entities, virtual online exchanges, a structured formal organization, or even informal or intangible entities^[2]. The main factor in forming communities of practice is "participation in practice activities." In communities of practice, learning is a process of cooperation and interaction with the group, and the interaction between individuals and specific social groups is at the heart of learning approaches and methods^[11]. Most post-employment teacher training projects in universities still adopt a unidirectional transmission method of training, which is cost-effective and easy to organize but overall less effective^[6]. Since the target group of teacher training is adults, prolonged unidirectional theory infusion not only directly occupies the effective interaction time between teacher educators and participating teachers but also causes some teachers to experience issues such as "distraction," "difficulty understanding," and "disjointed thinking," further lowering their theoretical learning efficiency and participation enthusiasm.

2.3 Insufficient Effective Practical Transformation of Training Outcomes

Lave, from an anthropological perspective, points out that true "legitimate peripheral participation" should involve learning knowledge through participation in practice, with the learning process gradually moving from the periphery to the core^[4]. Situated learners must be legitimate participants in the learning community, and such activities should also take place in the work context of the community. "Peripheral participation" means that learners do not fully participate in the community activities but only as participants in some activities. Through observing experts and discussing with peers, learners learn while participating in part of the community's activities. Legitimate peripheral participation is not a teaching method but a learning model that integrates observation and understanding. Currently, post-employment teacher training in China not only lacks systematic planning in content, with frequent occurrences of course patchwork and expert patching[8] but also often lacks follow-up measures after training. This makes it difficult for participating teachers to maintain contact with teacher educators after training ends. For instance, after explaining certain teaching theories, almost no teacher educators assign teaching tasks as consolidation exercises for participating teachers who actively express needs, or continue to follow up on specific problems encountered by such teachers in practice. This results in some participating teachers who seriously contemplate during training and desire subsequent feedback in practice not receiving appropriate guidance, making most post-employment teacher training in China "one-off" and significantly affecting the effective transformation of theoretical knowledge into practice.

3. Causes of Problems in Post-employment Teacher Training in China from the Perspective of Situated Learning Theory

Based on Situated Learning Theory, the three main issues in post-employment teacher training in China—"the disconnect between training content and teaching practice," "the predominance of unidirectional transmission in training methods," and "the insufficient effective transformation of training outcomes"—stem fundamentally from the negative states of three factors: "situated knowledge," "communities of practice," and "legitimate peripheral participation":

3.1 Lack of Attention to Situated Knowledge

The disconnect between the content of post-employment teacher training in China and teaching practice is related to the lack of attention to situated knowledge by teacher educators. First, teaching contexts are complex, influenced by numerous and broad factors.

Due to content and time limitations, centralized short-term training provides limited case studies, satisfying only some participating teachers' needs. Classroom teaching is a complex process influenced by curriculum content, environment, student interactions, and teaching methods. Teachers' learning is related not only to their professional knowledge and experience but also to their work contexts and understanding of those contexts^[9]. While teacher training can equip teachers with some basic pedagogical theories and methods, it cannot fully address the challenges teachers face in teaching practice.

Furthermore, finding targeted practice cases in the theory transmission process is challenging, and not every teacher educator is capable of connecting theory with practice cases. Participating teachers, immersed in teaching practice, need practical examples or situational introductions to understand many abstract theories. Additionally, most participating teachers are accustomed to everyday, colloquial language, and purely academic terminology may increase their difficulty in understanding. Finding practice cases related to theory and adjusting the way of expression are not easy tasks, closely related to the disciplinary background and teaching segments of participating teachers, consuming a significant amount of preparation effort by teacher educators. This lack of attention to situated knowledge directly leads to the disconnect between training content and teaching practice, as the difficulty of condensing, summarizing, and systematically teaching situated knowledge inadvertently increases the difficulty of preparation, discouraging most teacher educators from attempting.

3.2 Difficulty in Promoting the Formation of Communities of Practice

The issue of predominantly unidirectional transmission in post-employment teacher training is related to the loose connection between teacher educators and participating teachers in forming communities of practice.

First, the lack of participation among trainees directly affects the effectiveness of teacher training. Pure lecture-style teaching has limited benefits for the teacher group. The target group of teacher training is adults, aiming not to prepare for exams but to promote the enhancement of teachers' teaching practice abilities. Even if the methods and skill-based knowledge taught are directly relevant to teachers' practice, the single mode of lecture can negatively impact teachers' understanding and application of knowledge. Situated Learning Theory posits that learning occurs not through the transmission of knowledge but through participatory observation and experience. The lack of participatory observation and experience in educational practice may lead to participating teachers simply imitating the teaching techniques and strategies provided by teacher educators without grasping the practical culture behind those techniques and strategies, which is why some scholars propose "school-based research" as an important aspect of teachers' professional development^[10].

Additionally, completely unidirectional lecture methods result in a lack of effective interaction. In Situated Learning Theory, "communities of practice" are a vital medium for the dependence and maintenance of knowledge^[7]. However, in lecture-based teaching, knowledge flows indirectly, and the lack of effective interaction between participating teachers and teacher educators makes it difficult to form "communities of practice." The centralized teacher training model in China simplifies the learning process, neglecting the agency and participation of teachers and failing to reflect the dynamism of education as a practice. Lecture-based training methods directly prevent the formation of "teacher training communities of practice" due to a lack of "participation" and "effective interaction," with the phenomenon of "monologues" indicating the nominal existence of communities of practice.

3.3 Obstacles to Legitimate Peripheral Participation

The issue of insufficient effective practical transformation of training outcomes is related to the severe obstruction of the legitimate "peripheral participation" process for participating teachers, manifested as "fragmentation of training content," "difficulty in transforming practical knowledge," and "absence of feedback mechanisms."

First, the fragmentation of training content refers to the lack of tight connections between training contents, making it difficult to form a systematic knowledge system. Most teacher training projects cover

multiple topics in a limited time, resulting in a lack of study time for participating teachers on each topic, making their learning superficial. Situated Learning Theory considers learning a participatory process requiring sufficient reflection time for learners. Linda Darling-Hammond's research indicates that achieving good teacher training outcomes typically requires 30 to 100 hours of learning time over 6-12 months^[11]. Short-term teacher training, with its large course volume and high density of knowledge and theory, cannot systematically encompass the background, core concepts, real significance, and specific applications of theories, nor does it provide participating teachers with enough time to digest theory, making application in practice even more challenging.

Additionally, the difficulty for participating teachers to translate abstract theory into teaching practice far exceeds teacher educators' expectations^[12]. Compared to theoretical knowledge, teaching work demands more practical knowledge, which teachers develop by reflecting on their actions and experiences during practice. Although abstract theory can guide teachers' practice in the long run, most participating teachers lack the ability or energy to apply abstract theory to their teaching processes. In terms of ability, most participating teachers, having not undergone systematic academic training, may misunderstand abstract theory and are reluctant to assume additional teaching responsibilities due to experimentation. In terms of energy, most participating teachers, burdened with heavy teaching tasks and academic pressure, often have no time to consider the theories mentioned in training.

Lastly, the absence of feedback mechanisms affects the effectiveness of teacher training. According to Situated Learning Theory, appropriate feedback and support are crucial during the learning process. Novices in legitimate peripheral participation may remain on the periphery without the help of seniors or community support^[7]. Similarly, participating teachers in teacher training are often in a position of peripheral participation but are core participants in classroom teaching practice. Participating teachers' understanding of theory mostly remains at the conceptual level, requiring further guidance from teacher educators for practical implementation. However, for short-term centralized teacher training projects, the end of training often means the severance of connections between teacher educators and participating teachers. After training ends, teacher educators generally do not assign tasks or provide follow-up guidance on participating teachers' educational practice. Except for a small number of participating teachers who proactively maintain some contact with teacher educators, almost no one can contact the teacher educators responsible for the corresponding training activities through official channels again. Without subsequent guidance, many participating teachers genuinely wishing to implement educational concepts and improve their teaching levels are drained of psychological energy by problems encountered in teaching practice, gradually losing the "drive" to transform from peripheral participants to core participants. In summary, the "fragmentation of training content," "difficulty in transforming practical theory," and "absence of training feedback mechanisms" severely hinder the process of teachers moving from peripheral participants in training to the center of teaching practice.

4. Optimization Pathways for Post-employment Teacher Training in China from the Perspective of Situated Learning Theory

4.1 Training Content Level: Focus on Real Issues of Teaching Practice and Pay Attention to the Situating of Training Knowledge

Traditional post-employment teacher training projects mainly focus on the transmission of abstract theory. Learning is a process of continuously growing practical ability and completing socialization, and regardless of the teaching method, the fundamental goal is to form the individual's capacity to participate in practice activities and contribute to the "communities of practice" they belong to [13]. In the collective of teacher training, the practice community that teachers belong to is the learning community formed by participating teachers. The fundamental purpose of teacher training is to enhance the teaching practice ability of participating teachers, manifested in both "teaching practice ability" and "problem-solving ability."

Regarding teaching practice ability, it includes insight into problems, reflection, and decision-making judgment. On problem insight, Sato believes that the practice of experienced teachers features "improvisational thinking that adapts to changing moments," "active and thoughtful participation in situations," "integrating multiple perspectives in understanding classroom phenomena," "contextualized thinking in problem representation and resolution" and "continuous problem formulation and reconfiguration during events"^[14]. Regarding reflection and decision-making judgment, the goal of Korthagen's realistic approach to teacher training is to enhance teachers' ability to reflect systematically and act^[12]. Teacher training programs can effectively support teachers' daily teaching practice only if they

gradually emphasize the cultivation of teachers' "problem insight" and "reflection and decision-making judgment."

In terms of problem-solving ability, the focus on specific practical problems in teaching urgently needs to be strengthened. Compared to didactic teaching that ignores teachers' needs, training models that combine with actual situations and are based on problem-solving resonate more with teachers. For instance, explaining abstract concepts and theories through classroom situational examples can better link abstract theory with practical situations, stimulating teachers' learning initiative. Furthermore, focusing on the problems and actual situations teachers encounter in teaching practice can evoke teachers' reflection, organization, reproduction, and expression of their experiences, deepening their understanding of abstract theories and having a substantial impact on their philosophies and behavior patterns.

4.2 Training Method Level: Add Participatory Training Activities and Build Training Practice Communities

In Situated Learning Theory, "communities of practice" are groups of individuals participating in learning and practice activities, where "participation" is the fundamental condition for the formation of communities of practice. Researchers have pointed out that participatory activities designed during teacher training, such as "case analysis," "teaching observation," and "group discussion," can create situations for teachers to reflect on and apply these knowledge^[2]. In participatory teaching activities, participating teachers are not merely listeners but practitioners involved in "reflection, sharing, and action."

In terms of reflection, having action-oriented, rigorous, and analytical reflection processes is crucial for enhancing learning quality^[15]. Teachers can only have a deeper understanding of educational practice and internalize external knowledge as their "practical knowledge" by reflecting on common problems and confusions in practice. In "participatory" teaching activities of teacher training, participating teachers can find more resonating issues in situations for reflection. This reflection helps connect abstract theory with teaching practice and internalize theory as knowledge for storage. In terms of sharing, the process of exchanging and sharing views with other teachers after reflection also deepens the impression of these viewpoints. Teachers need to reorganize their views linguistically if they share their viewpoints in activities, leading to a second integration of the knowledge previously internalized through reflection. The knowledge is reinforced again during the organization and sharing process. Regarding action, both the problem situations given by teacher educators in participatory activities and the problem situations participating teachers encounter in future teaching practice can help participating teachers engage in "third-time reflection." The aim of this reflection is to find problem-solving strategies and guide teachers' actions. Whether participating teachers can translate ideas into actions in this phase is key to determining if they have initially formed internalized "practical knowledge."

4.3 Training Outcome Level: Emphasize Post-training Practice Transformation and Promote Teachers' Peripheral Participation

The learning process for teachers is one of acquiring knowledge from practice and progressing from the periphery to the core. This process requires not only expert on-site guidance but also a substantial feedback mechanism for support. The implementation of continuous guidance and the establishment of feedback mechanisms are crucial for the transformation of training outcomes for participating teachers, providing timely feedback and help during the application of new knowledge (which reflects not only at the professional level but is more importantly emotional support and psychological safety for teachers) and also serves to supervise and improve the quality of teacher training. Specifically, post-training practice transformation can be achieved through three approaches: setting a "systematic teacher training framework," "post-training contact persons," and a "teacher training outcome evaluation system":

First, establish a systematic teacher training framework. On one hand, due to the large capacity and intensity of teacher training, there's a risk of thematic repetition or irrelevance. Teacher educators need to carefully consider the relevance and logic between training themes to prevent "patchwork" fragmented themes. On the other hand, given the limited and varied receptivity of participating teachers, it's practical to split larger training themes into several parts and set "graduated" training programs, placing some basic, simple theories in the initial lectures and more abstract and challenging theories later, based on the receptivity of participating teachers, to allow for digestion and buffer time.

Second, provide post-training liaison and guidance experts. Although participating teachers learn theory during training, the lack of a post-training support system prevents them from contacting teacher

educators when they encounter specific problems in teaching practice, ultimately leading to the failure of theory-to-practice transformation. This significantly affects teachers' progress toward the center of practice. After training ends, it's necessary to offer contact and support from the teacher educators involved in the training. Participating teachers can request face-to-face or online solutions from teacher educators when they encounter practical problems post-training. A separate consulting department can also be established to specifically address the concrete problems participating teachers face in practice over a subsequent period.

Third, construct a teacher training outcome evaluation system. A significant reason for the poor outcomes of many teacher training projects is the lack of follow-up on training effectiveness evaluation. Currently, the quality evaluation of most teacher training projects mainly uses self-evaluation by teachers, which is subjective and lacks validity. Therefore, establishing a scientific teacher training outcome evaluation system is necessary, such as developing an integrated "teacher self-assessment + expert external assessment" mixed evaluation model, assigning reasonable weights to each indicator, or introducing third-party evaluation agencies^[16] to enhance the validity of teacher training outcome evaluation.

5. Conclusion

This article, from the perspective of Situated Learning Theory, proposes three optimization paths for the three main issues in post-employment teacher training models in China. However, this does not mean that these paths can be smoothly implemented in practice for several reasons. First, focusing training on the real issues of teaching practice requires not only considering the universality of abstract theory but also attempting to find examples from educational practice to help teachers understand the theory, which will inevitably increase the workload in the teacher educators' training preparation phase. Second, designing participatory training activities is challenging; beyond ensuring effectiveness, how to "manage the classroom" and "control the pace" during activities are potential difficulties faced by teacher educators. Lastly, the practical transformation of training outcomes is not immediate but a lengthy process. For example, in setting up a systematic training content framework, teacher educators themselves need to have a clear understanding of the logical structure between different training themes, consider the difficulty gradient between the same training themes, and flexibly adjust according to the specific audience of the training. In the process of setting up post-training contact guidance experts, considerations include whether there is a need to specially set up post-training expert contact points and how to balance the feasibility and efficiency of guidance forms. In constructing a teacher training outcome evaluation system, the selection of evaluation indicators and the delineation of standard baselines face the tests of validity.

In summary, while Situated Learning Theory plays a guiding role in analyzing the problems of teacher training programs in China and providing optimization paths, teacher educators, in referring to relevant theories, should not only focus on the integrity of theories to avoid one-sided interpretations but also maintain a cautious and dialectical attitude in the specific implementation of optimization paths. This approach is necessary to avoid the risks associated with "theoretical dogmatism."

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