

Discussion on Teachers' Practical Knowledge Learning—Based on Professional Learning Community

Zhaodan Nie^{*}, Saihua Yang

Institute of Education, Yunnan College of Business Management, Kunming, China

^{*}Corresponding author

Keywords: Professional learning community, Teachers' practical knowledge, Knowledge learning and development

Abstract: In the professional development of teachers, the professional learning community has the important value of promoting teachers' practical knowledge learning through professional guidance, context creation, empowerment and accountability, and collaborative inquiry. Based on the content dimension of teachers' practical knowledge, this paper constructs a teacher's practical knowledge model based on professional learning community. The six repeated steps of collaborative inquiry, achievement learning, promotion of reform, and evaluation and feedback promote the in-depth development of teachers' practical knowledge in the direction from internalization to individualization/socialization.

1. Introduction

Since the 21st century, the professional development of teachers has shown the trend of specialization, diversification and lifelong. In China, driven by the education reform, the state and society have put forward higher requirements for the professional development of teachers, including the Outline of *The National Medium- and Long-Term Educational Reform and Development Plan (2010-2020)*, *Opinions on Comprehensively Deepening the Reform of Teacher Team Construction in the New Era* and *Teacher Education Revitalization Action Plan (2018-2022)* emphasize the need to continuously improve the quality of teacher pre-service training and post-service training, innovate teacher education models, and cultivate future outstanding teachers.

In the process of teachers' professional development, teachers' practical knowledge is a field that is widely discussed. The research on teachers' practical knowledge can be traced back to the development of human knowledge concept and learning theory. Human research on knowledge and learning behavior has a long history. Since the beginning of the 20th century, human's view of knowledge and learning theory have experienced the evolution of behaviorism, cognitivism, constructivism and sociocultural theory. As an important indicator for evaluating teachers' learning and development, teachers' knowledge has two main research orientations: focusing on the basic structure of teachers' theoretical knowledge, which focuses on “what teachers should know”, and teachers' practical knowledge, which discusses “what teachers actually know”. Elbaz [1] first proposed that teachers' practical knowledge is a mixture of teachers' personal values and beliefs, professional theoretical knowledge, and other knowledge resources guided by teachers' values and beliefs. Clandinin [2], Duffee [3], Schon [4] et al. further enriched related research.

Teachers' professional learning community is a learning organization that connects learners and assisted scholars with voluntary as the premise, sharing and collaboration as the core, and common vision as the link. Based on the social, dynamic and complex nature of teachers' practical knowledge generation, professional learning community can provide them with sufficient and effective learning resources, stimulate and maintain their enthusiasm for learning, and improve the professional level of practical knowledge.

2. The Value of Professional Learning Community to Teachers' Practical Knowledge Learning

Although the generation and development of teachers' practical knowledge has certain individual characteristics, the professional learning community has the systematic advantages and value of coordinating various elements:

2.1 Stimulate Teachers' Motivation to Learn Practical Knowledge through Professional Leadership

The professional learning community is different from the general learning activities of individual teachers. It is a meaningful in-depth learning that encourages teachers to actively participate and actively construct under the guidance of professional researchers. An effective teacher learning community can enhance teachers' enthusiasm and sense of efficacy in teaching, strengthen teaching responsibility, and improve job satisfaction. It can prompt teachers to think about real teaching, have meaningful dialogues and exchanges with other people in the teaching environment, and improve teachers' knowledge effectiveness of learning. The leaders of the professional learning community are generally those who have the theoretical literacy of systematic education. Through sharing, dialogue, guidance, construction, reflection and other professional cooperation and joint efforts aimed at efficient teachers' practical knowledge learning and excellent development, they can improve or re-emphasize. The purpose of constructing teachers' practical knowledge structure.

2.2 Incorporate Teachers into Practical Knowledge Learning by Creating Situations

The learning theory about teachers' practical knowledge has changed. Early learning theories believed that "knowledge" can exist independently and objectively, and can be transmitted and carried by the medium, and it is an entity that exists independently of the learner. With the development of constructivism, social and cultural theory, etc., the situational and generative nature of knowledge has been paid attention to, and knowledge must be acquired and generated only by learners participating in the construction, discovery and selection as the main body. The value of a professional learning community is that it can be created through thematic situations, so that teachers can communicate, share, and participate in solving learning problems in practical situations in the learning organization. On the basis of existing experience, combine a series of ideas or ideas developed through community activities. Actions are used to solve practical teaching problems.

2.3 Regulate Teachers' Practical Knowledge Learning through Empowerment and Accountability

The professional community pays attention to the learning of all members. It gives members rich participation rights and strengthens the mutual development responsibilities of community members. It focuses on cultivating teachers' creative thinking and critical thinking problem-solving skills, both in teaching situations and in teaching experience. In the reflection, community members learn to find, evaluate and synthesize relevant information of teachers' practical knowledge to construct arguments, to make careful sharing preparations for others in the community, and to generate and develop practical knowledge for practical teaching situations. It is both a right and a responsibility to design solutions to a series of complex problems. Teachers who are highly trusted and professionally empowered in the community will be more willing to participate in the community and bring disruptive experiences, which will truly improve teaching practice.

2.4 Deepening teachers' Practical Knowledge Learning through Collaborative Inquiry

The learning behavior of the community advocates professional, focused, specific, and in-depth learning. The learning process requires the cooperation and support of members. Through collaborative exploration of practical knowledge achievements, we can explore professional issues in educational work and deepen our understanding of practical knowledge, which is conducive to improving teaching, to help all students meet achievement expectations. In addition, through the

community, teachers are encouraged to conduct in-depth research on teaching and learning, and they can display their practical knowledge and academic achievements faster and more effectively. Professional learning community can bring the following positive effects to teachers: enhance self-confidence, strengthen belief, strengthen responsibility, share effectively, practice commitment, and be creative.

3. The Generating Environment and Content Dimensions of Teachers' Practical Knowledge

3.1 The Generating Environment of Teachers' Practical Knowledge

The generation of teachers' practical knowledge is the result of teachers' dynamic interaction with the information-rich environment as actors with certain intentions. The environmental system where teachers are located mainly includes micro (mainly curriculum, discipline, teaching, teaching, teacher-student relationship), mesoscopic (mainly school field) to macro (mainly various social, cultural, political, historical environmental factors) three levels. The development of teachers' practical knowledge is mainly based on the school field, but it is affected by the interaction between the micro-environment and the macro-environment.

3.2 The Content Dimension of Teachers' Practical Knowledge

Elbaz [1] pointed out that teachers' practical knowledge consists of five interconnected elements: knowledge of self; knowledge of the milieu of teaching; knowledge of subject matter; knowledge of curriculum; knowledge of instruction. In China, researchers have put forward different views on this basis. For example, Chen [5] proposed that teachers' practical knowledge includes teachers' educational beliefs, self-knowledge, interpersonal knowledge, situational knowledge, strategic knowledge and critical reflection knowledge. six categories. This paper cites Pan [6]based on the dynamic generation perspective analysis of teachers' practical knowledge content; the specific model is as follows: Stage 1: Internalization-Public theoretical knowledge(Subject content knowledge + education subject knowledge + general cultural knowledge);Stage 2: Conversion-To believe in knowledge (Theoretical knowledge+experience+personal belief; Stage 3: Externalization-Subject teaching knowledge(Belief Knowledge +Curriculum Knowledge+Situational Knowledge);Stage 4: Systematization-Practical knowledge(Subject pedagogical knowledge manifested in real classroom practice);Stage 5: Personalization/socialization- Practical knowledge (personal theoretical knowledge+public knowledge; Content based on practical experience, group reflection, etc.)

4. Basic Model of Teachers' Practical Knowledge Learning Based on Professional Learning Community

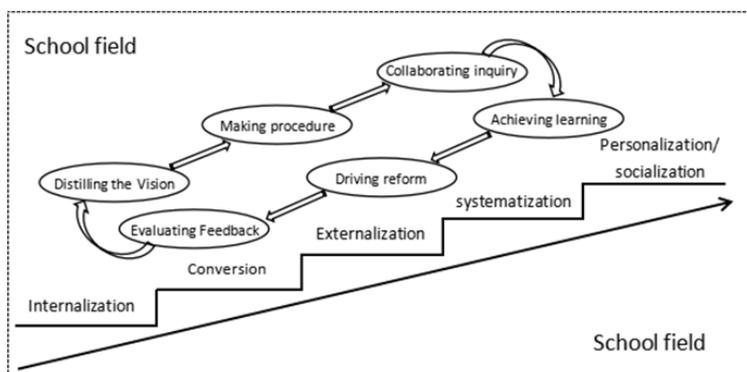


Fig.1 Teachers' Practical Knowledge Learning Model Based on Professional Learning Community in the School Field

Participants in the model (Figure 1) include learners and facilitators. Learners refer to teachers who aim at practical knowledge learning; assistant scholars include key teachers, school (college, department) leaders, teaching and research staff, education experts, etc., who play the role of

learning guidance, demonstration and consultation in the process of community learning evaluation and comprehensive support. This model mainly exists in the school field. It is a cyclical model that rises in steps. It promotes the continuous and in-depth development of teachers' practical knowledge learning through the six steps of the repeated cycle of the community. Each new cycle of the Community is not a simple repetition, but a deepening and improvement of the previous cycle by adding new methods, new practices, new solutions, new tools and new support.

(1) Refine the vision

The vision structure of teachers' practical knowledge learning community includes the following parts: First, the significance of teachers' practical knowledge. The meaning analysis can come from the eternal pursuit of knowledge by human beings, or from the new requirements of the state and society for teachers' practical knowledge learning. Second, when extracting a common vision, we should consider the dual identities of teachers as educators and learners at the same time. Community is not only to meet the needs of teachers' professional development, but fundamentally, it is also to promote students' learning. Third, we should try our best to consider the demands of various stakeholders in the community. The existence of a community indicates that there is a "deep similarity" between members, and a shared vision should enable teachers to understand its value, while stimulating and maintaining members' motivation to participate.

(2) Make a plan

Planning is based on a common vision to formulate a specific strategic plan that can promote learners to keep learning and improve practical knowledge, fully consider various supports and resources, and establish a system for daily management, operation and supervision. Members go through a cycle of common thinking, forming beliefs, formulating plans, and cooperative actions, and finally verifying beliefs and results. This transformation does not happen overnight, so it needs to be gradually nurtured by formulating clear rules for the operation of the community. Reasonable development planning and the community culture formed by member responsibilities, social and human resource bases contained within also play an important role in the development of the community. In this process, the balance of personal accountability and positive interdependence is very important.

(3) Collaborative inquiry

Community to achieve true "cooperation", it is necessary to clarify the ways, rules and member relationships of members, to determine and build internal communication opportunities and platforms, to determine the form and tools of gathering and communication between members, and to clarify the members' self-management, each member is responsible for the learning achievement of students and the teaching progress and development of all members of the school community. Furthermore, the goals of individuals and the common goals set by the community are not necessarily the same. Therefore, members and groups should respect each other, trust and depend on each other, establish collective identity, and make practical knowledge understandable through collaborative inquiry to solve more complex problems. The problem.

(4) Achieve learning

Regardless of whether the community is improvement, development, or research, special attention should be paid to the motivation of teachers to participate and the achievement of learning outcomes. The community should make efforts in both the depth and breadth of teachers' learning, and must design activities in a targeted manner based on its own goals and tasks, so as to effectively support the community's tasks and achieve teachers' development. In addition, improve the systematicness of learning content and select appropriate learning types to improve teachers' learning effectiveness, "information sharing learning" based on teaching practice and reflection, and the value of practical knowledge learning from the conceptual level through lectures and lesson analysis. Each of the "knowledge-building learning" has its own unique value.

(5) Push for reform

In China, the promotion of teachers' professional community is mainly based on the following motivations: First, the continuous curriculum reform puts forward new requirements for teachers' teaching. Teachers are the key force in curriculum implementation, and their professional

development directly affects the effectiveness of the new curriculum reform. In the practice of professional development with teacher training as the main path, it is difficult for teachers to convert the knowledge learned into teaching practice, and the psychological construction process from individual to individual to social practice expected by education and training does not conform to the development of human cognition and practical ability. law. The professional learning community of teachers' practical knowledge, no matter its content or form, emphasizes learning in practice and problem-solving. New content, new methods, new achievements, new ideas and other reforming forces.

(6) Evaluation feedback

The development of the community, including the research content and the process of activities, should be continuous. Problems that teachers constantly encounter in their teaching practice can provide a continuous field of study for the community. It is a long-term process that teachers realize the transformation of fundamental thinking and the improvement of teaching skills through professional learning community, which requires the participation of all members of the professional learning community. Community practice is exploratory, and may face twists and turns or even failures due to resource constraints. Therefore, evaluation of community members should not be completely result-oriented, but should focus on process evaluation and guide learners from the inner world to perfect cultivation. As long as members can actively invest in the community and truly realize their own development, they should be given positive evaluation and encouragement.

In practice, teachers' practical knowledge learning based on professional learning community also needs to be combined with the requirements of teachers' core literacy, teacher professional development, and teacher training and training, so that the development of professional learning community has both top-level design overall considerations and bottom-level considerations. Spontaneous practical exploration.

Acknowledgment

The authors gratefully acknowledge the financial support from *Research on the complex dynamic system of practical knowledge learning in the process of pre-service primary school teacher training*2022JK16 funds.

References

- [1] Elbaz F. Teaching Thinking a Study of Practical Knowledge[M]. London Croom Helm. 1983: 5
- [2] Clandinin D J. Personal practical knowledge: A study of teachers' classroom images[J]. Curriculum inquiry, 1985, 15(4): 361-385.
- [3] Duffee L, Aikenhead G. Curriculum change, student evaluation, and teacher practical knowledge[J]. Science education, 1992,76(5):493-506.
- [4] Schon D A. The Reflective Practitioners: How Professionals Think in Action[M]. New York: Basic Books, 1984: 49.
- [5] Chen Xiangming. Practical knowledge: The knowledge base of teacher s' professional development [J]. Peking University Education Review, 2003, (01): 104-112.
- [6] Pan Yuelin, Zhang Kuiming, On Teachers' Practical Knowledge and Its Generating Mechanism, Teacher Education Forum, 2021.6