Research on Training Mode of Practical Ability of Preschool Education based on Functional Theory

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Abstract: In view of the problems existing in the training of practical ability of preschool education in higher vocational education, the creation of practical environment is lack of creativity and innovation; The practice proves that this method improves professional identity, promotes independent learning, and improves the effect of professional practice ability.

1. Introduction

Preschool education has strong professional and practical characteristics, and the professional practical ability of preschool education is the basic ability of high-quality preschool teachers in the future. The cultivation of the professional practice ability of preschool education undergraduates directly affects the vocational competence and professional development of graduates, relates to the quality of national preschool education, and further affects the great rejuvenation process of the Chinese nation. It has important practical and theoretical significance to study the training of practical ability of preschool education specialty.

Foreign views on pre-service teacher training: the cultivation of professional practice ability determines the quality of student training, and off-campus professional practice courses are the main way to cultivate students' professional practice ability[1-3]. Some domestic researchers discuss the training scheme and training mode of preschool education specialty from a macroscopic perspective. Lian Jiaxuan (2020) believes that there are few practical training courses for preschool education majors in China, and the construction of professional practice platforms is insufficient[4], so students are not given sufficient opportunities to practice . Huang Jing et al. (2020) emphasized the importance of professional practical ability of preschool education, which is the foundation of preschool teachers[5]. Li Jing and Li Jin (2020) set training goals from the perspective of professional certification. Full consideration should be given to the position's ability requirements. Both at home and abroad, the training results of preschool education are not good, and the problem of disconnection between theory and practice has not been solved well [6].

This paper makes an in-depth analysis of the problems existing in the training process, and puts forward a number of strategies and suggestions to improve the professional practice ability of preschool education undergraduates, aiming to provide valuable reference.

2. Overview of relevant theories

2.1. Social Learning Theory

In 1977, Albert Bandura proposed a learning theory -- Social Learning Theory [7]. It focuses on the relationship between the learning process and social behavior, and holds that new personal behaviors can be learned in the process of observing and imitating others. The central idea of Bandura's theory is that learning happens through observation in a social context. In addition, factors such as environment, thought, personality and behavior interact to influence learning in a

self-directed, goal-oriented manner.

According to Bandura's research, self-efficacy comes from four main sources: success or failure experiences, surrogate experiences, verbal persuasion, and emotional states. Experience of success or failure is the most influential source of self-efficacy, because people associate their actual experience with possible future outcomes. Vicarious experience refers to observing how others perform real or simulated tasks, especially tasks that the observer considers relatively difficult. Verbal persuasion refers to persuading and encouraging people to believe that they have the ability to complete a task, which helps them to put more effort and persevere when there are problems or difficulties. Emotional state. Emotional state affects self-efficacy. Depending on the situation, stressful situations often trigger emotions that can cause people to doubt their own abilities. When individuals are not stressed or stressed, they are more likely to successfully complete an activity or task.

2.2. Situational learning theory

Situated learning theory is a learning theory proposed by Jean Lave and Etienne Wenger in the 1990s. It is a theory to explain the acquisition of individual professional skills, including the study of apprenticeship and how learners become a member of the existing community of practice through legitimate marginal participation [8].

The essence of learning is the process in which individuals participate in real practice and interact with others and the environment, so as to form the ability to participate in (professional) practical activities. Only when learning is in a specific situation can individuals make appropriate behaviors in similar situations in the future. Situated learning theory emphasizes interaction. Interaction refers to the interaction between learners and learners and between learners and their social environment.

Community of practice and legitimate marginal participation. The so-called community of practice, specifically speaking, is the work collective composed of each participant in the work environment. Start at the edges and do some peripheral support. With the growth of the skills in the social environment, they continue to practice deeply and gradually become the core of the community of practice.

Traditional cognitive theory describes the characteristics of knowledge itself and knowledge development. Episodic learning theory holds that all knowledge is based on the individual's contact with specific situations, and is influenced by social values, other people's behavior and the implicit views in practice. Situated learning theory emphasizes interaction. Interaction refers to the interaction between learners and learners and between learners and their social environment.

3. Analysis of existing problems and causes

3.1. Investigation on the influencing factors of professional practice ability

Respondents can choose one or more according to their actual situation, and consider the factors that affect the formation and development of professional practice ability: 55 people (26.8% of the total sample) think the school's talent training plan; 131 people (63.9% of the total sample) think professional theoretical knowledge; 146 (71.2% of the total sample) thought school skills courses; 204 people (99.5% of the total sample) thought kindergarten probation/internship; 27 people (13.2% of the total sample) thought montessori teaching support room; 175 (85.4%) thought microteaching; 155 people (75.6% of the total survey sample) considered professional practice competition as shown in Figure 1. This indicates that the respondents generally believe that kindergarten novitiate/internship is conducive to the formation and development of professional practical ability. Secondly, the school's theoretical knowledge, skills skills courses and professional practice activities. As the basis of talent cultivation, students choose fewer training programs, which may be related to the quality of professional training programs in colleges and universities and students' understanding of training programs. There are also fewer experimental classrooms such as Montessori teaching rooms, which may be related to the setting, use and opening of such teaching
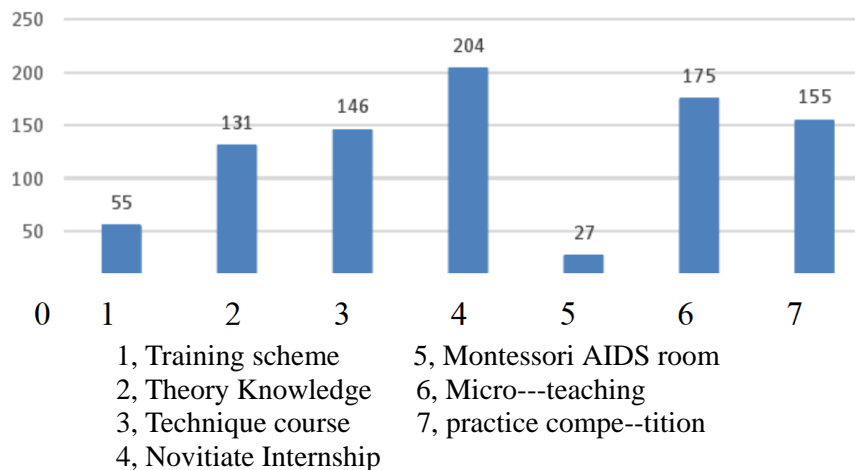
rooms in universities.

1, Training scheme   5, Montessori AIDS room
2, Theory Knowledge   6, Micro---teaching
3, Technique course   7, practice compe--tition
4, Novitiate Internship

Figure 1 Distribution of influencing factors of professional practice ability.

3.2. Multidimensional linear space description

Description of multi-dimensional linear Space Traditional mechanical design space is three-dimensional Euclid space, measured by distance or Angle. Generally speaking, there is no measurement for a multidimensional space, only the introduction of norms, making it a normed space. To measure by norm, the concepts of open set, closed set, convergence and continuity can be introduced accordingly. In order to solve the problem of functional analysis of multidimensional variables, a normed space is defined.

Definition Let X be a vector space over the number field K (real number field R or complex number field C). If, for each, a real number $\parallel X \parallel$ is specified, it is called the norm of X, which satisfies the following norm axioms:

homogeneity: $\|\alpha x\| = |\alpha|\|x\|$;

Triangle inequality: $\|x + y\| \le \|x\| + \|y\|$;

Positive characterization: $\|x\| \ge 0$ $\|x\| = 0$

The above x, $y \in X$, $\alpha \in K$ is called the normed vector space on K, referred to as normed space; If K = R (or C), a normed space on K is called a real normed space.

Norms can be defined in a variety of ways. The norm can be defined according to the physical meaning, for example: x(t) is the linear space x formed by all continuous differentiable functions defined on [a, b], and the norm is assigned to each one in $x \in X$

$$\|x\| = \max_{a \le t \le b}|x(t)| \text{ or } \|x\| = \max_{a \le t \le b}|x(t)| + \max_{a \le t \le b}|\dot{x}(t)| \text{ Or } \|x\| = \int_a^b |x(t)|dt.$$

3.3. Problems existing in the training of practical ability of preschool education specialty

Environment creation lacks flexibility and creativity. Kindergarten environment can affect children's growth for a long time and imperceptibly. It is an important educational resource and a direct medium to achieve the goals of early childhood education. Kindergarten teachers can use environmental resources to trigger children's appropriate behaviors, complete environment creation, play teaching AIDS and learning materials, and game organization design.

Children's game design is lacking in innovation and practicability. Children can cultivate their character, acquire knowledge, exercise and develop intelligence through games, and promote the development of their sports ability, good emotion, sociality and personality. At present, the design and implementation of games do not combine with professional theoretical knowledge, and conform to the characteristics of children's interest and stage development, so there are shortcomings. The goal is not clear, the game process observation and result analysis are not paid attention to, the educational effect of game activities is reduced.

Lack of ability to communicate with others. Most of what a teacher does needs to be with all kinds of people. Kindergarten teachers need to communicate and cooperate with students, colleagues, parents and the community in their daily work. According to the concept of "Community of practice", managers, full-time teachers and nursery staff in the kindergarten environment together constitute a community of practice with the same goal. Community collaboration and communication can achieve educational goals. Therefore, students should have good interpersonal skills.

Inadequate capacity to respond to emergencies. The difference between preschool education and other education lies in the combination of child rearing and education. Cultivate children's good eating, sleeping, washing, excretion and other living habits and self-care ability.

Lack of reflection and development. Reflection ability is a learning tool to improve professional practice ability, and is the core element of students' professional development and career growth. Such as game guidance issues, family parenting issues, etc., to promote the continuous renewal, progress and enrichment of the internal professional structure of the self. Preschool teachers have the conditions to observe, explore and study the practical problems in preschool education.

3.4. Analysis of reasons for lack of professional practice ability

According to the theory of competency-based education, it is necessary to deeply study the needs of post competence, establish a teaching environment and organize a teaching system of courses and teaching around the knowledge, skills and abilities required by the job position. To cultivate students' vocational ability as the fundamental purpose of education. Establish the working environment and cultivate the practical ability required by the post. The main reasons for Q's lack of professional ability are as follows:

The cultivation measures are not clear. Training objectives of preschool education major: professionals who love preschool education, have professional knowledge and skills in preschool education, and are able to engage in nursing care, education and research in preschool education institutions. It can be seen that the target does not stipulate the implementation method, does not aim at the realistic problem, lacks the implementation way. The positioning of professional practice ability is not accurate, resulting in poor training effect.

The professional theory foundation is not good. Only with a clear understanding of the theory can we have a deep understanding. Improve the depth and practicability of theory, strengthen the training of practical ability, adapt to the requirements of post ability. Off-campus professional practice is the core link to improve students' professional practice ability. The qualification conditions, educational philosophy, hardware foundation and teaching environment of the internship kindergarten will directly affect the internship effect..

Students have low professional identity. According to social learning theory and situational learning theory, behavioral factors are the result of interaction between individual factors and environmental factors. Therefore, students' personal emotional attitude plays a very important role in learning effect.

4. Strategies for improving professional practice ability

4.1. Reasonably locate the training target and optimize the training program

The talent training program of preschool education is the programmatic document of talent training in colleges and universities, and the concentrated expression of the whole talent training mode. It not only provides the implementation standard of talent training for colleges and universities, but also provides the direction of professional development for students majoring in preschool education. The formulation of training programs for junior college students in preschool education should comply with the following principles: oriented by application-oriented personnel training, paying attention to the integration of theory and practice; To "specialized and excellent" talent training as the fundamental, out of the "wide and extensive" misunderstanding; Adhere to the principle of "professionalism, democracy and development", eliminate "conventional" thinking. The

construction of preschool education specialty in colleges and universities and the researchers should have a forward-looking and international vision, and the talent training program should be timely updated to maintain the advancement and adaptability of the programmatic document of preschool education specialty construction.

4.2. Consolidate professional theoretical basis, improve professional skills and techniques

Professional theoretical knowledge can lay a foundation for students' professional practice and career development after graduation. The present of theoretical knowledge of pre-school education in colleges and universities mainly depends on the systematic knowledge of theoretical courses and teaching materials and the theoretical knowledge level of full-time teachers. Colleges and universities can improve the learning and reserve of professional theoretical knowledge of preschool education students from the following aspects: improve the implementation of professional theory and skills courses, standardize the selection and use of theoretical course materials, pay attention to the professional construction of the teaching staff; Improve students' awareness of attaching importance to theory and correct the view of "theory useless"; To strengthen the evaluation of students' theory and technique courses to ensure the learning effect; Relying on modern education technology, establish preschool education shared knowledge base.

4.3. Improving the professional practice curriculum system and the quality

As a core part of global teacher education programs, professional practice courses provide a platform for students to combine theory with practice before they enter the workforce, mainly including internships, novitiates and other off-campus practices. The effect of professional practice courses directly determines the professional practice ability of preschool education graduates and affects their survival, employment and professional development. Colleges and universities should provide effective professional practice courses for students, cultivate students' professional identity, stimulate students' practice motivation, so as to bridge the gap between theory and practice of preschool education professional training. Attach importance to the cooperation between universities and kindergartens and the construction of "double teachers" to build a community of practice; Optimize the implementation process, improve the effect of professional practice; Standardize the evaluation standards of professional practice courses.

Colleges and universities should have the following principles when choosing professional practice bases: First, the principle of nearby, choose the practice kindergartens with convenient transportation and short distance; Second, the principle of high quality, choose a new school philosophy, good school environment, harmonious atmosphere and strong teaching staff of the kindergarten practice; The third is the principle of stability. Kindergartens with strong cooperation will be selected as practice units, which is convenient for long-term college practice curriculum research.

4.4. Strengthen professional identity and promote students' independent learning

The school invites experts, scholars and outstanding graduates to share their professional learning experience, methods and skills, provide some guidance and suggestions for professional learning, promote the formation of students' professional learning ideas, establish learning goals and future development direction.

Create academic atmosphere and strengthen professional understanding. From the perspective of social learning theory, college teachers, as the main participants in talent training, play an exemplary role in students' learning. Appropriately open subject research, as part of professional practice, encourage students to actively participate in the process of teachers' subject research, feel the charm of academic research, understand the method of subject research, understand the significance of academic research, and enhance the fun of professional learning.

Attach importance to individual differences and advocate personalized education. Schools should be based on the overall basis, according to the individual characteristics of students, as much as possible to provide personalized education opportunities. Schools can adopt a flexible and flexible professional management mechanism according to their own conditions to provide students with

second opportunities to choose majors.

5. Conclusion

(1) Early childhood education is very professional and practical. In the new era, preschool education graduates are required to have strong professional practical ability. It is necessary to constantly explore and improve the training methods of professional practice ability.

(2) The root cause of the lack of practical ability of preschool education is the lack of systematic understanding of education and post ability. Post ability is the training goal, and post environment is the construction goal of practical teaching environment.

(3) Locate the training target and optimize the training program. Oriented by the enterprise's post capacity demand, the integration of theory and practice, training of specialized talents, rather than generalists.

(4) Improve professional skills. Improve the implementation of professional theory and skills courses; To strengthen the evaluation of students' theory and technique courses to ensure the learning effect; Relying on modern education technology, we should fully investigate the job demands and establish the knowledge base of pre-school education job ability requirements.

(5) School-enterprise cooperation, improve professional practice curriculum system. Go into the enterprise, experience the post needs, please come in the frontline staff, about the points of practical ability; Organize diversified practice and internship activities. According to the post ability requirements, standardize the professional practice curriculum evaluation standards.

References

[1] Manning M, Wong G T W, Fleming C M, et al. (2019).Is teacher qualification a ssociated with the quality of the early childhood education and care enviro nment? A meta-analytic review[J]. Review of Educational Research, 89(3): 370-415.

[2] O'Connor D, McGunnigle C, Treasure T, et al.(2015).Educator identities. Emergin gissues within personal and professional identities: changes experienced by Australian pre-service teachers following professional exposure to education al practice within childcare settings[J].Early Child Development and Care, 185(8): 133-1342.

[3] Weatherby-Fell N, Duchesne S, Neilsen-Hewett C.(2019).Preparing and supporting early childhood pre-service teachers in their professional journey[J]. The Australian Educational Researcher, 46(4): 621-637.

[4] Lian Jiaxuan. (2020).Research on the development of practical ability of students majoring in Preschool Education [J]. Journal of Jiamusi Vocational College, 36(12):134-135+138.

[5] Huang Jing, Li Jun. (2020).Journal of Shengli College[J], China University of Petroleum,34(04): S8-62.

[6] Li Jing, LI Jin.(2020).Design and Evaluation of Undergraduate Talent Training Objectives in Pre-school Education under the Background of Professional Certification [D]. Journal of Teacher Education, 7(03):84-91