### Research On The Balanced Development Of Compulsory Education In Shaanxi Province From The Perspective Of Information Technology—A Study Based On The Feedback Opinions Of The National Education Inspection

#### Yanni Ren

School of Education Shaanxi Normal University, Xi'an, Shaanxi, 710062, China School of Education Shaanxi Xueqian Normal University, Xi'an, Shaanxi, 710062, China

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**Abstract:** The wide application of modern information technology, such as computer technology, communication technology and Internet technology, not only profoundly changes people's work and life style, but also has a great impact on the economy, society and other aspects. Information technology has had a positive impact on urban and rural compulsory education, especially rural areas, in Shaanxi. This study is mainly based on the Feedback of the National Education Inspection Team on the "Supervision and Inspection of the balanced Development of compulsory Education" (hereinafter referred to as "Feedback") for five consecutive years from 2013 to 2017 in Shaanxi province. this paper focuses on the mechanism of information technology in improving the balanced allocation of compulsory education resources in Shaanxi Province.

Educational equity is the important foundation and primary condition of social equity. Compulsory education, as the main component of the national education system, has the characteristics of compulsion, fairness and public welfare. Whether it is balanced or not is not only related to the stability of the country. It also involves the rejuvenation of the nation. The balanced development of compulsory education is an important task for the development of compulsory education in China in the new era, and it is also a difficult problem facing the educational cause of our country at present. For a long time, due to China's completely different policies on urban and rural areas, the phenomenon of urban-rural dualization has been highlighted, and there is a big gap between urban and rural areas in politics, economy, culture, education and other fields. In the field of education, the huge differences between urban and rural areas in educational investment and the allocation of teachers and educational resources lead to the prominent phenomenon of dual education in urban and rural areas, and the huge gap between urban and rural education. A large number of studies have shown that the shortage of high-quality educational resources is a realistic dilemma for the balanced development of urban and rural compulsory education, and the strengthening of public demand for education in the period of social transformation has promoted the continuous progress of educational reform. In recent years, both the party and the state regard the balanced development of compulsory education as the goal of improving people's livelihood. As an important feature of the development of modern society, information technology has been deeply integrated into education and teaching, infiltrated into all fields of education, completely changed the traditional form of teaching and learning, and has a growing impact on urban and rural education. it is helpful to improve the quality of rural education. This study is based on the Feedback of the National Education Inspection team on the balanced development of compulsory education in counties (districts) of Shaanxi Province for five consecutive years from 2013 to 2017 (hereinafter referred to as "Feedback"). This paper focuses on the core mechanism of information technology to improve the balanced allocation of compulsory education resources.

# 1. Achievements Made In The Balanced Development Of Compulsory Education In Shaanxi Through The Use Of Information Technology

From 2013 to 2017, 5, 16, 29, 20 and 30 counties in Shaanxi Province respectively passed the

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national evaluation, and a total of 100 counties (cities and districts) in the province were determined by the national basic balanced development of compulsory education, accounting for 93.5% of the total number of counties. From 2014 to 2017, Shaanxi Province ranked first in 12 western provinces (autonomous regions and municipalities) for four consecutive years, and currently ranks 11th in the country. Shaanxi has made remarkable achievements in the balanced development of urban and rural compulsory education. Shaanxi Province pays special attention to the application of information technology in the process of balanced development of urban and rural compulsory education. Modern information technology facilities meet the requirements of national and provincial construction standards, and promote the modernization of teaching management. The Provincial Department of Education has established big data and Tencent App Center of education in the province, and the network covers all counties (cities and districts), basically realizing the "three links and two platforms", making up for the shortage of teachers and narrowing the gap between schools. Urban and rural schools can share high-quality educational resources.

## 2. Exploration On The Path Of Balanced Development Of Compulsory Education In Shaanxi Province Based On Information Technology

Due to the revolutionary role of information technology, China began to implement the strategy of educational informatization at the beginning of the 21st century. The basic connotation and characteristics of educational informatization make it have great potential advantages in improving the quality of education and realizing the balanced development of compulsory education. The experiences of the projects such as "distance Education Project in Rural Primary and Middle Schools" and "Experimental Research on Leap-forward Development of Basic Education" have proved that under the guidance of the theory of information-based teaching innovation, educational informatization can indeed improve the teaching quality of various subjects and the comprehensive quality of students in weak schools (especially rural schools) in the stage of compulsory education, so as to promote the high-quality and balanced development of compulsory education and put the goal of educational equity into practice.

The state regards the informationization of schools in the central and western regions and rural areas as an important breakthrough and increases the tilt and support of policies. The Ministry of Finance, the Development and Reform Commission, the Ministry of Education, the Ministry of Science and Technology and other departments have implemented modern distance education projects in rural primary and secondary schools and built information infrastructure at different levels. Since 2010, the central government has allocated a total of 32. The 600 million special funds have built nearly 0.2 million multimedia classrooms in weak rural schools in the central and western regions. In counterpart support, many eastern and central provinces regard the construction of multimedia classrooms in primary and secondary schools and the sharing of high-quality educational resources as important contents, which to a certain extent narrow the digital gap between urban and rural areas.

Information-based teaching resources is an important focus for the balanced development of compulsory education. in order to achieve the purpose of "sharing resources under the blue sky", our government has increased the construction of resource transmission system and resources themselves. At present, the Chinese government has completed the construction of the China Education and Scientific Research Network and the education satellite broadband transmission network, and has formed a situation that complements the education network of some provinces, autonomous regions and cities, and interconnects with the public network to cover the whole country. to achieve the unity of heaven and earth education network system. The use of information technology to quickly share resources in every part of the education system. At the same time, nearly 15000 school hours of video education resources have been built at the national level, which are provided free of charge to all rural small and medium-sized schools, covering 160 million rural students. The total amount of information-based teaching resources in rural areas has been improved and the conditions of information-based teaching have been improved.

In order to improve the educational technology ability of school teachers, the central and local

governments have conducted educational technology training for more than 5.5 million primary and secondary school teachers. In 2010, a distance training project was set up in the national training plan to provide subject training for 2.7 million primary and secondary school teachers by means of information technology. Teachers' ability to apply information technology is generally enhanced, and information technology education is basically popular in primary and secondary schools.

Some progress has been made in the balanced development of compulsory education in China. The research shows that "from the four aspects of regions, urban and rural areas, schools and educated groups, it is found that in recent years, the development of basic education in China, especially compulsory education as a whole, is becoming more balanced." On the whole, the gap in basic education in various regions has narrowed, the enrollment rate of basic education, especially compulsory education, and the gap in the qualified rate of primary and secondary school teachers in different regions has been narrow. However, the equilibrium of quantity and quality are two important aspects, and there is still a long way to go from the equilibrium of quantity to the equilibrium of quality.

### 3. Policy Choices for the Balanced Development of Compulsory Education In Shaanxi Province

There are still some problems in the balanced development and use of information technology in compulsory education in Shaanxi: on the one hand, some individual learning modern information technology facilities are not up to standard; On the other hand, although the modern information technology facilities have reached the national standards, the overall professional accomplishment and ability of teachers need to be improved urgently, because the utilization rate of advanced instruments and equipment already configured in some rural schools is insufficient, which fails to serve education and teaching well, which affects the efficiency of the use of modern education and teaching facilities. Therefore, we should take measures to continue to give full play to the great role of information technology in the balanced development of urban and rural compulsory education.

First of all, we will promote the development of "Internet plus Education", introduce the "Platform + Education" Service Model, integrate all kinds of educational resources public service platforms and support systems at all levels, gradually realize the interworking, connection and opening of resource platforms and management platforms, and establish a national digital education resources public service system. Give full play to the role of the market in the allocation of resources, integrate crowd funding and innovation, realize the effective sharing of digital resources, excellent teachers, educational data and information dividends, and promote the upgrading of educational service supply mode and the level of educational governance. Combined with the requirements of national and local courses, focus on foreign language, art and science courses, cover all disciplines, introduce or develop curtain courses, micro courses and other courses, provide rich and high-quality online education resources, and ensure that the two types of schools open enough courses to make up for the shortage of teachers. We should give full play to the radiation-driven role of high-quality schools and backbone teachers, and adopt synchronous classes, open classes, online Q & A counseling and other ways to promote online classes, teaching, research and exchanges between teachers and students of the two types of schools and high-quality schools. Research and explore the use of big data, cloud computing, artificial intelligence and other technologies, scientific analysis and monitoring of the two types of school education and teaching, based on accurate data, targeted to guide students to learn and improve school education and teaching management, give full play to the leading role of the government in promoting the development of "Internet plus Education", actively use the market mechanism, adopt the government to purchase services, and strengthen the construction of software and hardware. In addition, we should select experienced teaching and research personnel, teachers and professional and technical personnel in the county to provide regular guidance to the two types of schools to improve the level of development and application of "Internet plus Education".

Secondly, we should formulate the school layout plan of compulsory education in accordance with the rural revitalization and urbanization planning, optimize the allocation of educational

resources, and promote the integrated development of compulsory education in urban and rural areas.

We will strengthen the construction of small-scale rural schools and township boarding schools, and promote the sinking of high-quality educational resources through "Internet Plus" and other forms. The main reason for the weak education in rural and poverty-stricken areas is the lack of teachers, especially excellent teachers, so it is necessary to strengthen the training of normal students and train "one-specialty and multi-competent" teachers for rural schools and teaching points, at the same time, we will improve the income, treatment and working and living conditions of rural teachers, and attract more outstanding talents to teach in rural areas for a long time. The development of vocational education is an important breakthrough in deepening educational reform, it is necessary to put vocational education in a more prominent position in educational reform and innovation, deepen the reform of the training mode of compound technical and skilled personnel, and promote in-depth cooperation between schools and enterprises, improve the quality of vocational education development.

Thirdly, strive to improve the guarantee conditions. To run modern education well, we must have a strong human, financial, material and institutional guarantee. The investment in education should be tilted more towards teachers to ensure that the average salary level of teachers is not lower than or higher than that of local civil servants. It is necessary to optimize the expenditure structure, spend more on teaching facilities such as laboratories, distance education, and playgrounds, further improve the quality of education and teaching, build a contingent of high-quality professional cadres, and enhance the working ability and professional level to meet the requirements of educational modernization.

Finally, we should continue to promote the deep integration of information technology and education and improve the level of the two aspects. We will promote the high-level evolution of educational informatization from integrated applications to innovative development, and information technology and intelligent technology will be deeply integrated into the whole process of education to improve teaching, optimize management and improve performance, so as to comprehensively improve the information literacy of teachers and students, promote the expansion from the application of technology to ability and quality, make them have good information thinking and meet the requirements of the development of the information society. The ability to apply information technology to solve problems in teaching, study and life has become a necessary basic quality. Strengthen the system deployment and in-depth promotion of educational informatization from research to application, so as to form a sustainable development trend of innovation and stubble promotion of the research generation, the demonstration generation, the application generation and the popularizing generation.

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