

China's Endeavors to Promote Educational Equity through Technology Use

Wenyu Wu

University of Leeds, West Yorkshire, England

Abstract: Nowadays educational equity constitutes a fundamental component of social fairness, and technology is deemed a vital means for mitigating educational inequalities. This article is a survey of China's experiments in harnessing modern technologies to promote equity in education. This study, after giving a summary of common conceptions of educational equity in researchers, focuses on reviewing China's endeavors to leverage technology to close disparities in education, including introducing high-quality educational resources into underdeveloped regions through information technology; developing distance education models; providing customized teacher training and specialized vocational education; and using smart teaching platforms to supply personalized learning opportunities to underprivileged groups. Also discussed are the challenges of the application of educational technology, such as inadequate digital competence in teachers and students, widening digital divides, quality gaps in educational resources, and ethical issues in technology use. The article concludes with moves proposed for addressing these issues.

Science Insights Education Frontiers 2025; 27(2):4533-4547

DOI: 10.15354/sief.25.re505

How to Cite: Wu, W. (2025). China's endeavors to promote educational equity through technology use. Science Insights Education Frontiers, 27(2):4533-4547.

Keywords: Educational Equity, Technology Use, Educational Technology, China

About the Author: Wenyu Wu, University of Leeds, West Yorkshire, England. E-mail: wuwenyu_wwy@163.com

Correspondence to: Wenyu Wu at University of Leeds in England.

Conflict of Interests: None

Funding: No funding sources declared.

AI Declaration: The author affirms that artificial intelligence did not contribute to the process of preparing the work.

© 2025 Insights Publisher. All rights reserved.



Creative Commons NonCommercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License

(<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed by the Insights Publisher.

Introduction

Educational equity, as a crucial part of social fairness, has been a focal topic in global education conversations. Despite the unwavering commitments of governments and international organizations to promote the balanced distribution of educational resources, the issue of inequity in education remains. Particularly in developing countries, many children have been deprived of up-to-par learning opportunities due to geographical, social, and economic constraints. In this context, technology, especially ever-advancing information technology, is seen as the overriding vehicle for enhancing educational equity.

According to existing research, technology can help narrow the disparities in education standards between regions and individuals and realize relative equity in education outcomes because of its role in optimizing education and instruction processes (He, 2011). Specifically, technology applications can break down the constraints of time and space, creating online learning environments and communication communities that enable learners from diverse origins to have equal access to educational opportunities; at the same time, technology assists underserved schools and districts in improving their standards and efficiency of education by facilitating the sharing of high-quality educational resources (Aksu & Canturk, 2015; Li & Fan, 2018; Han, 2021).

On the other hand, concerns about the across-the-board effects of educational technology are also pervasive in academia despite its widely acknowledged prospects. For instance, the effects of educational technology on the individual's learning could be heavily affected by their family's cultural capital and socioeconomic status (SES). Underprivileged students cannot take full advantage of technological advances, and the widened digital divides are impeding the mitigation of educational inequity (Chen & Gu, 2019).

China, a populous developing country, is also facing the issue of educational equity. Hence, the nation is actively exploring the possibilities of using modern technologies, particularly the internet, artificial intelligence, and big data, to overcome geographic restrictions on educational resource distribution in a bid to enable as many children as possible to benefit from high-quality education. China's experiments in this regard are of vital significance to its own educational development while also providing implications for global endeavors to achieve the ideal of educational equity. Using the method of literature review, this study investigates China's experiments in leveraging technology to advance educational equity with the view to contributing to educational technology and equity literature.

Educational Equity and Technology

There are different and even opposing conceptions of educational equity in the education community despite it being their common goal. Levinson et al. (2022) expound on these competing conceptions and pinpoint five popular meanings of educational equity in current use: (i) equal distribution of outcomes across populations (e.g., equal percentage of college graduates or of people living fulfilled lives across racial groups, genders, SES, nations, etc.); (ii) equal resources allocated toward education across students, schools, districts, states, or nations, which is measured by money or by other criteria such as the student-teacher ratio, infrastructure and facilities, the number of advanced courses, etc.; (iii) equal experiences for each child (e.g., experience of being respected or challenged, opportunities for play, social inclusion); (iv) equal levels of growth or development by each learner; (v) equal outcomes for every learner (academic, social-emotional, etc.). According to Levinson et al.'s argument, each of these conceptions may represent a significant aim or value of educational equity; nevertheless, they are often mutually competing and can never be simultaneously realized in practice. For instance, equal growth from unequal starting places will result in unequal outcomes; equal outcomes may necessitate unequal resource distribution; and even equal experiences can lead to unequal educational outcomes or opportunities.

Apparently, there is no such thing as a conclusive or universally applicable definition of educational equity; it can mean different things and be achieved by different means, depending on the specific goal, context, or value orientation. This perception underscores the importance of ascertaining the purpose of technology use in equity promotion efforts. If the priority is to equalize educational resources, technology applications should be focused on optimizing resource redistribution; if it is to provide equal education experiences to every child, technology should be applied to create more favorable learning environments; and if it is to privilege disadvantaged student populations, technology ought to be used to identify these groups and support them with extra services.

In China, there have also been debates on the definition of educational equity. The following conceptions represent those well-accepted understandings: (i) Educational equity is not identical with educational equality. It is a value judgment regarding resource distribution and outcomes rather than the idea of allocating equal resources to each individual student (Chu, 2006; Chu & Yang, 2008). For instance, providing more educational resources to disadvantaged students than their ordinary peers is counted as equity. The focus here is on the equal right to education and equal opportunities for every child; it is reasonable to strive to close disparities in educational outcomes, but without a rigid requirement for absolute equality of outcomes. (ii) Educational equity necessitates diversification of educational resources. The idea of equating educational equity with the

provision of uniform and homogeneous education should be abandoned. It is important to make structural transformations to facilitate the supply of diverse educational resources (e.g., different education tracks, curricula, teaching modalities, etc.) to students with differential abilities and aptitudes, showing respect to their interests, preferences, individuality, and freedom of choice (Chu, 2006; Chu & Yang, 2008; Shi, 2008). (iii) Weighted resource distribution for disadvantaged groups helps us get closer to realizing the ideal of educational equity (Shi, 2008). In other words, SES disparities between students should be a central consideration in the allocation of educational resources, and compensatory services should be ensured for those with underprivileged family backgrounds (Chu, 2006).

China's Endeavors to Promote Educational Equity through Technology Applications

With the said understandings of educational equity, Chinese educational authorities, educators, and education researchers have conducted an array of experiments in exploiting modern technologies to advance the realization of the shared ideal. The education world has been persistently pursuing digital transformation of education to tackle inequity in education caused by regional differences in economic and cultural development, the large-scale migration of population, and disparities in home capital (Wei, 2024) to make high-quality education resources and experiences generally accessible.

Priorities

Leveraging Technology to Redistribute High-Quality Educational Resources

Due to unbalanced economic development across China, education is less developed in its rural and western remote areas in comparison to its urban and eastern areas. The past several decades has witnessed much effort by the Chinese government and educational institutions to utilize modern technologies to bridge the gaps in education between rural and urban areas and between western and eastern regions. A salient practice in this regard has been the adoption of information and communication technology (ICT) to introduce quality educational resources from developed into underdeveloped regions. The 2016 “Cross-Regional Simultaneous Teaching Application Pilot Project,” for instance, was developed to enable schools in remote areas in China to have access to high-quality primary education resources via satellite-based broadband connection and online learning platforms (Kou, 2020). With this project, students at these schools can receive online instruction and tutoring from teachers in developed regions. It

also assists teachers in underserved areas in enhancing their instructional quality by collecting teaching and learning data and creating learning analytics systems for them. Additionally, the project's implementation has resulted in the improvement of infrastructure and facilities of these remote schools, enabling them to access internet connection, which had been denied ground-based internet because of their special geographical locations. Yang et al. (2018) dubbed technology application models like this the "Remote Synchronous Classroom (RSC)" and noted that the RSC model had been effective in connecting urban and rural classrooms through ICT, successfully combining the remote instruction of urban teachers and on-site tutoring of rural teachers, while also compensating for the missing subjects in rural schools' curricula due to their difficulties with teacher staffing.

Yet, the RSC model has the limitation of being susceptible to network connection disruptions, which can cause delayed transmission. To address this issue, the education departments and schools engaged in developing the asynchronous online teaching model. With this model, schools in developed regions are responsible for producing digital courses and uploading them to specified online platforms; teachers and students in less-developed regions can then download these courses or use them online. For example, at the primary and secondary levels, prestigious schools in developed regions create teaching materials, such as instruction videos, for the national public platform of "Smart Education of China," which are accessible for all teachers, including those working in rural and hard-to-reach areas (Yang et al., 2018).

To guarantee the quality of online educational resources and the compliance of online learning platforms, the China E-Learning Technology Standardization Committee (CELTC) was established and held responsible for developing a framework for standardizing online learning technology systems. It has published six clusters of standards (Overall, Management, Resource, Learner, Environment, and Localization) and 16 specifications (Zhu et al., 2011). In the sphere of higher education, the East-West University Course Sharing Alliance was formed as a result of the joint efforts of universities and colleges across China. This alliance advocates that higher education institutions develop and share high-quality online teaching resources, leveraging expertise in their respective outstanding disciplines. As of 2022, over 140 courses were rated as state-level first-class online courses. The number of courses developed, participating universities, and student users of the platform has been growing year by year. The initiative has benefited more than 2,300 universities nationwide, reaching over 30 million college students (Gao et al., 2022).

Providing Differential Support Contingent on Specific Circumstances of Schools and Districts

While schools in underdeveloped regions are working towards the same goal of improving educational standards, the specific assistance they need varies significantly due to factors such as the geographical location, educational level, and cultural environment. Hence, it is essential to adopt targeted strategies and provide differentiated support in leveraging technology to drive educational equity.

For instance, schools in remote, mountainous areas may have difficulty in recruiting and retaining highly qualified teachers due to their isolated locations and undesirable living environments. The most pressing need of these schools is to enhance the teaching competence of local teachers. To address this issue, the Ministry of Education of China has formulated criteria for teachers' educational technology competence development as well as providing extensive training programs, aiming to elevate the digital teaching skills of teachers in these schools to ensure that technological tools and distance education resources can be fully and effectively utilized (Zhu et al., 2011).

On the other side, most children in underdeveloped regions enter the labor market at younger ages due to factors like family financial distress and peer influence. As a result, there is a strong demand among them for effective practical skill training that are employment-supportive (Fu & Zeng, 2019). To better serve the needs of these children and propel regional economic growth, it is imperative to enhance the quality of vocational education and its alignment with local industrial development with the assistance of technology. For example, online education platforms and virtual reality and augmented reality technologies can be adopted to facilitate the introduction of high-quality vocational education resources to underdeveloped areas as well as students' access to advanced practical skill training, and in the meantime, to significantly lower instruction and placement costs (Peng et al., 2024). Additionally, big data technology can be used to analyze the match between local industrial demands and students' interests, enabling the customization of training schemes and improving the relevance and effectiveness of vocational education (Tian & Jin, 2024).

Offering Technology-Assisted Services to Educationally Disadvantaged Student Groups

The economic transformation of Chinese society has fueled the massive flow of rural labor forces to urban areas. A portion of migrant workers manage to have their children live and receive education in cities, and this group of

children is known as “migrant children.” Although migrant children are entitled to the same educational opportunities as their urban counterparts, they often fail to acquire comparable educational experiences and outcomes. This is primarily because they have less ideal home support in education because of their low SES background and attendant lower education levels of their parents. Furthermore, their “outsider” status and distinct growth environment often lead to their reluctance to engage with the teachers. The fear of adding burdens to the teacher or receiving negative comments dampens their willingness to approach him or her for help when encountering academic challenges (Xu, 2009). These issues render migrant children a special group in the education system.

To tackle educational disadvantage in this group, Chinese educators and education researchers tap into the smart teaching systems to improve their quality of education. These smart systems can help migrant children acquire more desirable educational experiences and outcomes in many ways (Jia et al., 2022). For instance, a smart platform assigns legitimate after-school exercises to them in accordance with their learning progress and academic levels as compensatory learning resources. In doing these exercises, they can turn to an online teacher for help when encountering difficulties, who offers one-on-one tutoring mostly through text-based communication. This approach not only ensures that migrant children receive precise academic support but also is effective in encouraging active communication with teachers in them thanks to the anonymity of the online environment. To prompt their sustainable use of the platforms, some smart teaching systems even devise rewarding mechanisms with which the user will receive virtual rewards for their efforts to complete online learning tasks and get physical rewards after they have accumulated a certain number of virtual ones.

Effects and Appraisals

There are many studies of the effects of technology use on educational equity in Chinese academia. A portion of them address the relationship between educational equity and technology use in its broad sense. Hu et al. (2021), for example, investigate the effects of technology use on the equity of educational outcomes in different areas, using data from the China Education Panel Survey (CEPS). According to the research findings of the study, educational technology, generally, has a positive effect on equity in educational outcomes, particularly in terms of student cognitive ability and academic performance, and this effect is, however, subject to the influence of various factors. The scientific application of technology to teaching is the central factor in promoting equity in educational outcomes; the roles of digital facilities and digital educational resources are pending further enhancement. Furthermore, Wen et al.'s (2023) study reveals that the

relationship between the efficiency of technology applications and educational equity is a U-shaped nonlinear one with a distinctive single threshold effect, which means that technology use can promote educational equity only after its efficiency reaches a certain threshold. Tang et al. (2024) focus on examining different views on the said relationship in the literature: while some researchers argue that the integration of technology with education can significantly narrow educational disparities by increasing learning opportunities and resources, as well as elevating educational efficiency and outcomes by providing differential instruction based on students' different learning styles and needs, others express their concerns over the possible challenges of educational technology, such as technology use-induced education costs, which may bring schools and student families disproportionate financial burdens.

Other studies focus on the effects of specific technologies on educational equity. Much research has been conducted on the impact of internet use in education. Based on provincial-level panel data from 2003 to 2019, Yan and Jin (2022) performed an econometric study, which finds an inverted U-shaped nonlinear relationship between internet use and educational equity: the initial use of internet technology may contribute to educational equity; nevertheless, as the “digital divide” widens with the increased use of the internet, the application of internet-based technologies can intensify educational inequity. Using PISA data from Shanghai, Chen and Gu (2019) conducted an in-depth analysis of the relationship between learners' internet use preference and outcome inequality and discovered that the preference of using the internet for academic purposes exhibited a significantly positive effect on the learner's performance in mathematics, reading, and science literacy, whereas entertainment-focused preference had a significantly negative effect on academic achievements. Notably, the preference is associated with the learner's home economic, social, and cultural status: students from more advantaged families are more likely to use the internet for academic purposes, while those from less advantaged families are more inclined to use it for entertainment. This divergence in internet use preference leads to unequal benefits from internet technology between students of different SES, potentially widening disparities in educational outcomes. Liu and Zhang (2022) draw similar conclusions, noting that rural students and those from disadvantaged families are more likely to use the internet for entertainment activity, a tendency leading to increased inequality of educational outcomes.

Issues with China's Technology-Driven Educational Equity Endeavors

The Chinese education community has encountered multiple challenges in their experiments in promoting educational equity through technology applications. First, the deficits in digital literacy and application skills in teachers and students are a major barrier to the effective application of technology for advancing educational equity. Despite the governmental financial support for digital infrastructure and facility construction of rural and disadvantaged schools and other material support from third-sector organizations, digital equipment available is often underused because of the inadequate digital competence of teachers in underdeveloped regions, which exacerbates educational inequity. At the same time, students in impoverished areas may lack the basic manipulation capacity for information acquisition, resulting in their inability to utilize digital resources for self-directed learning or to adapt to the digital teaching environment replete with technology use. This compromises the role of technology in improving educational equity (Guo & Wang, 2025).

Second, the issue of “digital divide” remains pronounced due to regional disparities in economic development and differences in student SES. Disadvantaged students, without necessary family support, may lag behind their advantaged peers in technology learning and use (Yan & Jin, 2022). Also, the gap, without effective intervention, may continue to widen with the expedited development of technology, further magnifying educational inequality.

Third, the construction of digital teaching resources involves a wide variety of entities, including higher education institutions and businesses in the education sector, which results in the stark variations in the quality of these resources. Also, current digital resources typically lack the capability to adapt to the personalized needs of students of different learning capacities across diverse regions. For instance, students in certain remote, underserved areas may have difficulty making use of and benefiting from these digital teaching resources because of the different cultural contexts as well as their own inadequacies in foundational knowledge (Tang & Carr-Chellman, 2016).

Fourth, ethical issues like data privacy and informed consent have also raised wide concerns in the context of increased penetration of new technologies, such as AI, in educational settings. For example, the use of electronic cameras for real-time monitoring of student on-campus activities can serve purposes such as teaching management or educational data collection. Nevertheless, illegitimate practices in this regard may infringe upon students' privacy and other rights.

Lastly, the sustainability of technology applications is another concern, as the deployment and development of educational technology require enduring financial investment and technical support. Yet, long-term costs of digital education may be a burden beyond the financial capacity of schools and educational authorities in underdeveloped regions. Issues like

outdated equipment and software as a result of the school's inability to keep pace with the ongoing iteration of technology may threaten the continuation of digital education development in impoverished areas.

Discussion and Conclusion

The study reviews China's recent practices in leveraging technology to drive educational equity, highlighting the roles of technology in redistributing educational resources, narrowing regional disparities in education, and enhancing educational opportunities for the disadvantaged populations. It finds technology applications have significantly advanced equity by making high-quality educational resources accessible to impoverished children and those living in hard-to-reach areas and by meeting the diverse needs of different learners through digital platforms and smart tutoring systems. It also pinpoints the challenges of implementing educational technology, such as the inadequate digital competence of teachers and students in underserved communities, exacerbated digital divide, starkly different quality standards of digital teaching resources, and ethical risks in technology use.

In response to current challenges, we recommend the following moves: (i) Enhance digital technology literacy training programs for teachers and students, particularly those targeting underserved populations and disadvantaged groups, to improve their technology application skills to ensure optimal utilization of technological tools and digital educational resources. (ii) Introduce "minimalist educational technology" as a solution to the issues of digital skill acquisition costs and efficiency of technology applications, considering the limits of time and energy (Yan et al., 2021). Minimalist educational technology refers to easy-to-learn, user-friendly, highly effective technology for teaching and learning processes, with the underlying principle of human-centeredness (Li, 2019). The term was advanced to underscore that technology is not used for its own sake but rather for efficiently and effectively tackling educational issues. (iii) Encourage long-term cooperation in technology application between schools in developed and underdeveloped regions with a mechanism for facilitating the former sharing high-quality teaching resources with the latter, the development of collaborative teacher training programs, and inter-student communication. (iv) Enhance the quality standards and review mechanisms for digital teaching resources to ensure their rigorosity, relevance, and practicality. (v) Establish stringent regulations for ethical issues associated with educational technology to regulate the collection, storage, and use of student data and safeguard their privacy and right to informed consent. (vi) Develop an educational equity index framework for regular evaluation of the effect of technology use on educational equity and for policy adjustment in correspondence to problems identified.

The scope of the literature review and the research method of the study may constrain the generalizability of its research results. Future research efforts should be concentrated on the following areas: (1) Longitudinal research to investigate the long-term impact of educational technology on equity in various dimensions, such as student academic achievement, resource distribution, teaching techniques, and education opportunities; (2) Empirical research that blends quantitative and qualitative studies to examine the role of technology in specific education scenarios and the genuine digital education experiences of teachers and students. In addition, we recommend the interdisciplinary approach that brings together perspectives of education sciences, sociology, psychology, IT, and so forth to generate more comprehensive insights into the relationship between technology and educational equity.

References

- Aksu, T., & Canturk, G. (2015). Equality of educational opportunity: the role of using technology in education. *International Journal of Academic Research in Progressive Education and Development*, 4(4), 79-93. DOI: <http://dx.doi.org/10.6007/IJARPED/v4-i4/1933>
- Chen, C. & Gu, X. (2017). Does the internet contribute to the inequality of educational outcomes: An empirical study based on PISA data from Shanghai. *Peking University Education Review*, 15(1), 140-153+191-192. DOI: <https://doi.org/10.19355/j.cnki.1671-9468.201701009>.
- Chu, H. (2006). Several philosophical questions on educational equity. *Journal of the Chinese Society of Education*, 2006(12), 1-4. Available at: <https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuT1UAAIOUUYHctFSG8Ez1vbS8Nx20hokzOY522nN-G3GRs8vFQfyv5WIEY1T7eUVo17hW8ZuTimpbvt3tcD1Qd07TeiYFKp8rszw8MihWA4-iryNywXAgRmjfaHlULcF-gyESAb7s2MvVrCRDYKwDU7UEVJcMyqwq31BTjYIaP4gA==&uniplatform=NZKPT&language=CHS>
- Chu, H. & Yang, H. (2008). The principles underlying educational equity and their policy implications. *Educational Research*, 2008(1), 10-16. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuTnbnluToBFQMYOj3JzbCwHkdzWAAybXV4BxbKU_5ChiU3bXh46C_tOywrlM6F29YfoMgyviCkeDfydBfwadkk_X7Fcqp_cBn1dLJ71ODs0rYtZAJOUiAhP-ri4eGb8VsGu-Jx4COjTHc9L2ywEA6-OS8XofGmNK9nZ0n727twPQ==&uniplatform=NZKPT&language=CHS
- Fu, W. & Zeng, X. (2019). The outcomes, problems, and prospects of poverty alleviation through education in China: A study based on a survey of 18 targeted counties (districts) in six provinces in central and western China under the poverty alleviation and development program. *Journal of Central China Normal University (Humanities and Social Sciences Edition)*, 58(5), 45-56. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuQdxNDpjgmf--Yp6SGT6j2Dg-84Hfy0TzxzFqoJsqAne6ITDpjTyTbjcMOqPx_nMQvFZpl_cW86mmL0i2zxmdHJ

- [FcfCAAddAwH5hNDPhxT5cdow1jhISTiEwILA66iVmPjddyTaiy8vUdlybuflmWdEsve-HebqetvObBSg2rg9w==&uniplatform=NZKPT&language=CHS](#)
- Gao, S., Li, Z., & Xiang, C. (2022). Digital education fosters high-level equity in higher education: Using the practice of the East-West University Course Sharing Alliance as an example. *China University Teaching*, 2022(3), 4-10. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuSC5BmEL2SmardXRifyp9_cOH70tBNiFiEYkFd3Fh_Z4ui3qdxdz7ORAI8Q4p8L2WsbW7zXex2OYwy9XpOkcnuYjLvT0sZEaLs91LCAKBXQMm3qGq0AxQ78URnxErJ8_ZmumJIwhxIRR_kgfmvX6_m-3o2tBDEXbjzn3sfXNJc7P8Q==&uniplatform=NZKPT&language=CHS
- Guo, S. & Wang, J. (2025). Smart education: A new path to achieving equity through technology for rural education. *China Educational Technology*, 2025(2), 67-74+83. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuQ4sgHMZza8wPRgJTZ0baTEbParU45j-rFnW4j2OnLODEOnDDc3gP1i6HvKH8qSKQ-Mk8-nrG1_-uyV0-93iwef49gFYB5P2yLoSf8IvLWE_WGvDPxUyztZn5-EOIWw5MEeQt5dwVMWIGt6TfHHIQHADpA4ynQdQ9FIE3RQr9qfg==&uniplatform=NZKPT&language=CHS
- Han, S. (2021). China's endeavors to promote educational equity through digital education: The evolution of policies, analysis of problems, and suggestions for future development. *Chinese Journal of Distance Education*, 2021(12), 10-20+76. DOI: <https://doi.org/10.13541/j.cnki.chinade.2021.12.002>.
- He, K. (2011). Education informatization: An essential avenue for high-quality and balanced development of compulsory education. *Modern Distance Education Research*, 2011(4), 16-21. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuTFUczsvStth-1_nrintcZSjdN0exryfEJT83Hj92XivVbth6c-SWTgrUKs6fmsOuxbsks-39xWQRL-L7mCT57wgaMCSwruWspTKe5iyEkpxcQmJzrZw_9a987h6qljjwBwNh5ed8Btwrdhj0lfaD7DaBRYIOGUmKRveUBky1NjqA==&uniplatform=NZKPT&language=CHS
- Hu, Q., Lin, X., & Zhang, Y. (2021). The role of information technology in promoting equality in basic education outcomes: An analysis based on data from the China Education Panel Survey. *Educational Research*, 42(9), 142-153. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuQkY6rwEJv3vxDW0rPY98ncR-eMLKJIKiZJ82I3ytVwsyY7em7zXvzG8pwZVo4ncAbVS4Wn864ifmACu5P0rDHUoN5GAJyOmrA5aMC2XVQdRKGFmFsg2C5rM409JQ8iBpKU5TSDrUclJbz9_w_Z0rt8-efzo6lHtZlQy91clL3BCQ==&uniplatform=NZKPT&language=CHS
- Kou, S. (2020). Application of education informatization promoting educational equity in remote areas of China. *International Journal of Information and Education Technology*, 10(8), 608-613. DOI: <https://doi.org/10.18178/ijiet.2020.10.8.1432>
- Jia, J., Le, H., Li, Z., & Gui, Y. & Zhang, H. (2022). The role of artificial intelligence in promoting balanced development of education: Using the online teaching system-based, personalized tutoring for migrant children as an example. *China Educational Technology*, 2022(1), 42-49. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuRvYqqO9e8xd89Bm34BjvzlzL4su8AdHbRKPr7n3wv2D-ZP2wsbdyLrEvOCv8x4H_d5-XCGNvSm31FUUzNnvkESK2Fxdjbh89QF8_E7SfScD6pnNs6LuqXmgOndpOQzXZWQFLaes4GPpyQyJAHllbCdTBgV5oeHqiUOnEzm21WWT7Q==&uniplatform=NZKPT&language=CHS
- Levinson, M., Geron, T., & Brighouse, H. (2022). Conceptions of educational equity. *AERA Open*, 8(1), 1-12. Available at: <https://files.eric.ed.gov/fulltext/EJ1360521.pdf>
- Li, J. (2019). The rise of minimalist educational technology in basic education. *China Educational Technology*, 2019(2), 6-9. Available at: <https://link.cnki.net/urlid/11.3792.G4.20190124.0851.004>
- Li, S. & Fan, L. (2012). Pathways for promoting balanced development of compulsory education through digital transformation. *e-Education Research*, 33(10), 41-44. DOI: <https://doi.org/10.13811/j.cnki.eer.2012.10.013>.

- Liu, Y. & Zhang, D. (2022). The role of online learning in promoting educational equity: An empirical study of the “digital divide” in online learning among primary and secondary school students during the epidemic. *Journal of Schooling Studies*, 19(2), 58-68. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuRYBS2GGauoOs4ggFx1YnJQbOFb3oVxMM6uV1mFwS4hHiMXt5AeYDVHME_LqVlcskxtGRjXJvyg5aHiMKee0jHIT3UgNp0Sw_VjgMaBCKsUZr84kOXCCCHUByHD_puYkhNv95Onj_oRkyHo3f63pqalQOTKPBFv9P-1319hP8v0LGg==&uniplatform=NZKPT&language=CHS
- Peng, J., Li, J., & Lin, T. (2024). The application of virtual reality technology in vocational education: A case study of Fuzhou Software Technology Vocational College. *Journal of Continuing Higher Education*, 37(5), 40-46. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuQYWGcZpKM7JSlg1h8xVsDTiugp252tvFLurTXNXw0KYliuHHdkv0PLXJFEuuhNvn5wEPQqEKQA5LmwUgBdZGN9X0Ks0bAYf0SJmzP-6OHh186JiFVYD9-7OEMMP49o-XpAKHNfo8RpawIJNemQAZ2Rlj0gBvZfhw5_Lv5utl9NA==&uniplatform=NZKPT&language=CHS
- Shi, Z. (2008). Connotations and social significance of educational equity. *Journal of the Chinese Society of Education*, 2008(3), 1-6+27. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuTLVlq_8pChcuN9vYVMUwiONXSQRQi7Nb_wB60DkGuZxb25Ajy_ogBSrCof5RHV9UsaUf6hvgfGcKP7V3YLe_dI2svrloQGcziCSH8Y2xkfP8HsAup3VeIrkqvPErNgHFXF5AIWXcmYDAri70hDgFOT6UkViqsZRIqSA9Z3MSKg==&uniplatform=NZKPT&language=CHS
- Tang, M., Ren, P., & Zhao, Z. (2024). Bridging the gap: The role of educational technology in promoting educational equity. *The Educational Review, USA*, 8(8), 1077-1086. DOI: <https://doi.org/10.26855/er.2024.08.012>
- Tian, X. & Jin, S. (2024). The supportive role and prospects of big data analytics in higher vocational education. *Journal of Liaoning Economic Management Cadre College*, 2024(4), 186-188. Available at: [https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuQ5z6zAwMHLBa0NW6a28CfnJlkoURjjdkJSCvTVH-7UbcFzV45V1FDgUi87aoHkHJZKabq3Kg_uW0hBOg8IdwBrVeGf7xZq-q92Slj45sFivgBtqP0po9EROkS2QD5Zg3CPtiEq24vcOVvVDJ3AXJpPWY3JxpRq3UuoSexK6g8Q==&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuQLrffPXWNY-CSq4sIVSAEmk6rfhAvrI2jTRYdrsXjhJ9HrA_iTI61BSiS9HZ8NM3rEMI36erTwP_gpa-bUtPV2X8R107yPb-gKPNpFtGZ9j7uSkQs-8JyxDUplV6NFY21tIgmtQXdBcmP0U37_S3OYa28CmOd9FqnaCKRVZ5nnORbg==&uniplatform=NZKPT&language=CHS)
- Wei, X. (2024). Balanced development of compulsory education in urban and rural areas: Causes of problems, policy evolution, and pathway improvement. *Rural Reviews*, 2024(5), 14-20. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuQ5z6zAwMHLBa0NW6a28CfnJlkoURjjdkJSCvTVH-7UbcFzV45V1FDgUi87aoHkHJZKabq3Kg_uW0hBOg8IdwBrVeGf7xZq-q92Slj45sFivgBtqP0po9EROkS2QD5Zg3CPtiEq24vcOVvVDJ3AXJpPWY3JxpRq3UuoSexK6g8Q==&uniplatform=NZKPT&language=CHS
- Wen, L., Ding, P., & Li, L. (2023). An empirical analysis of the impact of education informatization on educational equity. *Teaching and Administration*, 2023(36), 21-26. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuTUtGpuQYotV47cYed7Ise9SvrdljfZL5Wk8nviGZ7W2CWxalTo21Y9UrAeC1fdPjkCQ25cWfm-3eUkYA1bxNQOILynHj97JZAo4_Ct-TO5xfD65Y48u_w7ROSGQabJzW7fKmhbB3CLAUO4vyvqzJPqdGWTaG9jkZi7cA7_OvoB0Q==&uniplatform=NZKPT&language=CHS
- Xu, L. (2009). *The Integration of Migrant Workers' Children into Urban Schools: A Developmental Research Framework* (Doctoral Dissertation). Nankai University. Available at: https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuRncuXn2Cqyn7eBhhpYy6Y6cYWVE8ZmUMqIBB3C75F_rfJSSa3slYj_paYTvhsT7wRO-IevhsUZhCb4pziHsX7BqjS44UHSvpKhZPiOGmDlGTBSTR-d9XESay7CpTTR19x4K6YB-VC7NV62rWryDapq7OuitJ-hOdKK2kWLBzBe1y3Jlx8uCaZ&uniplatform=NZKPT&language=CHS
- Yan, B. & Jin, Z. (2022). Can popularized internet use advance educational equity: An empirical study based on provincial-level panel data in China. *Journal of Party School of the China Nanjing Municipal Committee of CPC*, 2022(3), 59-70.

- Available at:
https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuSRwKLWoODNDNZ8aIrvDm8sRhiodt_2XkTK61SCi9-puugEB0XNHpiMxjHPIRbMRZADo-aLL6db-RFAEo-n4n6ru0Wpk5zAw9K8knhdMcOgtU5na83xGbUIWXVih7R6OQwtJ43OLB6N8Q83-IjFNrSjd6spcLde-IJ7pDVvS5sA==&uniplatform=NZKPT&language=CHS
- Yan, H., Ouyang, H., & Miao, D. (2021). Education informatization promotes high-level equity in basic education: A review of successful programs based on multiple case studies and findings. *China Educational Technology*, 2021(5), 10-17. Available at:
https://kns.cnki.net/kcms2/article/abstract?v=GofKS1StuS_Mhw0oX0ba0c_2CKrf70qgf33M8QrBnm0Bjc2935dMZUiiDSJLH4sSvL6R7zvSlxevxeYXST0EdYXs5aiIYQeQV25x9eIffB5HH4SUbAP5rSMBwQhFQNTG4zIz9utBde8XsmsKEi0fZT6lpTBN2sHqklgBdkz15nVnDd74CbG4g==&uniplatform=NZKPT&language=CHS
- Yang, H. H., Zhu, S., & MacLeod, J. (2018). Promoting education equity in rural and underdeveloped areas: Cases on computer-supported collaborative teaching in China. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(6), 2393-2405.
<https://doi.org/10.29333/ejmste/89841>
- Zhu, Z., Gu, X., Collis, B., & Moonen, J. (2011). Use of ICT in Chinese schools: Striving for educational quality and equality. *Educational Technology*, 51(3), 32-37. Available at:
<https://www.jstor.org/stable/44430005>

Received: December 18, 2024

Revised: February 05, 2025

Accepted: March 18, 2025