# The Coordinated Development of Rural Basic Education and Economy

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Abstract: With the improvement of the level of social and economic development, people are required to have a higher level of knowledge and skills, thus forcing people to improve their educational level. Rural basic education is mainly based on preschool education, primary, junior high and high education. It is the basis for cultivating high-quality talents to allow more people to receive basic education. Only in this way can high-quality labor force be supplied to the society, thereby improving the level of rural economic construction and promoting rural development. Continuous development. The key to improving rural productivity is to promote the coordinated development of rural basic education and the economy. The coordination of the two has far-reaching significance in motivating the rural population to improve their own quality, adjusting the modernization of the rural economy, and adjusting the rural industrial structure.

**Keywords:** Rural Basic Education, Rural Economy, Coordinated Development, Sustainable Development

#### 1. Introduction

The development of education in a country or region must first consider its economic conditions. The speed and scale of development must be adapted to its economic conditions. Excessive or insufficient development will not only affect the development of education, but also have a huge impact on economic development. Therefore, the coordinated development of education and economy is the basic principle that any country must follow to develop education.

At present, there are many scholars devoted to the research on the coordinated development of rural basic education and economy, and to a certain extent, they have achieved good results. For example, a scholar used the factor analysis method to evaluate the comprehensive index of educational factors affecting economic growth, and calculated the economic contribution rate of my country's basic education. According to the influence of local development, it is concluded that investment in basic education is the factor with the highest contribution rate among various factors affecting economic development [1-2]. Relevant research studies the relationship between my country's rural basic education and rural economy from the perspective of econometrics with empirical research methods, and fully expounds the important role of rural basic education in rural economic development [3]. Although the research results on the coordinated development of rural basic education and economy are good, it is necessary to continue to explore suggestions for coordinating rural basic education and economic development in order to make the relationship between rural education and economy more harmonious.

This paper explains the scope of rural basic education, analyzes the relationship between basic education and economic development, and then takes the current situation of rural basic education and economic development in a province as an example to analyze the basic education expenditure gap and per capita GDP in the five cities of the province. Finally, put forward suggestions to promote the coordinated development of rural basic education and economy.

#### 2. Rural Basic Education and Economy

#### 2.1 Scope of Rural Basic Education

Rural basic education mainly includes rural preschool education, nine-year compulsory education (primary, junior high school) and general middle and high school education.

Rural preschool education: With the development of society, education has become lifelong education, and the years of education have also extended to both ends. The society and family gradually realize the importance of early education. Urban preschool education appeared earlier than rural areas. In recent years, rural preschool education has also been continuously developed and perfected, forming an integral part of the systematic education system connected with compulsory education [4-5]. Rural preschool education is held in kindergartens, or preschool classes in ordinary primary schools, and the education for children aged 4-6 lasts about one year.

Compulsory education in rural areas: The first grade of primary school is generally recruited from children aged 6-7, and primary school requires five or six years of study. After graduating from primary education in rural areas, they enter higher-level schools, or go through vocational training for employment and part-time study. Rural ordinary junior high school is the advanced stage of nine-year compulsory education in rural areas, and it is also the primary stage of secondary education. It is one of the main links in the rural education system [6].

General high school education in rural areas: General high school education also occupies a very important position in the rural education system, and is the bridge connecting the span of compulsory education to higher education [7]. Ordinary high school is very important in the rural education system, but it is not the focus of rural education development at this stage. This is mainly limited by the current educational resources. The focus is on popularizing nine-year compulsory education, but popularizing high school education is the development trend of universal education in my country in the future.

#### 2.2 The Relationship between Basic Education and Economic Development

The relationship between basic education and the economy is first shown as the decisive role of the economy on education. The economic base determines the superstructure, and the decisive role of the economy in education is that the economy provides conditions for the development of education, as well as provides the material and technical foundation, and solves social needs while promoting the development of education [8]. From a social point of view, with the continuous development of the economy, people's demand for education is increasing, which requires education to provide the society with technical talents suitable for the labor force; from an individual point of view, everyone's demand for education is also Determined by the economic situation of the individual or family, the desire for education will inevitably increase as the level of personal income increases [9]. At the same time, education is not completely passive to adapt to the economy. Education has a stimulating effect on the economy. This reaction is mainly reflected in the fact that education can cultivate high-quality labor for economic development. Moreover, with the continuous enhancement of the role of science and technology in social production, the role of education in The function of science and technology dissemination and cultivation is increasingly emerging, and its huge role in promoting the economy is becoming more and more important [10].

Education has a positive effect on economic development, and the social function of education is multi-faceted. It also has a more important and far-reaching significance for the improvement of social politics, culture and even the quality of human beings. The development of education must be guaranteed by the economy, and the status of economic development in turn affects the actual level of educational development [11-12].

#### 3. Experimental Research

#### 3.1 Research Content

This paper takes the rural basic education and economic development of five cities in a certain province as the research object, collects the average education expenditure data and GDP data of rural basic education students in the province in the statistical yearbook of the province, and analyzes the differences between the five cities. From 2015 to 2020, the absolute gap in education expenditure and

the relative gap in per capita GDP, the gap has narrowed, indicating that the province's rural basic education and economic development have improved.

#### 3.2 Research Methods

The absolute gap and relative gap in mathematical statistics are used to analyze the difference between basic education and economic development. Among them, the absolute difference calculation method can be divided into standard deviation and range. This calculation method mainly reflects the absolute difference of the economic zone. The calculation formula is:

$$S = \frac{\sqrt{\sum_{j=1}^{n} (Y_{j} - \overline{Y})}}{N}, (j = 1, 2, ..., N)$$
(1)

In the formula, S represents the standard deviation, Y is the variable,  $\overline{Y}$  is the average value of the variable Y in a certain period of time, and N is the number of comparisons in cities or counties. The relative gap calculation method is divided into range rate and variation coefficient here. The range rate is the ratio of the maximum value to the minimum value. The formula for calculating the coefficient of variation V is:

$$V = \frac{\sqrt{\sum_{j=1}^{n} \frac{(Y_j - \overline{Y})^2}{N}}}{\frac{\overline{Y}}{Y}}$$
 (2)

#### 4. Analysis of Results

#### 4.1 Analysis of the Status Quo of Rural Basic Education and Economic Development

#### (1) Status quo of basic education in rural areas

*Table 1: Average Educational Expenditure of Students* 

	Average education expenditure of students (yuan)	Growth
2015	21536.71	0.108%
2016	18364.28	-14.73%
2017	18769.57	2.207%
2018	19173.42	2.152%
2019	17343.16	-9.55%
2020	13784.95	-20.52%

As shown in Table 1, it is the average education expenditure per student for all rural basic education in the province from 2015 to 2020. In 2016, the average educational expenditure per student in rural basic education in the province was 18,364.28 yuan. Compared with the initial 2015, the average expenditure per student decreased by 3172.43 yuan, a decrease of 14.73%. After a slight increase in the following two years, the growth rate is still relatively slow. Since 2019, the rate of decline has increased again, dropping to 17,343.16 yuan, 1,830.26 yuan less than in 2018, and the rate of decline is 9.55%. Subsequent 2020 suffered a sharper decline, falling to 13,784.95 yuan, with a decline rate of 20.52% to the bottom. The provincial government has reduced funding for rural basic education.

# (2) Research on the status quo of rural economic development

Table 2: GDP

	GDP (billion)	Growth
2015	10522.37	7.15%
2016	11489.96	9.20%
2017	15652.74	10.12%
2018	19341.08	23.56%
2019	21247.46	9.86%
2020	23710.85	11.59%

From 2015 to 2020, the rural economy of the province started to develop in a high-speed mode. It can be seen from Table 2 that in 2015, the total value of rural GDP in the province was 1,052.237 billion yuan. In 2016, the total production volume was 1,148.996 billion yuan, a growth rate of 9.20% compared with 2015. In 2018, the province's rural GDP was 1,934.108 billion yuan, an increase of 368.834 billion yuan or 23.56% over 2017, which was the year with the largest GDP growth rate in recent years. Overall, the province's comprehensive economic strength continues to strengthen.

#### 4.2 Analysis of the Gap between Education and Economic Development

# (1) The gap in education expenditure

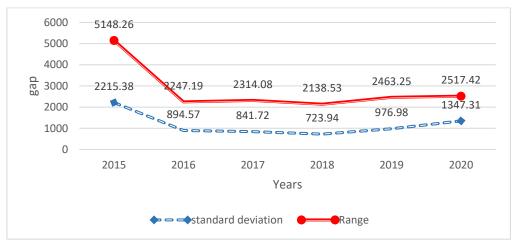


Figure 1: The disparity in rural basic education expenditure within the province

As can be seen from Figure 1, the absolute gap in rural basic education expenditures in the five municipal regions of the province from 2015 to 2020 changed in stages, fluctuated greatly, and was divided into two periods with 2018 as the boundary. In the first period from 2015 to 2018, the gap between the average educational expenditures in the five urban and rural areas continued to narrow, with the extreme gap reduced from 5148.26 to 2138.53, a decrease of 58.46%, and the standard deviation also continued to shrink, from 2215.38 to 723.94; the second period 2018-2020 During the period when the absolute gap between the five cities increased, the range increased from 2138.53 to 2517.42, and the standard deviation increased from 723.94 to 1347.31. The overall trend of the absolute gap between rural areas in the five cities in the province is decreasing, but the gap is gradually expanding compared with the previous stage. Generally speaking, the gap in rural education expenditure in the province is narrowing, indicating that the province invests more equally in rural basic education in each municipality.

#### (2) Gap in per capita GDP

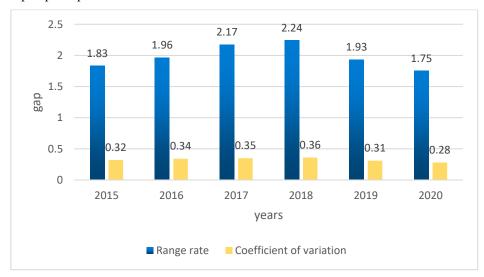


Figure 2: Disparities in per capita GDP of rural economies within the province

It can be seen from Figure 2 that from 2015 to 2020, the relative gap between the rural economic per capita GDP of the five municipal regions in the province also changed in stages, and it was still divided into two periods with 2018 as the boundary. The relative gap in the first period from 2015 to 2018 is increasing. Compared with the initial year, the range rate in 2018 increased by 0.41, an increase of 22.40%, and the coefficient of variation increased by 0.04, an increase of 12.5%; in the second period from 2018 to 2020, the gap gradually narrowed, and the range rate was reduced from 2.24 to 1.75, a reduction of 21.88%. Compared with the first stage, the relative gap between the five cities is shrinking, and the situation is optimistic. It shows that the rural economic gap in the province is decreasing.

### 4.3 Proposals to Promote the Coordinated Development of Rural Basic Education and Economy

#### (1) Coordination mode of rural basic education and resources

Natural resources are one of the most powerful material guarantees for a country's survival and development, especially in the past when productivity was underdeveloped, and natural resources largely determined the speed of social development. In the current situation of highly developed production technology, although the utilization of resources has been greatly improved, it has not yet reached a scientific and reasonable level. Therefore, human society has been and is vigorously developing and utilizing natural resources, transforming natural resources into natural resources. However, from the analysis of the history of human social civilization, it is found that each era of society has a specific range and quantity of natural resources in that era. The development and utilization of natural resources by human society is not only a quantitative increase, but also a deeper qualitative development and utilization. Natural resources seem to be a special category with historical significance. With the progress of human society, its extension and connotation are constantly expanding and enriching with the progress of human society. With the progress of society, especially the development of science and technology, more and more natural materials are separated from the general "objective existence" and become resources. At the same time, every natural resource has new contents that can be utilized in the development and progress.

# (2) Promote education equity and quality improvement, and realize innovation-driven economic development

The improvement of the quality of basic education has a significant effect on driving economic development, and the two should develop mutually beneficially. As far as the current development of rural education is concerned, the distribution of resources is unfair, and the quality of teaching needs to be improved. Second, break the concept of distribution of educational resources. To break the traditional concept of allocating high-quality educational resources, realistic factors such as regional population, student population, and economic development strength should be taken into account. Provide reasonable and high-quality rural basic education resources according to the actual development of the region.

# (3) Strengthen the management of rural basic education to ensure the healthy development of rural education

The main goal of rural basic education management is to improve the quality of rural education. For different educational forms, we should strengthen investigation and research according to their characteristics and educational laws, formulate different quality standards and management norms, and achieve targeted management. The main purpose of rural basic education is to strengthen the research on the quality evaluation system of "quality education" of basic education, to effectively transfer "examination-oriented education" to the track of "quality education", and to strengthen the coordinated management with rural economic development.

In view of the current situation of rural education, the standardized management of rural basic education should be strengthened, especially in the guiding ideology of running schools to avoid profit-seeking. Management needs to be strengthened in terms of insufficient school-running conditions, non-standard education and teaching, and a low proportion of teaching funds in tuition fees. It is recommended to conduct regular evaluations of basic education and teaching work and make the evaluation results public. Pay attention to the punishment of the quality of education, in order to promote the quality of running schools in basic education, and effectively improve the chaotic situation of management.

#### 5. Conclusion

This paper analyzes the education expenditure of rural basic education in a province, and finds that the investment in rural basic education in this province has decreased, but the gap in rural education expenditure in five cities in the province is narrowing, which shows that the province has a great influence on rural basic education in each city. According to the analysis results of the province's rural per capita GDP increasing year by year and the narrowing of the per capita GDP gap, it can be seen that the rural economic strength of the province is increasing. In order to coordinate the relationship between rural basic education and economic development, relationship, and put forward suggestions for coordinating the development of the two.

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