

Research on the Accessibility and Realization Mechanism of Quality Basic Education in Rural Areas

Zhilin Sun

Lanzhou City University, Lanzhou 730000, Gansu, China

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited

Abstract: How to meet people's demand for quality educational resources through research on the accessibility of quality basic education in rural areas is a new topic that urgently needs to be studied to promote urban-rural education integration and achieve the rural revitalization strategy. This paper provides a detailed introduction, evaluation, and extension of influential foreign theories on "accessibility" and related domestic research, aiming to offer insights for effectively addressing this issue, narrowing the urban-rural gap, and promoting the quality and balanced development of education.

Keywords: Quality basic education in rural areas; Accessibility; Realization mechanism

Online publication: September 26, 2025

1. Introduction

The Fourth Plenary Session of the 19th Central Committee of the Communist Party of China proposed that it is necessary to improve the national basic public service system, including childcare and education, and promote the equalization and accessibility of basic public services. The term "accessibility" appears in policy texts on basic public services ^[1]. As an important area of basic public services, basic education in rural areas has solved the problem of "access to education" after years of effort, especially through the Ministry of Education's assessment of balanced development in compulsory education, ensuring the standardization of basic education. However, compared with education in urban areas, the accessibility of quality basic education is a major shortcoming that troubles education in rural areas, making "access to quality education" a prominent issue. How to meet people's demand for quality educational resources through research on the accessibility of quality basic education in rural areas is a new topic that urgently needs to be studied to promote urban-rural education integration and achieve the rural revitalization strategy.

The current pain point in basic education in Gansu lies in the fact that "the structure of educational layout is not entirely reasonable; the urban-rural integration development pattern of compulsory education has not yet formed; quality educational resources still cannot meet the needs of the people". Education, as a fundamental strategy to "inspire and empower", must meet the demand for quality education in rural areas. This is a prerequisite for comprehensively promoting rural revitalization after achieving victory in poverty alleviation.

Gansu has proposed the development goal of building a "fair, shared, open, innovative and distinctive western education highland" during the "14th Five-Year Plan" period. The realization of this goal depends on our understanding of the external environment and internal conditions of education development, implementation of the new development

concept, and construction of a quality, balanced and appropriate basic public education service system^[2].

2. Research subject

The theme of this study is the accessibility and realization mechanism of quality basic education in rural Gansu. The research subject is rural education in Gansu, primarily the rural compulsory education in the context of rural revitalization, with urban education as the comparison object.

3. Framework

The overall framework of this study is mainly composed of the following five parts.

3.1. Intrinsic logic of the accessibility of quality basic education in rural Gansu

Rural revitalization is a comprehensive, inclusive, and all-encompassing revitalization, and education plays an important role as intellectual support in the process.

First, given the issues such as the shortage of rural educational resources and policy inefficiencies, this study systematically examines the disparities between rural schools and the accessibility gap of quality basic education resources for rural children.

Second, this study analyzes the necessity of shifting rural education from “basic care” to “quality balance” in order to “deeply inspire and empower the rural population and stimulate the endogenous driving force of the rural population” and “build a long-term mechanism to promote rural revitalization”^[3].

3.2. Value connotation of the accessibility of quality basic education in rural Gansu

Sorting out the origin and historical changes of the concept of accessibility, and based on the current situation of urban and rural quality education in Gansu province and the actual needs of rural quality education, this study explores the connotation and basic characteristics of the accessibility of quality basic education in rural Gansu, thereby constructing the “priority model for disadvantaged groups”, the “egalitarianism model”, and the “free competition model” for achieving the accessibility of quality basic education in rural areas.

3.3. Evaluation dimensions of the accessibility of quality basic education in rural Gansu

In terms of evaluation subjects, quality basic education in rural Gansu is considered as a holistic dimension relative to quality basic education in urban areas; in terms of spatial measurement, rural schools in poverty-alleviated areas are the primary spatial scope, specifically selecting rural schools in Gannan, Linxia, Dingxi, Longnan, and other regions; in terms of measurement methods, a combination of positive and negative assessments is adopted; in terms of evaluation indicators, a comprehensive evaluation system is constructed focusing on the accessibility of quality educational resources in terms of people, finance, and materials, and the accessibility of individual capability and willingness needs from the perspective of “input-return”.

3.4. Constraints on the accessibility of quality basic education in rural Gansu

Regarding the issues of uneven distribution of quality resources on the supply side and insufficient access to quality resources on the demand side, this paper addresses the issues of institutional guarantee, spatial accessibility, resource balance, service availability, and burden affordability in basic education in rural Gansu. It explains and analyzes the constraint mechanism for the accessibility of quality basic education in rural areas formed by the interaction between the “accumulated disadvantages” of rural families and the external environment from the perspectives of “supply” and

“demand”^[4].

3.5. Mechanism for achieving the accessibility of quality basic education in rural Gansu

Within the localized framework of Theodore W. Schultz’s theory of “human capital”, John Bordley Rawls’ theory of “justice in distribution”, Amartya Sen’s theory of “capacity” and other theories, this study explores the deep-seated mechanisms of opportunity, distribution, rights, and development that hinder the accessibility of quality basic education in rural Gansu^[5].

4. Research emphasis and challenges

4.1. Emphasis

By reviewing and localized analyzing relevant domestic and international theories, and constructing a comprehensive evaluation index system focusing on the accessibility of quality educational resources, including teacher quality, funding, and school hardware, as well as individual capabilities and willingness from the perspective of “input-return”, this study innovatively proposes a theoretical framework for accessibility analysis, incorporating elements such as research subjects and urban-rural spatial domains.

Based on factors such as institutional arrangements, spatial resource endowments, and individual capabilities and willingness that constrain the accessibility of quality basic education in rural areas, this study summarizes and refines the mechanisms that restrict the supply and demand accessibility of quality basic education in rural Gansu. It proposes pathways to achieve the accessibility of quality basic education in rural Gansu, aiming to help rural children “access to quality education”.

4.2. Challenges

Is quality rural education under the rural revitalization strategy a “balanced quality” in the context of urban-rural integration, or a “utility quality” that promotes rural economic and cultural development, or both? Determining the evaluation system of “what kind of education is quality basic education in rural areas” is both the logical premise of this study and one of the challenges^[6].

Data collection is the foundational work of this study. However, the related surveys are distributed across areas such as Gannan, Linxia, Dingxi, and Longnan, involving remote and ethnic regions. The wide scope and large volume of work, including selecting survey subjects, organizing and implementing surveys, and designing questionnaires, pose significant challenges. Coordinating the credibility and effectiveness of survey research and sample selection is one of the challenges as well.

5. Research objectives

Sort out the origin and historical evolution of the concept of accessibility; examine the urgency of proposing the accessibility of quality basic education in rural Gansu in the new era; clarify the indicators for measuring the accessibility of quality basic education in rural Gansu; classify and summarize the constraints affecting the accessibility of quality basic education in rural Gansu; and propose the path to realize the accessibility of quality basic education in rural Gansu in a targeted manner, so as to achieve the balanced development of quality education^[7].

6. Innovations

In terms of academic thought, the accessibility and realization mechanism of quality basic education in rural Gansu in this study essentially reflect the interrelationship between national policies, locational resources, and quality basic education in

rural areas. Compared with previous studies, this study is more in-depth, comprehensive, and forward-looking.

In terms of academic perspectives, this study expands the research field of public service accessibility by incorporating the accessibility of quality basic education in rural areas into the scope of equalization and accessibility of basic public services. Against the backdrop of the popularization of rural compulsory education and the urban-rural education gap, the accessibility of quality basic education in rural areas is a core value proposition for promoting balanced urban-rural educational development.

In terms of research methods, this study combines literature research with field investigation, integrates quantitative and qualitative research, and comprehensively applies comparative research methods and inductive analysis. It emphasizes the use of field case studies, holistic research, and interdisciplinary research as comprehensive research approaches. Through field investigations of rural education, the daily scenarios of rural education are incorporated into the scope of educational accessibility research. While emphasizing the traditional availability of educational opportunities, this study highlights the accessibility of quality basic education for rural areas and farmers.

7. Research methods

This study involves both theoretical and practical research. Based on the nature and characteristics of the research questions, literature research and comparative research methods were primarily used in theoretical research. In practical research, professional life observation, questionnaires, interviews, and case analysis were employed to study cases. The Delphi expert survey method was used during the questionnaire design process, effectively combining qualitative and quantitative research. Quantitative data from the questionnaires were analyzed using descriptive statistics, variance analysis, and factor analysis. Qualitative data obtained from interviews were validated and interpreted. In-depth interview materials, texts, and online resources obtained from case studies were triangulated for verification.

7.1. Literature research method

Using online and physical resources to collect, organize, and summarize domestic and international literature on the accessibility of quality basic education in rural areas, including resources from libraries, cultural centers, archives, district, township, and town government departments, education bureaus, and policy documents preserved by primary and secondary schools. This involves reviewing and synthesizing current research perspectives, and providing a comprehensive and systematic explanation of the accessibility of quality basic education in rural areas, to form a clearer framework for problem analysis.

7.2. Comparative research method

The “comparison” involved in this study refers to comparison between China and other countries, inter-provincial comparison, and comparison between theory and practice. The comparison between China and other countries examines the current state of access to quality basic education in rural areas domestically and internationally, to gain an understanding of the theoretical research, practical efforts, and outcomes in different countries regarding the accessibility of quality basic education in rural areas; the inter-provincial comparison examines the current accessibility of quality basic education in rural areas of Gansu, Ningxia, Guizhou, and Shandong, to analyze and draw on exemplary experiences; the comparison between theory and practice involves a critical comparison of the current state of access to quality basic education in rural areas based on the analytical framework established, so as to identify the gaps between theory and practice and to seek a mechanism suitable for achieving the accessibility of quality basic education in rural areas of the country.

7.3. Field investigation method

Conducting long-term investigations on individuals, groups, or organizations, and drawing conclusions through studying

behavioral changes, is an effective sociological research method mainly used to observe and examine the process of events, event characteristics, and internal relationships. The field investigation method, primarily through field interviews and questionnaires, organizes research materials that are more authentic and better reflect the actual situation.

7.4. Case analysis method

Case studies obtain comprehensive, systematic, and in-depth information by dissecting typical cases, achieving an overall effect of “seeing the whole picture from a few details”. This study focuses on analyzing the teaching lives and professional development status of multiple rural teachers to identify shortcomings in the accessibility of quality basic education in rural areas.

7.5. Interdisciplinary research method

This study primarily involves multiple disciplines, including education, public administration, sociology, and economics. Through interdisciplinary research, this study breaks down disciplinary boundaries, and uses interdisciplinary knowledge to grasp the deep structure of politics, economy, culture and education, as well as the mutual influence of subject concepts, behaviors and rural revitalization, exploring the value connotation and constraint mechanism of accessibility of quality basic education in rural Gansu, and providing interdisciplinary theoretical support for effectively building a mechanism for achieving the accessibility of quality basic education in rural areas^[8].

8. Research measures

Adopting interdisciplinary research and field investigation methods, this study utilized SPSS23.0 and Nvivo software to analyze and process questionnaire and interview materials; conducted exploratory factor analysis and compare with previous theoretical dimensions; triangulated questionnaire data with qualitative data obtained from interviews; and conducted statistical analysis using the Mare model (Logistic Response Model of School Continuation).

9. Review of the academic history and research trends of related studies domestically and internationally

9.1. Internationally

Foreign research on “accessibility” originated in the field of public health services. Ronald Anderson, a scholar at the University of Chicago, first proposed it in 1968 in “A Behavioral Model of Families’ Use of Health Services”. In 2000, the World Health Report incorporated the concept of accessibility into an international official document for the first time^[9]. As an academic concept, “accessibility” research has undergone three stages: emergence, refinement, and critical development. The first stage (1968–1980) marked the emergence of the concept of accessibility, symbolized by Ronald Anderson’s (1968) introduction of the concept of accessibility in public health services, which vaguely defined accessibility as “using services”; the second stage (1981–1999) was the refinement of the concept of accessibility, marked by the critical analysis of the traditional concept of accessibility limited to “using services” by scholars Roy Penchansky and J. William Thomas from Michigan State University in 1981, advocating that accessibility should focus on the “the degree of fit between the clients and the system”; the third stage (from 2000 to the present) marks the critical development of the concept of accessibility, characterized by Sydney University scholar Emily Saurman’s critique of the traditional focus on service providers while neglecting the perspective of service recipients in 2000, leading to the construction of a multi-element concept of accessibility based on the “objective needs” and “subjective awareness” of service recipients.

Research on “accessibility” has gradually extended from the field of management to the field of education. Currently, research on accessibility in the field of education mainly includes the following two dimensions of cognition: the first is

“using services” which is based on the supply perspective and emphasizes educational standardization. Different scholars have different focuses within this dimension. For example, Gary S. Becker (1985) proposed the theory of educational accessibility choice based on “cost payment–function satisfaction”, integrating factors such as “cost”, “benefit”, “risk”, and “status improvement”; Shengelia. B and Tandon. A (2005) emphasized “coverage” and “benefits”, arguing that the accessibility of education should focus on the coverage of educational supply and the cost-benefit situation of learners; Levesque J. F. (2013) emphasized that accessibility is “the opportunity for needs to be genuinely met”^[10–12]. The second is “the degree of ‘fit’ between the clients and the system”, which, from a needs perspective, emphasizes the “fit” between educational supply and individual characteristics. For example, Pierre Bourdieu (1977) emphasized the impact of family capital on access to quality education, arguing that social groups or classes with advantages in family cultural capital, social capital, and economic capital are more likely to “fit” with quality education; Annette Lareau (2009), based on the restrictive mechanisms of social structure on individuals’ access to educational resources, argued that family social structure, community environment, and family education patterns are key factors limiting disadvantaged children’s access to quality education; D. Martin (2015) used indicators such as geographical accessibility of schools in England, opportunity availability, and education quality to measure the “degree of fit” with individual needs^[13–15].

9.2. Domestically

The term “accessibility” in Chinese appeared early in idioms, meaning “availability”, such as in phrases like “within reach” or “out of reach”. However, research on the accessibility of public services in China started relatively late. Current studies on educational accessibility are mainly based on Western research frameworks and are scattered across fields such as compulsory education, vocational education, and lifelong education, with contents focusing on conceptual clarification, indicator measurement, and influencing factors.

In terms of conceptual analysis, Shi Zhongying (2008), from the perspective of opportunity accessibility, regarded “the possibility of receiving a certain education as a social right” and “the possibility of receiving a certain education as a personal desire or need” as specific references to the accessibility of educational opportunities; Nie Lei (2019), from a localized perspective, believed that “accessibility in China has a distinct contemporary context and rich developmental connotations”; Zhuang Xizhen (2021), from the perspective of the new era, believed that the current stage of educational accessibility has entered a new phase of connotative development, with the core including “effectiveness” and “high quality”^[16–18].

In terms of indicator measurement, the joint research team of the Development Research Center of the State Council and the World Bank pointed out in their 2014 study that transaction costs, payment capacity, and exclusionary policies are the main indicators for assessing the accessibility of basic public services; Wang Ying (2008) constructed an accessibility evaluation index for elderly education in China from three dimensions: supply-side accessibility, demand-side accessibility, and learning outcome accessibility, based on whether the service distance, time, content, and method facilitate the service recipients’ enjoyment; Jin Honglei (2021) proposed indicators for measuring the accessibility of welfare for children in distress from the aspects of availability, accessibility, affordability, acceptability and adaptability^[19,20].

In terms of influencing factors, Dai Jiaxin (2017), based on a review of domestic and international literature, proposed the factors influencing the accessibility of “supply” and “demand”; focusing on the accessibility of quality education in rural areas, Wu Yuxiao (2018) and Li Chunling (2021) believed that the “urban-oriented” nature of institutional design, family support, and resource allocation are important factors affecting the accessibility of quality education in rural areas^[21–23]. Gu Mingyuan (2020), Fan Xianzuo (2019), and Ye Jingzhong (2017) believed that the upward shift in educational resources caused by left-behind children and the adjustment of rural school layouts is the main issue affecting access to quality education in rural areas, and the key problem lies in the “inability to attract and retain” quality teaching staff^[24–26].

In addition, based on the role between education and accessibility, research on the accessibility of public services also examines the “education background” of the demand side as a robust variable. For example, Schultz (1961) and Becker (1962) believed that “human capital is the main source of agricultural growth”, and “if farmers’ education does

not keep up with the requirements of material capital, traditional agriculture cannot rejuvenate itself”; Amartya Sen (1995) believed that the perspective of “capability deprivation” takes precedence over the “basic needs” perspective of specific goods when understanding poverty, and education is a key factor in acquiring capabilities; Haruna Sani (2019) included ensuring individuals’ access to education and equal access to education as a key measure to address poverty in the National Economic Empowerment and Development Strategy (NEEDS) program^[27–30].

In summary, the research on the accessibility of public services, including education, has developed continuously over the past 50 years, forming two main perspectives: “using services” and “user fit”. The former emphasizes ease of use based on functionality, while the latter emphasizes ease of access based on opportunity, and is extending towards the concept of “quality balance”. However, in the field of rural basic education, existing research still has some weaknesses, mainly reflected in the following aspects.

In terms of theoretical innovation, existing research often follows the accessibility theory framework constructed by early Western studies, without making valuable modifications to the theoretical framework of accessibility based on elements such as research subjects, urban-rural spatial fields, institutional environments, local social culture, and contexts. Additionally, there is a lack of investigation into the mechanisms between rural quality basic education and rural revitalization, and localized research is insufficient.

In terms of research content, most of the existing scattered literature focuses on the accessibility of educational opportunities as the research content of rural education accessibility. However, the accessibility of quality basic education in rural areas is rarely mentioned, especially the accessibility dilemma faced by rural quality basic education, such as “private quality education being too expensive and public quality education being too far away”, as well as the accessibility of providing adaptable educational resources for rural students to apply their learning. This highlights the necessity for academic research on the accessibility of quality basic education in rural areas.

10. Unique academic and practical value of this study compared with existing research

10.1. Academic value

From the perspectives of education and public administration, this study expands the traditional research field of basic public service accessibility by placing the value connotation, conceptual extension, basic components, and restrictive bottlenecks of rural quality education accessibility within the context of rural revitalization, enriching the theoretical research on accessibility. Based on the macro background of the rural revitalization strategy, exploring the intrinsic logic between education and rural economic development, and providing suitable education from the perspective of rural needs, contributes to refining the value implications of rural quality basic education accessibility within the context of local academic discourse.

10.2. Practical value

According to the 2024 National Education Development Statistical Bulletin, the quality of education has steadily improved, and the issue of “access to education” in rural areas has been effectively resolved. High-quality educational accessibility, characterized by “access to quality education”, will become the core value demand of current rural education. This study is conducive to transforming this demand into concrete practice and promoting the quality and balanced development of education.

10.2.1. Conducive to consolidating and expanding the achievements of poverty alleviation

Consolidating and expanding the achievements of poverty alleviation and rural revitalization cannot be separated from the development of rural education. How to efficiently promote the development of rural education is a major issue that urgently needs to be addressed. Based on the current state of rural education and the “accessibility” theory, this study conducts research on quality basic education in rural areas.

10.2.2. Conducive to the implementation of a long-term development mechanism for rural revitalization

Consolidating and expanding the achievements of poverty alleviation and effectively connecting them with rural revitalization, this study, based on the necessity of rural revitalization and the long-term mechanism of quality basic education for rural revitalization, explores the accessibility and realization mechanisms of quality basic education in rural areas to provide valuable references for the government in formulating policies to improve rural education quality and achieve urban-rural educational integration.

10.2.3. Conducive to the realization of urban-rural educational integration

The research on the accessibility of quality basic education in rural areas provides new research ideas. By combining concepts such as “using services” and “fit”, this study analyzes the impact of the educational environment, opportunity accessibility, and educational needs on rural basic education, providing some reference for effectively solving this problem, aiming to narrow the urban-rural gap and promote quality and balanced educational development.

11. Conclusions and outlook

Under the background of the rural revitalization strategy, education has the dual effect of “benefiting the present” and “advancing the future”, which provides the action logic for including it in the important field of building a beautiful countryside and becoming an important means to help “inspire and empower” rural Gansu^[31].

To achieve rural revitalization, attention needs to be paid to the following two points: first, the positive function of education on family economic benefits; second, the development of high-level and distinctive rural education to achieve integrated development of urban and rural education.

The feasible path for making quality basic education in rural areas from “out of reach” to “within reach” includes the availability of supply of quality basic education in rural areas by the state and relevant departments (such as policy accessibility, resource accessibility, space accessibility, and opportunity accessibility, breaking the urban-rural dual system, improving the conditions for running quality schools in rural areas with resources such as teacher allocation, per-student funding, and teaching facilities and equipment as the core, optimizing the layout of quality schools in rural areas, and increasing the special enrollment plan for quality higher education) and the availability of demand for quality basic education in rural areas by individuals (such as ability accessibility and willingness accessibility), improving the universality of quality preschool education in rural areas, realizing the same treatment for the enrollment of children of migrant workers in cities, promoting the integration of urban and rural compulsory education, changing the design of urbanized education, and providing “appropriate education” with higher returns.

This study, based on the new requirements for rural education in the new era and the logical perspective of quality basic education in promoting rural revitalization, focuses on examining the accessibility of rural quality schooling conditions standards centered on resource elements such as teacher staffing, per-student funding, and teaching facilities and equipment, as well as the accessibility of rural quality education opportunities centered on obtaining higher-level educational opportunities, to build a quality and balanced basic public education service system.

The new era of economic and social development changes in the country has set new requirements for the transformation of rural education values. The accessibility and realization mechanism of quality basic education in rural areas are essentially based on the interactive shaping relationship between national policies, regional resources, and quality basic education in rural areas, and also encompass the significant of quality education in promoting rural revitalization. Compared with existing research, this study is more comprehensive, in-depth, and forward-looking.

This study extends the field of research on the accessibility of public services. The accessibility of quality basic education in rural areas is included in the research scope of the equalization and accessibility of basic public services. Based on the practical contradiction between the popularization of rural compulsory education and the urban-rural education gap, the core value proposition for promoting balanced urban-rural education development is the accessibility of

quality basic education in rural areas.

Funding

Gansu Province Philosophy and Social Science Planning Project “Research on the Accessibility and Realization Mechanism of Quality Basic Education in Rural Gansu” (Project No.: 2022YB093)

Disclosure statement

The author declares no conflict of interest.

References

- [1] Zhao Z, 2020, Issues and Improvement Paths for Accessibility of Basic Public Services in Ethnic Areas of the Western Frontier Regions, thesis, Huhhot: Inner Mongolia University.
- [2] Qin Z, 2022, Interpretation of the “14th Five-Year Plan” for the Development of Education in Gansu Province. *Gansu Education*, 2022(4): 6–12.
- [3] Jing R, Ye J, 2016, From a Virtuous Cycle of Rural-Urban Education to Urban-Oriented Rural Basic Education in China: An Explanation of the Failure of China’s Rural School Mapping Adjustment Policy. *Journal of Rural Studies*, 2016(47): 601–611.
- [4] Ji D, 2018, Rural Revitalization Strategy and Integrated Development of Urban and Rural Compulsory Education. *Educational Research*, 2018(7): 79–82.
- [5] Lai D, Chen J, 2018, Human Capital and Rural Revitalization. *Social Sciences in Chinese Higher Education Institutions*, 2018(6): 21–28.
- [6] Xue E, Zhou X, 2017, Policy Design and System Innovation of Educational Poverty Alleviation in China. *Educational Research*, 2017(12): 29–37.
- [7] Jin J, 2019, From Capital Gap to Field Separation: A Study of the Family Support Gap in Urban and Rural Education. *Education Science*, 2019(2): 1–8.
- [8] Ye L, 2019, Threefold Reflection on the Quality and Fair Development of Education. *Guangming Daily*.
- [9] Dai J, 2017, Research on the Concept, Measurement, and Influencing Factors of Accessibility: A Literature Review. *Study and Practice*, 2017(4): 86–94.
- [10] Becker G, 1985, Human Capital, Effort, and the Sexual Division of Labor. *Journal of Labor Economics*, 3(1): S33–S58.
- [11] Shengelia B, Tandon A, 2005, Access, Utilization, Quality, and Effective Coverage: An Integrated Conceptual Framework and Measurement Strategy. *Social Science & Medicine*, 61(1): 97–109.
- [12] Levesque J, 2013, Patient-Centred Access to Health Care: Conceptualising Access at the Interface of Health Systems and Populations. *International Journal for Equity in Health*, 12: Article 18.
- [13] Bourdieu P, 1977, *Reproduction in Education, Society and Culture*. Sage.
- [14] Lareau A, 2010, *Social Class: How Does It Work?* Russell Sage Foundation.
- [15] Martin D, 2015, Developing a Flexible Framework for Spatiotemporal Population Modeling. *Annals of the Association of American Geographers*, 105(4): 754–772.
- [16] Shi Z, 2007, Philosophical Analysis on the Equality of Educational Opportunity and Its Policy Significance. *Peking University Education Review*, (10): 75–82.
- [17] Nie L, 2019, Research on the Accessibility of Basic Public Services from a Localized Perspective. *Journal of Public Management*, 16(3): 45–58.

- [18] Zhuang X, 2021, The Connotation and Realization Path of High-Quality Development of Vocational Education Accessibility. *China Vocational and Technical Education*, 2021(21): 5–12.
- [19] Wang Y, 2008, Research on the Evaluation Index System of Elderly Education Accessibility in China.
- [20] Jin H, 2021, Multidimensional Construction of Welfare Accessibility for Children in Distress. *Youth Exploration*, 2021(4): 34–43.
- [21] Dai J, 2017, Review and Prospect of Research on Accessibility of Basic Public Services. *Library and Information Service*, 61(14): 132–140.
- [22] Wu Y, Huang C, 2018, The “Urban-Oriented” Bias in the Allocation of Educational Resources and Rural Education Development. *Sociological Studies*, 33(4): 123–146.
- [23] Li C, 2021, Educational Inequality in the New Era: Trends, Causes and Countermeasures. *Journal of Central China Normal University (Humanities and Social Sciences)*, 60(1): 25–36.
- [24] Gu M, 2020, Focusing on Rural Education Relative Poverty and Its Governance. *Educational Research*, 41(10): 4–12.
- [25] Fan X, 2019, The Dilemma of Rural Small-Scale Schools and Its Solution Strategies. *Chinese Journal of Education*, 2019(5): 1–6.
- [26] Ye J, 2017, Left-Behind Children and the Future of Rural China. *Journal of China Agricultural University (Social Sciences)*, 34(2): 5–16.
- [27] Schultz T, 1961, Investment in Human Capital. *The American Economic Review*, 51(1): 1–17.
- [28] Becker G, 1962, Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy*, 70(5, Part 2): 9–49.
- [29] Sen A, 1995, *Inequality Reexamined*. Harvard University Press.
- [30] Sani H, Othman M, 2019, Impact of National Economic Empowerment and Development Strategy (NEEDS) on Poverty Alleviation in Nigeria. *Journal of Economics and Sustainable Development*, 10(4): 15–22.
- [31] Xue E, Li J, 2023, The Foundation, Principle and Path of Building a Powerful Country in Education: A Strategic Analysis of the 20th National Congress of the Communist Party of China. *Journal of Beijing Normal University (Social Sciences)*, 2023(1): 16–26.

Publisher’s note

Whioce Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.