

Research on the Development and Application of Preschool Education Informatization and Network Curriculum

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Abstract

With the advent of the era of new media education, great changes have taken place in the existing educational models and concepts. Preschool education should make use of the convenience and high-quality resources brought by new media to comprehensively improve the ability of kindergarten teachers, accelerate the development of online courses, and optimize the effect of education and teaching. This paper focuses on the promotion of preschool education informatization and the construction of preschool education network curriculum model. and studies the content, mode and path of preschool education network curriculum. By promoting the proper integration of preschool education and the Internet, A new preschool education ecology has been established effectively improve the efficiency and quality of preschool education, and promote the healthy and comprehensive growth of children. Meanwhile, exploring the online preschool teacher education system and improving the information technology literacy of teachers will be conducive to the transformation of preschool education ideas, the establishment of a harmonious preschool education environment and the sharing of educational resources in different regions. At the same time, because the kindergarten network curriculum is based on the characteristics of children's physical and mental development and the specific social and cultural background, through the interaction between teachers and children and the construction of information technology means, to help children obtain useful learning experience, will be conducive to promoting the harmonious and comprehensive development of children's body and mind, and to the sustainable development of preschool education.

Key words: Preschool education; Informatization; Network curriculum

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INTRODUCTION

Preschool education plays an important role in China's education. The development of information technology makes the informationization of preschool education an inevitable trend. China's Education Modernization 2035 proposes that high quality preschool education should be popularized by 2035, and that accelerating the educational reform in the information age should be one of the ten strategic tasks for the modernization of education. Among them, the network course is a new teaching method developed in this change. In teaching activities, we must give full play to the advantages of new media, such as convenience, flexibility, three-dimensional intuition and strong interaction, speed up the informatization process of preschool teacher education, build an integrated intelligent teaching, management and service platform, provide effective technical support for the comprehensive and in-depth development of modern distance education, and lay a solid foundation for improving the information literacy of kindergarten teachers in an all-round way. At the same time, vigorously promoting the universal application of information technology in teaching should be based on the dual values of children's cognition and behavior, follow the principles of scientificity, flexibility and practicability, explore the strategies of constructing kindergarten network curriculum from the perspective of children, kindergartens and social status, and promote the integration of information technology and subject curriculum.

1. CURRENT SITUATION OF PRESCHOOL EDUCATION INFORMATIZATION

Under the background of "Internet + education", the application of information technology has penetrated into the field of preschool education, and the informatization in the field of preschool education has also witnessed great changes and development. "The Ten-Year Development Plan for Education Informatization (2011-2020)" of the Ministry of Education clearly States that "the construction of teachers is the basic guarantee for the development of education informatization, and various methods and means should be adopted to help teachers effectively apply information technology". In October 2013, "The Ministry of Education's Opinions on Implementing the National Project to Improve the Information Technology Application Ability of Primary and Secondary School Teachers (including Kindergartens)" clearly pointed out that "Information Technology Application Ability is the necessary professional ability of teachers in the information society, and it is necessary to comprehensively improve the information technology application ability of teachers".

However, at present, the development of preschool education informatization is not comprehensive and has not been fully constructed. First of all, the scale, nature and form of preschool education in different regions are inconsistent. Comparing with urban and rural areas, there are great differences in the information resources of preschool education. In the construction of preschool education curriculum, there are also differences in the quality, depth and content of the educational resources available. Secondly, there is a lack of effective information and standardized management mode, no timely update of the database, no efficient use of information platform, and these problems directly affect the effect and quality of the information construction of preschool education curriculum. Thirdly, the concept of education lags behind, teachers lack strong information technology ability, it is difficult to make full use of network technology in educational activities, and still adopt the traditional education model. Finally, the existing objective situation is that the training of information tools is insufficient, the support of modern

educational technology is lacking, and it is not conducive to the self-development and improvement of teachers.

Today, with the gradual development of education informatization, the development of education through "Internet +" is an important decision of our country. As a fast and efficient new development mode, it is also the trend and direction of the development of education intelligence and informatization at this stage, and is changing the traditional preschool education step by step. China attaches great importance to preschool education, and has formulated a series of plans to promote the development of preschool education informatization, which fully guarantees the sustainable development of preschool education.

2. THE DEVELOPMENT TREND OF PRESCHOOL EDUCATION INFORMATIZATION

2.1 Improving Teachers' Information Technology Literacy

At present, the development of education informatization has entered the stage of application ability construction as the core, and teachers' information literacy is an important guarantee to promote education informatization. The Ministry of Education's "Education Informatization 2.0 Action Plan" proposes to "vigorously improve teachers' information literacy". With the continuous advancement of educational informatization, it will become a new task and an important part of the professional development of preschool education teachers in the future to correctly recognize the role of information technology tools in education and teaching, quickly learn the necessary information technology means and reasonably apply them in education and teaching activities.

2.2 Adoption of mobile learning

Education is a professional field in dynamic development, whose basic knowledge is constantly updated and expanded, and teachers' ideas about education are also changing. The main task of teacher development and teacher education in the new era is to enable teachers to acquire the ability of professional growth and selfconstruction consciousness, and to become active teaching practitioners and the main body of educational reform. In the new media era, with the popularity of mobile devices, the technical means of new media provide people with more convenient, flexible, rich, autonomous and efficient learning methods, and also provide the possibility for teachers to quickly complete autonomous professional development through mobile learning. Teachers can make full use of the usual "fragmented time" to learn through mobile learning devices under the coverage of mobile networks.

2.3 Construction of Online Teacher Education System

Preschool education in China has undergone drastic changes, and accelerating the construction of preschool teacher education system in the new era has become an urgent task to be solved in the modernization of education. First of all, digital equipment and information environment needs to be configured as soon as possible. Secondly, through the integration of high-quality resources to build online preschool teacher education resources coconstruction and sharing mechanism, to solve the problem of resource shortage, to achieve a larger preschool teacher education resource bank. Thirdly, we should make full use of information technology to promote the innovation of online training and training mode for teachers' mobile learning. It is supported by integrated digital information and meets the individual needs of learners. Finally, efforts should be made to strengthen the training and training of teachers' information technology literacy in povertystricken areas and expand the coverage of high-quality educational resources.

3. SIGNIFICANCE OF PRESCHOOL EDUCATION INFORMATIZATION

To a certain extent, information technology education has changed the way and method of preschool education teaching and home co-education, provided a new platform for kindergarten teachers' professional growth, and also posed new challenges to teachers' ability structure and professional development mode. At the same time, the kindergarten network curriculum based on information technology is a systematic project. How to achieve highquality co-education through the network and realize the integration of educational information technology and kindergarten curriculum requires rational thinking and effective development, which is the focus of preschool education at present. kindergartens and teachers devote themselves wholeheartedly to the construction of preschool education by truly understanding its value and significance.

3.1 It is conducive to changing the concept of preschool education

In the information environment, new concepts such as micro-class and MOOC are constantly emerging, and various forms of new teaching resources and teaching modes reflect different teaching concepts. Teachers should pay attention to children's individual differences, hobbies and dominant position, and provide them with diversified and multi-level teaching resources according to their development needs in the teaching process. Carrying out the information construction of preschool education and implementing the new teaching ideas can fully change the traditional and outdated concept of preschool education. 2. It is conducive to the establishment of a harmonious preschool education environment. D e v e l o p t h e information construction of preschool education curriculum and change the traditional teaching mode. When organizing and implementing information-based teaching courses, teachers and children should interact efficiently and conveniently, and implement targeted and operational teaching according to their psychological state and personality characteristics, so as to optimize and improve the preschool education.

3.2 It is conducive to sharing educational resources in different regions.

Under the environment of information technology education, when organizing and implementing preschool education activities, the use of network advantages can smoothly break through the time and space constraints of regional interaction and communication, better realize resource sharing, so that remote areas and economically underdeveloped areas can also get multi-level and multitype learning resources. Teachers, children and parents can understand and grasp the frontier preschool education information through the network platform, and provide them with different teaching resources according to their age characteristics and growth needs, so as to achieve a wider range of sharing of high-quality education resources.

Preschool education informationization is an intelligent and effective educational activity in the modern intelligent technology environment, centered on the particularity of children's teaching, physiology and cognition, and based on the cross-regional joint technology and the Internet. In this process, preschool teachers should timely evaluate and feedback preschool education through network evaluation system and big data platform, integrate spiritual communication, technical support and tool application in the teaching process, uphold the basic principles of interactive and intelligent education, promote the integration of preschool education and the Internet, and establish a new preschool education ecology. To promote the healthy and full development of children.

4. CURRENT SITUATION OF NETWORK CURRICULUM DEVELOPMENT

In Kindergarten Kindergarten network curriculum is the sum of activities based on the network, starting from the characteristics of children's physical and mental development and the specific social and cultural background, through the interaction and construction of information technology between teachers and children, to help children gain useful learning experience and promote their physical and mental harmonious and comprehensive development. High-quality online courses, for kindergarten children, are conducive to the formation of a good learning atmosphere, such as: online courses are a new situation of teaching methods formed after the rational use of the Internet, to a certain extent, it breaks the limitations of time and space, freedom is relatively strong. On the other hand, it can stimulate students' interest in learning. Compared with the traditional classroom, online courses are no longer confined to a fixed small space. As long as there is a network, for kindergarten children, learning becomes a small game in life.

In view of the current situation of the development and implementation of network curriculum, network curriculum should ensure its operability from four aspects: First, systematicness, the development and implementation of network curriculum in kindergartens is a systematic project. Attention should be paid to the overall design and implementation monitoring of each unit of the network course, including the setting of the objectives of the network course, the arrangement of the structure of the network course, the selection of the content of the network course, the way of the implementation of the network course, the application of the resources and media of the network course, and the evaluation of the network course. Secondly, interactivity. Kindergarten network curriculum provides a variety of interactive ways dynamically and constantly updated, and learners can interact with curriculum content and media resources. Thirdly, the kindergarten network curriculum focuses on the key and difficult problems in children's one-day activities for targeted design and implementation. Based on the network, using modern means of information, the five fields of health, language, society, science and art are interpenetrated to promote the all-round development of children's body and mind from different perspectives. Finally, we should be innovative, take games as the basic activities, and attach equal importance to education. Respect the law of children's physical and mental development and learning characteristics, combined with the actual situation of children's families, from the reality of children's life, simple, innovative, vivid, creative and enlightening guidance.

Network course is a form with a relatively large scale under the current information conditions. It not only makes full use of the network, but also adds infinite fun to the classroom, satisfies students' curiosity about the classroom, enhances the relationship between students and teachers, and makes the classroom atmosphere more dynamic. It can be seen that the application of network courses is an inevitable phenomenon under the development of society.

5. THE PATH OF KINDERGARTEN NETWORK CURRICULUM DEVELOPMENT

In the long run, the kindergarten network curriculum is moving towards a more open, collaborative, interactive and shared direction. At the same time, the development and implementation of kindergarten network curriculum will force the improvement of preschool teachers' information level and the sustainable development of preschool education.

5.1 Define the task of kindergarten network curriculum and build a network platform for home co-education

Different from the network curriculum in primary and secondary schools with students as a single audience, the audience of network curriculum in kindergarten stage is parents and children, and the main task is to build a network platform for home co-education. To guide parents to create a healthy and rich living and activity environment for children, and to meet the needs of children's development in many aspects, the development and implementation of network curriculum should start from the characteristics of children's physical and mental development, invite parents to participate in the development of curriculum content and experience sharing, and build a network "home co-education experimental field" with cooperation, mutual assistance, organic interaction, interesting, teaching and learning, and good atmosphere. At the same time, we should collect parents'opinions and suggestions on online courses in time, adjust activities according to parents' feedback as far as possible, select and share high-quality network resources for parents to choose, guide parents to carry out appropriate parent-child activities, and avoid online courses becoming a burden for parents and children.

5.2 Increase the network education of thematic courses and strengthen the sustainable development of preschool education

The network curriculum of preschool education is the experience beneficial to the physical and mental development of children in a happy daily life, and it is the core guiding ideology that must be established in the process of the development and implementation of the network curriculum in kindergartens. In addition to the traditional five fields of health, language, society, science and art, the construction of life and safety education, STEM curriculum education and international understanding education will be more conducive to the sustainable development of preschool education.

6. STRATEGIES FOR THE DEVELOPMENT AND APPLICATION OF NETWORK CURRICULUM IN KINDERGARTENS

6.1 Optimize the construction of curriculum system

Through government intervention and actual participation, we can ensure the authority and implementation of online education in the process of school implementation. According to the Guidelines for the Learning and Development of Children Aged 3-6, the kindergarten curriculum is selected or compiled by the provinces independently, which easily leads to the marginalization of the preschool education curriculum. Therefore, there is an urgent need to increase the curriculum system with the goal of network education and training. In today's society, the important contents of nature, life and psychology should be included in the national curriculum system, and teachers should be guided to implement the corresponding network curriculum education according to the curriculum content and the actual situation of children.

6.2 Improve the quality of teachers

The future kindergarten will be an intelligent kindergarten, using network information technology means, through the network curriculum platform, the people, things and things in the world will be vividly, vividly and timely presented to children. Even at home, children can explore, play and learn independently around certain themes and goals with the help of teachers and parents through teachers' organization, including knowledge and skills of educational information technology, design and development of micro-lessons, organization and guidance of one-day activities, so as to promote children's comprehensive and balanced development.

6.3 Deliberating Network Course and Research Network Kindergarten

Kindergarten online curriculum is a new topic and challenge in the field of preschool education, so it is necessary to actively start online curriculum review, through online kindergarten-based research, give full play to collective wisdom, discuss the problems in the development and implementation of kindergarten online curriculum, and make choices and decisions. Kindergartens should develop network education kindergarten-based curriculum according to their resources and environment, as well as children's interests and needs. Online course deliberation can be carried out in the following four steps: identifying course problems, collecting course information, seeking solutions, and making course decisions. In the process of network curriculum deliberation, we should not only pay attention to the integration and innovation of the five areas in the network curriculum theme scheme and plan, but also pay attention to the actual situation of teachers and parents, the characteristics of children's physical and mental development, existing experience and interest, existing curriculum resources and other factors, as well as the feasibility and operability of the network curriculum scheme in the implementation process.

6.4 Create a good atmosphere of trinity

Preschool education is a systematic project, involving family, kindergarten and society. First of all, parents should set an example, play a leading role in life, behavior and speech, and cultivate their children imperceptibly with their own words and deeds. Secondly, kindergartens should make full use of all kinds of open resources to provide parents and teachers with rich knowledge of preschool education through micro-blogs, micro-letters and QQ, so as to better carry out online curriculum education. Finally, the society should increase the support for children's online curriculum education. The effective combination of the three subjects forms a trinity of preschool education network courses, which deepens the quality of life education.

6.5 Construction of Distance Interactive Teaching and Research Platform

Between Kindergarten and University Establish a number of development community schools of universities and kindergartens to form a long-term mechanism of interaction, mutual benefit, mutual assistance, win-win and common development. On the one hand, it provides a wide range of technology, resources and tools for the continuing education of preschool teachers, on the other hand, it expands the breadth and scope of the practice community of preschool teachers and university teaching and research personnel, so that preschool teachers can get more extensive learning support. By using network technology as a link, the mode of constructing kindergarten-university distance interactive teaching and research platform has formed a win-win situation among university teaching scientific research, kindergarten teachers' professional growth and normal university students' observation, reflection and research.

CONCLUSION

Under the background of "Internet +" era, accelerating the construction of online preschool teacher education system, improving teachers' information technology literacy, leading teachers to actively respond to the challenges of the new era, and realizing professional independent development are the inevitable way and active choice in the process of preschool education modernization. On the other hand, the kindergarten network curriculum takes the construction of preschool education curriculum model as the starting point, analyzes the role and significance of informatization in promoting preschool education curriculum construction from the aspects of resource sharing and concept innovation, and studies the mode of preschool education curriculum informatization in depth. The exploration and research on the informationization of preschool education and the development and implementation of network curriculum make our preschool education keep up with the pace of the times and will eventually achieve its sustainable and healthy development.

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