

# **Practice and Exploration of Talent Cultivation Mode in Applied Undergraduate Schools--Taking the Preschool Education Major of Shaanxi Institute of International Trade &Commerce as an Example**

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**Keywords:** Application-oriented university; undergraduate; pre-school education; personnel training mode

**Abstract:** Diversified, high-quality and "pre-school education plus" applied undergraduate pre-school education personnel training mode is the ideal path for pre-school education professionals training, which can enable pre-school education professionals to have strong social adaptability and competitiveness, and adapt to the diversified educational environment and job needs. The training process of "preschool education plus" is centered on preschool education specialty, guided by diversified employment development, radiating various related fields, and realizing the training goal of high-quality applied talents by means of the training process of "production, learning, research, utilization and creation".

## **1. Introduction**

Since 2010, the government has paid unprecedented attention to the development of preschool education and issued the Outline of the National Medium and Long Term Development Plan (2010-2020). Some Opinions on the Current Development of Preschool Education and a series of other decrees to promote the development of preschool education, which put forward clear standards and requirements for the quality development of preschool education teachers. In January 2018, the Central Committee of the Communist Party of China and the State Council issued the "Reform Opinions on Fully Deepening the Construction of Teachers in the New Era" which called for "comprehensively improving the quality of kindergarten teachers and building a high-quality and well-protected teaching team". However, in China's basic education system, preschool education is still a weak link. The overall level and specialization of kindergarten teachers are not high, and the requirements for preschool education development are far from the state. Therefore, to promote the improvement of the overall quality of the pre-school education teachers and to promote the continuous improvement of the professional level of pre-school teachers has become an urgent demand of the entire country, society and parents.

The characteristics of preschool education determine that the quality of preschool teachers must be a complex structure. Employers pay more attention to the practical teaching ability of graduates and become a major feature in the process of preschool education teachers. Some researchers pointed out that through interviews with kindergarten heads at all levels, it was found that most kindergartens hope that the curriculum of pre-school education is more applicable and practical. This requires us to take the application-oriented as the foundation and high-quality as the guidance in the training of preschool education teachers, and explore the application-oriented training mode of preschool education talents to meet the needs of social development and educational reform [1].

## **2. The Connotation of the Training Model of Pre-school Education Professionals in Applied Undergraduate Schools**

In 1998, at the first National Conference on teaching work in Colleges and universities held by the Ministry of Education, Comrade Zhou Yuanqing, then Vice Minister of Education, expounded the concept of "talent training mode". "Personnel training mode" refers to a certain modern

education theory, education ideas under the guidance of specific training objectives and personnel specifications. With relatively stable teaching content and curriculum system, management system and evaluation methods, the total process of implementing talent education. In short, the "talent training mode" is actually the training objectives and specifications of talents, as well as the methods or means to achieve these training objectives. The training mode of pre-school education professionals in applied undergraduate colleges should be based on the needs of the job, combined with the local and school characteristics and the actual teaching environment and resources, to form a distinctive educational practice paradigm [2]. It specifically includes the following four meanings: first, clear objectives and distinctive culture specifications. Secondly, the entire educational process to achieve certain training goals and specifications. Thirdly, a set of management and evaluation systems to achieve this process; fourth, scientific teaching methods, methods and means to match them.

### **3. The Connotation of "M+H+X" Pre-school Education Professional Talents Training Model**

#### **3.1. M-Diversified Training Objectives to Adapt to Different Job Needs and Educational Environment**

"M + H + X" is a combination of certain talent training paradigms and paths. M is the English initials of multiple, translated into multiple, multiple, complex and multi-functional. The application-oriented undergraduate course focuses on the word "application", which requires the cultivation of high-quality application-oriented talents guided by the concept of talent, quality and education, which reflects the spirit of the times and the requirements of social development. With the rapid development of science and technology in modern society, the rapid development of artificial intelligence and the irresistible trend of internationalization and globalization, all of these have put forward new demands for the development of education, especially preschool education and personnel training. The goal of talent training in applied undergraduate colleges should not only meet the needs of social development and education reform, but should also be based on local and regional radiation. It is necessary to cultivate the application-oriented talents who are determined to strive for the development of the local and pre-school education of the nation in order to demonstrate the true nature of education equity. Therefore, the orientation of pre-school education professionals in applied undergraduate schools must meet the needs of different levels of internationalization, urbanization, nationalization, and specialization.

#### **3.2. H-Quality Training with High Qualities and Specifications with Strong Social Adaptability and Competitiveness**

The comprehensiveness of preschool education determines that a qualified preschool teacher should have comprehensive knowledge literacy. The connotation of high-level "kindergarten teachers should be supporters, cooperators and guides of kindergarten learning activities" and "supporters, cooperators and guides" is actually the demand of society and parents for high-level, high-level and high-quality kindergarten teachers. The "Professional Standards for Kindergarten Teachers" puts forward clear standards and requirements for the comprehensive quality of preschool teachers from three dimensions: professional concept, professional knowledge and professional competence. Strong social adaptability and competitiveness are the characteristics of applied talents. Based on the above understanding, the application-oriented undergraduate education professional training standards must be based on solid humanistic quality, healthy physical and mental quality, certain innovative qualities and good professional ethics, and excellent positions can be aims.

#### **3.3. X -- "Pre-school Education +" Talents Training Process**

The core of the training mode of Applied Undergraduate pre-school education specialty is to design the training process of pre-school education + production, study, research, use and creation, and pre-school education + is the core of pre-school education specialty. Guided by the diversified

employment development of talents, radiation preschool education in various related fields, with the help of the training process of "production, learning, research, use and creation", to achieve the training goal of high-quality applied talents. The training process of "pre-school education plus" has the following characteristics: 1) With the special advantages of local or national areas, we should strengthen local and national culture learning and national art training to meet the requirements of local development. 2) Docking industry, integration of production and education, integration of science and education, reconstruction of teaching content based on project tasks. 3) Innovative quality development system, implementation of standardized management and training teaching and practice combined to build a teaching method that emphasizes production, learning, research, use and innovation. 4) Ability-oriented, focus on strengthening the cultivation of practical and innovative abilities, and build a sound entrepreneurial education system. 5. Build an industrial chain ecosystem to ensure the effective, rapid and normal development of the practical teaching system.

The preschool education major of Shaanxi International Business College has a history of nearly 20 years of schooling and is the only undergraduate level preschool education major in Luxi New Town, Xixian New District. Based on the orientation of the school's "applied undergraduate colleges", adhering to the "accommodation of local economy, social development and industry, industry needs." The orientation of training advanced applied technical talents with all-round development of morality, intelligence, physical fitness, solid professional foundation, strong practical ability, innovative spirit and professional accomplishment is analyzed, and the development trend of preschool education specialty is analyzed. On the basis of learning from the advanced experience and practical exploration of similar universities, the pre-school education professionals training mode of "N diversification + H high-quality + 3" has finally been formed.

Table 1 Data and results

Professional category	Professional name	Docking position	Talent Training Objectives	Vocational Qualification Certificate
Basic professional	Pre-school Education Major	Kindergarten Teachers	Master solid preschool education professional knowledge and skills, have preschool education teaching ability, multi-cultural and social care of preschool educators.	Kindergarten Teacher Qualification Certificate
		Nursery governess		Nursery Caregiver Qualification Certificate
	Early Education Major	Infant English Teachers	Master abundant basic knowledge and characteristic theory of early childhood education,	Early training instructor, parent-child education and
		Kindergarten Art Teachers		

		Infant Intelligence Development Teachers	possess professional ability of early childhood education, and have noble teachers' morality.	training instructor, Montessori training instructor, Orff music training instructor, sensory system and training instructor, multiple intelligences training instructor (optional two)
"Pre-school Education +" Major	Preschool Education + Art	Dance teacher	It has strong theoretical accomplishment and high artistic accomplishment, solid professional ability and broad international vision, full of positive expression will and advanced innovative ideas.	Professional Grade Certificate
		Art teacher		
		Piano teacher		
		music teacher		
		writing master		
	Preschool Education + Product Design	Kindergarten Toy Designer	To cultivate professional talents with both "Tao", "Art" and "Technology" can combine local culture and characteristics, carry out "customized" and "aesthetic" fashion creative children's commodity design, and be able to engage in high-quality application-oriented personnel related to children's product planning and design.	
		Kindergarten Designer		
	Pre-school education + Entrepreneurship	Research and development of preschool curriculum	To cultivate practical technology and methods with innovative thinking, innovative, entrepreneurial consciousness and spirit, entrepreneurship and kindergarten management, innovative entrepreneurship practice and practical ability, and high-quality pre-school entrepreneurship and management personnel to adapt to the development of the times.	
		Establishment, operation and management of kindergartens and early education institutions		
		Start-up and Operation of Children's Products Company		

## 4. Training Path of "M Diversification+H High Quality+3" for Preschool Education Professionals

### 4.1. The idea of "fixing learning by post" runs through the whole process of talent cultivation

"M pluralism + H high-quality + 3" pre-school education personnel training mode reform the traditional academic orientation. Taking the post practice ability as a breakthrough, this paper investigates the posts involved in the preschool education industry, and analyses the core competencies required by each post. Taking the core competence of the post as the logical starting point for talent training. The training direction is closely related to the future market demand, and the "double certificate system" is adopted to realize the seamless connection between talent training and job requirements, and to meet the individual development of students' careers and employment. In the future, we will achieve a diversity of training objectives.

### 4.2. Construction of Teaching System Based on the Thought of Integrating Learning with Post and Docking Classes with Post

Focusing on "cultivating all-round development of morality, intelligence, physique and beauty to meet the needs of socialist modernization construction in China, with good ideological and moral qualities, solid pre-school education professional knowledge and excellent professional skills. Have a certain spirit of innovation and entrepreneurial ability, can be in the pre-school education related institutions, engaged in education, teaching, nutrition, health care, business management and other high-quality applied talents" overall goal positioning. Reconstruction of professional curriculum system and practical teaching system, to create The disciplined professional group of production and education promotes the coordinated development of students' knowledge, ability and quality (Figure 1).

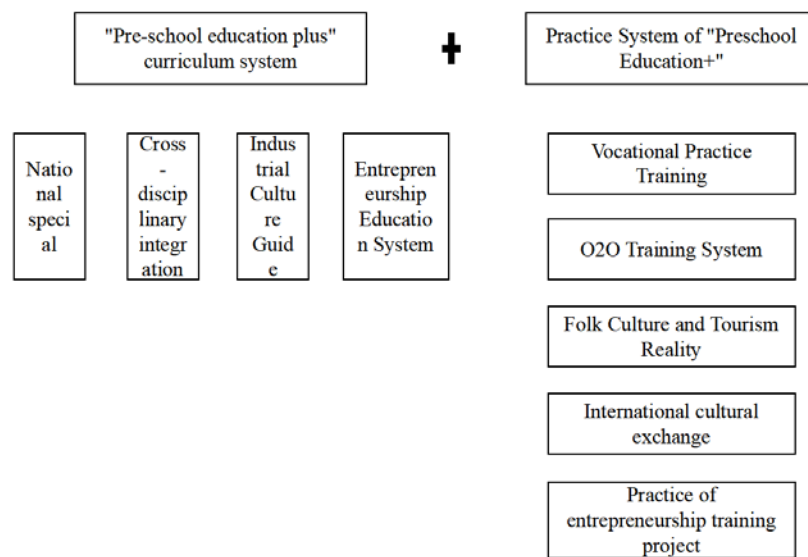


Fig.1. Pre-school Education + Production, Learning, Research, Utilization and Creation Model of Talents Training

### 4.3. Construction of theoretical curriculum system

In order to achieve the training goal of Applied Undergraduate preschool education talents, the curriculum system of "platform + module" is established in the curriculum system of preschool education specialty (Fig. 1). Increase the freedom and flexibility of curriculum setting, highlight the practical application value of basic knowledge to the profession, emphasize the students' practical ability, and meet the needs of different types of talents in the society (Figure 2).

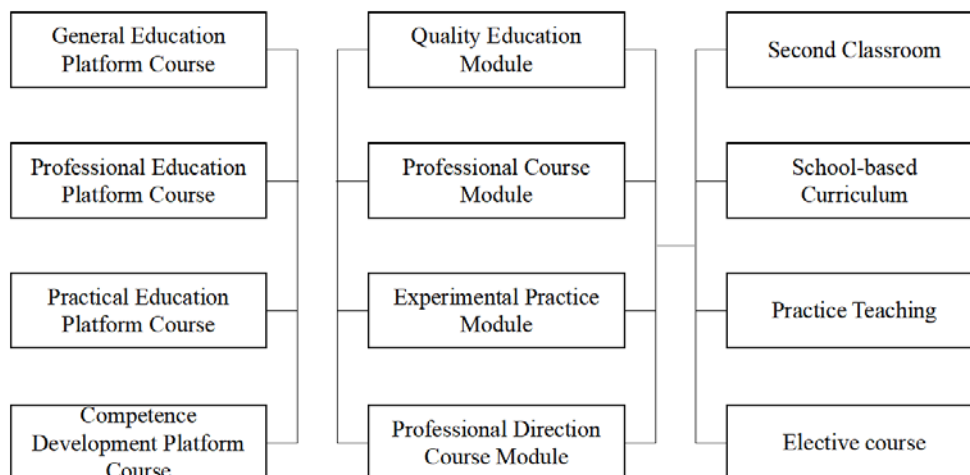


Fig.2. Overall Framework of "Platform + Module"

The theoretical curriculum system can be divided into four categories: general education platform, professional education platform, practical education platform and capacity development platform. According to the development trend of preschool education industry, the characteristics of school running and the advantages of the original specialty, early education, art education and nutrition and health care are added to the original specialty. In order to ensure the necessary professional theoretical courses, we have increased the guidance of prenatal education and childbirth, early childhood education at the age of 0-3, infant potential development, creative art, infant nutrition and feeding. The ratio of emergency treatment and prevention of infant diseases, observation and evaluation of infant behaviors, observation and evaluation of infant behaviors, performance of national musical instruments, prevention and care of infant epidemics, and emergency treatment of kindergarten emergencies. The purpose is to consolidate the students' practical ability so that they can adapt to the working environment as soon as possible in the future jobs. The cultivation of talents in pre-school education can closely follow the pulse of the industry and maximize the satisfaction of students' individual development and needs.

#### 4.4. Construction of Practical Teaching System of "One Main Line, Four Stages"

Practice teaching is an important link to cultivate students' practical and innovative abilities, as well as an important way to improve students' social professional quality and employment competitiveness. The construction of teaching system in Applied Undergraduate Universities embodies the word "application", and its core link is practical teaching. The preschool education talent training mode of "M+H+3" focuses on the practice link, which highlights the optimization of the construction of practical teaching system and emphasizes the cultivation of applied technology talents. Put the main line of "practice" through the cultivation of talents.

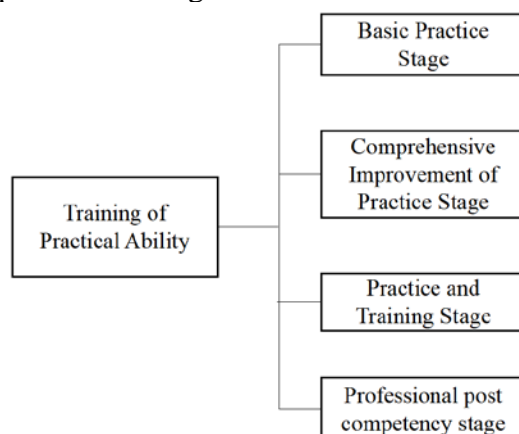


Fig.3. Structural Diagram of Practice Link

The construction of practical teaching system is closely related to the distribution of students' employment posts, as well as the task and work flow of typical working groups and the requirements of Vocational ability. It also makes innovative breakthroughs in top-level design, training conditions, distribution of teaching modes and training projects. The purpose of realizing the integration of teaching, learning, doing and creating and establishing four stages of practical teaching is to realize the four-year continuous line of practical learning in universities. Let the students study systematically and practice preschool education in a simulated preschool environment at the same time. First, in the stage of basic practice, students are organized to visit preschool educational institutions such as kindergartens and early education institutions during the period of freshmen's entrance education, so that students can form a preliminary understanding of the future work and employment environment. The second is to comprehensively improve the practice stage. It consists of electric steel training, dance training, art training, simulated kindergarten + behavior observation training, creative children's book reading training, infant health training, innovative entrepreneurship simulation practice and entrepreneurship incubation, aiming at training students' professional skills. We try to set up kindergarten class management, kindergarten operation management and other courses related to kindergarten management, and carry out professional innovation and entrepreneurship simulation training and innovation and entrepreneurship project incubation in the concentrated practice link. Through real environment simulation, students can understand the whole process of entrepreneurship, stimulate entrepreneurship perception, learn entrepreneurial knowledge and skills, and conduct business model validation and revision training. Through the entrepreneurial angel investment fund, the docking of capital and creativity and innovative business models will be promoted to promote the entry, cultivation and incubation of outstanding entrepreneurial projects. Actively explore effective ways to integrate innovation and entrepreneurship education with professional education. The third is the internship training phase, including professional skills training, educational internships and professional internships. Put Putonghua training and three-word training in the centralized practice session to consolidate the students' professional skills. Re-smoothing the internship training session, and finally formed the internship training process of "the first year - professional visit - sophomore professional half-day trainee, demonstration class observation - junior professional trainee - senior professional internship". The fourth is the vocational post-ability stage, which consists of the post-experience ability expansion courses for infants and young children nutrition and feeding, emergency treatment and prevention of infant and young children, nutrition and dietary guidance, prevention and treatment of infant epidemics, and emergency treatment of kindergarten emergencies. The aim is to achieve a seamless connection between professional skills and jobs.

#### **4.5. Preschool education professionals training method of "M+H quality +3"**

In the process of teaching, it pays attention to cultivating students' critical thinking, and guides students to realize the transition from passive learning to active learning, from relying on teaching materials to research-based learning. Teaching methods use participatory, discussion, case, project introduction and other methods of teaching, using micro-courses, reverse classrooms and other teaching methods to achieve students' main position in teaching, to create a space for independent thinking. For example, the introductory course of preschool education specialty can deepen the understanding and mastery of knowledge by forming a special research group for students, collecting hot issues of preschool education through consulting relevant materials, setting discussion topics, designing process independently, debating, teacher guidance, induction and summary, etc.

Strengthen the assessment of teaching process, focus on the comprehensive ability of students, avoid the recurrence of knowledge, focus on the cultivation of innovative thinking. For example, five fields of kindergarten curriculum are assessed by combining theory with simulation teaching. Replacing graduation thesis with a combination of reporting performance and graduation design, not only innovating the assessment method but also enhancing the effectiveness of the assessment.

## 5. Conclusion

Based on the analysis of the mechanical theory as the foundation, designed the soccer robot pick the ball institutions optimal design process, found aim function, select design variables and the corresponding optimization algorithm to optimize a complete set of institutions. At last through the test to get the final performance parameters of the institution. Experiments show that the system has higher accuracy and stability, the new optimize pick the ball have design basic requirements, and achieved good ideal control effect.

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## References

- [1] Chen J, Wang Q P, Wang Z F. Current Situation and Thoughts on the Cultivation of Undergraduate Urban Rail Transit Talents in China [J]. Applied Mechanics and Materials, 2014, 641-642:763-766.
- [2] Wafik W, Tork H. Effectiveness of a first-aid intervention program applied by undergraduate nursing students to preparatory school children [J]. Nursing & Health Sciences, 2014, 16(1):112-118.
- [3] Zhu Y, Wu J. A Study of Difficulties and Approaches for Innovative Talents Training of Public Administration Undergraduates [J]. Higher Education Studies, 2014, 4(5):153-155.
- [4] Michail S , Apostolos P , Georgios T , et al. Developing an International Combined Applied Surgical Science and Wet Lab Simulation Course as an Undergraduate Teaching Model[J]. BioMed Research International, 2015, 2015:1-10.
- [5] Pelin Piştav Akmeşe, Kayhan N. An examination of the special education teacher training programs in Turkey and European Union member countries in terms of language development and communication education, [J]. Cypriot Journal of Educational Sciences, 2016, 11(4):185-194.
- [6] Tweedale C, Kronborg L. What contributes to gifted adolescent females' talent development at a high-achieving, secondary girls' school? [J]. Gifted & Talented International, 2015, 30(1-2):6-18.
- [7] Datu J A D, Yuen M, Chen G. Development and validation of the, Triarchic Model of Grit Scale, (TMGS): Evidence from Filipino undergraduate students [J]. Personality and Individual Differences, 2017, 114:198-205.
- [8] AgudeloCalderón, Carlos A, GarcíaUbaque, Juan C, RobledoMartínez, Rocío, et al. Characterization of the training and practice of human talent working in environmental health in Colombia[J]. Rev Salud Publica, 2015, 17(4):552-564.
- [9] Sun D L, Zhang J, Lee J, et al. Mode for Cultivation of Diversified Informationized Innovative and Entrepreneurial Talents Research and Practice [J]. Applied Mechanics and Materials, 2014, 519-520:1626-1629.
- [10] Van Meteradams A , Frankenfeld C L , Bases J , et al. Students Who Demonstrate Strong Talent and Interest in STEM Are Initially Attracted to STEM through Extracurricular Experiences [J]. Cbe Life Sciences Education, 2014, 13(13):687-697.
- [11] Yadav A, Vinh M, Shaver G M, et al. Case-based instruction: Improving students' conceptual understanding through cases in a mechanical engineering course [J]. Journal of Research in Science Teaching, 2014, 51(5):659-677.