Proceedings of the 2nd International Conference on Global Politics and Socio-Humanities
DOI: 10.54254/2753-7048/83/2024.20816

Comparison of Urban and Rural Education in China -- A Case Study of Hunan Province

Zeyan Shen[1,a,*]

[1]*College of Foreign Languages, Central South University of Forestry and Technology, Changsha, Hunan, 410004, China*
a. zswdxxyx@csuft.edu.cn
**corresponding author*

Abstract: In recent years, society attaches more importance to rural education, exposing more rural education defects to people's vision, and the disequilibrium of development between countryside and city has become a hot topic. This paper takes Hunan Province as an example to study this unbalanced development. It starts with comparing the status in quo of city's and countryside's development and specifically compares the hardware facilities and teachers. It is learned that rural education lags far behind the city in these two aspects. It can also be seen from these small aspects, that although there are policies to help the countryside, rural education still lags behind the city. Further analysis is made of the four reasons that cause the disparity of their education level, namely, economy, cognitive level, registered permanent residence and faculty: the government invests less money in rural education, parents and students in rural areas have lower cognitive level and less information is obtained, registered permanent residence hurts rural students, and rural faculty is weak; Given these reasons for the backwardness of education in countryside, specific suggestions are given, hoping to provide some reference and value for the balance of urban and rural education.

Keywords: China, rural education, urban education, educational development balance

1. Introduction

Education is one of the fundamental pillars of development, raising individuals' productivity and promoting their life opportunities [1]. Educational equity is the basis of social equity. Therefore, education is very important, and educational equity cannot be ignored, too. Inequality of development between city and countryside is a situation that occurs in most countries in the world, and this imbalance can be manifested in education. China's urban and rural education imbalance has also troubled people for a long time. The Chinese government has been trying new policies to improve rural education, but there is still a huge gap between these two regions' education. The improvement of rural education is a vital step in China's rural revitalization strategy, so it is very urgent to improve rural education.

This paper studies the status in quo of these two areas' education level and makes a comparative analysis of it. The paper first compares the hardware devices of schools between town and country, including informatization facilities and school buildings. Secondly, it compares the faculty of urban and rural education, which compares teachers' number, academic qualifications, treatment, vocational training, and subject accomplishment. In addition, the paper analyzes the reasons for the

DOI: 10.54254/2753-7048/83/2024.20816

huge difference between them, starting from the economy, cognitive level, registered permanent and faculty, and finally puts forward four corresponding suggestions for these reasons.

It is hoped that this paper could give some valuable reference and suggestions to Chinese society and schools, and finally promote the balance and progress of city's and countryside's education.

2. Urban and Rural Education Status and Comparison

2.1. Comparison of Urban and Rural School's Hardware Facilities

2.1.1. Informatization Facilities

The status in quo of urban and rural education is analyzed from the difference in the proportion of broadband networks installed in schools, full coverage of wireless network, multimedia classrooms and informatization mobile terminal equipment in city and countryside. Take schools in Hunan Province as an example.

This information equipment is of great help to teaching, they can promote the information of school education and management, whether it is for the work of school management, teachers' teaching or students' learning is a good help. For example, through multimedia teaching, teachers can visualize the teaching content and arouse students' interest. According to the data in Table 1, there is a significant gap between urban and rural education informatization in five aspects, and rural informatization equipment lags far behind urban education [2].

Table 1: Application of informatization teaching in primary and secondary schools

	Urban schools in Hunan	Rural schools in Hunan
The proportion of urban and rural schools with Internet access and network bandwidth greater than or equal to 100M(%)	96.96	88.15
The proportion of urban and rural schools with full wireless network coverage(%)	22.76	21.44
Construction of multimedia classrooms in urban and rural schools(%)	91.27	73.22
Proportion of urban and rural schools with innovation laboratories (%)	21.55	6.20
The proportion of information mobile terminal equipment used by urban and rural teachers in school teaching	28.61	16.53

2.1.2. School Building

The teaching environment is an important factor affecting education. School buildings are the basis of teaching and learning, and the basic conditions for qualified school buildings are: clean and tidy, spacious, good lighting and complete infrastructure. At present, schools in Chinese cities basically meet the above conditions. But in the vast rural areas, school buildings are not well built, and many schools fail to meet even the most basic conditions. There is an enormous imbalance between metropolitan and provincial school buildings. Although some rural school buildings have been renovated and rebuilt in recent years, there are still a large number of school buildings that do not accord with the fundamental needs of students and teachers [3].

DOI: 10.54254/2753-7048/83/2024.20816

2.2. Faculty

2.2.1. Number of Teachers

The number of rural teachers is much smaller than that of urban schools, and the personnel structure is very unbalanced. Due to the large shortage of teachers, many rural teachers hold several posts. The number of music, art and physical education teachers is insufficient [4]. Some teachers who have been employed in rural schools also quit the rural teachers for various reasons [5].

2.2.2. Teachers' Academic Qualifications

Taking Hunan Province as an example, the minimum requirement for primary and secondary school teachers in Hunan province's urban area is a bachelor's degree, and plenty of schools recruit teachers with master's degrees, even many doctoral students go to the provincial capital to apply for teacher positions. Due to the poor environment of rural schools, teachers are more willing to go to urban schools, thus rural schools will lower the educational requirements for teachers when recruiting teachers [5]. There are a large number of teachers with junior college degrees.

2.2.3. Treatment of Teachers

The salaries and welfare benefits of urban teachers are generally good, and there are additional benefits. Their teaching environment is better, the office is larger and more comfortable. However, in rural areas, the salary of a large number of teachers can only support the daily living expenses, and the welfare benefits are relatively much less [3].

2.2.4. Teacher Vocational Training

Urban school teachers have regular teacher vocational training, including subject knowledge update, teaching skills improvement, educational psychology learning, teaching evaluation and informatization teaching, etc. The training content will keep pace with the times, so that teachers can get the most advanced teaching methods. However, it is difficult for rural teachers to obtain high-quality vocational training and more possibilities for further study.

2.2.5. Teachers' Subject Accomplishment

As the main component of teachers' knowledge level, subject knowledge has a profound influence on teachers' subject teaching and students' achievement.

Taking primary school math teachers as an example, a paper studies the methods of paper testing for primary school math teachers in city and countryside. According to the data in Table 2 and Table 3, the overall subject knowledge level of rural teachers is lower than that of urban teachers, and there are problems of large internal individual differences [6].

Table 2: Description of subject knowledge accomplishment of primary school mathematics teachers

	Sample size	Total scores	Average score	Highest score	Lowest score	Score gap	Standard deviation
Rural area	83	100	56.33	94	8	86	20.77
Urban area	61	100	66.56	93	24	69	15.69
Totality	144	100	60.66	94	8	86	19.40

DOI: 10.54254/2753-7048/83/2024.20816

Table 3: Description and analysis of subject knowledge level of mathematics teachers in urban and rural primary schools

Dimensionality	Total score	School type	Sample size	Average score	Standard deviation
Correctness	44	Rural primary school	83	28.289	11.222
		Urban primary school	61	35.082	7.462
		Totality	144	31.167	10.340
Interpretability	32	Rural primary school	83	17.976	8.495
		Urban primary school	61	19.721	6.696
		Totality	144	18.715	7.807
Connectedness	24	Rural primary school	83	10.060	6.406
		Urban primary school	61	11.754	5.412
		Totality	144	10.778	6.043

3. Reasons

3.1. Economy

In terms of economy, the state invests different funds in metropolitan and provincial education. The funds for urban education are much more than those for rural education, which widens the inequality between these two regions' education [7]. As a result, the environment and equipment of rural schools are more backward, the quality of teachers is worse, and because the number of schools is affected by funding and proportional, rural children have less opportunities to further study than urban students, which also leads to a vicious circle. In addition, the family economic level will also affect the education level, because the rural family income is small and the rural welfare is poor, parents will let their children drop out of school earlier to earn more family income.

3.2. Cognitive Level

The cognitive level of metropolitan and provincial people is various, and the cognitive difference between them gradually expands with time. Students' cognitive levels will be affected by the social environment, school environment and family environment. Rural students receive less information content than urban students during childhood and adolescence. Among them, the education level of parents in a family and the number of siblings in a family are connected to the cognitive level of students. The education level of parents in rural families is lower than that in urban areas, and the number of siblings is also lower than that in urban areas due to the birth policy [8]. All these lead to poorer cognitive ability of rural children, thus widening the urban-rural education imbalance

3.3. Registered Permanent Residence

China has a dual structure of urban and rural areas, and the economic level of cities is higher than that of rural areas, so urban work can get more pay. However, since urban and rural registered permanent residence cannot be transferred to each other, rural parents who go to the city for work cannot take their children to the city to study, because the school area needs to be in the registered permanent residence location, otherwise they will be charged extra fees by public schools, and the education cost will be transferred from the government to the rural children and their families, the education of these children will be passively affected, which is negative [9].

DOI: 10.54254/2753-7048/83/2024.20816

3.4. Faculty

The gap of teachers results in the imbalance of city's and countryside's development. The reasons for the weak teachers in countryside are also affected by the economy and policies. The state invests less in rural education, so rural teachers get worse pay and benefits. The working environment and living environment of teachers are also worse, and the way of entertainment is single, so few high-level teachers are willing to stay. In the recruitment process, the standards for teachers are lowered, and the subsequent vocational training is not in place, which leads to the poor teaching ability of teachers, children cannot get a good education, and thus fewer opportunities to study. After these people get married and have children, their low education level will hurt their children, thus becoming a vicious circle.

4. Suggestion

4.1. Economy

The government could continue to increase the investment in education in rural regions, increase the proportion of education investment in the total investment capital, and timely update school equipment and old buildings; Projects such as the Hope Project could also be launched to encourage caring people to donate goods and materials, and the amount of money invested needs to be determined according to the specific development level and specific education level of each region [10]. If there are extremely poor families, the government could waive their children's tuition fees and living expenses, and the government could give education subsidies to students with excellent grades.

4.2. Cognitive Level

Rural parents are relatively backward in thinking, and the government could try to give ideological work to those parents who do not want their children to go to school, so as to reduce their neglect of education; Reduce their preference for sons over daughters and give boys and girls equal access to schools. With the rapid development of the Internet, schools could advocate that children could go online at school or at home to learn the latest information, and teachers can also explain current affairs, so that children can get more circulating and timely information.

4.3. Registered Permanent Residence

For families working in cities, the government could show some tolerance and reduce the tuition fees for the children of such families. But of course, if the rural economy is developing better today, naturally there would not be so many rural people who go to the city to work, so the fundamental problem is to solve the rural economic problems, and vigorously develop the rural revitalization strategy.

4.4. Faculty

Education departments could provide more in-depth vocational training for rural teachers, and provide better salaries and welfare benefits. Rural teachers can be regularly trained together with urban teachers to learn more advanced and humane teaching methods and improve the level of rural teaching. At present, there is an exchange policy between urban and rural teachers, but it has not achieved a good effect, because the exchange time is short and urban and rural students have different abilities to accept information, and the teaching methods of urban teachers are not necessarily effective in rural areas. In the future, more researchers are needed to explore a more appropriate

DOI: 10.54254/2753-7048/83/2024.20816

approach. In addition, for in-service rural teachers, it is necessary to carry out some ideological training, affirm their contributions to the countryside, and encourage them to stick to it [5]. Of course, giving them better treatment is the best way to encourage them. Teachers also need to improve their subject knowledge level, the current burden reduction policy has not been implemented in place, so schools need to give teachers more time to return to teaching work, educational institutions should also expand online learning channels, give teachers the opportunity to combine online and offline learning.

5. Conclusion

This paper compares the status in quo of metropolitan and provincial education, and finds that rural education is worse than urban education in terms of hardware facilities and teachers, which are specifically manifested in insufficient information equipment, poor school environment, small number of teachers, low academic qualifications of teachers, low salary of teachers, insufficient vocational training of teachers and low discipline accomplishment of teachers. This reflects the severe imbalance between city's and countryside's education. Although the social attention to rural education has been significantly improved in recent years, the support policy has yet to be implemented and the financial support has yet to be improved. Therefore, the country could increase the investment in rural education, and call on the community to donate, so as to achieve the economic balance between these two regions' education, and use these funds to buy more advanced equipment and improve the school environment. In the face of the insufficient cognitive level of rural students and their parents, the government could publicize them, let them pay attention to education, and encourage and teach them to use the Internet to get more information; Due to the registered permanent residence, many rural children are unable or difficult to go to school in the cities where their parents go to work. It is suggested that the government give tuition preferential policies to these children. The salary and welfare of rural teachers are much less than that of urban teachers, so their income could be increased and more additional rewards should be given. Teachers with high academic qualifications who want to teach in rural areas could be given better welfare benefits. At the same time, a certain number of professional art and physical education teachers could be recruited to teach specialized courses and promote the all-round development of children. The training of rural teachers could also keep pace with the times, so that rural teachers can be regularly updated by the knowledge system and educational skills, and provide them with an online learning platform.

This paper will play a certain role in China's urban and rural education and even the balance of their development, and provide the Chinese government and rural schools with some current situation analysis and improvement suggestions, which will help to promote social attention to the backwardness of rural education, trigger people's thinking, and promote the implementation of policies. The growth of education in countryside will gradually promote the development of other rural regions such as the economy. The government would make the rural revitalization policy gradually play its role and ultimately achieve a balance between urban and rural development.

This paper also has some shortcomings. The latest data on teachers' salaries and welfare benefits are not available, so it is necessary to conduct investigations and collect relevant information in future research. As for the suggestions on improving teachers' vocational training, future researchers are needed to compare and research what methods are more suitable for the improvement of rural teachers' knowledge accomplishment.

References

[1] *OECD. (2016). Education at a Glance 2016: OECD Indicators. OECD Publishing.*

[2] *Wang, Y. X. (2020). Research on urban-rural development difference and influencing factors of basic education informatization in Central China [D]. Central China Normal University. DOI: 10.27159/dcnki.Ghzsu.2020.002747.*

DOI: 10.54254/2753-7048/83/2024.20816

[3] Tan, W. J. (2012). Research on optimal allocation of basic education resources in urban and rural areas of China [D]. Xiangtan University.
[4] Li, H. M., & Wang, X. H. (2019). The contradiction of rural teachers' supplement and its solution strategy. Journal of Ningxia Normal University, 45(05), 47-51.
[5] Dong, W. J. (2019). Research on the dilemma and countermeasures of rural teacher team construction under the background of rural revitalization. Neijiang Science and Technology, 45(03), 44-45+123.
[6] Liu, F. (2023). Rural elementary school mathematics teachers' subject knowledge development characteristics research [D]. Shanghai Normal University. DOI: 10.27312/dcnki.Gshsu.2023.001538.
[7] Gao, A. L. (2019). Analysis on the difference of educational resources in urban and rural middle school students and its impact on academic performance [D]. Shanxi University of Finance and Economics.
[8] ZHAO G, YE J, LI Z, et al. How and why do Chinese urban students outperform their rural counterparts?[J]. China Economic Review, 2017, 45: 103-123.
[9] Wang L. Social exclusion and education inequality: Towards an integrated analytical framework for the urban–rural divide in China[J]. British journal of sociology of education, 2012, 33(3): 409-430.
[10] Xiang L, Stillwell J. Rural–urban educational inequalities and their spatial variations in China[J]. Applied Spatial Analysis and Policy, 2023, 16(2): 873-896.