Educational Equity in China's Geographical Differences

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Abstract: Education inequality has long been a worrying issue but remains a global social problem lacking remedial measures. The foundation of social development is education, and regional differences in educational levels hinder individual growth and social progress. This article explores the main causes and impacts of regional education inequality. According to the data provided in this article, the two main reasons for regional education inequality are policy and economic factors. Economically developed regions have more high-quality teachers and educational resources, while economically underdeveloped regions lack resources, which affects the quality and competitiveness of students' education. In addition, differences in household income and parental education levels further exacerbate inequality. The government has made some efforts to narrow the regional education gap, but the effectiveness of policy implementation is limited by differences in local fiscal capacity. Therefore, this article proposes some suggestions to address regional education inequality, including balanced allocation of educational resources, strengthening the construction of teacher teams, formulating policies to promote educational equity, and promoting innovative educational technologies. Through policy guidance and technological means, it is expected to improve the quality of education in impoverished areas, gradually narrow the regional education gap, and promote social equity and economic development.

Keywords: China, education equity, regional education equity, regional differences.

1. Introduction

Equal access to education is a basic human right championed by the United Nations. For a country's economy, education is an important social investment that prepares the people to become the needed labor supply for economic development [1]. The concept of educational equity has existed for thousands of years, and the pursuit of educational equity has always been an ancient idea in human society.

Plato was the first to propose the concept of educational equity, and two thousand years ago, Confucius in China also put forward the idea of educational democracy with no discrimination. Educational equity is an important guarantee for social development and stability. Promoting educational equity not only helps improve national quality and promote economic and social development but also lays the foundation for achieving social equity and justice. China has taken many measures to promote educational equity, from the nine-year compulsory education to the reform of the college entrance examination system. Despite these efforts, the phenomenon of educational inequality still occurs.

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Since the reform and opening up in 1978, the country has implemented the "coastal opening-up" strategy, prioritizing the development of the southern coastal areas. The development of the southern economy has attracted a large influx of northern labor and talent, while some traditional industrial cities in the north have slowed down their economic development speed due to industrial restructuring and other reasons, resulting in a huge economic gap between the north and the south. At the same time, the western region has a slower opening-up process and relatively lagging economic development due to its geographical location and infrastructure disadvantages. The huge economic disparities have led to regional educational inequality, which further affects regional economic disparities and forms a cycle [2]. In the following chapters, discuss the factors that contribute to regional educational inequality, their impacts, and some suggestions for improvement.

2. Factors Affecting Regional Inequalities in Education

The problem of regional education inequality is intricate and multifaceted, encompassing not just the distribution of educational resources but also the impact of social, economic, and cultural variables. Regional disparities in education are particularly noticeable in China, where problems including disparities in economic development between areas and urban-rural divides have exacerbated the allocation of educational resources. The primary variables influencing regional disparities in schooling are as follows.

2.1. Educational Resources

Table 1 shows the key education indicators that various regions will focus on in 2022, such as the number of schools, education personnel, and full-time teachers. Take Xizang, Guangdong, and Shandong for example, Xizang has 40 schools. Guangdong has 1121sahools [3]. This highlights the limited supply of educational institutions in Xizang and the uneven distribution of educational resources. Guangdong also has the largest number of educational personnel, with nearly 200000 in Shandong. However, Xizang has significantly fewer educational personnel, less than 10000 (7652). Xizang has 6588 full-time teachers, 164739 full-time teachers in Guangdong, and 161771 full-time teachers in Shandong, all significantly higher than Xizang, indicating that Xizang is facing a serious shortage of qualified educators [3]. These data clearly show that there is a huge gap in educational resources between Xizang and other regions in China. Provinces with similar large gaps are not limited to Xizang, but also Qinghai, Ningxia, and Xinjiang.

Table 1: Number of teaching staff, full-time teachers, and schools by region in 2022 [3].

Region	Educational Personnel	Full-time Teachers	Schools
Total	3224457	2133159	15026
Beijing	68899	22789	351
Tianjin	34214	17959	201
Hebei	199162	134101	775
Shanxi	106257	64989	508
Inner Mongolia	62062	40737	311
Liaoning	69291	54275	434
Jilin	48233	35129	266
Heilongjiang	58992	44979	363
Shanghai	37748	20127	280
Jiangsu	157268	121392	644
Zhejiang	106205	78339	641

Table 1: (continued).

132600	90183	679
121866	57662	578
122203	81583	561
199958	161771	753
238239	184224	1050
103258	76048	563
142017	102263	726
303581	164739	1121
120459	83638	537
34505	15909	135
80875	44213	277
207071	111409	809
99393	71721	494
118204	76425	641
7652	6588	40
86422	57339	444
63762	47955	368
15081	10789	106
15834	13063	70
63146	40821	300
	121866 122203 199958 238239 103258 142017 303581 120459 34505 80875 207071 99393 118204 7652 86422 63762 15081 15834	121866 57662 122203 81583 199958 161771 238239 184224 103258 76048 142017 102263 303581 164739 120459 83638 34505 15909 80875 44213 207071 111409 99393 71721 118204 76425 7652 6588 86422 57339 63762 47955 15081 10789 15834 13063

Therefore, from the perspective of software resources, teacher resources are an important factor affecting regional educational inequality. Economically developed and urban areas are usually able to attract and retain more high-quality teachers, which is not only related to the living conditions and salary benefits in these areas but also closely related to career development opportunities. On the contrary, economically underdeveloped areas and rural areas have poor living conditions and low salaries, making it difficult to attract high-quality teachers. Even with some policy support, there is still a significant gap in the number and level of teachers. At the same time, rural teachers in China have weaker strength compared to urban teachers, often facing problems such as lower average age and professional level of teachers, and even a lack of teachers in some subjects [4]. This uneven allocation of teacher resources directly affects the quality of education in different regions, thereby affecting regional education inequality.

From the perspective of hardware resources, economically developed regions usually have more financial resources, which can provide more financial support for the education system. These resources are not only reflected in the infrastructure of schools and the salary and benefits of teachers but also the overall improvement of education quality. For example, economically developed regions can provide schools with better teaching equipment, and more extracurricular activities, thereby enhancing students' learning experience and educational quality. In contrast, education resources in economically underdeveloped areas are relatively scarce, with low teacher salaries, outdated school infrastructure, and difficulty in ensuring educational quality.

2.2. Family Condition

Family background and social capital are also important factors affecting regional education inequality. Factors such as parents' income and education level have a significant impact on their

children's education. In economically developed areas, families with higher incomes usually can provide better educational environments and more educational resources for their children, such as tutoring classes and extracurricular activities, thereby improving their academic performance and overall quality [2]. Families in economically underdeveloped areas, due to their lower income levels, are unable to provide sufficient educational resources for their children, nor are they able to provide additional educational resources for them. Meanwhile, in China, a child's academic performance is influenced by their parents' values and cultural levels within the family structure [5].

A certain degree of influence: the higher the education level of parents, the greater the possibility of their children receiving higher education, which is known as intergenerational transmission [6]. In addition, differences in family social capital can also affect students' educational opportunities, and family education expenditures are affected to some extent due to income inequality between urban and rural areas, developed coastal and inland regions, as well as the Northeast and Western regions [7]. Students with higher family social capital can obtain more educational opportunities and resources through their parents' social relationships. On the one hand, this puts students in these regions at a disadvantage in educational competition, and on the other hand, in the long run, it will lead to a widening gap between students from both sides.

2.3. Government Policies and Financial Investment

The government's policy orientation and financial investment have a direct impact on regional education inequality. Although the Chinese government has made many efforts to narrow the regional education gap, such as the policy of balanced development of compulsory education and the Western Development Education Assistance Program, the effectiveness of policy implementation varies due to differences in the financial capacity of local governments. In areas with higher fiscal revenue, the government can invest more funds in education construction, while in areas with lower fiscal revenue, even with policy support, it is difficult to obtain sufficient funds, which makes it difficult to effectively solve the problem of uneven distribution of educational resources between regions.

2.4. Urban-Rural Dual Structure

The dual structure of urban and rural areas in China is one of the important factors leading to regional education inequality. There are significant differences between urban and rural areas in terms of economic development level, infrastructure construction, and social service supply, which directly affect the distribution of educational resources. Schools in urban areas are usually equipped with better teaching facilities and higher-quality teachers, and students also have more opportunities to access high-quality educational resources. However, rural areas often face problems such as a shortage of teacher resources and outdated educational facilities, making it difficult to compare the quality of education for students with that of urban students. In addition, the acceleration of urbanization has led to a large influx of rural population into cities, migration of rural population, and migration of resource-rich families to developed areas, further affecting the balance of urban and rural development, disrupting the original education system structure in rural areas, and causing the education gap between urban and rural areas to continue to widen [8].

3. Impact of Inequity in Education

The term "regional educational inequality" describes the occurrence of notable variations in educational opportunities, resources, and quality among various locations. Globally, inequality is pervasive, particularly in developing and impoverished areas. Significant effects of regional educational disparity have been seen in many facets of society. The primary variables influencing regional disparities in schooling are as follows.

3.1. Limitations on Economic Development

Regional educational inequality directly affects the potential for regional economic development. Education is the foundation of economic development, which not only provides technical talents and professional knowledge for society but also promotes innovation and technological progress. However, due to the uneven distribution of regional educational resources, many underdeveloped areas are unable to cultivate sufficient high-quality labor force. This makes it difficult for these regions to attract high-tech industries and external investment, severely limiting their economic development. For example, in some remote rural areas, due to a lack of educational resources, many young people are unable to receive high-quality education, resulting in a lack of competitiveness, and can only engage in low-income physical labor. This has led to a shift in China's education from a source of justice to a source of injustice, with a greater impact on income inequality and more replication of environmental factors of inequality, rather than providing opportunities for people's choices or efforts in economic life [9]. This not only exacerbates the imbalance in regional economic development but also further widens the wealth gap, forming a vicious cycle.

3.2. The Impact on Social Mobility

Education is an important way to achieve social mobility. Through education, individuals can acquire higher knowledge and skills, thereby gaining higher status and better living conditions in society. However, regional educational inequality limits the possibility of social mobility. In areas with scarce educational resources, students often find it difficult to access the same educational opportunities and quality as urban students, which puts them at a disadvantage when entering higher education and the labor market. Over time, this educational inequality has solidified social classes, leading to a decrease in social mobility. For example, in rural areas, many students are unable to access high-quality educational resources and ultimately have to stay in their hometowns to work in low-income jobs, which makes it difficult for them to break the poverty cycle of their families and greatly limits social mobility.

3.3. Limiting Personal Development

The impact of regional educational inequality on individual development is profound. Education is an important way for individuals to realize their self-worth. It not only helps individuals acquire knowledge and skills but also cultivates their moral values and sense of social responsibility. However, due to regional educational inequality, many people are unable to access the same educational opportunities as other regions during their growth process, which limits their development potential. In areas with scarce educational resources, students have poor learning conditions and weak teaching staff, resulting in generally lower academic performance than students in developed regions. This educational gap may put them at a disadvantage in their future career development, thereby affecting their income level and quality of life. In addition, educational inequality may also lead to a blow to individuals' self-esteem and confidence, further affecting their mental health and social integration.

4. Recommendations for Promoting Equity in Education

Many nations throughout the world struggle with regional education inequality, particularly those like China that have large territories and notable urban-rural divides. This disparity has an impact on the social economy's overall growth in addition to limiting educational equity. Regional education disparity must be addressed at several levels, including the creation of policies, the distribution of

resources, the development of teacher strengths, the use of technology, etc. The strategies to alleviate regional disparities in education from various angles will be discussed below.

4.1. Policies to Promote Equity in Education

The imbalance of educational resources is one of the main reasons for regional educational inequality. To narrow this gap, the government and relevant institutions need to take measures to balance the allocation of educational resources.

On the one hand, some educational resources from developed areas can be transferred to underdeveloped areas through fiscal transfer payments to help improve teaching conditions in these areas. It is necessary to understand the actual needs of schools in different regions, identify the different needs of each school, accurately allocate educational facilities, and invest corresponding educational funds [2]. For example, the government should strengthen financial support for remote and impoverished areas to ensure that schools in these areas can receive sufficient funds for daily operations and teaching activities.

Secondly, it can encourage and guide social resources to tilt towards underdeveloped areas. For example, businesses and social organizations can support the development of education in these areas by donating educational funds, establishing scholarships, and funding teaching facilities. At the same time, the government can establish incentive mechanisms to encourage more outstanding teachers to teach in impoverished and remote areas, provide policy support such as economic subsidies and housing security, and attract and retain high-quality teaching personnel.

On the other hand, the government should formulate and implement policies to promote educational equity, ensuring fair distribution of educational resources in various regions through legal and administrative means. The government can establish special funds to support the construction of schools, improvement of teaching facilities, and teacher training in areas with scarce educational resources.

Furthermore, it can consider increasing education investment in these areas to ensure that they are not inferior to developed regions in terms of teacher salaries, school infrastructure, and teaching equipment. For some extremely poor families, especially those who cannot afford their children's daily learning expenses, it is appropriate to reduce their children's learning expenses or provide certain subsidies.

4.2. Promoting Innovation in Education

With the rapid development of information technology, educational technology has provided new possibilities for addressing regional educational inequality. Online education platforms, distance education technology, and intelligent educational devices can break geographical limitations and provide high-quality educational resources for students in remote areas. The government and educational institutions should vigorously promote the popularization and application of educational technology, especially in areas with scarce educational resources.

First of all, the government should invest in building a wide range of educational information infrastructure to ensure that schools in remote areas can access high-speed Internet and be equipped with necessary teaching equipment. Secondly, online educational resources and platforms that cater to the needs of students in different regions can be developed and promoted to help students in these areas gain more learning opportunities.

In addition, educational technology can also be used for teacher training, enhancing the teaching ability and professional knowledge of teachers in remote areas through online courses and remote teaching. By building virtual classrooms and remote teaching platforms, high-quality educational

resources can be shared to help students in these areas gain the same learning experience as students in developed regions.

5. Conclusion

This article addresses the issue of regional education inequality in China, examines its effects, identifies the primary causes, and suggests remedies. First of all, educational equity is the cornerstone of a nation's social and economic progress in addition to being a significant social justice manifestation. Yet, there is a substantial disparity in educational resources between urban and rural areas, as well as between the north and south and the east and west regions, which results in regional educational inequality. This disparity is caused by the uneven development of the regional economy and the unequal distribution of resources.

The primary cause of educational inequality is the unequal distribution of educational resources. Rich areas have greater financial resources, better instructional resources, and better facilities than impoverished rural areas this areas face problems such as teacher shortages and outdated facilities. This has a direct impact on students' educational experiences, which in turn restricts their ability to grow personally and advance in society. Educational inequality is further compounded by the disparities in social capital and family background, which impede children from low-income families from accessing the same educational opportunities as their wealthier counterparts. Students in economically poor areas find it challenging to access the same educational resources as students in economically developed areas due to the issue of inequality. Several recommendations are made in this article to remedy these problems. To ensure the rational distribution of educational resources and to increase financial support for impoverished areas, the government should, first and foremost, balance the allocation of educational resources through fiscal transfer payments and incentive mechanisms. Additionally, it should encourage exceptional teachers to teach in remote and underprivileged areas. Lastly, geographical differences can be effectively closed and more excellent educational materials can be made available to students in remote places through educational innovation, particularly through the use of online and distance learning technology.

In summary, regional education inequality is a complex social issue that calls for collaborative efforts between the public and private sectors as well as academic institutions to advance educational equity and the long-term, sustainable development of society via the wise use of resources, the creation of sound public policies, and creative use of technology.

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