

# Research on Preschool Education and Training of College Students Based on Internet Technology

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**ABSTRACT.** *Based on the analysis of the current professional development needs of kindergarten teachers, this article deeply explores the construction and practical feasibility of an Internet-based preschool education teacher ability improvement platform. Through innovative teacher training models, the introduction of professional guidance and high-tech information methods, and actively provide services to the professional needs of preschool teachers, play a role in promoting the professional construction of regional preschool education care teams and promoting the balanced development of local preschool education.*

**KEYWORDS:** *Pre-school education, Internet, platform for improving teachers' ability.*

## 1. Introduction

With the advancement of the second and third preschool education action plans in China, the work of improving the professional abilities of kindergarten teachers and then promoting the overall quality of kindergarten education has been rolled out across China. However, due to the large differences in educational backgrounds, the nature of positions, and the different professional abilities of kindergarten teachers, how to effectively implement the after-service training of kindergarten teachers and effectively improve the level of kindergarten teachers has become an important topic. Based on the actual situation of school location, school administration, and school-enterprise (kindergarten, school) cooperation, the research group conducted in-depth research on the development and construction of curriculum resources for kindergarten teachers' post-employment training, and the status quo and existing problems of kindergarten post-employment training. Made a preliminary analysis and judgment, and cooperated with first-line kindergartens to create a series of multi-level teacher training courses for novice teachers, experienced teachers, and expert teachers [1]. How the curriculum resources are more in line with the actual work of kindergarten teachers and more effectively satisfy kindergarten teachers' post-employment training needs to form its own characteristics.

At present, the "Internet +" has brought unprecedented opportunities and challenges to Chinese education. Education will further break through the limitations of time and space, eliminate the information gap, and promote the realization of education equity. The "three links and two platforms" being implemented by the Chinese government (three links refer to broadband network school-to-school links, high-quality resource class-to-class links, and network learning spaces for everyone. The two platforms refer to the construction of educational resources public service platforms and education management public service platforms) is the basis for achieving this goal. Therefore, the construction of digital resources, especially high-quality digital resources, is particularly important.

## 2. The impact of Internet technology on children in preschool education

### 2.1 Changing the way children learn

In the past kindergarten teaching, certain scenes were often used as supplements to help children conduct independent learning and exploration. For example, lead children to visit aquariums and museums to learn about some animals in nature; or organize children to go out in the wild for spring and autumn outings to appreciate the change of seasons. In the past learning model, the arrangement of knowledge is usually linear, but the large-scale popularization of network and computer technology has

made knowledge divided in a network and format, so the learning process is no longer linear. Children can obtain enough information from the Internet. The multimedia function is very powerful and has the potential to be a teacher [2]. Children can learn a wealth of knowledge in the process of interacting with it. The individuality of learners is also fully demonstrated in online learning. Due to individual differences, all aspects of things are judged differently, instead of being measured by a single standard, and strengthening mutual cooperation can enrich children's multi-faceted understanding of things. Under the guidance of teachers and parents, children learn online, so that they can get richer knowledge through this powerful tool and use the Internet as a tool for learning and communication. It is generally believed that if children are exposed to the Internet or computers too much, it may be detrimental to their ability to communicate normally with other children.

## ***2.2 Changing the traditional roles of children and teachers***

In the past, kindergartens used teachers to transfer skills and knowledge to students. The teacher was the centre and played the role of command. At the same time, it also took into account the responsibilities of management, supervision and dissemination of knowledge to children. Teachers can refer to students' responses. Looks, and exercises to learn about students' understanding of knowledge and skills, and at the same time use it as a reference to adjust the progress and strategies of subsequent teaching guidance. The relationship between students and teachers is acceptance-transmission. Students who are recipients are more passive, this learning model of passively absorbing students and imparting knowledge by teachers no longer meets the new requirements of today's personalized learning. In today's network age, the role of the teacher will change, and multiple roles will be expanded: researcher, learning partner, manager, learner, organizer of student learning. Network multimedia technology has mobilized people's perception and touch from many aspects, improved the efficiency of learning, and brought students the joy of learning.

## **3. The role of "Internet+" in the preschool education and training of local teachers**

### ***3.1 Abundant training resources***

In the context of "Internet + Education", not only educational resources are abundant, but various training resources are also abundant. Teachers can find the resources they need on the Internet. In the past, teacher training was conducted offline. Now online training is also a training method. There are abundant online teaching resources [3]. Teachers can communicate with other excellent teachers on the network platform, exchange resources, and learn from other excellent teachers' teaching Achievements, enriching one's teaching experience, and learning the teaching methods of other excellent teachers, this is the advantage of educational resources brought by the background of "Internet + education". The abundance of teacher training resources can bring better training results.

### ***3.2 Diversified training methods***

Under the traditional model, the means of teacher training in local colleges and universities is relatively single, and does not reflect the diversified role of teacher training methods. Under the "Internet + education" model, the means of teacher training can be enriched, making teacher training methods not so single. For example: you can set up situational teaching through multimedia to improve the training effect; you can provide a large number of professional materials and courseware, communicate and interact online, and listen to expert comments; you can also learn in one-to-many small or large classes; and so on. Each teacher's training purpose may be different, so diversified training methods can also meet the needs of different teachers, so that training can be carried out better.

### ***3.3 Changing the training mode***

The traditional teacher pre-school education training model is relatively single, so in the training process, there are often low efficiency and poor results. However, teacher training will change greatly under the background of "Internet + education". The change in training mode is mainly the combination of online training and offline training. The past training model is reflected in the unity, and now teachers can have more choices for training to achieve their training goals. Online training has

brought many changes to teacher training [4]. Teachers can choose training courses that suit them according to their specific conditions. If it is to improve their academic qualifications, they can find more relevant information through the Internet.

#### 4. Investigation and analysis of the current situation of college students' pre-school education and training resource sharing

##### 4.1 Course content

Table 1 Course List of Undergraduate Program of Preschool Education

First year at school			Second year		
Course Title	Class hours	ETSC credits	Course Title	Class hours	ETSC credits
Introduction to Education	3+0	8.0	Principles and history	4+0	6.0
computer	3+0	10.0	Writing and speaking skills	4+0	6.0
Principles and methods of preschool education	3+0	10.0	Teaching plan and assessment	4+0	8.0
Human Physiological Anatomy	3+0	8.0	Development and learning	3+0	8.0
Child Developmental Psychology	3+0	8.0	Music teaching	6+0	9.0
Mother and child health and nutrition	6+0	10.0	Child language and conceptual development	3+0	8.0
German, French and English	4+0	6.0	Children's action and game development	6+0	9.0
			Oral and writing teaching	6+0	6.0
Third year			Fourth year		
Course Title	Class hours	ETSC credits	Course Title	Class hours	ETSC credits
Classroom management	3+0	8.0	Personalized education project development	6+0	6.0
advisory	3+0	10.0	Special teaching methods	6+0	6.0
Painting teaching for preschool children	6+0	6.0	Children's creativity and drama	6+0	6.0
Children's literature	6+0	5.0	Child psychology and adjustment issues	3+0	6.0
Preschool education computer teaching	3+0	4.0	Textbook compilation in preschool education	6+0	6.0
Parent education	3+0	6.0	Teaching practice	5+0	10.0
Preschool Science and Mathematics Teaching	6+0	6.0	Training for children with hearing, expression and visual impairment	3+0	6.0
Preschool education practice	9+0	6.0	Training for children with behavioral and learning problems	3+0	6.0
Personal identification skills	6+0	5.0	Teaching technology and textbook compilation	3+0	8.0
Special education	3+0	4.0	Course Title		

The purpose of this project is to promote pre-school education students to master the knowledge, skills and attitudes needed for careers. The curriculum of the first year focuses on cultural foundations, and the fourth year focuses on professional knowledge. The four-year curriculum always pays attention to the mastery of professional teaching knowledge, and the curriculum settings are shown in Table 1.

Pre-school education practice courses are offered in the third academic year. The teaching week is 24 weeks and 8 hours per week (a full day). Based on observation, interview, practice and evaluation, the purpose is to let prospective teachers understand the pre-school institutions and courses for internship. And the basic situation of the intern instructor. Teaching practice courses are offered in the fourth academic year, for 14 consecutive weeks, 8 hours a week (a full day or two and a half days), aiming to allow prospective teachers to verify and improve the theoretical knowledge and skills they have learned and obtain the required professional skills [5]. The Open Education Institute and the institution where the internship is located undertake the necessary management responsibilities. With the help of instructors, prospective teachers conduct teaching practice in local kindergartens under the supervision of the Ministry of Education. The teaching practice structure of this cooperative project is shown in Figure 1.

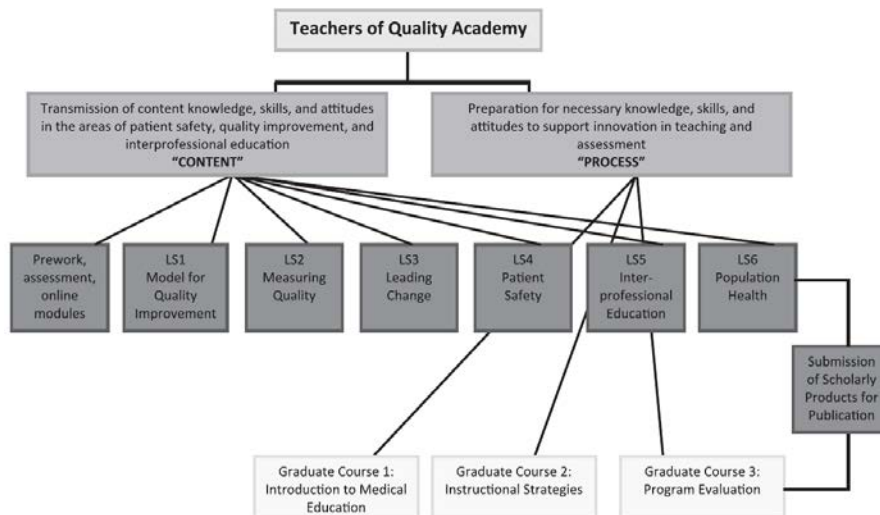


Figure. 1 Schematic diagram of teaching practice of preschool teacher training program

#### 4.2 Project teaching resources

The teaching resources of the project include teaching printed materials, radio and TV programs, videos, remote classrooms and academic counselling services. Teaching materials (books and manuals) are compiled by editors and experts, based on the principles of distance education and independent learning. There are 23 volumes in total. Each unit in each volume includes objectives, table of contents, instructions, text, summary, evaluation questions, and references. At the same time, there are 123 TV programs as support for teaching materials. Each course is equipped with 2 to 6 20-minute TV programs, which will be broadcast once a week in the morning and evening on the national TV channels at the specified time. In addition, academic counselling services are provided on the Internet to help students solve practical problems. It is also equipped with online education software to supplement the preschool education practice in the third year and the teaching practice in the fourth year.

#### 4.3 Analysis of project training effect

In terms of teaching practice, prospective teachers think its effect is positive and beneficial. Teaching practice has a pivotal position in this project, allowing students to apply the knowledge and skills learned in theoretical courses to practice. Pre-school prospective teachers generally have a positive attitude towards examinations. The prospective teacher affirmed the validity of the exam, the time of the exam, the content of the exam and the quantity and quality of the questions. In terms of teaching materials, prospective teachers gave positive comments on its printing quality, content, language and visual design [6]. They believe that the page layout and printing quality of the textbooks are excellent, the goals, prompts, abstracts, and evaluation questions are designed reasonably, which is very easy to read, and the selection and arrangement of learning materials are very conducive to teachers' teaching activities. Distance education is a feasible, practical and suitable teacher education model, which helps to carry out teaching strategy reform according to the requirements of education system reform. Its teaching materials and TV programs are more suitable for teacher training. Moreover, these TV programs are not only suitable for prospective teachers in pre-school majors, but also for others who are concerned about child development and education.

### 5. Internet sharing platform design for preschool education and training

The remote real-world interactive training platform is based on the "interconnection" thinking model, through the creation of a province-city-county-park base, and relying on the Internet video conference system to realize simultaneous online learning and communication in multiple places. The training platform integrates multiple functions such as video interaction, audio interaction, document sharing, screen sharing, remote control, remote assistance, text communication, media sharing, data

distribution, meeting recording, etc., forming a "backbone first, all staff follow up; Group training, cooperative learning; professional guidance, experience improvement" training method. In terms of function, the platform can gather base venues located in different provinces, cities, and different districts and counties to hold multi-point remote training [7]. Experts/trainers can use the pre-school education remote real-world interactive training system to carry out remote real-world interactive training including national and provincial large-scale preschool training interactive live broadcasts, normalized activity observation and interaction in provincial demonstration parks, and expert online guidance exchanges. The main venue can watch the situation of various remote venues in real time, ask questions, and the kindergarten teachers distributed in different branch venues can respond accordingly at the kindergarten base. During the training period, the questions that kindergarten teachers generate in real time can also use the system to interact with the trainers to answer questions. Figure 2 shows the pre-school education and training sharing platform.

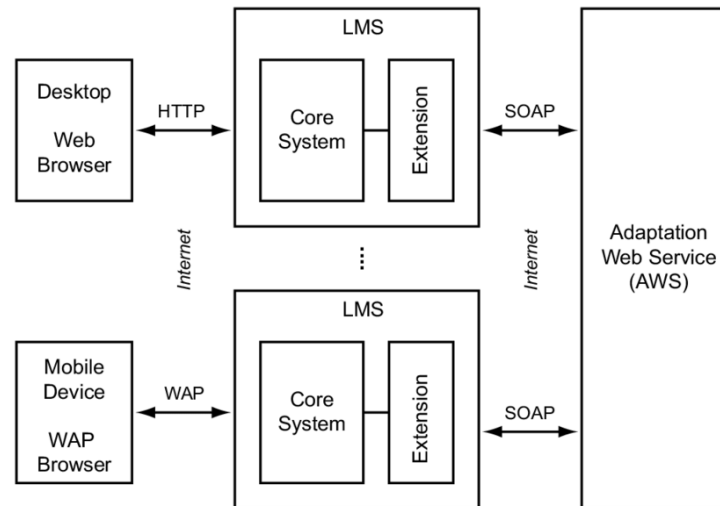


Figure. 2 Preschool education and training sharing platform system

## 6. Conclusion

The professional development of kindergarten teachers does not only stop at the simple accumulation of knowledge or skills, but also needs to rely on problem-centric and professionally guided kindergarten-based teaching and research activities. Through the interaction between community members and the collective improvement of education and teaching practice to promote teachers' professional identity and the development of teacher ethics; through in-depth exchanges and sharing of reconstruction of educational and teaching practice experience, so as to achieve the growth of professional knowledge; through cooperation and collaboration Practice activities to increase the professional ability of kindergarten teachers. The pre-school education teacher capacity improvement platform will gradually add problem-based interactive teaching and research, topic-based interactive seminars, video case analysis and other content. In sharing, communication, continuous and other more open teaching reflection activities, the atmosphere of the kindergarten seminar will be further promoted. Promote the construction of kindergarten learning organizations and enhance the practical wisdom of kindergarten teachers.

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