

Research on Methodologies for Fostering Equity in Secondary Education in Urban and Rural in Contemporary China

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Abstract: Currently, education inequities are prevalent in the domain of secondary education within China, manifested in the marked discrepancies in educational opportunities, an uneven distribution of educational resources, and a discernible lack of investment in educational infrastructure in rural localities. From the perspective of promoters and leaders of educational policy, this study delves into a meticulous examination of the projects undertaken by local welfare organizations in the context of rural secondary schools within Hunan Province, China. The intent is to dissect the tangible impacts of these endeavors and to probe into the root causes of the education inequities within these rural secondary schools. The paper underscores the paramount requirement of education equity—ensuring that every student, irrespective of their socioeconomic background, geographic location, or familial financial standing, has equal access to premium educational resources. Furthermore, the document cautions against the perils of adopting a "binary opposition" mindset—one that merely ascribes the equities between urban and rural educational systems to a lack of resources or policies. Instead, it advocates for a more holistic, profound, and nuanced analytical framework that involves immersive fieldwork, comprehensive understanding, and integration into the educational service landscape to accurately navigate and respond to the intricacies and dynamics of the educational milieu. Finally, in the quest of formulating a viable and effective model for education equity, it is imperative to align with local realities and to leverage comprehensive data and resources.

Keywords: secondary education, equity, promoters, leaders, methodologies.

1. Introduction

Education has long been recognized as important to individual well-being and the nation's economic growth. Yet, despite the significant public and private investment, disparities in educational opportunities, behavior, attainment, and achievement exist among different student populations.

When discussing education equity, this study suggests that people first need to make it clear that its core is not limited to the equalization of results, but touches on the equity of opportunities and processes at a deeper level. Education equity is not simply a unified game rule set by the outside world, billed as "equity of opportunity", but should be based on specific service groups and their unique needs, through accurate strategies and tools, to build an enabling system. "Empowerment" is

meant to empower a group to develop itself, not simply to be its voice. Our role is to support them in the process of knowledge accumulation, gradually forming and expressing their own voice and awareness.

In China's urban and rural secondary education system, the primary factors influencing the teaching and learning process and educational outcomes encompass curriculum design, pedagogical practices, school organization and environment, urban and rural education policies, as well as educational preferences. Transformative leadership fosters educational equity by challenging existing biases and implementing policies that ensure all students, regardless of their identity or background, have access to equitable resources and opportunities[1]. The focal point of our discourse is how advocates for educational equity in leadership roles can contribute to achieving parity in education in both urban and rural areas of China, necessitating these leaders to establish sound notions of education. Effective leadership not only enhances overall student achievement but also plays a crucial role in promoting educational equity by addressing and mitigating disparities in resources and support among diverse student populations[2].

The notion of education, often perceived as an abstract notion, in fact embodies profound and tangible implications. Establishing a more equitable educational environment is imperative, necessitating the collaborative efforts of adults, urban and local educational institutions, and social development organizations. Moreover, it requires a student-centered perspective deeply rooted in their experiences and developmental needs. Every student should assume a leading role on the educational stage, possessing the courage and capability to articulate their ideas; their voices are indispensable forces driving educational progress. Therefore, one of the primary objectives for advocates and leaders of educational equity is to bridge student voices with active participation by creating platforms that facilitate free expression, meaningful interaction, team formation, and mutual respect. In this process, social workers dedicated to promoting educational equity must not only clarify the goal of education - namely nurturing individuals into well-rounded beings - but also contemplate and shape an ideal societal structure conducive to fostering educational equity while supporting holistic individual development. The notion of education expounded in this article is grounded in a vision that encourages students' vocalization while fostering interaction and collaboration; guiding them towards cultivating a positive group culture; all within a framework that promotes deep-seated values of respect, equality, and justice. This pursuit not only embodies the quest for educational equity but also represents a concrete depiction of our envisioned ideal societal structure along with an exploration of its realization pathway.

2. Main Influential Factors of the Current Situation of Urban and Rural Education Inequity in China

According to Guo Shaoqing and Hua Xiaoyu's Research on the Path of Educational Digital Transformation to Promote Educational Equity between Urban and Rural Areas, "the main source of the urban-rural education gap is the long-term urban-rural dual structure of Chinese society[3], and the distribution of urban and rural education opportunities, the ownership of social public education resources, the quality and development speed of urban and rural education are the specific manifestations of the urban-rural education gap[4]."

2.1. Differences in Levels of Economic Development

Generally speaking, education spending in rural areas is less than in urban areas. As Nielsen argues in Education, Equity, and the Big Picture, "education finance is only one part of a total system of education, many of the concerns about the financing of education reflect large issues regarding the overall education system[5]."

The balanced allocation of public education resources is very important to ensure the fairness of citizens' education opportunities and the equality of starting points. Global experience has clearly shown that the development of public basic education, in particular, is invaluable in alleviating poverty and improving people's quality of life.

Cities usually have a higher level of economic development and can invest more funds in the allocation of educational resources and the construction of educational facilities. In contrast, the economy of counties and towns is relatively lagging behind, and the investment in education is limited, which directly leads to the shortage of educational resources and facilities.

For example, there are still significant and growing differences in the quality and quantity of public infrastructure between urban and rural areas, and the supply of educational resources in rural areas is far from meeting the demand due to the limited economic level and geographical environment. For example, according to the data of the sixth national sports venues census, the number of sports venues between towns and villages shows an obvious imbalance, with the proportion of cities and towns as high as 58.61%, while the rural area accounts for only 41.39%[6]. Similarly, rural students also face many obstacles in enjoying social and cultural education resources such as youth palaces, libraries, and museums. It is urgent to strengthen the construction of social public education resources and digital connectivity to make up for their inherent disadvantages in education conditions and ensure that every child can enjoy equal and high-quality education opportunities.

What's more, the family background of students in counties and towns is relatively complex, and many students come from rural or low-income families, and their parents may not be able to provide them with a good learning environment and conditions. In contrast, urban students' family backgrounds are more advantaged, and their parents are often able to provide them with more study support and help.

2.2. The Imbalance of Teaching Staff

Excellent teachers and education talents are often more inclined to develop in cities, because cities offer more career development opportunities, higher salary levels and a better living environment. As a result, the teachers in counties and towns are relatively weak, and the overall quality and teaching level of teachers may not be as good as that in cities.

The difference in educational opportunity equity between urban and rural areas is deeply rooted in the deficiency of teachers' educational concepts, disciplinary ability, technical literacy and other aspects. Among them, the weakness of teachers and the imbalance of teachers' structure are particularly prominent, which have become the core bottleneck restricting the development of rural education. Although China is committed to promoting the high-quality and balanced development of compulsory education and deepening the reform of the teacher team, aiming to inject the vitality of high-quality teachers into the less developed regions in the central and western regions, the new challenges encountered by rural teachers have increasingly highlighted the distinctive brand of this era.

The prevailing challenges encountered by rural educators encompass several key aspects:

An optimization of academic qualifications within the teaching workforce is necessary to enhance educational quality and outcomes.

The high turnover rates and limited retention of educators result in instability within the teaching workforce, impeding consistent and effective instruction.

Restricted career advancement opportunities lead to diminished professional growth and satisfaction among educators, further exacerbating retention issues.

The increasing attrition of high-performing teachers raises concerns regarding the overall quality of instruction and the ability to attract top talent to rural educational institutions.

Addressing these multifaceted challenges is essential for improving the landscape of rural education and fostering a skilled, dedicated, and stable teaching workforce.

These problems are further amplified in the rapidly changing educational environment, especially in the context of the transformation of teaching mode from unified to personalized, teaching methods from technology application oriented to student demand oriented, and teachers' role from knowledge imparts to learning collaborators. Rural teachers are facing particularly severe challenges.

Limited by the lagging economic and cultural development in rural areas and the insufficient level of education cognition, rural teachers often lag behind urban teachers in accepting the deep integration of new technology and education, and lack the awareness and ability to use modern technology to improve teaching effect. With the continuous emergence of intelligent, virtual and highly interactive teaching scenarios, rural teachers are more likely to be marginalized in this wave of change, and it is difficult to effectively support students' personalized learning needs in offline teaching, thus aggravating the phenomenon of education inequity.

2.3. The Impact of Education Policy

The evidence shows that equity can go hand-in-hand with equality and that reducing school failure strengthens individuals' and societies' capacities to respond to recession and contribute to economic growth and social well-being. This means that investing in high-quality schooling and equal opportunities for all from the early years to at least the end of upper secondary is the most profitable educational policy[7]. Although the Chinese government has been trying to promote the balanced development of education, in practice, the effect of policy implementation may be affected by a variety of factors. Some policies may focus more on the development of urban education, while the support for education in counties and towns is insufficient. In addition, there may be deviations and loopholes in the implementation of policies, resulting in educational resources that cannot truly benefit students in counties and towns. In addition, the improper implementation of education policies is also one of the problems that cause the inequity of middle school education in urban and rural areas in China. In response to the challenge of uneven development of urban and rural education, the state has formulated and implemented a series of policies and projects aimed at promoting educational equity and optimizing resource allocation. For example, the Outline of the National Medium - and Long-Term Plan for Education Reform and Development (2010-2020) clearly points out that the core of equality in education lies in equal opportunities, and the key is to promote the balanced development of compulsory education and strengthen support for vulnerable groups[8]. The fundamental way to do this is to rationally distribute educational resources, especially by increasing investment in education in rural, remote and poor areas and ethnic minority areas. Strive to narrow the gap between urban and rural education. Although these policies have made efforts to bridge the physical gap between urban and rural education resources from the institutional level, and the construction of network infrastructure and education service platforms has continued to advance, the phenomenon of educational inequality has not been fundamentally eliminated.

3. Conceptual Unity: Story of Two Worlds

In line with what is mentioned above in Introduction about "building an enabling system," that is, empowering, it is crucial to focus on reflecting on the "story of two worlds" : are education leaders and promoters' efforts weaving a world story that includes all, or are they inadvertently maintaining a separate narrative of two worlds? The latter is often represented as a resource provider, with an urban culture and elite perspective, trying to provide assistance to another group in a one-way way, but subconsciously setting limits, expecting the recipient to eventually integrate into the former world.

This study suggests education leaders and promoters abandon this binary mindset and recognize that, despite the fact that groups are separated by historical, structural, and artificial barriers, in theory, all groups belong to the same vast world and should be integrated without boundaries. Therefore, this research argues that the goal of a leader committed to promoting equity in education is to break down barriers, promote mutual understanding and respect among different groups, and jointly build a more equitable and inclusive education environment. This requires that they not only provide resources, but also listen, learn, and cooperate, so that education can be a bridge that connects the world, not divides it.

Promoters and leaders in education equity is not only to build a bridge (or "ladder") between these two groups in the field of education, but also to provide solid support. This support is intended to help the two communities bridge those artificial divides and eliminate the barriers and misunderstandings between them. Through efforts of promoters and leaders in education equity, they promote normal interaction and in-depth dialogue among different groups, so that they can progress together on the basis of mutual respect and understanding, despite the inevitable challenges in the process. But it is these challenges that drive us to constantly explore more effective ways of integration, so that the world becomes more harmonious and inclusive because of our efforts.

When I interviewed and visited PEER, a public welfare organization that actively promotes equity in middle school education in urban and rural China, I was personally involved in their "Qi Zhi School House" project. This is a local liberal arts and humanities project designed by PEER for senior three graduates in less-developed areas of Hunan Province, China. PEER tries to build an equal and free living space for students in addition to traditional teaching and life, so as to communicate and learn together, expand life and explore life[9].

During the project, the tutors and students successively carried out activities such as classic reading, seminar, urban exploration, and movie salon to help improve their literacy and enrich their knowledge. At the same time, the school has implemented a parliamentary system and a committee system, which focuses on students' self-management and aims to cultivate their cooperation, organization and leadership skills. These students may be lively and cheerful, sensitive and delicate, may like to read and think quietly, and may be willing to communicate and express their views. Through this project, PEER hopes to see the county's middle school students constantly searching for answers and exploring themselves. It is also hoped that they will become inquisitive and introspective, and listen to others with an open and inclusive attitude. And, of course, the most important self-question of all: What do I want to be?

In summary, educational equity promoters and leaders must be physically involved in the service scene. A deep understanding of the world not only comes from their consciousness and ideas, but is more deeply rooted in the specific environment and situation they are in. Our working models and ways of thinking, such as planning fundraising and communication strategies, are important but often detached from the actual service scenario. Only by being in the field and interacting directly with the communities educational equity promoters and leaders serve can they gain real-life experiences and insights that cannot be replaced by reports or data. This interaction is vivid, direct, and difficult to achieve by any indirect means.

Second, reflexivity is an indispensable quality for educational equity leaders in their interactions with different groups. Lack of reflexivity, people tend to just mechanically one-way transmission of information and resources from different worlds, rather than deep, meaningful communication. Reflexivity forces us to constantly examine our words, actions and positions to ensure openness and understanding in our interactions, thereby building closer and more harmonious relationships.

Finally, leaders and promoters are not alone in our quest for educational equity. Millions of colleagues, with the same conviction and passion, are marching alongside them. This common goal and vision, like a bright star, lights their way forward and gives them endless strength and courage.

Therefore, educational equity leaders and promoters should cherish this solidarity and collaboration, and join hands to create a more equitable and inclusive education future.

The core of educational equity is not the lead in time or the accumulation of experience, but how to create enough space for each participant to grow and self-show the stage. This means that as pioneers or leaders, they should not only rely on their own experience and methods to teach, but should listen, understand and support more. At the same time, in view of the advantages brought by the chronological order, they should actively provide necessary support in the process to help other groups find their own space in the process of self-exploration and play. Such a practice is the responsibility and action of the pioneers in educational equity.

4. Specific approaches for promoting education equity

4.1. No Membership in Equity

When I visited PEER, a public welfare organization, the head of the organization shared an experience with me. PEER has established a PEER space in each of the township secondary schools it works with, where peers influence peers by recruiting volunteers from all over the world, and through these volunteers, new teaching methods and ideas are taught to local teachers. An important turning point occurred in 2015 with the establishment of the PEER space. Originally conceived as a continuation of the summer camp, the PEER space was membership-based and primarily for students who had attended a summer camp or specific tryouts. But one of the founders, drawing on his experience with other nonprofit organizations, objected, arguing that membership would reinforce a sense of privilege because students who could attend the camp tended to do better academically. As a result, PEER tried a non-membership operation of the space, only to receive unexpected feedback - students complained that PEER Space was no longer "pure" because there were many "weird" students in it. The student who complained acquiesced to the membership system of education, which is actually a cause for alarm among educators. As a result, PEER redefined the function of PEER space, making it more open and inclusive, allowing more different types of students to participate. Through this transformation, PEER space has become an important way for peers to enter schools and get close to students' daily life, and educators have begun to examine the issue of educational equity from a broader perspective. In fact, the membership-based PEER space reinforces the existing unfair education model of high school based on good and bad grades.

As Nico Cloete describes in *Transformation Tensions in Higher Education: Equity, Efficiency, and Development.*, retaining an elite higher education system was never going to provide enough opportunities to seriously redress inequity of opportunity[1]. In conclusion, education equity promoters and leaders do more than promote education; they advocate for rights and equity. Instead of just providing additional resources on top of the cake, they began to focus on and respond to basic needs that have been ignored or excluded by the existing education system. Educational leaders should let go of initial presuppositions and stereotypes, try to let students freely enter a space where they can interact equally, and find and solve problems in their interaction. Only by truly entering the world of students can they discover and solve the fundamental rights problems that have been blocked by the existing system. Therefore, educators should be committed to fighting for more equitable educational opportunities and resources for students through advocacy and practical actions.

The discussion about fairness cannot only stay at the theoretical level, but must be practical and stand together with students. Only through continuous self-reflection and situational adjustment can educational equity leaders and promoters better understand and respond to the issue of educational equity and create a more just and inclusive learning environment for students.

4.2. Education Digitalization

Under the wave of digital technologies such as artificial intelligence, big data, Internet of Things and 5G, people are experiencing an unprecedented digital transformation, which has profoundly penetrated and reshaped social production, lifestyle and even education models. Digitalization in the field of education, as the advanced stage of the evolution of educational information, is not only the deep integration of the whole field, the whole process, the whole elements and digital technology, but also a profound practice aimed at solving the problems of education imbalance and urban-rural gap in the information age through systematic reorganization and reconstruction.

Based on the ecological perspective, education digitization uses its powerful technology to reconstruct the education service system, lead the fundamental change of students' learning style, and build a new ecology of education service supply with individuation and equity as the core. This new ecology is not only committed to narrowing the gap in access to resources in urban and rural education, but also to promote education from basic balance to differentiated high-quality development, and realize a new leap in educational equity.

Specifically, the education service supply ecosystem enabled by education digitalization focuses on the following aspects.

In the learning ecosystem, students, as the core service objects, actively adapt to and promote the transformation of their own learning styles in the dynamic changing environment through independent exploration and interactive communication, and make use of digital technologies such as intelligent learning terminals, especially students in rural areas, to cross geographical restrictions and access to high-quality education resources. Achieve comprehensive improvement in knowledge, skills and higher order thinking.

In addition, the education service supply ecosystem has built a diversified and collaborative support system, covering multiple dimensions such as society, region, family and school, and providing all-round and intelligent education services with the help of digital means, including intellectual support, ubiquitous learning environment, diversified digital resources and accurate data analysis, forming an efficient interactive and mutually supportive supply network. To provide a solid guarantee for the healthy development of education ecology. For example, regional virtual schools have become a new front for rural education, using intelligent interactive systems and online intelligence service systems to create a learning platform for students to promote comprehensive literacy.

4.3. Reduction of Class Size

As a key factor affecting students' overall growth, class size is directly related to the realization of educational quality and educational equity. In the context of discussing educational equity, a phenomenon that cannot be ignored is that with the increase of class size, the difficulty of teachers' personalized guidance increases significantly, which may aggravate the unequal distribution of educational resources. Historical experience provides us with strong evidence, such as the STAR project in Tennessee in the 1980s and the SAGE project in Wisconsin in the 1990s, which showed that reducing class size not only effectively narrowed the academic achievement gap between students of different ethnic groups, but especially benefited minority students and students from economically disadvantaged areas. This opens up a new way to promote equality in education[10].

The American class size reform experiment emphasizes the pursuit of high education quality through educational equity and has sufficient financial guarantee and policy support, which is the successful experience of class size reduction. However, the lack of consideration of the economic cost of class size reduction and the inability of educational resources to support the continuous

implementation of class size reform is the experience and lesson it has brought to China's class size reform[11].

In the face of the unique trend of changes in the school-age population at the stage of compulsory education in China in the next 15 years, the demand for degrees in schools in urban and township areas is about to peak and then gradually decline, while the demand for degrees in rural areas continues to shrink[12]. This change in population structure poses a severe challenge to the allocation of education resources. It also creates a favorable opportunity for further optimizing class size and improving the quality of education. Especially in rural areas, compared with urban middle schools, the class size is generally too large, which needs to be solved urgently.

As class size reduction is a complex and systematic education reform project, it requires us to carry out comprehensive and in-depth consideration in terms of financial budget, reallocation of educational resources and related supporting measures. This is not only a simple adjustment of hardware facilities, but also a comprehensive reshaping of education concepts, teaching models and even the entire education ecology. Therefore, the reduction of class size must be based on national conditions and local conditions. It is necessary to do a good job in top-level design and long-term planning to ensure the correct direction and steady pace of reform. It is also necessary to fully consider the actual situation of different regions and different schools, and adopt flexible and diverse strategies to ensure the effective landing and continuous deepening of reform measures.

To sum up, China should seize the opportunity of school-age population change, take educational equity as the guide, actively and steadily promote class size reduction, especially in rural areas, but also as a key area of reform, through scientific and reasonable planning and implementation, and strive to narrow the gap between urban and rural education, and promote every student can thrive in a more high-quality and fair education environment.

5. Conclusion

In summary, the pursuit of educational equity should encompass not only the advancement of educational development but also the promotion of rights and fairness. Besides, it is imperative that educational equity leaders and promoters move beyond the provision of supplementary resources and opportunities to acknowledge and cater to the fundamental needs that are currently overlooked or excluded by the existing educational frameworks. Also, it is necessary to discard preconceived notions and foster an environment where students are encouraged to thrive autonomously, with educators identifying and addressing challenges through interactive engagement. Finally, they must acknowledge the existence of a "story of two worlds" in educational equity and assume the responsibility to bridge the gap between these disparate realities, aiming to enrich the lives of those who possess fewer resources and opportunities. In conclusion, the realization of educational equity is not a success overnight, it needs their persistent efforts and unremitting pursuit. In this process, they need to keep a clear mind, have the courage to face challenges, dare to break through traditional constraints, and promote the continuous progress of educational equity with innovative thinking and actions.

References

- [1] Cloete, N., & Moja, T. (2005). *Transformation Tensions in Higher Education: Equity, Efficiency, and Development*. *Social Research*, 72(3), 693–722. <http://www.jstor.org/stable/40971787>
- [2] Robinson, V. M. J., Lloyd, C. A., & Rowe, K. (2008). *The impact of leadership on student outcomes: An analysis of differential effects of leadership types*. *Educational Administration Quarterly*; 44(5), 635-674. Retrieved from DOI: 10.1177/0013161X08321509
- [3] Li Gang. (2020). *Promoting the fair development of urban and rural compulsory education more accurately*. *People's Education* (20), 31-34.

- [4] Guo Shaoqing & Hua Xiaoyu.(2023). Research on the path of Promoting urban and rural education equity through digital transformation of education. *Journal of the National Academy of Educational Administration* (04),37-46+95.
- [5] NIELSEN, N. (2013). Education, Equity, and the Big Picture. *Issues in Science and Technology*, 29(3), 76–82. <http://www.jstor.org/stable/43315744>
- [6] State General Administration of Sport. Bulletin of the Sixth National Sports Venue Survey Data [EB/OL]. (2014-12-26) [2022-09-30]. <https://www.sport.gov.cn/n4/n210/n218/c328625/content.html>.
- [7] Levin, B. (2012). Greater equity in education. *The Phi Delta Kappan*, 93(7), 74–75. <http://www.jstor.org/stable/23210013>
- [8] Chinese government website. Outline of the National Medium - and Long-Term Education Policy Reform and Development Plan (2010-2020) [EB/OL]. 2010-(c)07-29) [2022-09-17]. http://www.gov.cn/jrzq/2010-07/29/content_1667143.htm.
- [9] Introduction of Qi Zhi School House in PEER projects for pre-college <http://peerchina.org/projects/pre-college/2019i/>
- [10] Qin, Yuyou & Li, Shengbin.(2010). American Class Size reduction Project: Orientation and discussion. *Foreign Education Research* (11),70-76.
- [11] Li Chenran.(2021). Is class size Reduction Reform Effective? (master degree thesis, Nanjing Normal University. <https://link.cnki.net/doi/10.27245/d.cnki.gnjsu.2021.002647doi:10.27245/d.cnki.gnjsu.2021.002647>.
- [12] Zhang L L, Shi Y & Hu Y M. (2022). Trends and characteristics of school-age population in urban and rural areas from 2021 to 2035: A forecast based on the data of the 7th National Population Census. *Educational Research* (12),101-112.