Research on the Gap Between Urban and Rural Teacher Resources Based on Data and Case Analysis

Yu Zhang

College of Physics and Optoelectronics, Shenzhen University, Shenzhen, Guangdong, 518060, China

2020276173@email.szu.edu.cn

Abstract. With the development of society, the trend of urbanization is becoming clearer and faster. Despite its advantages, this trend also brings education an unignorable problem: The diverse Urban-Rural Gaps of Teachers. For students from rural areas, the gap in teacher resources may cause them hard to get sufficient education and can't accumulate enough knowledge to live a better life as a result. Although this is a significant problem, only a few papers offer this topic. So the author will introduce this topic and discuss the possible solutions to it by data analysis and successful cases reference. In conclusion, the Urban-rural gap in teachers' number has been narrowed a lot in recent years but the teacher-student ratio still remains unreasonable. The teacher quality gap between urban and rural areas is being widened with the Informatization, especially in the academic qualifications, age structure and on-the-job training preference. To gradually narrow the gap, Japan's "Teacher Regular Flow System" and "Special Allowance System" can be referred to by China. Also, the government should increase the financial support for teaching in rural areas as well as encourage informatization in poor counties in order to strengthen the attractiveness of talent in rural areas.

Keywords: Urban-rural gap, Teacher resources, Teacher quality.

1. Introduction

To achieve education equality between urban and rural areas and reduce the disparity between urban and rural compulsory schooling, teachers are the key. The current economic, educational, and career attractiveness gaps between compulsory education teachers in urban and rural areas are significant, which has an impact on the equitable distribution of teacher resources and, in turn, has an impact on the achievement of the goal of the equitable development of compulsory education. It is necessary to conduct a thorough investigation of the resource allocation structure and quality differences of the professional teacher groups, analyze the external conditions and internal mechanisms of their formation, and change the current situation of the uneven allocation of teacher resources between urban and rural areas. With the popularization of modernized and westernized education methods such as English education, quality education, and information-based education, the impact of the gap between urban and rural teachers is further reflected. Yubo Guan discovered that there is a systemic general scarcity of full-time teachers in rural schools, specifically a severe deficit of scientific and engineering teachers, and that many courses are ineffective as a result of the absence of qualified instructors [1]. According to Ling Hu, the government does not give relevant education policies long-term and careful thought, and this lack of thought causes the policy's implementation to face new challenges, which ultimately exacerbates the imbalanced allocation of teacher resources between urban and rural areas during the compulsory education stage [2]. In the opinion of Yongjiu Kang, because of the dual nature of urban and rural areas, the government should start by prioritizing the interests of the urban areas when formulating policies, while the rural areas are frequently disregarded and as a result contribute to the long-term imbalance that exists today [3].

In this paper, the author will explain the manifestation of the urban-rural gap at the teacher level from three aspects. The author will also demonstrate the thoughts on the reason why this gap exists and how to narrow it.

2. Urban-rural Gap in Teacher Resource

The gap in teacher resources between urban and rural areas refers to the gap between urban and rural teachers in the provision of courses, especially in some rural schools where the number of teachers is insufficient, which affects the availability and fullness of courses. the geographical dispersion of the countryside, smaller schools, and generally smaller class sizes put rural teachers in higher demand on average than urban ones. However, the current official teacher-student ratio standard in China is: Urban primary schools have a teacher-to-student ratio of 1: 19; county primary schools have a teacher-to-student ratio of 1: 21; and rural primary schools have a teacher-to-student ratio of 1: 23 [4]. It can be seen that this is a logically unreasonable regulation.

Although the gap in the number of teachers between urban and rural areas has gradually narrowed in recent years, and the number of rural teachers has tended to be sufficient or even overstaffed, the structural contradictions of rural teachers' disciplines are prominent, the shortage of teachers in some subjects, and the insufficient number of teachers in remote areas still plague the development of rural education.

According to the "National Education Supervision Report 2008", about 40% of junior middle school Chinese, mathematics, foreign language, art, music, art and physical education teachers with qualified initial education in rural areas are not learning what they are teaching. In many rural areas, there is a severe shortage of teachers in subjects such as foreign languages, music, physical education, art, and information technology, and it is difficult to provide relevant courses. Especially in the poverty-stricken areas of the central and western regions, and rural junior high schools in ethnic minority areas, there is less than one teacher per school in the three subjects of music, art, and information technology.

In contrast, teachers in urban areas are far better than those in rural areas in terms of professional counterparts and subjects availability.

According to data from China's seventh census in 2020, 63.89% of the country's population lives in cities and towns; the remaining 36.11% reside in rural areas. The share of the urban population climbed by 14.21 percentage points compared to the sixth national census in 2010 [5].

With the development of urbanization, the urban population has surpassed the rural population, and the population gap, wages, community environment and other conditions have jointly led to the gap in teacher resources between urban and rural areas.

3. Urban-rural Gap in Teacher Quality

Firstly, rural primary and secondary school teachers generally have low academic qualifications and the quality of teachers is uneven.

Taking Hunan Province as an example, the proportion of full-time teachers in rural primary schools with a bachelor’s degree or above is less than 20% of that in urban areas, and the proportion of junior high school teachers is only half of that in urban areas. For example, the qualification rate of first-degree teachers in rural schools in Hengyang City is 22.7% [6].

The quality of teachers cannot meet the needs of the rapid development of compulsory education. Many of the teachers in certain rural schools are local high school graduates who haven't received college admission. Even junior high school graduates have become instructors in some rural communities. Many impoverished counties have instructors who have completed elementary school. The disparity in educational quality is also influenced by the differing teaching age structures between urban and rural places. The teaching age structure of urban schoolteachers is better than that of rural schools: The proportion of experienced young and middle-aged teachers in urban schools is relatively high, while that of novice teachers and elderly teachers in rural schools is relatively high. Those differences jointly lead to the fact that a considerable number of rural teachers have outdated educational concepts, outdated knowledge, and backward teaching methods. In the situation of information technology’s rapid development, these teachers can hardly adapt to the needs of educational reform and development.

According to statistics, in 2009, primary school teachers in urban areas made up 43.25% of the total and primary school teachers in rural areas made up 12.03 percent of the total [6].

Compared to 78.14% of instructors in urban regions, 49.24% of junior high school teachers in rural areas have a bachelor's degree [6].

In addition to teachers' academic qualifications, rural teachers often undertake more and heavier teaching tasks than urban teachers in actual teaching. Taking primary schools as an example, in the county, 20.3% of instructors only teach one subject, and 15.3% teach four or more [6]. However, just 7.9% of teachers in townships teach just one subject, compared to 35.3% who teach four or more [6]. Nevertheless, instructors in rural areas spend substantially more time teaching each week than those in metropolitan areas, particularly in basic schools. Municipal primary schools had 32.2% of teachers with less than 14 weekly class hours, county primary schools had 58.3%, and township primary schools had 14.2%; similarly, county primary schools had 3.4% of teachers with more than 20 weekly class hours, municipal primary schools had 3.4%, and township primary schools had 14.2% [6].

Nevertheless, the difference in the quality of urban and rural teachers is also reflected in the huge differences in the level and content of on-the-job training: urban teachers have more special training than rural teachers, while rural professional title training and academic education are higher than those in urban areas. This shows that the ongoing education of urban teachers focuses more on improving teachers' internal abilities of quality-oriented education, while the continuing education of rural teachers pays more attention to the improvement of external skills and low-level abilities.

4. The Reason Why This Gap Exist

On the one hand, the level of education input varies depending on the level of economic growth between urban and rural locations. The backward economic level in rural areas makes it easy for local education to be abandoned or gradually marginalized. Due to this urban-rural dual structure, the education department implements different allocation standards between urban and rural schools, such as school conditions, teacher development opportunities, and teacher resource allocation. Or it is the housing conditions, various insurances, daily necessities and other benefits that teachers enjoy, and there are differences between urban and rural teachers. On the other hand, differences in economic development levels indirectly lead to the loss of students and teachers in rural schools. The first is the loss of rural students. With the rapid development of urbanization, the gap in economy, culture and living standards between urban and rural areas has gradually widened. What's more, there is also a large gap in the corresponding education level. Now many parents realize the importance of education. Therefore, in order to allow their children to receive a relatively good education, many parents will take their children to towns to enroll in schools, which also promotes population migration to a certain extent. The continuous loss of young adults and school-age children in rural areas conversely caused a rapid decrease in the number of students in rural schools. This vicious circle put many schools in the threat of being withdrawn and merged due to the extremely small number of students. The second is the loss of rural school teachers. The rural economic development level is not high, and the salary and living standards of rural teachers are relatively low. Therefore, the backbone teachers and young teachers of rural schools will leave rural schools and enter urban schools if they have the opportunity. The difference in the distribution of excellent teachers between urban and rural areas has been enlarged. Large differences in economic development levels have brought about imbalances in educational development. This impact is not temporary, nor can it be resolved quickly in a short period of time. The salary and other gaps between urban and rural teachers continue to shake the unsteady determination of rural teachers. So many teachers, driven by this economic interest and their own development plans, will automatically or passively leave rural schools and flow into town schools. This difference of salary and treatment may gradually form a contempt chain inside the teacher team and widen the gap of teacher resources between rural and urban areas.

Additionally, with the development of informatization, the educational gap between urban and rural areas may be widened, especially in those poor county. Data shows that: In 2016, the proportions

of rural primary schools, junior high schools and regular high schools establishing campus networks were 28.44%, 14.47% and 6.64% lower than those in cities [7]. The student who has more access to information can learn things in more comprehensive ways and shape their self-awareness well.

5. Suggestions

Firstly, China can learn from Japan's "Teacher Regular Flow System" and "Special Allowance System" [8].

In the world, the country with the most perfect implementation of the regular flow of teachers is Japan. Developed in the 1960s, this method, which was tested in public elementary schools at the start of World War II, is still in use today. The system mandates that all new teachers (with the exception of those who are 57 years old or younger, female teachers who are pregnant or on maternity leave, and teachers who have been absent for an extended period of time) who have taught in the same school for more than 10 or 6 consecutive years must be exchanged to teach in other institutions. The flow frequency is once every six years. Japan's "regular teacher flow system" has the characteristics of full and mandatory. Of course, in accordance with the provisions of the “Special Allowance System” for teachers and staff who migrate to rural and remote areas, Japan will provide additional subsidies to remote areas within 3 years from the date of change or flow in addition to paying wages in the area to make up for the gap between the areas. material and cultural differences.

As for Chinese scholars’ advice, Bo Yin mentioned that it is necessary to establish a two-way exchange system for teachers, organize district and township school teachers to go to key schools for temporary study and encourage and guide teachers from key schools to teach in district and township schools on a regular basis [9]. Ying Qu and Rongquan Fang proposed to encourage key teachers to teach in weak schools, implementing a regular rotation and exchange system for key teachers in schools in the region [10]. This advice further reflects the feasibility and benefit of the "Teacher Regular Flow System"

Japan's regular teacher exchange system has promoted the flow of school teachers at different levels in the same region, and played a role in promoting the balance of education quality between schools, which is worth learning from in our country.

Secondly, the government should increase the financial support for teaching in rural areas as well as encourage the informatization in poor counties. It is difficult to carry out rural teaching for a long time only by feelings. The performance salary of compulsory education teachers in China includes two parts: one is the basic performance salary uniformly distributed by the county-level government according to the teacher's professional title, and the other is the incentive performance salary independently allocated by the school according to its own situation.

The survey of performance wages found that there is no significant difference in the basic performance wages of teachers at the same level in the county. Because the basic performance wages belong to the rigid index income of teachers, which is the basic guarantee of teachers' income. It should be guaranteed by the financial department. however, incentive performance wages are different. It has an important relationship with the situation of the teacher’s school. The size, type, teaching performance and so on of the school all affect this part of the incentive performance wages of teachers. Incentive performance salary will vary depending on the school where the teacher is located, and there are many uncertainties. Often, the incentive performance salary of teachers in urban schools is higher. This might result in a one-way, irrational flow of teachers, which would eventually result in gaps between the quantity, caliber, and organization of teachers in urban and rural areas. Additionally, this impediment to equal teacher allocation between urban and rural schools. In order to genuinely increase the rural area's appeal to talent, the government should recognize the issue and balance the incentive performance wages.

6. Conclusion

Without question, the main elements that affect education quality are the availability of enough teacher resources and the caliber of teachers. Additionally, the structure of the teaching staff is an important link that cannot be ignored in the process of educational development. The education quality discrepancy between urban and rural areas can be seen clearly in the performance disparity of students between the two types of communities. Encouraging more young teachers to be willing to enter and remain in rural schools for a long time, encouraging more teachers to be willing to devote themselves to the development of rural education, gradually improving the quality of rural teachers and rural education. These actions should be taken in order to change the uneven education situation fundamentally. In today's rapidly developing information society, the Internet can narrow the educational gap between urban and rural areas, and at the same time, it may make this gap even bigger. Therefore, society should pay more attention to this issue, and achieve the goal of educational equity by strengthening economic support or referring to reform policies of other countries. This paper examines the statistics and examples to show the disparity in teacher resources between urban and rural areas and offers potential, workable remedies. It is hoped that China will change the current uneven situation of education by taking diverse efforts and give rural children the power to choose their own future.

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