

Research on the Interactive Demand of Preservice Teachers' Online Practice Community Based on Network Platform

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Abstract: With the development of information technology, the online practice community of preservice teacher based on the network platform has become a new type of education that conforms to the development of the information technology era. It is favored by more and more teachers. At the same time, the community of practice has gradually become the carrier of the implementation of online courses. And effective interaction is the key to the construction, existence and growth of the practice community, and is the fundamental to improve the quality of network distance teaching. Interaction is an effective method for teachers to accumulate practical knowledge of education and teaching. It is also an important way for preservice teachers to explicitly form tacit knowledge to form organizational knowledge and promote the professional growth of perservice teachers. Therefore, this paper takes the teacher-based students based on the network platform as the object, studies the interaction needs and content characteristics of the perservice teachers based on the network platform, and provides suggestions and strategies for the professional development model of the perservice teachers in the network environment, thus promoting the high-level interactive activities of the online practice community. .

1. Introduction

With the advent of the information society, modern information technology with computer and network technology as the core is developing at an unstoppable speed and rapidly covering the whole world. Its fields are distributed in all walks of life and are profoundly changing our production methods and life[1]. Ways, ways of working, and ways of learning. The advent of the information age has led to deep innovation in the field of education, which has brought about a new change in traditional teaching concepts, teaching systems, teaching models and teaching content. The most prominent feature of this change is that the central role of the teaching process has changed. Information technology is The role of modern education is not negligible and irreplaceable. Network technology is the core element of the information field, which has spawned the birth of various learning methods[4]. As a representative of online learning, online courses have changed the traditional way of learning and also made the network Learning has evolved from a complementary learning format to a new form of mainstream learning[3].

As an important feature of social network software, interaction is an important guarantee for online learning and an important way to realize online communication, dialogue and sharing. The structure and depth of interaction directly affect the quality of learners' online knowledge construction, affecting the expression of tacit knowledge of teachers and the accumulation of practical knowledge[2]. Studies have shown that the interaction structure and cognitive dimension with more compact structure, higher reciprocity and fewer edge members than the social dimension are beneficial to the high level of knowledge construction of community members. As a special learner, many students are mostly theoretical arguments for the factors affecting their online interaction and the strategies for promoting their online knowledge construction, but lack empirical research and data support[6].

In order to explore the factors affecting the online interaction needs of the teacher-age community, and put forward practical strategies to promote their interaction, this paper makes an in-depth analysis based on the online platform's online interaction community requirements. On the

one hand, it provides an empirical basis for the research on the online interaction of the teacher-student community[5]. On the other hand, it is convenient for the teachers' training schools in different regions to deeply understand the current situation of the online learning of preservice teachers in the region and to promote the quality of online learning to provide evaluation basis and decision-making reference. The interactive needs of the teacher-student online practice community based on the network platform make up for the lack of human factors in the virtual network world, and contribute to the improvement of the education technology literacy of preservice teachers.

2. Construction of preservice teachers' online practice community based on network platform

2.1. Constructing the ecological model of preservice teachers' practice community based on network platform

The practice community of preservice teachers based on network is not original and perfect. Only when society, system, culture and environment develop continuously and reach a certain level, can it be formed by using these positive factors, and then through internal factors and external support to promote its sustainable and stable development. Otherwise, even if it has been formed, it can only be formed. Stagnation, and unable to consciously further self-improvement and sustained development[7]. Combining these factors with the actual situation of our school, the ecological model of the network-based preservice teachers' learning community is shown in Figure 1.

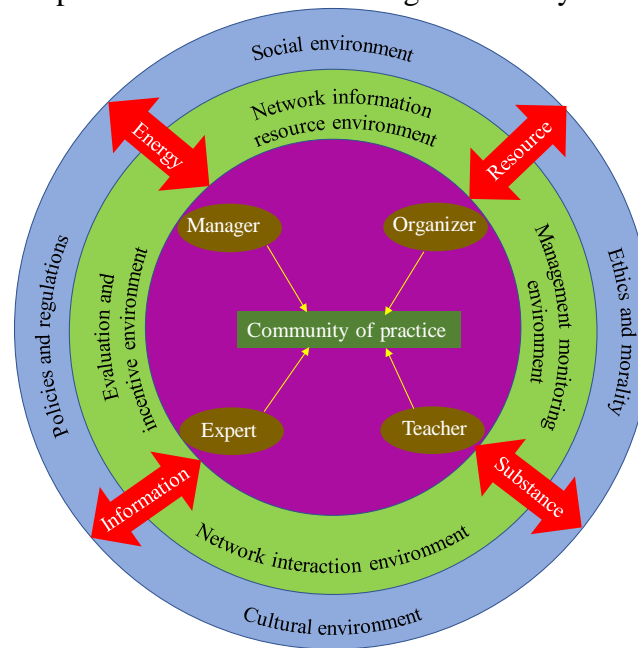


Fig.1. Ecological model of online practice community for preservice teachers based on network platform

From the perspective of the larger society, the ecosystem of the practice community of preservice teachers is the impetus and restriction attached to the social ecosystem. Preservice teachers' community of practice itself needs to be based on the voluntary feelings of its members. A good and healthy cultural atmosphere and a sound and relaxed social system are conducive to the discussion and free talk of its members in a democratic and equal atmosphere of cooperation[9].

From the perspective of the network, the hardware environment of the network and the network support platform that supports the learning of preservice teachers include interactive collaborative learning environment, information exchange environment, resource sharing environment, monitoring management environment and incentive evaluation environment. These provide a rich educational resource, a variety of online learning tools, friendly communication tools, powerful collaborative learning tools, and a variety of personal homepage spaces and blog space for the teacher community.

2.2. Construction of individualized practical learning community model for teachers' education practice

Ultralla Laboratory in the United Kingdom conducts mobile learning research. Through the experiment, some mobile devices are selected for students to learn and use. The results show that “learners are passionate about mobile learning, and 62% of them express their interest in future learning and desire for further learning after using mobile learning”. Mobile learning takes learners as the main body, mobile Internet as the medium, mobile terminal as the carrier and mobile environment as the background[8]. It has the informality of learning, the flexibility of learning time and place, the initiative of learning, the sharing and interaction of learning resources. It can be seen that mobile learning is suitable for the needs of preservice teachers' educational practice and the construction of virtual learning community of educational practice.

The digital learning environment is an information learning environment. This learning environment has the characteristics of information display multimedia, information transmission network, information processing intelligence and teaching environment virtualization. It includes several basic components such as facilities, platform communication, tool construction and problem-solving learning tools. The personalized virtual learning community of normal school students' educational internship is an information-based learning environment supported by information technology. Therefore, the functional model of the personalized virtual learning community constructed by the teacher-training students is shown in Figure 2.

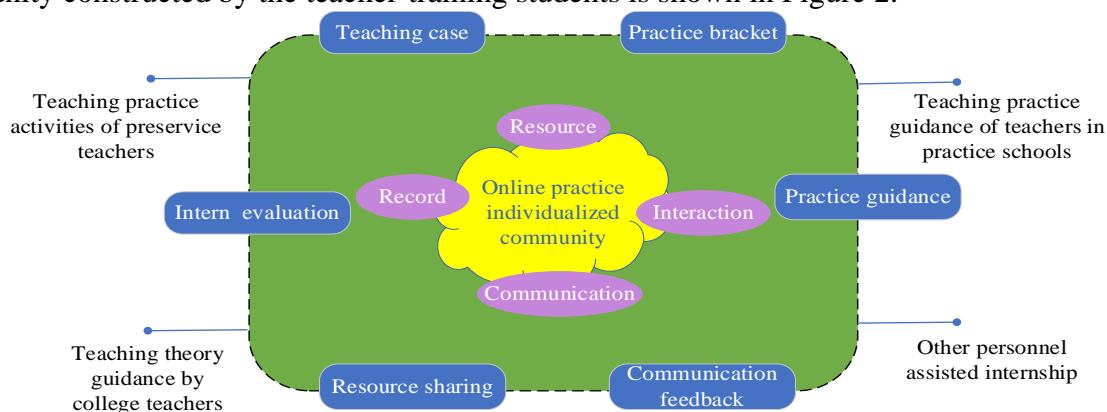
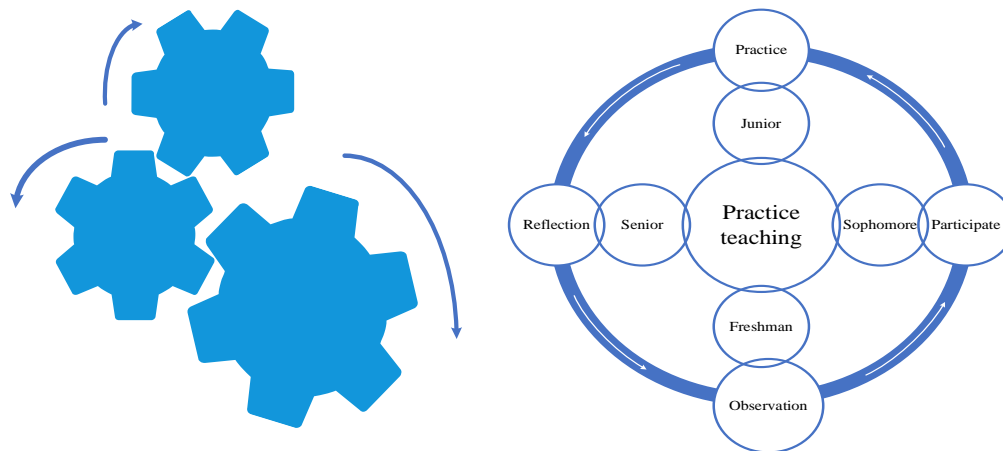


Fig.2. Functional model of individualized learning community for preservice teachers' online practice

3. Interactive mechanism of preservice teachers' online practice community based on network platform

The operating mechanism of the skill training mode of the online practice community based on the network platform is shown in Figure 3. Through the practice activities of the community, the efficiency is improved and the overall effect of the teaching skills training of preservice teachers is improved. The teacher's teaching skill learning mode is changed from the “individual” mode to the “community” mode, emphasizing the self-discipline, generative and situational nature of the professional development of preservice teachers[3]. The main members of the community of practice include all preservice teachers in the first year of the first year, sophomores, juniors, and seniors. Major are the main practitioners. The sub-community composed of freshmen and sophomores participates in the third-level teaching skills training through legal margins, and lays a certain foundation for their formal participation in training, so as to carry out daily professional learning more specifically. Because seniors have participated in the training, they can serve as the core members of the community, guide the teaching skills of junior or get the opportunity of self-reflection again, and further improve their teaching skills. As a junior in practice, the internal division is divided into multiple sub-communities of small group size[7]. They are constructed through common topics and in the same environment through participation, activities, training, reflection, conversation, collaboration, and problem solving. A learning atmosphere with a unique

skill training. In this way, a relatively coherent training mode is formed, and the perservice teachers in the observation of a practice-reflection model continue to cycle diagrams, which in turn is conducive to the improvement of teaching skills.



(a) Operating mechanism of teaching skills training model (b) Community-based integration cycle

Fig.3. operating mechanism of the skill training mode of online practice community based on network platform

First, according to the group homogeneity, group heterogeneity science grouping, and then select the subject of skill training in the teaching plan, based on the theme of this topic, provide and accept criticism and share by others through the group activities participating in the skill training. And integrate a variety of knowledge, participate in skills training, and solve problems. Groups and groups, students and students can communicate with each other. There will be more cross-knowledge, creative design and skill sharing throughout the process. It is easier for the peers to interact and provide feedback information[4]. It is also easier for the group to hand over, the group, the flow chart and the flow of the flow to identify the problems of the peers and propose improved opinions, which is conducive to the steady progress of the students and improve self-confidence and progress in progress. Exchange interest in the study group. Class-level communication is usually the common problem that the perservice teachers find in the skill training, the micro-practice practice, or the unique characteristics of the individual price in the biology teaching theory class. This class report improves teaching efficiency and improves learning efficiency.

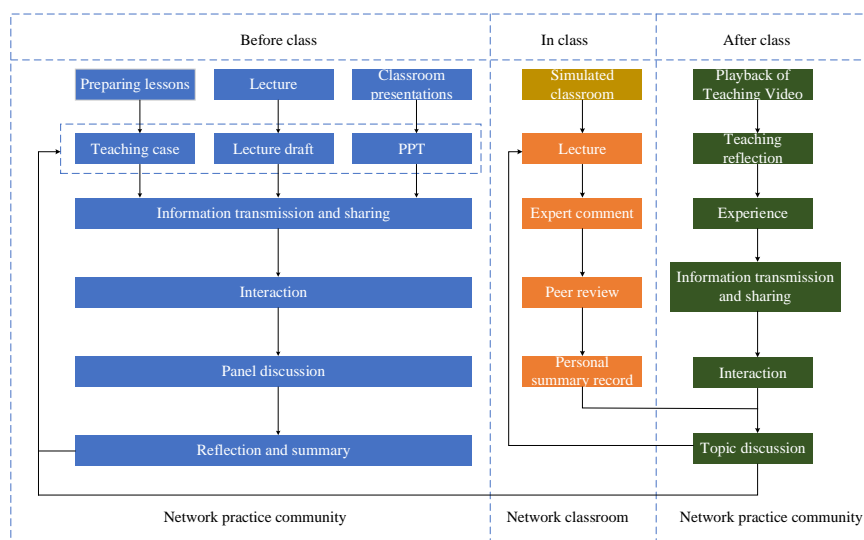


Fig.4. Interactive development model of preservice teachers' online practice community based on network platform

4. Effect of learning factors on effective interaction of practice community

Guided by interaction theory, through the long-term observation of online course learners and interviews with learners, the learner factors that influence the effective interaction of the practice community are divided into the following three categories:

4.1. Self-efficacy

Hannafin and Hill demonstrates that learners' self-efficacy affects effective interactions from the learner's psychological factors. At the same time, through interviews, it is also found that some topics related to self-efficacy are often mentioned, indicating that online learning self-efficacy has a certain impact on the practice community interaction. Bandura believes that self-efficacy is the individual's belief in whether or not he can complete certain learning tasks. It is the degree of confidence that an individual has certain abilities and can successfully complete a certain job or task. According to the literature analysis, the self-efficacy of e-learning means that in distance education, the learners are in the state of separation of teachers and students, mainly engaged in independent learning, including the use of network equipment, the rational use of various elements of the curriculum platform and the forum. The use of interactive tools such as message boards to control their own learning behavior, to achieve the subjective judgment of the network learning task or the knowledge ability of the homework or the confidence level of the applied skills. Some scholars have divided the self-efficacy of e-learning into two types: e-learning general efficacy and e-learning special efficacy. The author will also start from this classification, from the perspective of distance learning interaction classification, the network learning special efficacy can be classified into three kinds of specific efficacy sense: network learning operation interaction efficacy, network learning information interaction efficacy and network learning concept interaction efficacy. .

4.2. Learning motivation

In the online course study, learning motivation is also one of the factors that promotes the concentration of the learners, enhances the effort and will, and finally realizes the construction of the meaning of knowledge. Therefore, the strength of learning motivation in the online course learning will also affect the degree of interaction of the practice community. . Cognitive drive is a strong desire of learners to express their interest and improve their professional level and skills. They hope to continuously acquire knowledge, update knowledge and enrich their internal motivation. The self-improvement drive is based on the learner's personal career or academic progress, and the need to gain a corresponding position or prestige to improve work or study ability is an external learning motivation. Affiliated driving force is the participation of learners in order to comply with or meet the requirements or expectations of the outside world. These expectations or requirements may come from parents, unit leaders, teachers, etc., which is an external learning motivation. Observed that online course learners have high internal motivation or high external motivation. Their enthusiasm for learning online courses is high, and the interaction is more effective. On the contrary, learners' enthusiasm for learning is not obvious or reduced, and interaction tends to be inefficient or ineffective status.

4.3. Information literacy

Contemporary information literacy refers to the ability of online learners to use the Internet, computers, etc. to search for information, obtain information, organize information, and use information. Information literacy includes not only the basic skills of using contemporary information technology, but also the acquisition of identification information and processing information. The ability to deliver information, more importantly, is independent attitudes and methods, critical spirit, and a strong sense of social responsibility and participation, and these capabilities are used to solve the problem of information problems and the comprehensive ability to carry out creative thinking. In the course of online course study, computer and internet are the carriers of the community of learning and communication in the online course. Having a certain information literacy is the basis for learners to obtain information and realize the meaning

construction of learners. The higher the information literacy, the more effective learners can obtain information from online courses, and the more effective interaction between students and teachers.

5. Conclusion

This paper analyses the interactive needs of the practical community based on the network platform for Normal University undergraduates. The idea and strategy of skill training combined with the practical community and information technology can not only lay a broad academic foundation for the follow-up education, but also provide basic qualifications for the “novice” Perservice teachers, and provide a broader scope for the lifelong development of perservice teachers. Possibility and “sustainability”. From the perspective of teaching practice community, we can improve the effectiveness of teaching and then improve the teaching skills of teachers' colleges. This paper puts forward the model and practice of education and education based on teaching practice community with demonstration function through experiments. The interactive purpose of online practice community of perservice teachers based on network platform is to create a good social environment for cooperation and sharing, and ultimately to promote the common development and progress of members and integrate them into every link of professional development of perservice teachers reasonably, which can promote the development of perservice teachers. Perservice teachers interact deeply in online learning community, and constantly promote the sustainable development and innovation of education.

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