

# ***How the Covid-19 Pandemic Magnifies Existing Urban-rural Educational Inequality in China***

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**Abstract:** Through analyzing past essays on educational inequality, our group finds that such inequality is established very early and deep in Chinese society. The most crucial cause of urban-rural inequality is the family background – an extreme intergenerational inequality based on parents' educational level and family wealth. Other causes include technological differences and employment patterns. After identifying the causes, our group examines the influence of the pandemic on rural-urban inequality, and the result points out that covid elongates the gap. Furthermore, the financial capability of rural families is worsened under the covid since lots of small businesses owned by rural families shut down because the lockdown depleted their cash flows. Additionally, technology, which is very rare in rural areas compared to cities, has become vitally crucial under the context of Covid.

**Keywords:** educational inequality, urban-rural inequality, Covid-19 pandemic

## **1. Introduction**

As mentioned by President Xi himself in a meeting regarding shared prosperity, the Chinese government considers rural-urban inequality as the main obstacle to China's development for the next decade. The leading cause of urban-rural inequality is educational inequality, which is very severe as rural and urban students are distinctively different in the quantity and quality of their education. Therefore, this paper identifies the causes of urban-rural educational inequality and Covid-19's impact.

At the year-end of 2019, an unexpected incident, COVID-19, broke the calm life for everyone worldwide. The consequences of the pandemic were tremendous; industries were shut down, unemployment was climbing daily, and educational systems were forced to change by using online meetings. However, beyond those results, another thing that the epidemic situation has influenced would be the gap in education inequality between rural and urban areas.

Education inequality has always been a significant worldwide common-ground problem. It is a chronic challenge to all countries, whether developed or under, and the circumstances are especially

significant in China. Moreover, the vast gap is tough to resolve. Before the pandemic, education was dismal for a long time.

To be specific, even though the Chinese government has committed to boosting education spending from 2.7% to 4% since 2006, the investment is not reaching that level at all [1]. In referencing other industrialised countries located in the western part of the world, the spending should be at least 5% of GDP to be effective [2]. What is more unfortunate is that although the budget for education has not reached the optimal amount, most of the funds still flowed into urban schools. Apart from the inequality of education investment, the faculty between rural and urban areas may even worsen the inequality. Plus, the enclosure policy in most villages confined teachers who were supposed to get into rural schools [3]. These are some factors leading to education inequality. However, the factors are not limited to parental education level, demographic features like differences in height and weight, lack of measurements and therapies for mental health in rural areas and other possibilities.

The results of dismal rural education would be extremely severe. According to the data, the proportion of urban students who can finally attend a university is about 54%; on the contrary, the number is less than 3% in rural areas [4].

In addition to this, because of the lack of professional teachers, the average years spent in schooling in rural areas was about six years since as early as 1939. By contrast, urban students have four years more schooling, about 10.3 years on average [4].

Inequality between rural-urban areas has been a long-existing problem. It is a persistent and systemic issue. Moreover, the condition would have deteriorated even more with the advent of a cosmopolitan pandemic. The rest of the essay will find and illustrate how COVID-19 influences urban-rural education inequality.

## 2. Literature Review

### 2.1. Educational Inequality

Although China has experienced unprecedented economic growth in the past few decades, the result of this rapid development is not shared equally among urban and rural residents. That is to say, the development of the economy eventually widened the gap between urban and rural areas [5]. Along with the historical reasons and political factors, the rural and urban areas are divided into two distinct societies with different economies and cultures. Moreover, in urban areas, people have a much higher living quality than people in rural areas, with a higher salary and easier access to various products, as well as better social services and social security [6]. Considering these factors, the educational inequality gap is widening between rural and urban areas as the economy develops. As a result, people tend to turn their back on rural areas as long as they have the opportunity to chase a better life or further education. In conclusion, these factors affect education in urban and rural areas.

Educational inequality can be measured in terms of various variables. One of the existing papers used data from the China Family Panel Survey, including the test scores of words and math that were gathered immediately when the candidates finished them [7]. There are also studies combining the percentage of graduates of junior secondary schools and the average year of schooling of the population in the specific provinces. The evidence of the average years of schooling indicates that there has been a convergence in educational attainment measured and that the coastal and inland provinces reflect a faster decline in educational inequality within the coastal provinces than within the inland provinces.) [8]. Although, indeed, the overall schooling time had already increased as the economy developed, the average years of schooling between the rural and urban labour force do not decrease as cohort age declines [9]. According to the percentage of graduates, the results suggest more considerable disparities between rural and urban areas [10].

Indeed, policies have already been an impulse to improve the education quality in rural areas, for example, the compulsory 9-year schooling in China, but they have not solved the problems yet. The better living conditions and the higher salaries offered in the city still attract millions of people from countries to cities every year as long as they have the opportunity, especially when they want to improve themselves or receive further education. Despite the economic factors, other things limited education development in rural areas.

Among them, the most significant is the unequal distribution of educational resources, which leads to their scarcity. There is a "key point" school policy in China, whose priority is producing children who can progress further education. Due to this, the critical point is that schools are equipped with better infrastructure constructions and enjoy better teachers and learning resources. However, the most critical point is that schools are set in cities, which has increased educational opportunities and inequality between rural and urban areas. In addition, family income and resource allocation are also important factors when measuring inequality.

## 2.2. The Pandemic

The COVID-19 pandemic, which first exploded in China, and Wuhan in 2019, has brought great changes to daily lives worldwide. Globally, as of 5:15 pm CEST, 30 September 2021, 233,136,147 confirmed cases of COVID-19, including 4,771,408 deaths, were reported to WHO [11]. (<https://covid19.who.int/>) The fact that the COVID-19 virus is transmitted through air, face covering, or masks are essential during the pandemic, and gathering should be avoided as much as possible. This has brought great inconvenience to education since school holds a significant population and thus is one of the places with high transmission risks. Due to this, the schools all switched to online schooling when the pandemic was the worst in China.

To respond to the explosion of COVID-19, the Chinese government launched an emergency policy called "Suspending Classes Without Stopping Learning", which enables teaching progress to continue when the schools are closed to contain the virus [12]. In practice, the measure is turning offline schooling into online schooling, which requires a stable network connection to attend classes. Despite the debates on whether online education can reach the effectiveness of teaching compared with offline schooling, this implementation brings other difficulties. For instance, online teachers require a large number of high-quality information infrastructures that need to cover a prominent place. The government has indeed tried to make online teaching accessible to as many students as possible by broadcasting many platforms, including online websites, apps and TV cables. However, according to a survey conducted by CCTV, about 2% of students still have no access to online live teaching [13]. Some children in mountainous areas even walk for hours to find places with stable network signals [14].

Our paper mainly compares the educational inequality gap between rural and urban areas before and after the pandemic. We will be comparing three factors: the parent's educational background, the economic development between cities and countries, and the nurture of the students.

## 3. Existing Inequalities

### 3.1. Intergenerational Inequality

Through analyzing the current data, our group identified two primary sources of urban-rural educational inequality – the already-established causes, in other words, factors based on family backgrounds, and the developed causes, in other words, causes that formed through the process of studying. In shorter terms, the factors are either "nature" or "nurture."

Urban-rural educational inequality in China is also a form of intergenerational inequality, and family background plays a big part in it. Such inequality is caused by two main factors: family edu-

cational background and family's economic capability, and both factors are becoming increasingly influential under the context of Covid, further elongating the difference between urban and rural students' opportunities to receive higher education.

In China, Family's educational background is generally assumed to be the most significant factor in rural-urban educational inequality. This idea becomes a prevailing belief because even without close investigation, people can still see the colossal difference between the education levels of urban and rural populations.

The difference is not formed because no college graduates come from rural areas. It is formed because no college graduates are eager to stay there. The percentage of rural-background students in college is nearly always more than urban-background students. However, after receiving the education, most rural graduates join their urban contemporaries and stay in cities. Reasons for such actions are obvious – in 2021, the average disposable income in towns and cities (47412 ¥) is approximately three times more than the wage in rural areas (18931 ¥) [15]. Since most college graduates from rural areas dwell elsewhere, the ones who stay and start families in rural areas are not likely to have a high level of education. The question left for investigation is: will parents' education level carry on to the next generation?

Based on the current data, the answer is probably "yes." Chinese education is a perfect model for intergenerational inequality – the best thing Chinese high-educated parents can do is to make their children follow their example. Unfortunately, the circumstance is similar for low-educated rural parents.

This circumstance has been noticed by various social-study questionnaires investigating the correlation between parents' educational level and their children's. For example, in the Chinese General Social Survey (CGSS) in 2013, a survey that inquired about children's education status in more than one hundred counties in China, data shows that there is palpably a strong correlation between the parent's educational level and their children's. A brief summary can be observed in the graph below [16].

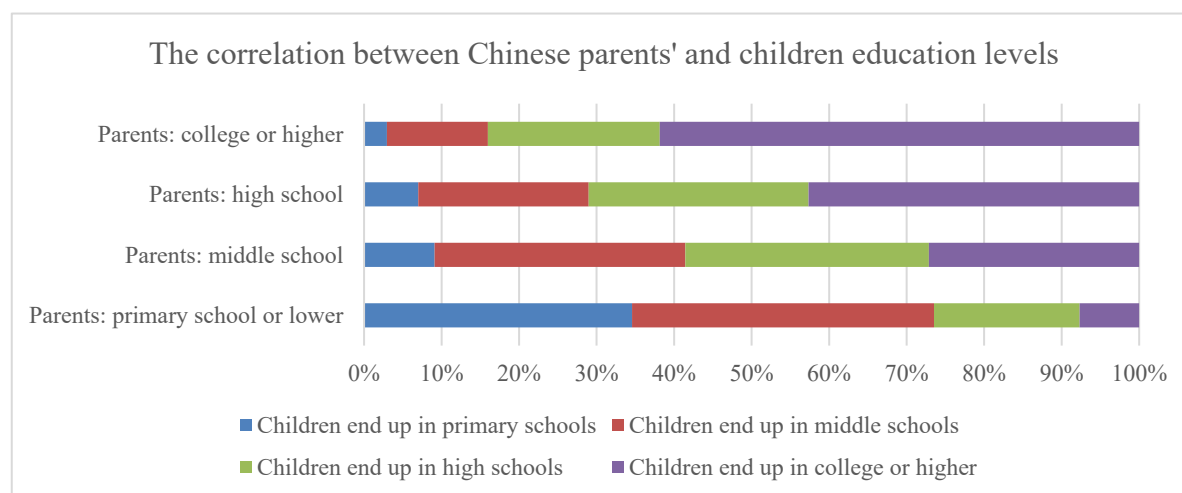


Figure 1: The correlation between Chinese parents and children's educational levels [16].

As shown in figure 1, more than sixty per cent of the parents with college or higher levels of education can keep their children highly educated. In contrast, parents with only primary or lower education backgrounds keep most of their kids (92.7%) out of college. Additionally, the term "college" includes vocational and community colleges. The difference will be even more distinct if the range is limited to first-class colleges in China.

Extending from the education level difference already established in rural-urban families, it is not hard to discover another inequality – the inequality of family wealth. Most common urban families in China accumulate their wealth from monthly wages and possibly small investments. In contrast, rural families commonly "earn" their wealth through daily wage jobs and running a small catering and retailing businesses. Such difference is identified in Graph 2 below, depicting the sources of wealth of rural versus urban individuals [17].

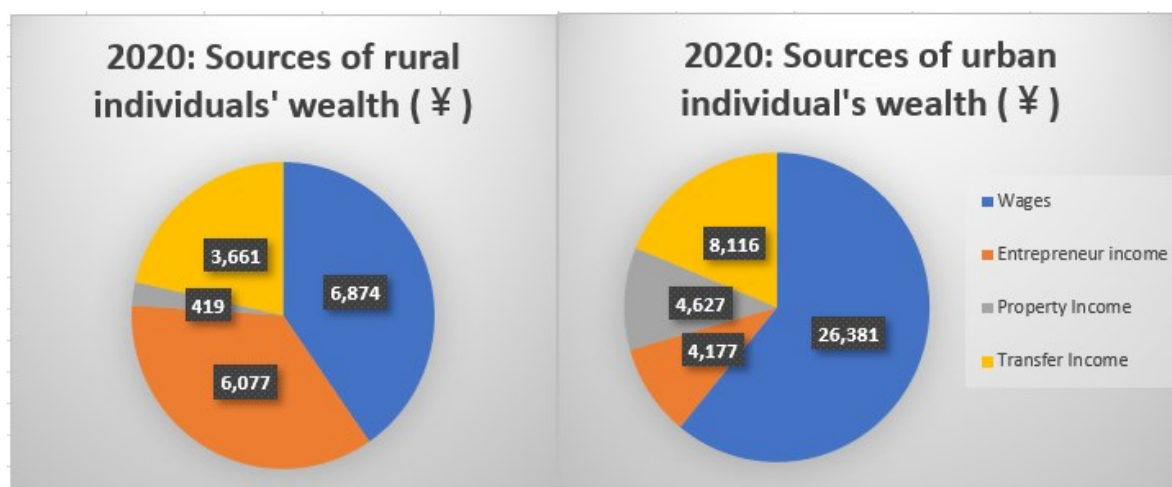


Figure 2: The sources of income of urban and rural individuals [17].

As shown in figure 2, It is obvious that urban individuals are earning much more in 2020 (in numerical values, 26210¥). However, the instability nature of rural families' income structure is often ignored. Compared to their urban counterparts, rural families depend much more on entrepreneur income from small private businesses, which is an unstable income source that often fluctuates daily. Nevertheless, based on the preceding analysis, it is evident that urban families have a more robust financial capability than their rural counterparts. This wealth can significantly assist education by buying physical capital (technologies) or human capital (tutoring).

The advantage based on technology is the simple idea that urban students can purchase computers, styles, and all different kinds of tools which make their lives easier. Additionally, the impact of technology will be fresh under the context of the covid, but that will be in the later discussion.

On the other hand, tutoring is a "money burner" for parents; New Oriental Education and Xueersi education, two public companies that dominate China's tutoring business in English and Math, charge at least 150¥/hour for their tutoring programs. After government regulations, these tutoring services become more private, expensive, and unattainable for rural families [18].

Compared to the pre-determined causes of inequality, the "nurture" causes are more subtle and less influential, but they are still essential factors in educational inequality. The main nurture problem rural kids face is the paucity of caring they experience – because many rural parents work and dwell in cities, they leave their children behind in rural villages and only meet them a couple of times annually.

Many rural children (4.7 million) aged 6-13 years old are left behind in rural areas [19]. This means these children are going through the critical process of their cognitive development and schooling without family support and care. Consequently, it is not hard to figure out why there are so many early dropouts and children with depressive orders in rural areas.



### 3.2. Pandemic's Influence

After investigating the causes of urban-rural inequality, our research group tries to find the result of the pandemic's impact on rural-urban inequality by examining how Covid influence the causes of inequality discussed earlier, and most data suggests that the covid is widening the already established gap between rural and urban students.

The most robust hit of the pandemic comes financially. As mentioned above, many rural families' income comes from family businesses, and most businesses in rural areas are small catering and retailing industries. A vital feature of these industries is that they need a daily cash flow to buy raw materials and keep the business cycle healthy. However, the government order a large number of businesses to close in order to coup the spreading pandemic. Even though the lockdowns are short-term, it is enough time to deplete all the remaining cash in the family and force the business to shut down. In numerical values, in the China Cuisine Association's survey, nearly 60% of the small catering businesses interviewed report that they are in an extreme shortage of cash flow [20]. In other words, these businesses will be forced to shut down if the situation continues for more than four months. In addition, the worsened economic situation means that more rural families will want their children to go to vocational schools to support the family earlier.

Another way a rural family can lose its income is by losing a job and wages. The pandemic is causing a recession in China's labour market. According to China's national bureau of Statistics -- the unemployment rate in cities soared from 5.3% in January 2020 to 6.2% in February 2020 [21]. This does not seem very devastating, but what comes next is the natural disaster. Under the influence of the covid, it is reported that 40.9% (2020 February) of employees are forbidden to reach their workplace because of the lockdown [21]. (After February, the number dropped to 18.3%, still much higher than the pre-pandemic value, which is generally lower than 10%) Unfortunately, those who come from rural areas to work in cities mostly do physical labour and services, so if they cannot reach their workplace, they will not be able to do their job. Unfortunately, the industries with the most rural migrant workers, like catering, manufacturing, housekeeping, and transportation, are also impacted mainly by the pandemic. Therefore, most migrant workers cannot possibly work and receive a wage under the lockdown, and their savings will not allow them to stay in the cities.

Consequently, a large number of migrant workers resign and move back to rural areas. Data collected from China's national bureau of statistics show that since the pandemic, more than 8 million migrant workers have moved back to villages, and the growth rate of migrant workers in cities became negative at 1.8% in 2020, which symbolizes the first-ever decrease in the population of migrant workers. In short, rural families are losing their businesses and jobs during the pandemic, so they do not have any extra money to support their children. The rural students mainly influenced should be those aged 14-16 (9-10<sup>th</sup> grade) because they are just entering high school and beginning their preparation for College Entrance Exams. Most Urban students around this age will take tutor classes to keep up with the pace. With lower family support, these rural students will be lagged compared to their urban competitors.

Long before the pandemic, the wealth inequality between urban and rural families is already a real problem. However, there have not been any strong policies to deal with this difficulty because wealth inequality is not very influential in the Chinese education system. Unlike the west, where college gives high consideration to student efforts in projects, activities, and sports, college entrance and high schools in China are almost purely based on the entrance exam score. Therefore, if rural students are diligent enough, they can eliminate the disadvantage caused by family wealth. Unfortunately, under the covid, family wealth becomes a key factor of success because students depend on one costly item – technology.

In 2020, almost all students in China experienced more than three months of internet lessons. In 2021 the situation was better, but there are often regional lockdowns of schools when the covid is spreading. Therefore, technologies such as computers have become essential for attending school. However, there is a massive gap between the quantity and quality of computers in rural and urban areas. Based on the graph below and considering all the internet café and borrowing services in cities, it can be concluded that urban students have a tremendous advantage. In other words, among five urban kids, one might have a problem having internet lessons, but among five rural kids, only one can access the internet. Additionally, there is a difference in the quality of computers since most rural students are using old desktop computers while urban students enjoy laptops and iPads.

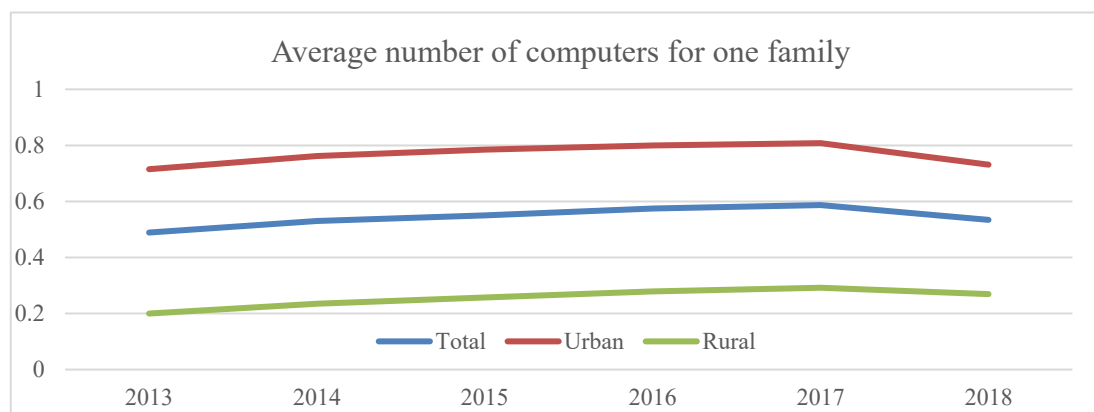


Figure 3: Average number of computers in urban and rural families from 2013-2018 [22].

Given the worsened economic condition of rural families shown in figure 3, they will have a hard time trying to buy a computer in order to "send" their child to school. However, more importantly, what is more harmful to rural area students is not the problem with buying devices to use the internet. Instead, it is a problem regarding whether there is internet at all.

If the students in rural areas are just missing computers, it is not a big obstacle since the government can lend enough computers when there is a covid lockdown. However, the internet itself is missing in certain villages of China.

#### 4. Conclusion

In the past ten years, China has increased its internet accessibility a lot, but there is still some difference compared to the western countries. According to the China Internet Network Information Center (CNNIC), there are currently around 1.01 billion internet users in China, which is 71.6% of the Chinese population. However, only 297 million (59.2%) of the rural population can access the internet compared to 704 million (78.3%) of the urban population [22]. What builds this gap is that many rural areas are missing fibre broadband and other vital technologies to use the internet actively. Moreover, even though the broadband is in place, things are not going smooth. Villages in mountainous areas often report that the internet is unstable and countless malfunctions are happening nationwide. Not to mention the leftover ten per cent of the villages is still quite a significant population.

For deserted/mountainous villages (typically found in Tibet autonomous region or Yunnan Province), the paucity of the internet is causing a big problem. According to interviews from National Business Daily -- in a typical class of sixty-five students in rural area schools near Chongqing, only around forty can join the online meetings daily. The China Youth Daily newspaper also reports that more than one hundred students in a Yunnan high school cannot attend internet lessons. In villages in Guizhou province, students have to stay outside the mountains (average temperature below -10

°C) in order to capture some internet "slipped" from nearby cities [23]. In February 2021, a middle schooler in Henan at a rural area school committed suicide simply because she could not attend internet lessons [24]. The problem of technology is becoming a physical and mental burden for rural families.

At last, the covid also impacted social welfare programs previously helping rural areas. For example, before the pandemic, more than ten thousand college students volunteered to teach in countryside schools annually. However, currently, most of these such long-distance travelling programs are cancelled.

In this paper, we have discussed the impact of the pandemic on urban education inequality by expounding on the inequality factors before and after the pandemic and actual data. Based on this, we got the following conclusions. First of all, by studying the nature and nurture situation of the urban and rural places, we found that the inequality of education in rural and urban areas existed for a long time and was difficult to reconcile. There was already a huge gap between urban and rural areas on the issue of inequality. Secondly, during the pandemic, the difference between parents, teachers and students from rural and urban was different due to technology and geographical issues aggravated by the pandemic. Because of this, the education inequality gap deteriorated. Finally, after the pandemic ended, the problem was alleviated perceptibly, but hidden dangers were still buried. Therefore, this problem should be paid attention to and improved by the government for a long time.

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