

The Modernization of Education and Its Role in Lifelong Learning System Construction and Population Quality Improvement

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Abstract: Chinese modernization is the modernization of a huge population, and its important component, the modernization of education, is not only related to the introduction of technology and equipment, but also emphasizes the innovation of the concepts of human-centeredness, all-round development and lifelong learning. In the face of global population aging, accelerated development of science and technology, and economic transformation, it is particularly urgent to build a lifelong learning system that covers both formal and informal learning. In order to cope with this demand, it is necessary to focus on policy support, institutional guarantee and the construction of learning resources and platforms.

Keywords: Education Modernization, Lifelong Learning, Population Quality

1. Introduction

Modernization of education is not only the updating of technology and equipment, but also the innovation of education concept and system, which emphasizes people-oriented, all-round development and lifelong learning, and aims to cultivate people with innovative ability, practical ability and social responsibility. With the knowledge-based economy and changes in occupational structure, lifelong learning has become an inevitable requirement for personal and social development. The aging of the global population has intensified the pressure on labor supply and social security. Lifelong learning plays a key role in promoting population re-employment and social participation, which can not only alleviate social pressure, but also help individuals realize their self-worth and improve their quality of life. Therefore, modernization of education lays the foundation for lifelong learning, and lifelong learning is an important way to improve the quality of the population, promote the modernization of education, and cope with social challenges.

2. The Necessity of Constructing a Lifelong Learning System in the Context of Education Modernization

With the accelerating process of globalization and the rapid development of information technology, the speed and depth of social change is unprecedented. Modern society not only puts higher demands on individual knowledge and skills, but also poses new challenges to the adaptability and flexibility of the education system. In this context, lifelong learning, as a mode of continuous learning and self-improvement, has become an important part of the modern education system.

2.1 Challenges of economic globalization and scientific and technological progress

Economic globalization and scientific and technological progress in modern society have had a profound impact on the labor market and occupational structure. Traditional vocational skills and knowledge have been difficult to meet the rapidly changing market demand. The emergence of new technologies and the restructuring of industries have caused many old occupational positions to disappear, while creating a large number of new occupational opportunities. To cope with these changes, individuals must continuously learn and update their knowledge to remain competitive. The role of lifelong learning in coping with career transition and skill renewal is self-evident. Through lifelong learning, individuals can acquire new knowledge and skills, thus adapting to career changes and improving employability and career stability. In addition, lifelong learning can also stimulate individuals'

innovative ability and creativity, promote technological progress and industrial upgrading, and inject new impetus for economic development.

2.2 Demands of population aging and social development

Low fertility rate, low or negative population growth and population aging are not unique to China, but are challenges that the world will face together in the 21st century^[1]. An aging society not only brings the challenge of insufficient labor supply, but also increases the pressure on social security and healthcare services. How to cope with population aging and improve the quality of life of the elderly population has become an urgent issue for governments and all sectors of society. Lifelong learning is particularly important in an ageing society. Through lifelong learning, older people can continuously update their knowledge and skills, re-enter the labor market and achieve re-employment. Re-employment can alleviate the problem of insufficient labor supply and improve the economic income and quality of life of the elderly. In addition, lifelong learning can also promote the active participation of the elderly in social activities, enhance their sense of social integration and promote active aging.

2.3 The Need for Individual Development and Social Progress

Modern society emphasizes the all-round development and lifelong development of individuals. Education is not only a process of imparting knowledge, but also a process of cultivating the comprehensive quality and social adaptability of individuals. As a continuous learning mode, lifelong learning can meet the learning needs of individuals at different stages of life and promote their comprehensive development. Lifelong learning has a significant effect on the individual's vocational ability, innovation ability and social adaptability. According to Amartya Sen, A person's viable ability refers to the combination of possible functional activities that are possible for that person to realize. Viability is thus a freedom, a substantial freedom to realize every possible combination of functional activities^[2]. Through lifelong learning and the continuous promotion of substantial freedom for educated people, individuals can continuously update their knowledge and skills, and improve their professional abilities and competitiveness.

2.4 The Inevitability of Educational Informatization

An essential component of educational modernization is the integration of information technology in education. The widespread application of modern information technologies provides robust technical support and guarantee for lifelong learning. By utilizing digital learning resources and online education platforms, lifelong learning can overcome temporal and spatial constraints, thereby achieving broad sharing of educational resources and flexible, diverse learning methods. The richness of digital learning resources and the convenience of online education platforms make lifelong learning more accessible and efficient. Individuals can flexibly choose learning content and methods according to their personal learning needs and schedules, enabling personalized and self-directed learning. Moreover, the application of information technology in education facilitates the evaluation and certification of learning outcomes, providing a scientific assessment standard and certification system for lifelong learning.

Against the backdrop of educational modernization, the necessity of lifelong learning is self-evident. Lifelong learning serves not only as a crucial means to address the challenges posed by economic globalization and technological advancement but also as a vital pathway to meet the demands of an aging population and social development. Through lifelong learning, individuals can enhance their professional competencies and social adaptability, thereby fostering personal comprehensive development and social progress. The advancement of information technology in education, coupled with policy support, offers a solid foundation for lifelong learning, thereby laying a robust groundwork for the realization of educational modernization and the high-quality development of the population.

3. The construction path of lifelong learning system empowered by education modernization

3.1 Policy Support and Institutional Guarantees

First, policy support and institutional guarantee are indispensable to the construction of an effective lifelong learning mechanism. The government plays a leading role in promoting the construction of lifelong learning mechanism, and should provide solid guarantee and support for lifelong learning by formulating and implementing a series of policy measures. In terms of government policy orientation

and support, the government should incorporate lifelong learning into national development strategies and important elements of education reform, and clarify the goals and tasks of lifelong learning. Through policy documents at the national level, it should promote the development direction and key areas of lifelong learning to ensure the continuous promotion of lifelong learning^[3]. Second, financial support is essential. The government should increase its financial investment in lifelong learning and provide financial support for lifelong learning programs. By setting up special funds, it supports the development of lifelong learning resources, the construction of platforms and the implementation of learning programs. Finally, a sound system of laws and regulations needs to be established to provide legal protection for lifelong learning. By formulating and improving relevant laws and regulations, the implementation process of lifelong learning is standardized and the rights and interests of learners are protected. Secondly, build a lifelong education system. On the one hand, it is necessary to improve the education system and build a lifelong education system including basic education, vocational education, higher education and adult education, so as to realize the organic convergence and coordinated development of all levels and types of education. Through the design of the system, the barriers between education stages should be broken down, so as to realize the smooth transition and articulation of learners between different education stages^[4]. On the other hand, it is necessary to broaden learning paths and provide diversified learning paths to meet the learning needs of different groups. Through the combination of formal education, non-formal education and self-education, learners are provided with flexible and diverse learning choices to realize the wide coverage of learning opportunities. Third, incentive mechanisms and social support. First, in terms of incentive mechanisms, it is necessary to establish incentive mechanisms to stimulate the enthusiasm of enterprises and individuals to participate in lifelong learning. Through policy measures such as tax incentives, tuition fee reductions and learning subsidies, enterprises are encouraged to provide learning opportunities for their employees, and individuals are supported to participate in lifelong learning^[5]. Second, in terms of social organization support, give full play to the supportive role of social organizations in lifelong learning. Through social forces such as community education centers, vocational training institutions and non-profit organizations, diversified learning resources and learning services are provided to expand the coverage and influence of lifelong learning.

3.2 Construction of learning resources and platforms

In the age of information technology, the construction of learning resources and platforms is the core content of the construction of lifelong learning mechanisms. Through the construction of digital learning resources and online education platforms, learners can be provided with convenient and efficient learning paths to promote the widespread implementation of lifelong learning. First, digital learning resources. First, in terms of resource development, rich and diverse digital learning resources are developed, including online courses, e-books, virtual laboratories and multimedia teaching resources. Through the integration of high-quality educational resources, systematic and modularized learning content is created to meet the diverse learning needs of learners. Secondly, in terms of resource sharing, it promotes the sharing and opening up of learning resources and realizes the wide coverage of educational resources. Through the establishment of an open resource sharing platform, it promotes the interoperability and cooperation of resources between different organizations, reduces learning costs and improves learning efficiency^[6]. Secondly, online education platform. First of all, in the platform construction, build a fully functional online education platform to provide learners with convenient learning tools and learning environment. Through the technical support of the platform, online learning, remote interaction, learning management and learning evaluation and other functions are realized to enhance the learning experience and learning effect. Secondly, on mobile learning, mobile learning is promoted, utilizing mobile terminals such as smartphones and tablet computers to provide learners with learning opportunities anytime and anywhere. Through mobile learning applications, the mobility and convenience of learning resources are realized to meet the flexible learning needs of learners.

A scientific and effective lifelong learning mechanism has been initially constructed through the dual promotion of policy support and institutional guarantee, and the construction of learning resources and platforms. Policy support and institutional safeguards provide a solid foundation and guarantee for lifelong learning, while the construction of learning resources and platforms provides convenient and efficient tools and means for lifelong learning. The two are complementary to each other, and together they promote the widespread and in-depth development of lifelong learning and the overall improvement of the quality of the population.

4. Value of Lifelong Learning to the Improvement of Population Quality

4.1 Vocational skills and employability

Lifelong learning plays an important role in enhancing vocational skills and employability. Occupational changes and technological updates in modern society are rapid, and the knowledge and skills provided by the traditional education system will soon be obsolete. Lifelong learning provides individuals with opportunities to continuously update and upgrade their skills so that they can adapt to occupational changes and market demands. For one thing, in terms of updating occupational skills, lifelong learning can help individuals keep pace with technological advances and master the latest specialized knowledge and skills. For example, with the development of artificial intelligence and big data technology, many traditional occupations require employees to have new skills, and through lifelong learning, employees can participate in relevant courses and trainings to upgrade their skills^[7]. Secondly, lifelong learning provides individuals with opportunities for interdisciplinary and cross-field learning, which equips them with diversified skills. This not only improves the employment competitiveness of individuals, but also increases their flexibility and adaptability in the workplace. Secondly, in terms of employment ability enhancement, through lifelong learning, individuals can continuously improve their professional ability and comprehensive quality, enhance their career competitiveness, and thus increase employment stability. Against the background of increasingly fierce competition in the job market, having the habit and ability of continuous learning and ability enhancement will enable individuals to maintain their advantages in the workplace. Secondly, lifelong learning provides re-employment opportunities for the unemployed. By participating in vocational training and re-education programs, the unemployed can acquire new vocational skills and re-enter the labor market. Especially in an aging society, lifelong learning can help the elderly re-employ themselves, extend their careers and reduce the pressure on social security.

4.2 Comprehensive personal quality and social adaptability

Lifelong learning not only helps to improve vocational skills and employability, but also has a significant effect on the comprehensive quality and social adaptability of individuals. In terms of improving the comprehensive quality of individuals, lifelong learning provides a way for individuals to continuously accumulate and update their knowledge, so that they can maintain their sensitivity to new knowledge and information. Through continuous learning, individuals can broaden their horizons, increase their knowledge reserves, and improve their cultural literacy and academic level. Secondly, in terms of psychological health and self-actualization, lifelong learning helps to improve individuals' psychological health and sense of self-actualization. The sense of achievement and satisfaction gained in the process of learning can enhance the individual's self-confidence and sense of happiness. Especially for the elderly, by participating in lifelong learning, psychological problems can be effectively prevented and the quality of life can be improved. In terms of social adaptability, lifelong learning can help individuals continuously adjust and update their knowledge and skills, and enhance their ability to cope with social changes. For example, digital transformation requires individuals to have certain digital literacy, and through lifelong learning, individuals can master the necessary digital skills to adapt to the development of the information society. Secondly, lifelong learning promotes individuals to actively participate in social activities and social interactions to enhance their social adaptability. By participating in various learning programs and social activities, individuals can expand their social circles and enhance their sense of social integration and belonging. Especially for the elderly, by participating in community learning and activities, they can effectively alleviate the sense of loneliness and enhance social interaction.

4.3 Quality enhancement of the elderly population and social participation

In terms of the quality of the elderly population, enhancing lifelong learning can improve the health quality of the elderly population. Through health education and wellness programs, the elderly can acquire scientific health knowledge, enhance health awareness, improve their living habits, prevent diseases and improve their quality of life. Secondly, lifelong learning helps maintain the cognitive ability of the elderly. By participating in various kinds of learning activities, older people can keep their brains active, prevent and delay the decline of cognitive functions, and reduce the occurrence of dementia and other diseases^[8]. In terms of social participation of the elderly population, lifelong learning provides re-employment opportunities for the elderly. By participating in vocational training and skills upgrading courses, older people can acquire new vocational skills, re-enter the labor market, realize their self-worth

and reduce the pressure on social security^[9]. Secondly, in terms of participation in social activities, lifelong learning promotes the active participation of the elderly in social activities. By participating in community education and cultural activities, the elderly can enrich their lives, enhance their sense of social integration and mental health, and reduce loneliness and depression.

4.4 Overall social quality and economic development

Lifelong learning not only has a significant effect on the enhancement of individual vocational skills, comprehensive quality and social adaptability, but also has an important impact on the overall quality of society and economic development. In terms of improving the overall quality of society, lifelong learning can improve the overall civic quality of society. Through the popularization of scientific and cultural knowledge and education on the rule of law, lifelong learning can enhance citizens' legal awareness, moral literacy and sense of social responsibility, and promote the harmonious development of social civilization. Secondly, in terms of social innovation capacity, lifelong learning can enhance the innovation capacity of society. By fostering innovative thinking and practical ability, lifelong learning can provide society with a steady flow of innovative talents and promote scientific and technological progress and social progress. In the promotion of economic development, lifelong learning can improve labor productivity. By constantly upgrading the skill level and vocational ability of laborers, lifelong learning can enhance the productivity and competitiveness of enterprises and promote economic growth. Secondly, in terms of industrial structure upgrading, lifelong learning can promote industrial structure upgrading. By cultivating high-quality professionals and skilled workers, lifelong learning provides talent support for the development of emerging industries and high-tech industries, and promotes industrial transformation and upgrading and economic structure optimization.

5. Conclusion

In the context of education modernization, building an effective lifelong learning mechanism is an important path to achieve high-quality development of the population. Lifelong learning is not only a necessary means to cope with the challenges of economic globalization and scientific and technological progress, but also a key way to cope with the needs of population aging and social development. Through lifelong learning, individuals can continuously update their knowledge and skills, improve their vocational ability and social adaptability, and promote their overall development and social progress. The impact of lifelong learning on the improvement of population quality is multifaceted. It not only improves the individual's vocational skills and employability, but also enhances the individual's comprehensive quality and social adaptability, and in particular has a significant effect on the quality improvement and social participation of the elderly population. In addition, lifelong learning has promoted the overall quality of society and economic development, providing important intellectual and human resources support for the realization of Chinese-style modernization. In the future, we need to continue to improve the lifelong learning mechanism, increase policy support and financial investment, optimize the construction of learning resources and platforms, establish a sound evaluation and certification system, and stimulate the enthusiasm of enterprises and individuals to participate in lifelong learning. At the same time, we should give full play to the role of social organizations and communities, provide diversified learning services, and expand the coverage and influence of lifelong learning.

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