Research on the Promoting Effect of Information Technology on Educational Equity in China

Xiongping Huang¹

ABSTRACT

Educational equity is an important component of social equity, and educational equity is an important link in promoting social development. Starting from the measures taken by the state to promote educational equity, this paper summarizes various measures taken by the state to promote educational equity, such as unbalanced economic development, improvement of information education conditions, and increase investment of teachers and students, which ultimately play a pivotal role in information education.

Keywords: Information technology, Informationization, Educational equity, Promoting effect.

1. INTRODUCTION

Educational equity can be considered from the perspective of starting point equity and outcome equity, focusing on the relative balance of teaching conditions, equal opportunities to receive education, and roughly equal educational outcomes and outcomes. Whether education is fair or not is also a yardstick to measure the fairness of social system. Promoting education equity can strengthen the motivation and ability of outstanding talents to serve the society, and make education become the reservoir of social talent resources. Promoting the development of information technology teaching means can alleviate the problem of educational information asymmetry caused by unequal conditions to a certain extent, and has positive significance for promoting educational equity to a large extent. This paper discusses the promoting effect of information technology on educational equity in China, hoping to provide some references and suggestions for the development of educational equity in other countries.

2. CURRENT MEASURES TO PROMOTE EDUCATION EQUITY IN CHINA

In order to achieve educational equity, the state has increased investment in basic education, secondary education and higher education to ensure that every student can enjoy equal educational opportunities and improve the quality and equity of education.

2.1 Measures to Eliminate Educational Imbalances Caused by Economic Disparities

The development of the times has brought the transformation of economic structure and social structure to Chinese society, and the economic level between people has appeared the difference between the rich and the poor, and the social and cultural development level between regions has also gradually separated. These changes are projected into the field of education, which is manifested as uneven distribution of educational resources. Developed regions have a significantly stronger ability to deploy social resources than less developed regions. Therefore, more educational resources are distributed in economically and culturally developed regions, and there is also a large gap in education level between urban and rural China due to historical and practical reasons of development. In the context of China's strategy of putting equal emphasis on efficiency and equity, only by driving the all-round development of education in the course of economic development and promoting cultural and social equity through educational equity can we promote the sustained prosperity and stability of Chinese society [1][2]. Education is the foundation. Therefore, educational

¹ Guangdong Polytechnic of Science and Technology, Zhuhai, Guangdong, China

equity is a yardstick to measure social equity [3]. For a long time, as an important policy implemented by China, the Chinese government has repeatedly mentioned the importance of equality in education at major conferences. In order to fulfill the Chinese government's call for educational equity, every province in China has carried out detailed research on relevant policies and introduced a series of policies to promote the concrete realization of educational equity. In the concrete practice, we can find that China has carried out positive efforts and practices on the road of educational equality, and achieved remarkable results. In the stage of basic education, tuition is free for all students, and free compulsory education is realized for the first time in the history of New China. Taking into account the gap between urban and rural development levels, all compulsory education expenses of rural primary and secondary schools are included in the state financial system. The Ministry of Finance allocated 139.1 billion yuan to support local governments to consolidate and implement the funding guarantee mechanism for compulsory education [4], which greatly promoted the development of compulsory education in rural areas, alleviated the gap between urban and rural wealth in the field of education, and promoted the economic and social development of rural China with education.

2.2 Measures to Improve the Conditions of Information Education

While giving economic support to the development of education, China has established and improved the relevant educational supervision mechanism to ensure that all of these funds are used to support the development of compulsory education. The purpose of the funds is clearly defined, and it is clearly necessary to strengthen the construction of educational infrastructure in the central and western regions and poor rural areas, build student sports fields and basketball courts, build student canteens, and improve the quality of catering. We have carried out comprehensive renovation of dilapidated buildings and schools, and provided free milk for students in some primary and middle schools. These measures have enabled students in the central and western regions and poor rural areas to enjoy fair educational conditions, provided basic guarantee for teaching, and made education fair at the starting point. In terms of teaching equipment, the government encourages and supports the upgrading and updating of teaching facilities, and actively

introduces advanced information equipment such as multimedia in teaching. Almost all schools in the city have realized the standard of one multimedia teaching facility per class. Primary school teachers in poor areas often have old desks and chairs. Therefore, in addition to renovating houses and dormitories, the government has also replaced and expanded students' chairs, desks and libraries, so that all students can have a comfortable learning environment and sufficient library resources.

2.3 Measures to Strengthen the Construction of Teachers and Improve Equity in Student Education

China's financial allocation has also been used for the construction of teachers in the central and western regions and poor rural areas, giving wage subsidies to primary and secondary school teachers in poor areas, improving teachers' treatment, attracting more excellent teachers to support education in poor areas, and making more teachers feel at ease to devote themselves to teaching. By 2022, About 25,000 compulsory education teachers went to less-developed areas to teach and give lectures [5]. In college education, it has pioneered free teacher training, provided more preferential policies to students majoring in normal education, expanded the ranks of primary and secondary teachers, strengthened the construction of the ranks of teachers, and provided preferential financial and treatment policies to students who volunteered to teach in primary and secondary schools in poverty-stricken areas in the central and western regions, providing soft power reserves for the fair development of education [6][7]. In addition to the construction of the above teachers, the state has also built a comprehensive and complete measure of student loans for poor students, provided financial support for secondary education and higher education in addition to compulsory education, and provided strong support for students from poor families to receive high school and college education. The loan policy for poor students not only provides relief for poor students in tuition fees, but also provides relief for poor students. It also improves the living conditions of students from poor families, provides help in life, and grants special funds to poor students. This policy effectively helps students from poor families to receive fair education and avoid students from poor families to interrupt their education because of financial difficulties. From the perspective of sociology, it is an effective means to promote the replacement of social classes, providing a way for

students from poor classes to change their fate, promoting social circulation, and contributing to the maintenance of social stability at the grass-roots level and maintaining a good social structure. Finally, due to the historical gap between urban and rural education conditions, China has also introduced the ethnic minority bonus policy and the enrollment plan for poor areas. This plan not only targets the learning stage of the national education system, but also includes the examination of various vocational skills qualification certificates in society. The state divides the test into three grades of ABC according to the region, and combines the education status of poor areas and ethnic minorities to provide the treatment of passing by lowering the score. The ratio of urban and rural students in colleges and universities is also controlled, requiring that the proportion of rural registered students should not be less than 5%, providing equal opportunities for rural students to receive higher education, improving the current situation of rural education, and narrowing the gap between urban and rural education [8].

3. THE SIGNIFICANCE OF INFORMATION TECHNOLOGY IN PROMOTING EDUCATIONAL EQUITY

Information technology plays an important role in promoting educational equity, which can break geographical restrictions, provide equal learning opportunities, bridge the gap in educational resources, provide personalized learning and teaching services, and make positive contributions to the realization of educational equity.

3.1 Enriching the Teaching Means and Realizing the Diversification of Education

Information technology is a new achievement of social development, which makes people's life more convenient and promotes the progress of living standards. It is of great significance to use the teaching means of information technology in classroom teaching to promote the development of educational equity. Information-based teaching is conducive to promoting teachers to update teaching means, change teaching methods, enrich the reserve of classroom teaching resources, provide teachers and students with a new vision of learning and teaching, make teachers and students shift their eyes from the traditional classroom to outside the

classroom, open up different types of education forms, make teaching means diversified and rich, promote the transformation of teaching roles and teaching paths. The classroom teaching has changed from the traditional person-to-person teaching to the teacher controlling the computer, and then the computer and the teacher participate in the teaching together. Such changes have brought the revolution of the teaching world, and made the classroom teaching become lively, interesting, efficient and convenient [9]. Teachers can make use of the massive resources of the Internet to obtain favorable information from all over the world, and select and integrate it for teaching, which provides great help to promote information symmetry. Schools in developed areas are no longer the only ones to broaden their vision and flow of information. In any corner of China, as long as they have the Internet, they can know the information of the outside world without leaving home. The source of educational information is fairly distributed, so that students in poor mountainous areas can also learn the latest news from all walks of life through the Internet, which greatly expands their vision and knowledge. In addition, with the continuous development of information technology, information-based teaching is no longer limited to multimedia teaching equipment in the classroom, and new electronic teaching assistants also come into being. It is believed that through further research on technology, these devices can serve the teaching, promote the establishment of diversified information acquisition channels, and educational information will no longer be limited by region and time. Students and teachers will have more educational choices, which will promote the development of educational equity [10].

3.2 Realizing the Sharing of Educational Resources

Educational resources are never the patent of a certain region and a certain school. Resources should be put to full use and be widely used in the largest scope to give full play to their value. Under the teaching mode of information technology, multimedia equipment can greatly save the sharing of teaching resources and realize the maximum educational value [11]. Log on the Internet, teachers can search for the excellent teaching plans of different schools. In the browsing process, teachers can learn from the excellent teaching methods of other schools and regions, and make use of them selectively according to the actual situation of students. The Internet can help teachers and

students break the restrictions of classroom teaching time and space, so that educational resources can be used in the multimedia platform. With the continuous development of information technology, the platform of online course has been developed and utilized to cover the excellent classroom resources nationwide and worldwide in an all-round way. Due to the limitation of class time, students often do not understand the knowledge in class, at this time, students can listen to the online course for repeated learning. For some students in poor areas, they can use the Internet online courses, listen to the explanation of excellent teachers, are not limited by the classroom conditions, and can access to excellent teaching resources like students in other areas. Since the construction of data network has been basically completed in China, no matter where you are, you can use Internet resources to obtain rich teaching resources for learning. The sharing of teaching resources has greatly promoted the realization of educational equity in China and broken the barriers of teaching hardware facilities. For some urban-rural and regional gaps that cannot be fundamentally changed temporarily, It can make up for teaching resources, change the unfavorable situation that the flow of educational resources is positively correlated with the level of economic development, and enable students in the central and western regions and poor rural areas to obtain the same teaching resources as those in other regions. As a part of social resources, educational resources can play a maximum role and greatly promote the realization of educational equity.

3.3 Promoting the Inherent Fairness of Education and Stimulating Students' Interest in Learning

The real connotation of educational equity is not to make educational conditions "look the same" in The ultimate purpose of promoting educational equity is to comprehensively promote the improvement of teaching level and teaching quality. Especially for students in underdeveloped areas, due to the restrictions of family environment and previous educational conditions, they may not have much interest in learning. They also lack the necessary knowledge accumulation. Therefore, educational equity should essentially improve their learning ability and make education inherently equal. Integrating informationization into classroom teaching is a new round of reform of teaching guiding ideology. The requirements of The Times for teaching are changing. Teaching should not stop

at the one-way teaching of teachers, but should enhance the interaction between teachers and students, and teachers should strengthen the understanding of students in all aspects. Therefore, the application of information teaching means in classroom teaching can fully mobilize students' enthusiasm and initiative, and the use of information technology educational means in classroom teaching can effectively stimulate students' interest in learning. The traditional teaching mode mainly adopts the form of teacherlecturing and passive acceptance of students. This kind of cramming method is not suitable for the actual situation of modern teaching. In the school learning stage, students are generally younger, and their personality and values have not been completely shaped, which has strong plasticity. Therefore, teachers can use multimedia teaching to improve students' interest in learning. Teaching should not only stay on the surface, but should actually be internalized by students and absorbed into their minds. The use of information technology in classroom teaching has greatly improved the of traditional classroom teaching. Multimedia rich teaching form has successfully attracted the attention of students, making students learn actively and willing to learn, effectively improving the effect of classroom teaching, so that the teaching mode has changed from passive to active. The appropriate use of information technology in teaching, active classroom atmosphere, so that every student can participate in the classroom teaching, forming a good teaching environment [12]. Therefore, the general application of information technology teaching means in teaching is conducive transformation of teaching ideas and innovation of teaching mode, saving the time of teachers copying blackboard writing, improving learning efficiency and getting twice the result with half the effort. In teaching, teachers can use the form of PPT to show the teaching content to students, only need to make the courseware before class can be used in the classroom teaching. In addition, teachers can also use multimedia technology to assign preview tasks to students. They can propose goals and tasks before class and send them to students in the form of courseware so that students can preview in advance, which is conducive to the completion of teaching tasks and the realization of teaching objectives [13]. These advantages greatly promote the substantive realization of educational equity, so that teaching equity is no longer limited in the form of improving hardware facilities, but to realize the equity of educational connotation.

4. CONCLUSION

The Chinese government has made great efforts in education equity and made great contributions to social development. In view of the significance of information-based teaching in promoting educational equity, the author believes that we should continue to strengthen the popularization of information technology, train the teaching team equipped with information-based teaching means, establish and improve the information-based resource sharing platform, attract famous teachers to join the construction of teaching resource bank nationwide, build intelligent libraries on campus, and accelerate the construction of informationbased teaching staff. Improve the informatization level of teachers, continue to narrow the differences in education, so that all students can enjoy equitable educational resources and conditions, and play a positive role in promoting the realization of educational equity.

ACKNOWLEDGMENTS

Fund Project:

2021 Guangdong Continuing Education Quality Improvement Project "Exploration and Practice of Learning Achievement Recognition and Transformation Relying on Zhuhai Vocational Education Group" (Project No. : JXJYGC2021AY0027)

2021 Guangdong Higher Vocational Education Teaching Quality and Teaching Reform Project "Exploration and Practice of Learning Achievement Recognition and transformation Mechanism under the Background of Higher Vocational Enrollment Expansion" (Project No.: GDJG2021156)

REFERENCES

- [1] Cai Minjun, Wei Yiyun, Cheng Yangzhe. Study on Policies of Promoting Equity in Basic Education through Informationization: An Analytical Perspective Based on Policy Tools[J]. E-Education Research, 2019,40(11), pp.48-55.
- [2] Han Shimei. Promoting Equity in Education Through Education Informatization: Policies, Issues and Recommendations [J]. Chinese Journal of Distance Education, 2021(12), pp.10-20+76.

- [3] Huang Lanlan, Exploration and Reflection on The Fairness of China's Rural Education. Central China Normal Unicersity, 2012.
- [4] The Ministry of Finance allocated 212.5 billion yuan to accelerate the high-quality and balanced development of compulsory education and the integration of urban and rural areas [EB/OL].(2022-05-12)[2023-03-16] http://jsz.mof.gov.cn/zhengcefagui/202205/t20 220512_3809782.htm
- [5] The Ministry of Finance allocated 212.5 billion yuan to accelerate the high-quality and balanced development of compulsory education and the integration of urban and rural areas [EB/OL].(2022-05-12)[2023-03-16] http://jsz.mof.gov.cn/zhengcefagui/202205/t20 220512 3809782.htm
- [6] Liu Jing. Analysis on Higher Education Resource Allocation Under Background of Education Informatization 2 . 0[J]. Heilongjiang Researches on Higher Education, 2019,37(10), pp.89-93.
- [7] Lei Lihua, Zhang Zishi, Jin Yifu. Reflections on and Reconstruction of the Balanced Development Path of Urban and Rural Education under the Background of Educational Informatization 2.0[J]. China Educational Technology, 2019(10), pp.47-53.
- [8] Lv Limin, Inspiration From The Development of Urban and Rural Vocational Education in Developed countries[J]. Jiangsu Education, 2014(16), pp.36-39.
- [9] Hu Qintai, Zhang Xiaomei, Zhang Yan. Informatization Promoting Education Equity: The Question Domain Framework and Question Optimization[J]. Journal of South China Normal University(Social Science Edition), 2022(02), pp.93-103+207-208.
- [10] Yan Hanbing. Reserch on How Education Informatization is Promoting Educational Equity in China:Aspects of Evolutinary Characteristics and Paths[J]. Journal of the Chinese Society of Education, 2019,No.317(09), pp.22-26.
- [11] Zhang Jianqiao, Zhang Junlie. On the Mode , Property and Condition of Information Technology to Promote Educational Equity: On the Misunderstanding

- of Technological Utopianism[J]. Journal of Shaoxing University, 2022,42(02), pp.1-9.
- [12] Jiang Yanli. Discussion on The Role of Information Technology in The Training of Innovative Talents in Art in Secondary Vocational Schools[J]. Charming China, 2020(4), pp.181-182.
- [13] Wang Jieyu. Analysis of The Application of Multimedia Technology in The Secondary Vocational Law Class[J]. Charming China, 2020(8), pp.245-246.