

The Characteristics of Lifelong Education in America and Germany and Its Enlightenment in China

Huiwen Shi

College of Education Science, Nanjing Normal University, Jiang Su Province, China 210024 arielyolo@163.com

Abstract. The idea of lifelong education was formally put forward in the 1960s, and academic research in this field has been on the ascendant for many years. Some developed countries have studied lifelong education earlier and have established a relatively complete and national lifelong education system. As the largest developing country, China is still groping for the development of lifelong education. This study selects the United States and Germany as the analysis objects and finds some common characteristics in the development processes of these two developed countries by studying their lifelong education policies and system construction and puts forward some reasonable suggestions based on China's national conditions. The research found that both the United States and Germany attach importance to education legislation, constantly constructing systems, and implementing education funding. These measures constantly promote the construction of a lifelong education system and mechanism. This study also puts forward some suggestions to China based on these three aspects. Firstly, the government should improve the legal system of lifelong education and strengthen the leading role of policies. Secondly, enrich the construction of the lifelong education system and broaden the learning platform. Finally, broaden the channels of fundraising and realize the diversification of funding sources.

Keywords: Lifelong Education, America, Germany, Policy.

1 Introduction

Since ancient times, education and human development have complemented each other, and the idea of lifelong education has been reflected in cultures all over the world. However, these ideas are limited by history and have not developed a systematic theoretical system. It was not until the 1960s that lifelong education, as a formal educational idea, faced the public and began to receive extensive attention from governments and researchers. In 1965, Paul Langrand formally put forward the concept of "lifelong education" in Paris, emphasizing the close relationship between education and life and putting forward clear strategic objectives and practical suggestions for lifelong education in An Introduction to Lifelong Education, setting off an international upsurge of lifelong education. In 1972, the International Commission on the Development of Education published the research report Learning to be: The World of Education Today

and Tomorrow, which marked the formation of modern lifelong education ideas. The report pays more attention to the role of education in people's lifelong development and advocates the combination of lifelong education and a "learning-based society" [1][2]. The concept of lifelong education has been attached to great importance by western countries since it was formally put forward. They carried out a series of educational reforms according to the report issued by the United Nations, which greatly promoted the development of lifelong education at the practical level. However, the development of life-long education in the world is not balanced, and this gap is particularly obvious between developing countries and developed countries. Therefore, "underachievers" should learn from "top students", strengthen interregional communication, and dialogue, and jointly expand the global influence of lifelong education. The research on lifelong education in the United States and Germany started early. After years of development, they have gradually built a lifelong education system suitable for their national conditions, which has important research value. However, although China's lifelong education system has made certain achievements after the reform and opening-up, it has not yet established a relatively complete system. The author hopes to find out the common policies to promote the development of lifelong education by comparing the development processes of lifelong education in the two countries and put forward corresponding suggestions for the reform of lifelong education in China.

2 The Commonality of Lifelong Education in America and Germany

Both the United States and Germany attach great importance to the role of lifelong education. After decades of development and improvement, the construction of lifelong education in the two countries has gradually become mature.

2.1 The Leading Role of Policies and Regulations

The formulation of a comprehensive lifelong education policy is the premise for lifelong education's sustainable and healthy development. Therefore, the United States and Germany have formulated a series of public education policies and laws according to specific national conditions to meet the social demands of lifelong education. The lifelong education policies formulated by the two countries in different periods mainly include goal planning, financial support, standard release, stakeholder coordination, and other aspects. These policies have laid a solid foundation for the development of lifelong education in the two countries.

The legislation on lifelong education in the United States has gone through a process from shallow to deep: the focus of the bill has gradually shifted from promoting national development to stimulating personal potential development; the concept of life-long education in the bill has gradually penetrated from adult education to basic education. In the early stage of the development of lifelong education, the United States promulgated the Adult Education Act of 1966, which established the legal status of adult education and took the first step in the development of lifelong education in the United

States. The Lifelong Learning Act of 1976 elaborated on the importance of lifelong learning and how to practice the idea of lifelong learning, further deepening the development process of lifelong learning in the United States. The Continuing Post Secondary Education Act published in 1980 emphasized that higher education should assume the responsibility of post-secondary education. The act also formulated education plans for people in rural and remote areas to facilitate their access to post-secondary education [3]. Building on this foundation, Goals 2000: Educate America Act, enacted in 1997, re-emphasized the need to clarify the roles and responsibilities of federal, state, and local governments, to promote educational reform and lifelong learning, and to implement the concept of lifelong education into all stages. In addition, the United States has successively promulgated Vocational Education Act(1963), the Comprehensive Employment and Training Act(1973), the Job Training Partnership Act(1982), and other adult groups-related laws to encourage workers to continue their education[4].

Germany also attaches great importance to the leading role of laws and regulations, and the promulgation of its policies and decrees is continuous and progressiveness. In 1969, the government promulgated the Employment Promotion Law to promote people's participation in adult education to improve the employment structure and promote the development of the national economy. The Education Structure Plan formulated in 1970 emphasizes the importance of nonformal education to human development, and also makes a series of provisions on continuing education; At the Research Committee of the Federal Parliament in 1990, the report Future Education Policy: Education 2000 pointed out the important position of life-long education in the education system. The idea of lifelong education in this period is not only to promote economic development but also to promote people's comprehensive development and cultivate people's various abilities in social life [5].

2.2 The Perfection of Lifelong Education System Construction

The improvement of the lifelong education system in the United States is mainly reflected in its diversified educational institutions. In addition to the basic national education system, the United States has also set up community colleges, adult schools, and all kinds of Adult Education centers to promote the development of adult education. At the same time, colleges and universities are also open to the public and provide adults with learning opportunities as much as possible. Moreover, the United States is also good at using the strength of enterprises and society to establish relevant educational institutions and organizations. The American Association of Adult and Continuing Education is the largest non-profit organization in the United States. After years of systematic adjustment and revision, this non-governmental organization has gradually become mature, academic, and professional. It has developed a complete set of organizational and administrative institutions and has very fine functional departments. At the same time, it will hold rich organizational activities every year. This kind of educational organization is spread all over the country and has gradually established a wide-ranging and multi-level professional organization system for adult education [6].

Germany has a scientific and rigorous national education system, which is a good guarantee for the development of lifelong education (as shown in Table 1). Students

first complete 4 or 6 years of primary education according to their state's regulations and then enter the secondary education stage. At this stage, students can choose different types of schools: Hauptschule (ordinary middle school), realschule, gesamtschule (comprehensive middle school), and gymnasium (arts and science middle school). Hauptschule generally goes to grade 9, and students can choose to make up grade 10 for one year and take the grade 10 examination. Realschule can go up to grade 10 and take the grade 10 examination. According to different regulations of different states, gesamtschule can go to grade 12 or 13 and take the Abitur test in Germany and pass the grade 10 test during this period. Gymnasium and gesamtschule are similar, but students have the chance to choose courses in Gymnasium. This secondary education stage includes an important node—the 10th-grade examination. Students are divided through the examination. After that, some will continue to study gesamtschule and gymnasium until Abitur, while the remaining 10th-grade graduates will choose to study in fachoberschule (vocational high school), berufsfachschule (full-time vocational college), or berufssechule (Dual Vocational School). Students at these schools and education can directly take part in work or obtain the admission qualification of higher education institutions through further studies. The third stage of the national education system is higher education, including Universitat, Technische Universität, and Fachhochschule. In addition to the perfect national education system, Germany has established a threedimensional education system integrating academic and technological integration, thus realizing the mutual development of vocational education and academic education. At the same time, the role of Volkshochschule (the Adult Education Center) in the lifelong education system is brought into play to promote the social coverage of the lifelong education system.

Table 1. German system of education (Drawn by the author)

			German System	of Education		
High Educa- tion	18		-			18
	17	Universität Technische Universität Fachhochschule				17
	16					16
	15					15
	14			Fachhochschule		14
Secondary Education II	13	Gymnasium Oberstute		raciiio	Cliscitule	13
	12			Fachoberschule	Berufsfachschule Berufsschule	12
	11			Berufsfachschule Berufsschule		11
Secondary Edu- cation I	10	Gesamtschule	Gymnasium	Realschule	Í	10
	9				Hauptschule	9
	8					8
	7					7
	6					6
	5					5
Elementary Education	4	Grundschule				4
	3					3
	2					2
	1					1

2.3 Multiple Sources of Funding

The rapid development of education cannot be separated from economic support. As developed countries, the United States and Germany can provide a certain economic foundation for domestic lifelong education. Meanwhile, the two countries are constantly enriching the multi-channel sources of lifelong education expenses and actively raising funds for their lifelong education. In the United States, national education spending started at the beginning of the 20th century, accounting for only 1% of Gross Domestic Product (GDP) at that time but increased rapidly during the first three decades. During the whole 20th century, the United States experienced the Second World War and the great domestic recession, and its education expenditure decreased when it reached a certain peak, but then it showed an increasing trend in the following period. Education spending in 2021 was 6.2 percent of GDP, significantly higher than in most other countries [7]. To improve the uneven distribution of higher education resources, in August 1997, the United States implemented the "Life Learning Credit" program, reducing the burden of higher education for some middle-income families. In addition, the U.S. government has also set up a wealth of scholarship and subsidy programs to improve the quality of education for all and enhance its international competitiveness. The U.S. government's education expenditure is mainly used to consolidate K-12 education and higher education. However, other stages and forms of education in the lifelong education system are largely attributed to the strength of various groups in American society. In the United States, the government encourages social forces to invest in the construction of lifelong education to make up for a lack of government funds. Such as churches, civic organizations, social service organizations, and cultural organizations, these non-profit organizations are keen to engage in education-related activities and provide funds, manpower, and time for them. Invisibly, the construction of lifelong education has gradually developed into a social undertaking. Through the pursuit of shared goals, different groups continue to work for the long-term growth of lifelong education.

The German government provides education assistance through scholarships or loans, such as Federal Education and Training Assistance Act published in 1971, which stipulated that those who cannot pay tuition can apply to the government for assistance. The government would subsidize or provide interest-free loans according to different groups of educates. This act was intended to change the unequal educational opportunities at that time. In addition to government financial support, enterprises will also contribute to undertaking various vocational training, especially training for posts required by enterprises. Germany's distinctive dual system vocational education system benefits from the strong support of enterprises, in which the government bears the education expenses generated by vocational colleges, while enterprises are responsible for their education expenses. In 2010, Germany's total investment in vocational education was 10.6 billion euros, of which the total investment of the public sector was about 2.9 billion yuan, while the enterprise provided 7.7 billion euros [8]. The proportion of its investment greatly exceeded that of various government departments, and it was the main source of funds for vocational education. Besides, there are also social organizations that raise funds themselves to broaden the sources of funds. The multi-channel funding sources have eased the financial pressure on the German government and are conducive to promoting the sustainable development of lifelong education.

3 The Significance of Lifelong Education Development in the United States and Germany for China

With the implementation of reform and opening up in 1978, China's economy began to develop rapidly. People realized the importance of education to the whole society. At this time, the idea of lifelong education gradually entered the public's vision. Over the past few decades, China has been constantly adjusting its lifelong education policy and trying to find a development path suitable for its national conditions. However, compared with the United States and Germany, which developed earlier, there is still room for progress.

3.1 Improve the Legal System of Lifelong Education and Strengthen the Leading Role of Policies

The results obtained from the analysis of the two countries demonstrate that policies and regulations play a programmatic role in the development of lifelong education and are an important guarantee for building a lifelong learning society. The early development of the concept of lifelong education in China owes much to the unremitting efforts of educational scholars. It was not until the 1990s that lifelong education was written into the education outline as a formal concept. In China's education policies and regulations, lifelong education has been constantly mentioned. The report, build a Well-off Society in an All-Round Way and Create a New Situation in Building Socialism with Chinese Characteristics published in 2002, pointed out to "build a life-long education system" and "form a learning society "with lifelong learning for all people". The Chinese government also proposed a similar goal in the Outline of the National Program for Medium and Long Term Educational Reform and Development (2010-2020 years): to form a learning-based society by 2020. All these indicate that lifelong education has become an important goal in the process of China's education development. However, most of China's life-long education policies put forward an ideal development goal and lack clear and rigid provisions for all kinds of education, which leads to the life-long education policy always being in an optional position in the social environment and the idea of life-long education not being deeply rooted in the hearts of the people. Therefore, China should fully learn from the policy experience of the United States and Germany to improve its policy and legal system. Firstly, consider the continuity and gradual nature of policy formulation. this can avoid conflicts and contradictions between policies so that the idea of lifelong education can be deeply rooted in consistent system planning. What is more, enhancing the specificity and operability of the lifelong education policy is also worthy of attention. By implementing various policies and measures in government institutions, schools, teachers, and social organizations, the authority of the policy can be maintained. Additionally, when Chinese scholars are

making laws or policies on lifelong education, they should fully consider their economic and social conditions.

3.2 Enrich the Construction of Lifelong Education System and Broaden the Learning Platform

The community colleges and adult education groups in the United States have provided a broader learning platform for the educated, while the flexible and cross-national education system in Germany has also provided citizens with more choices in their learning careers. In China, in addition to the insufficient popularization of life-long education, the construction of a lifelong education system also needs to be improved. China has entered an important historical period of building a well-off society in an all-around way and accelerating socialist modernization. It is facing a series of social problems. At the same time, China's economic strength and cultural background are not enough to establish an independent and complete lifelong education institution. Therefore, China must rely on the existing education system to expand the learning platform of lifelong education. Under this circumstance, all educational subjects should clarify their responsibilities and actively participate in the construction of lifelong education. Among them, higher education is an important force to support the development of lifelong education. Higher education institutions have relatively rich learning resources, and their curriculum settings also meet the needs of people from all walks of life. Therefore, colleges and universities should strive to open to the public to a certain extent, provide corresponding learning opportunities for people at different cultural levels and different age stages, open continuing education, and old-age universities, and establish a shared resource storehouse, which is an ideal way to build a learning society [9]. Secondly, vocational education is also indispensable in the lifelong education system. In China, vocational education has always been a weak link in the education system, while the dual system of vocational education in Germany provides a direction for China's reform. Fundamentally speaking, the development of vocational education needs to gradually change the old concept that vocational education is inferior to others and improve the social status of vocational education in China. At the same time, the development strategy of combining vocational education with academic education is implemented to train technical personnel with knowledge literacy and experienced academic personnel. Under this strategic system, education is no longer the goal of the educated but, under the guidance of the concept of lifelong education, strives to achieve the comprehensive development of people.

3.3 Strengthen the Investment of Education Funds and Broaden the Channels of Fundraising

The policies, regulations, and organizational systems of the United States and Germany on lifelong education are firmly supported by education funds, forming a diversified education fund structure with the government as the main body and the whole society participating widely, laying a foundation for the development of lifelong education. Thus, China can learn from the research on the ways of raising education funds in the

United States and Germany. Since the 21st century, China's economy has developed steadily, and the national education funds at all levels have also increased year by year. However, it is impossible to satisfy every group for China's education funds based on a huge population [10]. Therefore, the formation of a system in which the government, enterprises, and social organizations share the lifelong education funds is conducive to the sustainable development of China's lifelong education. First, the state should allocate a certain proportion of the established education funds for the development of lifelong education and set up a special education fund. Besides, formulating a fund allocation approval system to ensure the effectiveness of the investment is also necessary. Secondly, China could draw on the German model to encourage enterprises to participate in the construction of the lifelong education system. To be more specific, enterprises could set up corresponding courses to train talents according to market demand and bear corresponding expenses. This measure can not only ease the tight situation of education funds but also help to improve the unbalanced structure of the talent and employment market and provide practical learning opportunities for the public. The education department should actively cooperate with various enterprises, encourage enterprises to help reform and practice lifelong education in the form of fund sponsorship, and improve the popularity of the enterprise. Thirdly, the government can also carry out fund-raising activities in the whole society to raise funds for lifelong education and provide corresponding returns for fundraisers. Finally, as the direct beneficiaries of lifelong education, learners themselves should also bear certain costs to better enjoy the right to lifelong education.

4 Research Deficiency and Prospect

The above suggestions are based on the experience of life-long education in the United States and Germany, but there may be some problems in the implementation. For example, historical factors will affect the implementation process of policies. Germany has a developed industrial system to promote the technical reform of vocational education. What's more, vocational education has the same status as higher education in Germany, which is very conducive to the government's integration of vocational education and academic education. However, under the background of examination-oriented education, China pays more attention to achievement and academic qualifications. Chinese parents and students often have biased perceptions of vocational education and fail to consider the role of vocational education in life development from a long-term perspective. This preconceived concept will affect the implementation of relevant vocational education policies to a certain extent. Furthermore, the development of lifelong education requires many education funds, a large part of which comes from private investment. These social forces have different purposes from the government. They will also consider the investment benefits of funds. Therefore, how to obtain the support of commercial capital and reduce the profitability of capital needs further consideration. Although the United States, Germany, and other developed countries have provided advanced experience, this is not the fundamental way to solve the problem. The Chinese government should deeply analyze the national conditions and formulate a development path conforming to China's characteristics.

5 Conclusion

Based on the above results, this study found that lifelong education in the United States and Germany has something in common. Both countries attach importance to the leading role of lifelong education policies and laws and constantly improve their lifelong education reform. At the same time, their experience indicates that efforts should be made to build a complete lifelong education system to make up for the educational gaps at all stages. Finally, both countries actively promote the financing of lifelong education and provide material guarantees for lifelong education. On this basis, this study puts forward corresponding suggestions for the development of lifelong education in China, such as promoting the continuous development of the legal system of lifelong education, strengthening the construction of the lifelong education system, and giving play to the subjective role of higher education. Finally, this study also emphasizes the importance of raising funds from various sources for the development of lifelong education in China. This study mainly analyzes the development of lifelong education in different countries from a macro perspective and puts forward corresponding suggestions for China. However, to further implement these ideas, we need to consider many aspects and draw more specific conclusions. In future research, the author will focus on a specific stage of life-long education to conduct a more extensive investigation and analysis and make continuous contributions to the implementation of life-long education.

Acknowledgment

This article is the beginning of my academic career in comparative pedagogy, which means a lot to me. I would like to thank the professional teachers who led me into the hall of pedagogy and gave me a glimpse of the charm of education. Secondly, I would like to thank my family, who provided me with a warm and comfortable environment and often encouraged me to continue my creation. Finally, many thanks to my best friend, because every conversation with her will bring me new ideas and relieve my stress. Everyone I've mentioned has helped me improve and become a better person. They also made me more curious about education.

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