Research on the Construction of Elderly Smart Education Model Against the Background of Education Digitization

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ABSTRACT

In response to the numerous practical problems that urgently need to be solved in the field of elderly smart education under the current digital education background, starting from the analysis of the current situation, this paper proposes the practical background, value implications, countermeasures, and prospects for the construction of elderly smart education models.

Keywords: Education digitalization, Elderly smart education, Models.

1. INTRODUCTION: PRACTICAL BACKGROUND

The report of the 20th National Congress of the Communist Party of China emphasizes the need to "implement a national strategy to actively respond to population aging", and outlines the development direction of education digital transformation from the perspective of "promoting education digitization". Promoting the intelligence and modernization of elderly education through digitization is the key to implementing strategic deployments such as the "National Medium - and Long Term Plan for Actively Responding to Population Aging", the "Opinions of the Central Committee of the Communist Party of China and the State Council on Strengthening Aging Work in the New Era", and the "14th Five-Year Plan for Healthy Aging". "China Education Modernization 2035" proposes to build a digital learning ecosystem and a smart education network service platform. Smart education represents the direction and trend of educational modernization. Through various new learning methods such as connected learning, interdisciplinary learning, new independent learning, international learning, and ubiquitous learning, elderly education has entered a new stage of intelligent development. The above policies and regulations provide fundamental guidance for this study. The research on constructing a smart education model for the elderly against the background of digital education is proposed based on the above background.

2. ANALYSIS OF STATUS QUO

In recent years, smart education has flourished like mushrooms after rain, such as O2O learning methods, ubiquitous learning (U-Learning), mobile learning (M-Learning), and MOOC (massive open online courses). Online learning platforms suitable for different groups of people have emerged one after another, providing comprehensive technical support and revolutionary changes for elderly education. The practical progress of the elderly smart education model against the background of digital education is as follows:

The first is that some higher education institutions and community education institutions have established elderly smart education centers, with rich and diverse learning resources and tools, including online courses, learning communities, learning management systems, etc. The second is the rise of elderly smart education platforms with digital technology as the core, to provide online learning resources, communication and interaction, intelligent tutoring and other services for the elderly, such as China Elderly Education Network, Africa elders & mentors, etc. The third is that the learning platform monitors and provides real-time feedback based on the learning situation of learners, adjusting learning strategies and improving learning

outcomes for the elderly. The fourth is that with the help of remote education technology, elderly learners can participate in remote teaching and interactive communication through video conferencing, online live streaming, and other technological means, engage in real-time interaction with teachers and other learners, and learn and share together.

The research on smart education models for the elderly is in the ascendant, and representative studies such as: Zhan Xia and Shi Zhiming (2023) elaborated on effective paths to achieve mobile smart classrooms for the elderly from three aspects: smart education, smart training, and smart management; Ni Shanyu (2022) explored issues related to the construction of digital resources for smart elderly care and elderly education; Zhu Guanhua and Qiao Weide (2023) explored the construction of smart learning spaces for community elderly groups from the perspective of aging; Xie Qian explored the digital divide in elderly smart education from the perspective of formation mechanism and bridging strategy.

In summary, the insightful insights of the academic community on elderly smart education are worth learning from in the practice of elderly smart education in Liaoning. The construction and practice of smart education models for the elderly in the context of digital education are gradually advancing. This study will provide older learners with a more convenient, personalized, and high-quality learning experience by continuously improving smart learning platforms, personalized learning support, learning community construction, the application of distance education technology, and educational research and practice innovation.

3. VALUE IMPLICATIONS

The research value of constructing a smart education model for the elderly against the background of digital education is reflected in the following aspects:

3.1 Providing Theoretical Basis and Practical Reference for Promoting Elderly Smart Education

It is of great significance to explore the characteristics of smart education practices for the elderly in the context of digital education, identify the obstacles and problems that elderly people face in the learning process, integrate emerging digital technologies into elderly smart education, and

develop targeted elderly smart education measures based on the psychological, cognitive, and behavioral characteristics of elderly people's learning. It is necessary to develop a smart education model suitable for the elderly in the context of digital education, and a high-quality, personalized, and humanized smart education model built with the goal of cultivating the intelligent education ability of the elderly population, focusing on meeting the growing needs of the elderly for a better life, alleviating the contradiction of aging population, and achieving the necessary balance for social harmony and stability.

3.2 Developing Elderly Smart Education to Enhance Senior Citizens' Sense of Achievement and Happiness

There is a necessity to investigate the learning needs of elderly people in the context of digital education, analyze their learning behaviors, such as time allocation and learning outcomes, explore their tendencies towards choosing subjects, courses, and learning methods, and understand their learning motivation and obstacles. Integrating the learning, entertainment, and work of the elderly better provides them with more development opportunities and satisfies their aspirations for a better life.

In summary, the high-quality development value of elderly smart education is reflected in providing theoretical basis and practical reference for promoting elderly smart education, and enhancing the sense of achievement and happiness of the elderly.

4. DILEMMA ANALYSIS

With the rapid development of technology, digitalization of education has become an important trend in the current education field. As a product of this trend, elderly smart education aims to provide more convenient and efficient learning experiences for the elderly. However, in practical operation, the elderly smart education model faces many difficulties.

4.1 The Technical Threshold Being Too High

The elderly smart education model relies on advanced technological means, such as artificial intelligence, big data, etc. However, these

technologies have certain thresholds for the elderly. Many elderly people lack understanding and mastery of these technologies, making it difficult to fully utilize the convenience they bring. Meanwhile, some elderly people also face certain difficulties in operating these techniques due to age, physical condition, and other reasons.

4.2 Mismatch Between Teaching Content and Needs

The teaching content of elderly smart education should match the actual needs of the elderly. However, in practical operation, some teaching content is too specialized and theoretical, disconnected from the actual living needs of the elderly. This makes it difficult for elderly people to develop interest in these contents and to apply the knowledge to practical life.

4.3 Lack of Teaching Resources

Elderly smart education requires rich teaching resources support, such as high-quality teaching videos, courseware, etc. However, the current teaching resources in the field of elderly smart education are relatively scarce, making it difficult to meet the learning needs of the elderly. This makes it difficult for elderly people to have a comprehensive and systematic learning experience.

4.4 Insufficient Teaching Staff

The faculty strength of elderly smart education is a key factor determining its teaching quality. However, the current teaching staff in the field of elderly smart education is relatively insufficient and lacks a professional teaching team. This makes it difficult for elderly people to receive professional guidance and assistance, as well as to improve their learning outcomes.

4.5 Low Social Cognition Degree

As an emerging educational model, elderly smart education currently has relatively low recognition in society. Many elderly people lack understanding and trust in it, believing that it is an overly advanced and difficult to understand way of learning. This makes it difficult for elderly people to actively accept and participate in elderly wisdom education.

5. COUNTERMEASURE ANALYSIS

In response to the above difficulties, the following measures can be taken to improve:

5.1 Lowering Technical Barriers

To address the issue of high technical barriers, some measures can be taken to lower the technical barriers, such as, providing simple and user-friendly user interfaces and tutorials for the elderly to help them better master and use related technologies. At the same time, online or offline technical support services can also be provided to solve the problems encountered by the elderly during use.

5.2 Optimizing Teaching Content

There is a necessity to clarify the goal of elderly smart education, which is to meet the learning needs of the elderly and improve their quality of life. This requires a deep understanding of the learning needs and interests of the elderly, as well as their learning characteristics and patterns. To address the issue of mismatch between teaching content and needs, teaching content can be optimized to better meet the actual living needs of the elderly. For example, courses and activities related to daily life can be designed to enable elderly people to feel the connection between knowledge and life during the learning process. Practical teaching is an important part of elderly smart education. Through practical activities, experimental operations, and other means, the elderly can apply the knowledge they have learned to practical life, improve their practical and problem-solving abilities.

5.3 Enriching Teaching Resources

In response to the shortage of teaching resources, it is necessary to actively seek and develop high-quality teaching resources. For example, by collaborating with relevant institutions, more teaching videos and courseware resources can be obtained; Older people can also be encouraged to create their own teaching resources and share them with more people for use. It is also necessary to integrate various educational resources, including online and offline courses, textbooks, teachers, etc., to provide diverse learning choices for the elderly. Meanwhile, digital technologies such as big data and artificial intelligence can be

utilized to optimize and personalize educational resources.

5.4 Strengthening the Construction of Teaching Staff

To address the issue of insufficient teaching staff, there is a must to strengthen the construction of the teaching staff and attract more professional teachers to join the field of elderly smart education, such as offering generous benefits and benefits can attract excellent teachers, and providing training and development opportunities for teachers to improve their teaching level and professional competence. There is also a must to innovate teaching methods based on the learning characteristics and patterns of the elderly, such as using interactive, experiential, and situational teaching methods, to enhance their learning interest and enthusiasm. At the same time, digital technologies such as online courses and distance education can be utilized to break the limitations of time and space and provide more convenient learning methods for the elderly.

5.5 Improving Social Awareness

To address the issue of low social awareness, efforts can be made to increase publicity and raise awareness of smart education for the elderly in society. For example, the concept and advantages of elderly smart education can be popularized to the elderly through media promotion, community activities, and other means; some successful people can also be invited to share and exchange, so that more people can understand and trust elderly smart education. There is also a necessity to establish an evaluation mechanism to evaluate and provide feedback on the effectiveness of smart education for the elderly, promptly identify problems and shortcomings, and continuously improve and perfect the education model.

In summary, the construction of a smart education model for the elderly in the context of digital education requires efforts and cooperation from various aspects, including clarifying educational goals, integrating educational resources, innovating teaching methods, strengthening practical teaching, and establishing evaluation mechanisms. Through the implementation of these pathways, higher quality and convenient educational services can be provided for the elderly to meet their learning needs and improve their quality of life.

6. OUTLOOKS

The prospect of the elderly smart education in the context of digital education is very broad. With the rapid development of information technology, elderly education is gradually transitioning towards digitalization and intelligence. Here are some prospects for the future of smart education for the elderly:

6.1 Rich Digital Education Resources

With the continuous enrichment of digital educational resources, elderly education will have more learning content and learning methods to choose from. This will help meet the learning needs of different elderly people, enhance their interest and motivation in learning.

6.2 Improvement of Intelligent Learning Experience

By introducing advanced technologies such as artificial intelligence and big data, the elderly smart education will provide a more intelligent and personalized learning experience. For example, based on the learning progress and interests of the elderly, suitable learning content can be recommended and more accurate learning suggestions can be provided.

6.3 Integration of Online and Offline Education

With the integration and development of online and offline education, smart education for the elderly will no longer be limited to traditional classroom teaching, but can also be learned through online courses, distance education, and other methods. This will help break the limitations of time and space, making education more convenient for the elderly.

6.4 Diversification of Educational Services

In addition to traditional academic education, elderly smart education can also provide various non-academic education services, such as vocational skills training, cultural and entertainment activities, etc. This will help meet the diverse learning needs of the elderly and improve their quality of life.

Increasing Social Participation: With the increasing emphasis on elderly education in society, more social forces will participate in elderly

education. This will help enrich the content and forms of elderly education, and improve the quality and level of elderly education.

In short, the prospects for smart education for the elderly in the context of digital education are very broad, and there will be more innovation and development in the future. It is necessary to actively explore and practice to provide higher quality and convenient educational services for the elderly.

7. CONCLUSION

In the context of digital education, the construction of a smart education model for the elderly is a work of profound significance. Through in-depth research and exploration, there is a necessity to provide more intelligent and personalized educational services for the elderly, meet their learning needs, and improve their quality of life.

7.1 Fully Utilizing Digital Technology

Digital technology is an important means of building a smart education model for the elderly, which can utilize technologies such as big data and artificial intelligence to provide more accurate and personalized learning services for the elderly.

7.2 Strengthening the Integration of Online and Offline

The integration of online and offline is an important feature of smart education for the elderly, which can combine online courses with offline activities to provide a richer learning experience for the elderly.

7.3 Paying Attention to the Quality of Education

The quality of education is the core of smart education for the elderly, and it is necessary to focus on curriculum design, development of teaching resources, and other aspects to ensure the quality of education is guaranteed.

In short, building a smart education model for the elderly is a long-term and arduous task that requires continuous exploration and practice. In the future development, there is a necessity to continue to pay attention to the learning needs and educational development trends of the elderly, continuously improve and optimize the elderly smart education model, and provide higher quality and convenient educational services for the elderly.

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