

# **An Analytical Study on the Differences and Determinants of Basic Education Resource Allocation in Rural China and the United States**

Wendan Xue <sup>1</sup>, Wen Fei <sup>1</sup>

<sup>1</sup> University of West Alabama, Livingston, AL, USA, 35470

## **Abstract**

*In the current international perspective, China and the United States, as typical representative countries of different social systems, present resource allocation models with research value in the field of rural basic education. There are significant differences in hardware facilities, teaching staff, curriculum design, and other aspects between rural schools in the two countries. The emergence of these differences is not only related to national financial investment, but also reflects the deep influence of social and economic development, educational policy direction, and cultural value orientation. This article mainly analyzes the differences in the allocation of rural basic education resources between China and the United States, and explores their influencing elements in depth.*

## **Keywords**

*rural areas in China and the United States; elementary education; Differences in resource allocation; influence factor.*

In the rural education systems of China and the United States, there are significant differences in the spatial distribution and supply quality of basic education resources, which actually reflect the deep characteristics of education governance models under different social systems. Related studies have shown that the economy, policies, and society are key variables that affect resource allocation. Exploring the underlying mechanisms behind these differences in depth can help deepen our theoretical understanding of the laws governing the allocation of educational resources and provide practical inspiration for optimizing the rural education ecosystem from a cross-cultural perspective.

## **1. Analysis of the Differences in Resource Allocation of Rural Basic Education between China and the United States**

### **1.1. Differences in hardware facilities**

There are significant differences in the configuration of hardware facilities for rural basic education between China and the United States. In recent years, China has implemented the policy of "merging schools" to optimize resource allocation. From 2001 to 2010, a total of 233900 rural primary schools and 47400 teaching points were reduced. Although this measure has improved the hardware level of some schools, it has also caused many problems such as vacant school buildings, long distances for students to go to school, and lack of supporting facilities in boarding schools.

According to relevant data, the teacher-student ratio in rural junior high schools in China has been optimized to 1:12.5 in 2012. However, 48.3% of rural schools still lack standardized dormitories, and the coverage of school buses is still less than 30%. Compared to other countries, the United States has implemented systematic improvements to facilities through the Rural Education Achievement Program (REAP). Approximately 32% of federal funding in 2023 will be used for school upgrades and the introduction of technology equipment. The average teaching area per student in remote schools can reach 12 square meters, and the school bus network can cover 98% of rural school districts. Through the "small-scale school movement," community education space is preserved, effectively reducing resource waste.

## **1.2. Differences in teaching staff strength**

In terms of age structure, there is a problem of high mobility among rural teachers in the United States due to poor professional attractiveness, with approximately 40% of newly hired teachers choosing to resign before completing their 5-year term. On the other hand, the rural teacher workforce in China shows an aging trend, with over 60% of teachers aged 40 and above. Due to limited treatment and development opportunities, young teachers find it difficult to establish themselves in rural areas for a long time.

At the policy support level, the United States has implemented the "Teach for America" (TFA) program to attract top college graduates to teach in rural areas. Volunteers participating in the program can earn an average annual salary of \$22000 to \$40000, and are equipped with corresponding career development support measures. As of 2020, this program has covered 43 regions and delivered over 60000 teachers to rural areas. Although China has also implemented a special post program, the monthly salary of special post teachers in some areas is still less than 3000 yuan, and there is a lack of systematic and comprehensive training, which makes the stability of the teaching staff poor and the turnover rate as high as 25%.

## **1.3. Differences in curriculum design and teaching resources**

In China, rural schools are often limited by their teaching staff and facilities, and their curriculum mainly focuses on basic subjects such as Chinese and mathematics, while aesthetic education and practical courses have long been in a state of scarcity. For example, at Muchang Primary School in Zhenning County, Guizhou Province, there were only 3 teachers and 80 students, and the art education curriculum was almost blank. However, in recent years, local courses such as wax printing art and lusheng dance have been introduced through volunteer teaching projects. A matrix covering more than 60 micro courses has been constructed, covering more than 60 schools in Guizhou, Sichuan, Long and other regions, with a total of 15000 class hours.

On the other hand, in rural schools in the United States, although they attach great importance to subject integration and practice, the uneven distribution of funds has led to resource differentiation. The funding of public schools in the United States mainly relies on district property taxes, and the average student funding in affluent districts can be more than 10 times that of impoverished districts, which directly leads to a significant compression of non core courses (such as history, art, etc.) in schools in impoverished areas. For example, only 8% of students in some immigrant community high schools in the United States can meet the grade level standards for English and mathematics, and under the pressure of standardized exams, about one-third of rural high schools in the United States can only guarantee students'

graduation, making it difficult to effectively complete all teaching tasks.

## **2. Analysis of Factors Influencing the Allocation of Basic Education Resources in Rural Areas of China and the United States**

### **2.1. Economic factors**

There are differences in the allocation of basic education resources between urban and rural areas, which are limited by various economic conditions and exhibit distinct characteristics in China and the United States. As for the local fiscal system, the operating funds of rural schools in the United States rely heavily on local taxes to maintain, which has led to a long-term disadvantage in education investment in economically underdeveloped areas. The education funding allocation system based on property tax makes it difficult for impoverished communities to raise sufficient funds for school building repairs and the upgrading of teaching equipment. Even with subsidies from the federal and state governments, it is difficult to effectively narrow the gap in education investment between different regions.

In rural areas of China, education funding mainly comes from central government transfer payments and local supporting funds. However, the uneven regional economic development has made it difficult for some county-level finances to fully implement supporting funds, resulting in slower progress in standardized construction of school buildings and the popularization of information-based teaching equipment in remote areas of central and western China. The difference in fiscal supply structure fully demonstrates the fundamental differences in the investment mechanisms for basic education between the two countries.

However, the limitations brought by a weak economic foundation to the allocation of educational resources are not limited to hardware facilities alone, and their impact on the balanced development of educational quality is more profound. As far as the United States is concerned, rural school districts generally encounter difficulties in teacher recruitment due to financial constraints. Excellent educational talents are often more willing to work in urban schools with favorable treatment and complete supporting facilities, which leads to an imbalance in the structure of rural teacher teams and uneven levels of professional competence among teachers. In rural areas of China, in addition to the problem of teacher turnover similar to that in the United States, there are also unique challenges such as a high proportion of substitute teachers and a lack of on-the-job training resources, which are directly related to the payment ability of local finances. The long-term shortage of educational human resources has led to rural schools in both the United States and China falling significantly behind similar urban schools in curriculum development and teaching reform, resulting in an irreversible gap in education quality.

### **2.2. Policy factors**

The policy of allocating basic education resources in China is mainly coordinated and planned by the central government, which strengthens the balance of resource allocation through top-down planning and design. As for the implementation rules of the "Weak School Transformation Plan" jointly issued by the Ministry of Education and the Ministry of Finance on a regular basis, it is clearly stipulated that local governments need to follow the principle of "protecting the basic and covering the bottom line" to construct a fund allocation model. Such institutional arrangements can effectively prevent the excessive tilt of educational resources

towards cities. However, in the actual implementation process, the availability of county-level financial supporting funds often becomes a key factor limiting the effectiveness of policies. In some regions, due to weak fiscal strength, it is difficult for the policies formulated by the central government to be fully and effectively implemented.

In contrast, the US federal government's policy intervention in the field of basic education is mainly achieved through legislation, exhibiting typical characteristics of rule of law. Although the provisions of the "Title I Project" in the Elementary and Secondary Education Act clearly indicate the need to tilt resources towards impoverished school districts, the proportion of federal education funding in local education funds is relatively small, and the actual allocation of resources is still controlled at the state and school district levels. This decentralized management model has led to significant differences in the intensity of policy implementation among states, with a long-standing gap between southern agricultural states and northeastern industrial states in key indicators such as teacher compensation standards and school building construction norms.

### **2.3. Social factors**

The long-standing clan networks and local ethics in rural areas of China have a potential impact on the actual allocation of educational resources. Under the family style management model implemented in some regions, matters such as school building construction and teacher position arrangements are easily constrained by local interpersonal relationships. For example, some villages need to take into account the distribution of clan settlements when selecting the location for new teaching facilities. This decision-making model based on traditional social structures can easily lead to uneven distribution of resources.

Compared to others, the allocation of educational resources in rural areas in the United States is more influenced by the tradition of community autonomy, and the division of school districts and fundraising are generally determined by local councils through consultation. However, due to significant differences in economic foundations among different communities, agricultural counties with poor economic conditions find it difficult to provide sufficient funds to update school teaching equipment. This institutional arrangement based on local autonomy objectively widens the gap in the quality of educational resources between regions.

The different trends in population mobility between the two countries also have differential impacts. In China, a large number of young and middle-aged rural laborers are transferring to cities, which highlights the education problem of left behind children. Some village level primary schools are facing pressure to be merged due to a shortage of students. In rural areas of the United States, the population structure is relatively stable, and the size of schools is therefore maintained in a relatively stable state. However, there are language and cultural differences in ethnic minority areas in the United States, which poses special challenges to the allocation of bilingual teacher resources.

## **Conclusion**

In summary, the differences in the allocation of rural basic education resources between China and the United States stem from their distinct social structures, policy frameworks, and cultural traditions. To explore the underlying reasons for this difference, it is necessary to trace back from the perspective of institutional design. The institutional differences between

the two countries in the division of basic education powers, funding guarantee mechanisms, and social participation models constitute the basic framework for differentiated resource allocation.

## Reference

- [1] Li Jianpu A Comparative Study on the Shaping of China's National Tourism Projection Image by Typical Chinese and American Documentaries [D]. Yanshan University, 2023
- [2] Ding Wenxuan The problems and optimization paths in the targeted training mechanism for rural teachers: taking the training projects for rural teachers in China and the United States as examples [J]. Smart Agriculture Guide, 2023, 3 (16): 51-54
- [3] Xue Zhengbin, Zhang Binye A Comparative Study of Living Treatment Policies for Rural Teachers in China and the United States [J]. Contemporary Teacher Education, 2022, 15 (04): 28-31
- [4] Yan Kai Comparative Study on Rural Landscape Design between China and the United States Based on Actual Design Cases [C]//MCC Architectural Research Institute Co., Ltd. Proceedings of the 2022 Industrial Architecture Academic Exchange Conference (Volume 2) School of Architecture and Environment, Sichuan University,, 2022:20-23.
- [5] Pan Qilong, Han Zhen, Chen Jueying The Development of Rural Areas in the United States and Its Implications for Rural Revitalization in China [J]. World Agriculture, 2021, (09):76-82.