

# The Role of the Education and Training System on Human Capital Accumulation in the Context of High-quality Development

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**Abstract:** This paper explores the systematic composition and characteristics of China's education and training system under the background of high-quality development, and analyzes the obstacles of traditional education and training systems on the accumulation of human capital, from the perspective of system theory. Based on this, we put forward the method of building a systematic education and training channel for the sustainable accumulation of human capital, with a view to helping the sustainable accumulation and upgrading of human capital and promoting high-quality economic development.

**Keywords:** Education and training system; Accumulation of human capital; High-quality development

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## Fund Project:

General Project of the National Social Science Fund: "Research on the Evolution of China's Population Occupational Structure and the Transformation and Upgrading of the Employment System under the Background of High Quality Development" (2023BJL021)

## 1. Introduction

With the deepening adjustment of the global economic structure and the popularization of a new round of technological revolution, the pace of large-scale industrialization driving global economic growth has generally slowed down, and innovation-driven growth has become the mainstream (Shujun Lin et al, 2022). This transformation directly points to the upgrading of human capital, which is a new proposition thrown out by history.

Currently, human capital is an important force in China's transition towards high-quality development (Youlan Huang, 2000), and it urgently needs to be accumulated and upgraded (Wenwen Ji and Desheng Lai, 2018). However, it faces many challenges, for example, China's labor force is facing downward pressure, and there is a risk of "high-end not high" and "low-end lock-in" in human capital; Labor drift has led to the continuous dissipation of human capital in China (Xueya Qian et al, 2014)., and the accumulation channels have not been successfully built, making it difficult to meet the requirements of modern innovation; The accumulation of high-quality education human capital is insufficient, and medium to low-level human capital faces the risk of technological substitution (Yutang Shi and Xiaodan Wang, 2023). How to address the issue of human capital development and build a safe channel for sustainable accumulation of human capital is the primary issue to adapt to the deep adjustment of the global economic structure and promote high-quality development transformation. The key to solving these problems lies in the systematic transformation and upgrading of the education and training system. Based on this, we conduct research on the education and training system and the accumulation of human capital in the context of high-quality development.

## 2. The theoretical logic of education and training system promoting sustainable accumulation of human capital

### 2.1 The systematic characteristics of the education and training system

In the stage of high-quality development, the demand for human capital is rapidly changing and being influenced by key factors

such as the job market, technological revolution, and industrial transformation. These issues pose challenges to the traditional education and training system, which means that it needs to adopt more systematic and specific methods for transformation and reconstruction. It should be a subsystem composed of interconnected parts to ensure the sustainability of human capital accumulation and avoid employment drift caused by the interruption of human capital accumulation. This systematicity is reflected in wholeness, multiple subsystems coexisting, goal-directedness, dynamicity and adaptability.

It should be composed of multiple relatively independent but interrelated subsystems, and their interaction and coordination are key to ensuring the effective operation of the entire system. Specifically, it includes basic education and training systems, higher education and training systems, vocational education and training systems, and lifelong education and training systems. All subsystems share a common goal: to promote human development, and build a sustainable human capital accumulation pathway. It is also a dynamically developing system that should have adaptive capabilities to cope with changes in its internal and external environment.

## **2.2 The mechanism of education and training system promoting the accumulation of human capital**

Human capital, in contrast to material capital, condenses individual quality factors such as knowledge, skills, experience, health, and abilities, and creates value on this basis. The education and training system is a systematic platform for individuals to acquire knowledge, skills, and abilities, and then accumulate their own human capital. The basic education and training system accumulates basic knowledge and skills for labor; The higher education and training system provides labor with more in-depth and specialized knowledge and skills training; The vocational education and training system focuses on the establishment and development of a multi-industry and industry-education integration community, effectively serving the efficient connection between labor and employment positions; The lifelong education and training system helps labor continuously improve their employment quality and acquire the employment skills required by the market on the existing basis. The integration of the four promotes labor to continuously learn to adapt to the current diversified employment market, and promotes the sustainable accumulation and upgrading of social human capital.

## **3. The obstruction of traditional education and training system on sustainable accumulation of human capital**

In recent years, China has attached great importance to the development of education and training, and has achieved a series of constructive results. However, in the face of the requirements of high-quality development, there are still shortcomings in China's education and training system. The existing problems greatly restrict the sustainable accumulation of human capital in China, which is not conducive to the achievement of the strategic goals of high-quality development and the comprehensive construction of a socialist modernized country.

### **3.1 Uneven allocation of educational and training resources**

It is an undeniable fact that there is an imbalance and inequality in the distribution and allocation of education and training resources in China. There are significant differences in the allocation of educational and training resources between urban and rural areas. High quality universities, advanced educational facilities, and high-level teaching staff are mainly concentrated in urban areas, while rural areas face the problem of insufficient educational and training resources. The uneven allocation of education and training resources between urban and rural areas will lead to unequal educational and training opportunities for urban and rural labor, and cause obstacles to the flow of human capital.

### **3.2 Failure to update educational and training content in a timely manner.**

The education and training content in the traditional education and training system is somewhat disconnected from the actual needs of the job market, lacking the effectiveness, practicality, and pertinence of education and training. Firstly, the curriculum content and settings in the traditional education and training system are relatively rigid or even outdated, unable to meet the development needs of modern society, economy, and technology. Secondly, the traditional education and training system lacks systematic education and training in emerging fields and related technologies. Although some universities have established majors related to emerging fields, they are far from achieving scale and systematization. Thirdly, the education and training institutions in the traditional education and training system lack communication and close cooperation with enterprises and other social employers, which makes it difficult for them to truly develop education and training programs that are highly relevant to the rapidly developing technology and economy based on reliable employment market information.

### **3.3 Lack of lifelong education design**

Lifelong education involves the sum of all education in a person's life. It includes family education, school education, social

education, and all other related educational and training activities. Developing lifelong education policies and building a lifelong learning society is currently a key focus of education reform and development in various countries, and has become a universal trend. At the same time, it is also an important indicator for measuring a country's level of education popularization, social civilization, social welfare, and citizen rights protection. Developed countries around the world strive to achieve a blueprint for building a learning society through lifelong education systems and policies. At present, developed countries such as Germany, the United States, and France have regarded lifelong education as a national responsibility and formulated relevant legislation to promote the construction of a learning society. The construction of a comprehensive lifelong education system has become a trend. China has always emphasized the construction of a learning society, but lacks the design of policies, systems, and legislation.

#### **4. Building an education and training channel for sustainable accumulation of human capital**

Firstly, The government should actively respond to the employment priority policy. The government and enterprises should jointly create a labor market information database and develop detailed information on various occupations, including wages, required working hours, required qualifications, required skills, industry trends and training plans. By providing comprehensive job descriptions, labor can be more clear about their own career planning, their time entering the job market is shortened, and employment efficiency is improved.

Secondly, The government should fully recognize the significant significance of vocational education, improve relevant policy and institutional systems, vigorously promote the deep integration of industry and education in multiple industries, and promote the importance of vocational education and training. It should change the prejudice of the masses towards it, accelerate the establishment of a modern vocational education system for lifelong learning of labor, and improve the management system for various aspects such as the cultivation, evaluation, selection, use, and motivation of skilled talents.

At the same time, attention should also be focused on the problem of uneven allocation of education and training resources, and on the construction of a high-quality and balanced system of basic public education services. To this end, the Chinese Government should increase its investment in education and training resources, especially in poor and rural areas, in order to narrow the education gap between regions. At the same time, it should strengthen policy guidance and supervision to ensure the balanced allocation and rational use of education and training resources.

#### **References:**

- [1] Shujun Lin, Kaiming Guo, Liutang Gong. Industrial Structure Adjustment, Factor Income Distribution, and Common Prosperity [J]. *Economic Research*, 2022, 57 (07): 84-100
- [2] Youlan Huang. Investing in Education to Promote the Accumulation of Human Capital [J]. *China Human Resources Development*, 2000 (06): 42
- [3] Wenwen Ji, Desheng Lai. Human Capital Allocation and Innovation Performance in China [J]. *Economic Dynamics*, 2018 (11): 19-31
- [4] Xueya Qian, Renyu Miao, Bowen Hu. Research on the Efficiency of Human Capital Accumulation in Education Investment: Based on the Stochastic Frontier Education Production Function Model [J]. *China Population Science*, 2014 (02): 74-83+127
- [5] Yutang Shi, Xiaodan Wang. Research on the Impact of Enterprise Digital Transformation on Labor Employment: A Dual Perspective Based on Employment Scale and Employment Structure [J]. *Economist*, 2023 (10): 109-118