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Trends and Challenges in Educational Equity Research under China's Double Reduction Policy: A Bibliometric Analysis

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Abstract

Educational equity (EE), including China, has become a critical issue in global education policies. Implementing the "double reduction" (DR) policy poses significant challenges in ensuring equitable access to quality education while reducing students' academic burdens and regulating excessive supplementary education. This study aims to explore the critical trends in EE research within the framework of the DR policy using bibliometric methods. By employing CiteSpace software, this study conducts a visual analysis of 779 documents retrieved from the Peking University Core Journals and CSSCI databases. The analysis applies various bibliometric techniques, including author co-occurrence, institutional collaboration, keyword co-occurrence, and keyword clustering, to uncover the key themes and developmental trajectories of domestic research in this field. The findings reveal that the Department of Education has emerged as a central driver of EE research under the DR policy. Key research clusters focus on critical themes such as stakeholder competition, endogenous development, public educational services, academic achievement, and value dimensions. These clusters highlight the diverse and evolving nature of EE research in China. Based on these findings, this study recommends that future research should (1) deepen the evaluation and optimization of educational policies to enhance equity, (2) expand the scope of EE research by exploring new dimensions, particularly in the integration of digital technology, and (3) advance the understanding of how educational technology can support equitable access to educational services. These insights provide a foundation for addressing emerging challenges in pursuing educational equity.

Keywords: *Academic Achievement, Digital Technology, Educational Equity, Public Educational Services, Stakeholder Competition.*

A. Introduction

With the implementation of the Double Reduction (DR) Policy, China's education system has undergone profound changes. Introduced in 2021, the policy seeks to alleviate the excessive academic burdens on students in compulsory education by reducing homework and limiting extracurricular training. However, this reform has raised pressing challenges regarding educational equity (EE). As EE directly pertains to the fair distribution of educational resources and equitable access to quality education, it has become a pivotal issue in ensuring that every child has an equal opportunity to learn. Addressing this issue is essential for individual student success and fostering social stability and long-term national development (Zhang et al., 2022; Wu, 2023).

Studies on EE have grown significantly in recent years, particularly in the context of the DR Policy. Scholars have explored various dimensions of EE, including resource allocation, academic performance disparities, and the role of public educational services in promoting

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equity. Advanced bibliometric tools like CiteSpace have been widely used to identify research hotspots and emerging trends. For example, Li et al. (2022) highlighted the concentration of research on stakeholder competition and institutional roles in achieving equity. Chen et al. (2021) analyzed the value dimensions underlying policy-driven reforms. Despite the growing body of literature, there remains a lack of comprehensive analysis that systematically maps the developmental trajectory of EE research within this policy context, mainly through scientometric approaches.

This study addresses these gaps by employing scientometric methods to analyze journal articles from prominent Chinese academic databases. Specifically, the study uses CiteSpace software to create visual knowledge maps, identifying critical research drivers, hotspots, and trends in EE under the DR Policy. By synthesizing findings from 779 relevant studies, this research seeks to offer a structured and holistic understanding of EE research in China, particularly within the transformative framework of the DR Policy (Wang & Sun, 2023).

The significance of this study lies in its ability to bridge theoretical insights and practical implications. This paper provides a scientific foundation for policymakers, educators, and researchers striving to enhance EE in China by uncovering key themes and research directions. Furthermore, it argues for integrating digital technologies and innovative policy measures to address emerging challenges in equitable education. In doing so, this study advances academic discourse and offers actionable recommendations for fostering a more inclusive and equitable education system in China (Zhao, 2022; Sun et al., 2023).

Building on the existing body of literature, this study argues that while previous research has made valuable contributions to understanding the implications of the DR Policy on EE, there is still a need to explore the intersection of traditional equity challenges with emerging trends such as digital education. For instance, Zhao (2022) emphasized the transformative role of educational technology in bridging resource gaps, yet its integration within the DR Policy remains underexplored. Similarly, Wu (2023) highlighted the uneven distribution of teaching resources across urban and rural areas, stressing the need for a targeted policy evaluation to mitigate these disparities. These findings suggest the importance of adopting a multidimensional approach that combines policy evaluation, equity assessment, and technological innovation to enhance EE. The role of stakeholders, such as parents, teachers, and policymakers, in shaping EE outcomes under the DR Policy is another critical area requiring further analysis. As Li et al. (2022) noted, competition among stakeholders often exacerbates inequities, particularly in access to quality educational services. This study seeks to extend this discussion by identifying the driving forces behind stakeholder dynamics and their impact on policy implementation. Such an approach will contribute to a deeper understanding of how EE can be improved through coordinated efforts among different actors in the education system. The study underscores the importance of tracking the evolution of EE research trends using scientometric methods. This study provides a roadmap for future scholarly inquiry by mapping research frontiers and identifying underexplored areas. For instance, integrating CiteSpace's knowledge-mapping capabilities with qualitative analyses can offer new insights into the policy's long-term effects. Through this combination of methods, the study fills critical research gaps and offers evidence-based recommendations for policy optimization and equitable education reform in China.

B. Methods

1. Research Design

This study adopts a descriptive bibliometric approach to systematically analyze research trends in educational equity (EE) under China's Double Reduction (DR) Policy. The study maps the knowledge structure and dynamics of EE research by employing CiteSpace, a

widely used visualization software for scientometric analysis. The design identifies research hotspots, collaboration patterns among scholars and institutions, and thematic clusters in the field. The visualized outputs, such as co-authorship networks and keyword clusters, provide a comprehensive understanding of EE research's developmental trajectories and future directions.

2. Research Procedure

The research process was carried out in sequential steps. First, the dataset was established by retrieving relevant literature from the China National Knowledge Infrastructure (CNKI) database, renowned for its extensive coverage of Chinese academic journals. A keyword search using "educational equity" (EE) was conducted, covering the period from July 2021 to October 31, 2024, ensuring the inclusion of studies aligned with the timeline of the DR Policy implementation. Second, duplicate entries, conference summaries, news articles, and irrelevant studies were manually excluded to refine the dataset. This procedure yielded a final sample of 779 documents. Third, the refined dataset was imported into CiteSpace for analysis, including generating knowledge maps for co-authorship, keyword co-occurrence, and thematic clustering.

3. Data Collection Techniques

Data collection involved querying the CNKI database using "educational equity" as the primary keyword. To ensure the dataset's quality, the search was limited to core journals listed by Peking University and CSSCI, focusing on high-quality, peer-reviewed publications. Non-research documents and studies outside the scope of China or with unclear relevance to EE were excluded through manual screening. The final dataset represented a diverse yet focused selection of 779 studies relevant to the research objectives.

4. Data Analysis Techniques

The collected data was analyzed using CiteSpace, a powerful visualization tool for scientometric research, to uncover trends and patterns in educational equity (EE) studies. The first step in the analytical process was co-authorship analysis, which identified active scholars and collaborative networks. This analysis provided insights into influential contributors and partnerships significantly shaping EE research under the Double Reduction (DR) Policy. The next step involved keyword co-occurrence analysis, which examined the dataset's frequency and relationships between recurring terms. This technique was instrumental in identifying critical research hotspots and thematic priorities within the field. Building on this, clustering analysis was employed to group studies into distinct thematic categories, allowing for exploring underlying patterns and the developmental trajectories of research topics. This clustering provided a nuanced understanding of EE research's thematic structure and interconnections. Finally, temporal trends analysis was performed to track the evolution of research topics over the study period, highlighting emerging trends and shifts in academic focus. By integrating these analytical approaches, the study offers a comprehensive, multidimensional perspective on the state and progression of EE research, contributing valuable insights into its future directions and policy implications.

C. Findings and Discussion

1. Department of Education: The Core Force Driving Research on EE

We visually analyzed the sample literature's authors to understand the core authors and their collaborative relationships in EE further. Using the results from CiteSpace, we generated an

author knowledge map for China's EE research under the DR Policy (see Figure 1). The analysis revealed that the author collaboration network consists of 128 nodes with only 20 connections, resulting in a network density of 0.0025. This indicates that authors have loose connections, limited collaboration, and a fragmented research landscape. According to Price's Law, the minimum number of publications required for an author to be considered a core contributor in a specific research field can be calculated using the formula M = 0.749 (Nmax)^1/2, where M represents the minimum number of publications by core authors, and Nmax is the publication count of the most prolific author. Given that the highest publication count is Nmax = 6, substituting into the formula yields M = 1.83. Therefore, authors with two or more publications are considered core contributors, with 52 publications among them. The findings indicate that the number of core authors in this field remains relatively low, and collaboration among scholars is weak. There is no solid collaborative network, and a united research team has yet to form. To address these issues, it is necessary to stimulate researchers' enthusiasm and strengthen the research community's construction.

Among the notable contributors, Zhang Zhiyong provided an in-depth interpretation of the DR Policy, analyzing the policy's potential impact on EE and discussing strategies to promote equity through policy measures (Zhang, 2021). Feng Jianjun and Gao Zhan attempted to construct a theoretical framework for EE that aligns with China's national conditions, emphasizing the foundational role of EE in social equity (Feng & Gao, 2022). Liu Baochun and Gou Minghan highlighted the importance of resource allocation in achieving EE, noting that fairness and quality are critical issues in modern educational reform and development, and many countries focus on improving educational opportunities and rights for marginalized groups at various levels (Liu & Gou, 2023). Xue Erqiang examined educational reform from multiple dimensions, including systems, policies, and practices, emphasizing the need to enhance EE and quality to build a strong educational country (Xue, 2023). Despite theoretical discussions and policy analyses, empirical research on the actual effects of the DR Policy remains insufficient, and more data support and long-term follow-up studies are needed to fully understand the policy's impact (Peng et al., 2020).

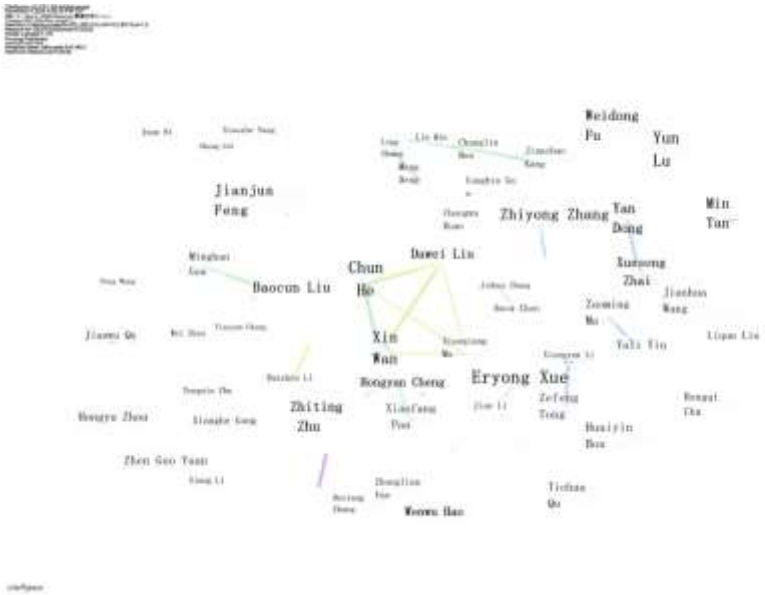

Figure 1. Author Knowledge Map of China's EE Research under the DR Policy

Research institutions in EE are tasked with providing balanced educational resources to society and promoting fair educational opportunities for students across all regions. These institutions serve as crucial bases for enhancing EE and promoting social justice. Quantitative

analysis of these institutions can reveal the distribution of research efforts in EE. The visualization analysis identified 154 nodes and 73 connections, with an overall network density of 0.0062. The visualization shows that various regular universities' departments and colleges of education play a central role in EE research. Notably, the Department of Education at Beijing Normal University, the College of Education at Central China Normal University, and the Department of Education at Southwest University have the highest research output, with 26, 22, and 17 publications, respectively. Additionally, the Department of Education at East China Normal University, the College of Educational Science at Nanjing Normal University, and the Department of Education at Northeast Normal University are significant contributors to this field. The concentration of research outputs from these institutions reflects their high research activity and influence in EE. Regarding the initial publication time, the top six institutions in terms of publication volume have similar publication timelines, indicating that these institutions almost simultaneously initiated research in this field. This reflects EE's widespread attention and importance as a research area in academia. Based on the characteristics of the publishing institutions, research activities in the field of EE are primarily concentrated in higher education institutions and related research institutes. This suggests that universities and research institutes are the main drivers in this research field. As research on EE continues to deepen and be implemented, more researchers from diverse backgrounds are expected to join this field.

Figure 2. Research Institutions in EE under the DR Policy

2. Core Issues: Focus Points of Research on EE

Keywords can succinctly summarize the core content and focus of research, helping to reveal hotspots and development trends in specific research fields (Peng et al., 2020). In this study, keywords were used as node types in the software to deeply explore the hot topics in China's EE research under the DR Policy, and the frequency of keyword occurrences was statistically analyzed. Some keywords naturally have higher frequencies and centrality due to the nature of the research theme, such as "EE" and "equality." These keywords were excluded from the final analysis to avoid bias (Wang et al., 2021).

Based on the above criteria, this study selected the top 20 keywords by frequency for in-depth analysis, with specific results shown in Table 1. The table reveals that keywords such as "strong education," "common prosperity," and "basic education" have not only high frequencies but also strong centrality in the network, indicating that these concepts occupy a core position in discussions of EE under the DR Policy. Additionally, keywords such as "obligatory education,"

"quality of education," and "vocational education" also exhibit great attention, reflecting society's ongoing concern for improving educational quality and promoting vocational education development. The distribution of these keywords provides essential insights into the current state of EE research under the DR Policy.

Table 1. Critical Keywords in EE Research under China's DR Policy

Rank	Frequency	Centrality	Keyword	Rank	Frequency	Centrality	Keyword
1	31	0.03	Strong Education	11	9	0.05	Right to Education
2	26	0.23	Common Prosperity	12	9	0.17	New Era
3	25	0.18	Basic Education	13	9	0.03	Education Policy
4	21	0.25	Quality of Education	14	8	0.24	Artificial Intelligence
5	20	0.20	Vocational Education	15	7	0.15	Moral Education
6	17	0.53	Obligatory Education	16	7	0.03	Chinese Characteristics
7	16	0.51	Higher Education	17	6	0.05	Inclusive Education
8	11	0.50	Digital Divide	18	6	0.14	Smart Education
9	11	0.07	Education Governance	19	6	0.19	Ethnic Regions
10	11	0.02	After-School Services	20	6	0.00	Quality Balance

Based on the Data in the Table, the Hotspot Keywords Are "Strong Education," "Common Prosperity," "Basic Education," "Quality of Education," and "Vocational Education."Additionally, based on the co-occurrence network of keywords, the LLR (Log-Likelihood Ratio) algorithm was used to cluster the keywords in the literature. The clustering results for the top 5 clusters were analyzed, and the visualization results are shown in Figure 3. The results indicate that the modularity value (Q value) is 0.8502, more significant than 0.3, and the average silhouette value (S value) is 0.9646, more significant than 0.5. These values suggest that the clustering results are highly reliable. The clusters are identified by analyzing the keyword clustering diagram:#0 Stakeholder Interests #1 Endogenous Development #2 Public Educational Services #3 Academic Achievement #4 Value Dimensions. Through the analysis of high-frequency keywords and their clusters, the core issues in the field of EE research in China under the DR Policy can be summarized into the following five aspects:

Figure 3. Keyword Clustering Diagram of EE Research in China under the DR Policy

Pursuit of EE: The Dynamics Among Stakeholders

The dynamics among stakeholders refer to the competitive interactions between different interest groups within a specific social domain to secure resources or power. Such competitions typically involve political, economic, and cultural dimensions, influencing society's development and stability. Various interest groups—governments, schools, parents, and students—frequently conflict over issues like allocating educational resources, teaching quality, and academic policies. For instance, during the implementation of the DR Policy, the conflict between policy enforcers and the targeted groups has been a significant factor contributing to policy delays. To achieve EE, it is essential to develop sound policies and measures that harmonize the relationships among these interest groups, ensuring the fair distribution of educational resources and enhancing academic quality.

Scholars have offered insightful analyses from diverse perspectives in the EE and resource allocation research. The strategic importance of ethnic education has been highlighted, with arguments that it is vital for maintaining long-term national stability and revitalizing the Chinese nation, particularly in ensuring EE and balanced resource allocation (Chen et al., 2022). The role of class teachers in inclusive classrooms has been examined, exploring how their efforts can promote the fair distribution and effective use of educational resources, especially in the context of inclusive and special education (Zhang & Lou, 2022). The issue of regional educational balance has been addressed, focusing on teacher mobility and proposing strategies to achieve EE across regions through optimized resource allocation (Sun, 2022). The impact of digital transformation on educational governance has been investigated, emphasizing the need for innovative approaches to enhance educational quality and fairness in the digital age (Yuan, 2022). The implementation of the DR Policy has been discussed, advocating for establishing a long-term mechanism for teacher ethics to improve educational quality and promote equity (Qin et al., 2022). The role of EE in fostering shared prosperity through equalizing educational public services has been explored (Qi & Gao, 2022). Lastly, the potential of digital inclusive finance to mitigate the effects of non-merit-based family factors on educational opportunities has been studied (Chen et al., 2022).

These studies collectively highlight the core challenges of EE and resource allocation, offering deep insights into contemporary educational disparities and providing theoretical foundations and practical guidelines for crafting more equitable and effective educational

policies. Specifically, they underscore the importance of digital transformation and teacher ethics in driving educational reforms, suggesting ways to optimize educational governance through digital means and establish sustainable practices in teacher ethics. These findings not only deepen our understanding of educational policy reforms but also provide valuable theoretical and practical guidance for developing more equitable and effective policies, thereby promoting the continuous optimization and development of the educational system. By leveraging these insights, we can better navigate the direction of educational policy reforms, advance EE, optimize resource allocation, and achieve high-quality educational outcomes.

Endogenous Development in Education: Enhancing Quality and Driving Innovation

Endogenous development refers to the sustainable growth of a system or region driven by its resources and capabilities. In education, endogenous development focuses on the internal factors within the educational system, such as updating educational philosophies, improving teaching methods, and optimizing educational management, and how these factors contribute to enhancing academic quality and equity.

Under the DR Policy, research on EE has increasingly emphasized endogenous development. This emphasis is evident in updating educational philosophies, the innovation of teaching methods, the optimization of educational management, and the rational allocation of educational resources. The pursuit of EE in the new era goes beyond equal opportunities; it prioritizes the quality of education and its alignment with the comprehensive development of individuals (Feng, 2023). This pursuit necessitates a profound transformation of educational philosophies to meet the demands of the modern era, thereby better-integrating equity and quality in educational practice. Studies have shown that innovative teaching methods, such as project-based learning and flipped classrooms, effectively address students' personalized learning needs, enhancing both learning outcomes and EE (Yang & Wang, 2023). Additionally, optimizing educational management, including reforms in school governance and improvements in educational evaluation systems, is crucial for enhancing educational quality and achieving equity. The rational allocation of educational resources, particularly in teacher professional development and educational financial investment, forms the foundation for promoting EE and quality improvement. These studies underscore the pivotal role of internal factors in advancing EE and quality, highlighting endogenous development's importance and urgency in the DR Policy context.

Endogenous development plays a central role in the research on EE under the DR Policy. Researchers generally agree that internal reforms and innovations within the educational system can significantly enhance EE and quality. However, endogenous development is gradual and requires policy support, practical school implementation, and active social participation. Future research should focus on building effective mechanisms for endogenous development and evaluating their effectiveness to ensure the realization of EE goals. It is also essential to address potential challenges, such as imbalances in resource allocation and inadequate teacher professional development, and to identify appropriate solutions.

Public Educational Services: Equalization and Policy Responses

Public educational services are government-led initiatives designed to meet the basic educational needs of society members. These services emphasize the accessibility and inclusivity of education, ensuring that every citizen, regardless of gender, race, socioeconomic status, or geographic location, has access to fundamental educational resources and opportunities. The core value of public educational services is to promote EE and foster social inclusiveness and cohesion. In the educational sector, public educational services are primarily reflected in the universalization of compulsory education, the balanced development of educational quality, the rational allocation of educational resources, and support for disadvantaged groups. Specifically, they encompass various aspects such as school construction, teacher allocation, curriculum

development, and educational fiscal investment. For example, implementing free nine-year compulsory education ensures that all eligible children and adolescents receive basic education. Educational assistance policies help reduce the economic burden on families with economically disadvantaged students, and the advancement of educational informatization helps narrow the gap in educational resources between urban and rural areas.

Research on public educational services under the DR Policy has shown a diversified trend. Scholars have explored the challenges and opportunities of public educational services from multiple angles in the new era. On the one hand, some studies indicate that the DR Policy, by reducing students' academic workload and off-campus training burdens, can help promote equalizing public educational services and enhance educational quality (Qin & Kang, 2023). On the other hand, other studies highlight new inequities that may arise during the implementation of the DR Policy, such as hidden variations in subject-based off-campus training, which could exacerbate disparities in student academic achievement (Fu & Guo, 2023).

In terms of providing and optimizing public educational services, the research underscores the importance of information technology applications in improving the efficiency and quality of educational services (Hu & Zhu, 2023). Additionally, some studies propose reforms to existing educational service delivery models, such as creating a diversified educational service system to meet the needs of different groups (Guo & Zheng, 2023). Overall, research on public educational services in the context of the DR Policy demonstrates a deep concern for EE. Scholars focus on the direct effects of policies and delve into the underlying educational philosophies and practical challenges. In the pursuit of EE, the role of public educational services is indispensable, as they reflect government responsibility and serve as a cornerstone of social progress. Future research should pay more attention to how institutional and technological innovations can drive high-quality development in public educational services, ensuring the realization of EE goals. Simultaneously, it is essential to continuously monitor and address new issues that may emerge from the DR Policy to maximize its positive impact.

Academic Achievement Gap: Influencing Factors and Fairness Strategies

Academic achievement refers to enhancing students' knowledge, skills, and abilities through learning and assessment and their performance in standardized tests and evaluations. It is a crucial indicator of educational effectiveness, reflecting individual learning progress and academic levels. Additionally, it is essential for assessing educational quality and equity. In the educational context, academic achievement is typically measured through examination scores, educational attainment, and comprehensive quality assessments. These metrics serve as vital benchmarks for evaluating the effectiveness of educational policies, the quality of school teaching, and student learning outcomes. The distribution and variation in academic achievement can reveal the fairness of educational resource allocation, the equality of educational opportunities, and the equity of educational outcomes.

The DR Policy aims to alleviate students' academic burden but may also impact academic achievement. Some studies suggest that the policy could lead to hidden variations in subject-based off-campus training, potentially widening the gap in students' academic achievement (Fu & Guo, 2023). Factors such as family background and socioeconomic status significantly influence academic achievement, and promoting EE requires addressing the achievement gaps caused by these factors (Yao & Shen, 2023). With the advancement of educational informatization, the role of technology in enhancing academic achievement has become increasingly important. Research indicates that applying information technology can improve the sharing and accessibility of educational resources, thereby boosting academic achievement, especially among disadvantaged students (Hu & Zhu, 2023). Reforms in educational evaluation aim to provide a more comprehensive reflection of students' academic achievements. Studies emphasize that a diversified evaluation system can more accurately capture students' academic

and personal development, thus promoting the improvement of academic achievement (Wang & Zhu, 2023).

Academic achievement is a critical dimension in the research on EE under the DR Policy. While the policy seeks to reduce students' academic burden, it raises concerns about potential negative impacts on academic achievement. Moreover, the application of technology is seen as a vital means to enhance academic achievement, particularly for students from disadvantaged backgrounds. However, balancing improving academic achievement with realizing EE remains a complex challenge that requires in-depth exploration. Future research should focus on the specific impacts of the DR Policy on different student groups and how educational evaluation reforms and the application of educational technology can achieve a more equitable distribution of academic achievement. Additionally, attention should be given to how educational policies can better support improving academic achievement for all students, especially those in disadvantaged positions.

Realization of Educational Values: Policy Orientation and Benefit Assessment

The value dimension in education encompasses the core values and goals pursued in educational activities. It includes fundamental values such as equity, quality, efficiency, and deeper values related to promoting social justice, individual development, and national competitiveness. In the educational field, the value dimension serves as a multi-faceted framework for evaluating policies, practices, and outcomes, reflecting the significance and impact of educational activities at various levels. A comprehensive consideration of EE, quality, innovation, and benefits characterizes the value dimension in education. For instance, EE focuses on the equal distribution of resources and opportunities, educational quality emphasizes the excellence of content and processes, educational innovation involves the renewal of models and methods, and educational benefits aim to maximize the returns on educational investments.

Under the DR Policy, the value dimension of EE has been extensively explored. Many studies highlight that EE embodies core socialist values and discuss how reducing students' academic burden can lead to higher levels of EE (Chen et al., 2023). In terms of balancing educational quality and efficiency, researchers focus on maintaining or improving educational quality while reducing students' academic workload and enhancing the efficiency of the educational system through policy adjustments (Cheng & Wang, 2023). Regarding educational innovation, some studies indicate that in response to the challenges posed by the DR Policy, innovation in teaching methods and the application of educational technology are crucial for enhancing educational value (Yang & Liu, 2023). In the multi-dimensional assessment of educational benefits, researchers explore how the DR Policy can maximize educational benefits, including improving academic achievement and cultivating students' comprehensive development and lifelong learning skills (Qin & Kang, 2023).

The value dimension is a critical perspective for evaluating the effectiveness of the DR Policy. Under this policy, the pursuit of EE remains the core goal of policy formulation and implementation. Simultaneously, key research topics are ensuring educational quality while reducing students' academic burden and enhancing educational benefits through innovation. Future research should delve deeper into the profound impact of the DR Policy on the value dimension of education, particularly in balancing different value goals and assessing the long-term benefits of the policy. Additionally, researchers should pay attention to new inequalities and challenges that may arise during policy implementation and explore ways to address these issues through policy adjustments and educational practices to achieve the comprehensive value of education.

D. Conclusion

Under the DR Policy, educational equity (EE) research in China has seen the emergence of notable core authors and institutions, with research focusing on policy interpretation, resource allocation, and quality improvement. However, the number of core contributors remains limited, and the research concentration in higher education institutions restricts broader collaboration. Key challenges include a need for longitudinal studies, narrow research perspectives, and underutilization of digital technology in advancing EE. Addressing these issues requires a more systematic and innovative approach to strengthen EE research and its practical application in the Chinese educational system.

Future efforts should focus on three key areas to enhance EE research and practice. First, long-term tracking and evaluation of educational policies are necessary to provide evidence-based insights for optimizing their impact. Establishing robust feedback mechanisms can ensure policies are responsive to changing educational needs. Second, EE research should expand its scope by adopting interdisciplinary approaches, incorporating sociological, economic, and psychological perspectives to explore broader social, financial, and individual impacts. Finally, leveraging digital technology remains crucial. Research should investigate how technology can effectively promote EE, focusing on adaptability, user acceptance, and practical applications in reducing disparities. These steps will provide a solid foundation for advancing theoretical understanding and practical solutions to achieve equitable education in China.

References

Chen, B. K., Kang, Y. K., & Hou, J. Y. (2023). Equalization of public services, educational equity, and common prosperity. *China Economic Quarterly*, 6, 2104–2118. https://doi.org/10.13821/j.cnki.ceq.2023.06.03

Chen, J., & Zhao, L. (2021). Educational value dimensions and policy reform: A critical analysis of China's double reduction policy. Journal of Educational Theory, 29(1), 67–82.

Chen, L. P., Zhang, J., & Li, Z. X. (2022). The theoretical essentials of Xi Jinping's important statements on ethnic education. *Guizhou Ethnic Studies*, 4, 186–191. https://doi.org/10.13965/j.cnki.gzmzyj10026959.2022.04.029

Chen, S. J. (2009). *Survey of approaches to research front detection. Data Analysis and Knowledge Discovery*, 9, 28–33. Retrieved from https://lib.cqvip.com/Qikan/Article/Detail?id=31857333&from=Qikan_Search_Index

Chen, W. Y., Cheng, Z. J., & Cai, Q. F. (2021). Educational equity from the perspective of family expectations for education: The mitigation effect of digital inclusive finance on non-self-induced family factors. *Educational Research*, 10, 122–137. Retrieved from https://lib.cqvip.com/Qikan/Article/Detail?id=7106032419&from=Qikan_Search_Index

Cheng, H. Y., & Wang, J. Y. (2023). The practical logic of the reform of the college entrance examination system: Based on the perspective of balancing the interests of multiple subjects. *Contemporary Education Sciences*, 10, 71–80. Retrieved from https://lib.cqvip.com/Qikan/Article/Detail?id=7112446377&from=Qikan_Search_Index

Feng, J. J. (2023). Ten years of the new era: Achievements in the construction of the socialist pedagogy system with Chinese characteristics. *Journal of Soochow University (Educational Science Edition)*, 3, 1–14. https://doi.org/10.19563/j.cnki.sdjk.2023.03.001

Feng, J. J., & Gao, Z. (2022). Policy orientation and practice exploration of educational equity in the new era of China. *Journal of Northeast Normal University (Philosophy and Social Sciences)*, 4, 16–23. https://doi.org/10.16164/j.cnki.22-1062/c.2022.04.002

Fu, W. D., & Guo, S. W. (2024). Implementing the "Double Reduction" policy and the new educational inequity: Based on the survey of 30 counties (cities, districts) in six provinces. *Modern Education Management*, 4, 42–51. https://doi.org/10.16697/j.1674-5485.2024.04.005

Guo, L. M., & Zheng, Q. H. (2021). Internet-driven reform of educational services supply: Change in demand, type of transformation, and development pathways. *Chinese Journal of Distance Education*, 12, 21–27+62+76–77. https://doi.org/10.13541/j.cnki.chinade.2021.12.001

Hu, J., & Zhu, Z. T. (2023). *Equity and quality-oriented classroom digital transformation: Logic, philosophy, and pathways. China Educational Technology*, 8, 18–24. Retrieved from https://lib.cqvip.com/Qikan/Article/Detail?id=7110305907&from=Qikan_Search_Index

Li, Z., Chen, M., & Huang, Y. (2022). Mapping educational equity research in China using CiteSpace: Insights from the double reduction policy. *Education Science*, 18(3), 98–114.

Liu, B. C., & Gou, M. H. (2023). Toward 2035: International experience in building an educational power. *People's Education*, 5, 12–16. Retrieved from https://lib.cqvip.com/Qikan/Article/Detail?id=7109228991

Peng, R. Z., Zhu, C., & Wu, W. P. (2020). Visualizing the knowledge domain of intercultural competence research: A bibliometric analysis. *International Journal of Intercultural Relations*, 74, 58–68.

Qi, F., & Gao, C. (2024). Equal access to education-related public services to promote common prosperity. *Journal of Beijing University of Aeronautics and Astronautics (Social Sciences Edition)*, 3, 140–146. https://doi.org/10.13766/j.bhsk.1008-2204.2022.0210

Qin, L., & Kang, J. C. (2023). International experience in supporting the construction of an educational power with educational equity. *People's Education*, 22, 6–10. Retrieved from http://218.28.6.71:81/Qikan/Article/Detail?id=7111015684&from=Qikan_Search_Index

Qin, M. M., Qu, J. W., & Qin, L. F. (2022). Construction of the long-term mechanism on teachers' morality to improve the effectiveness of the "Double Reduction" policy. *Journal of Tianjin Normal University (Social Sciences Edition)*, 5, 29–34. Retrieved from http://218.28.6.71:81/Qikan/Article/Detail?id=7108402452&from=Qikan_Search_Index

Sun, F. J. (2022). Imbalance of middle-school teachers' mobility and countermeasures in the perspective of balanced development of regional education. *Theory and Practice of Education*, 23, 21–24. Retrieved from http://218.28.6.71:81/Qikan/Article/Detail?id=7107975797

Sun, T., Zhang, X., & Liu, R. (2023). Future directions in educational equity research under the double reduction policy. *Journal of China Education Development*, 19(2), 34–48.

Wang, F., & Sun, R. (2023). Bibliometric analysis of educational equity research in China. Asia-Pacific *Journal of Educational Research*, 41(3), 89–105.

Wang, Z. Y., & Zhu, D. Q. (2024). "Breaking" has "standing": The rational logic of educational evaluation reform in the new era. *Tsinghua Journal of Education*, 1, 99–109. https://doi.org/10.14138/j.1001-4519.2024.01.009911

Wang, Z. Y., Xie, S. X., & Cheng, M. (2021). Comparative analysis of domestic and international STEAM education research based on bibliometrics. *Modern Distance Education*, 2, 81–88. https://doi.org/10.13927/j.cnki.yuan.20210330.001

Wu, L. (2023). Rethinking educational inequalities in the era of double reduction: Challenges and opportunities. *China Education Studies*, 28(4), 215–230.

Xue, E. Y. (2023). Building a high-quality basic public education service system. *People's Education*, 12, 17–21. Retrieved from http://www.moe.gov.cn/jyb_xwfb/moe_2082/2023/2023_zl07/202306/t20230616_1064674.html

Yang, X. W., & Wang, J. (2024). Opportunities, challenges, and responses to the application of ChatGPT in basic education: Drill-based education, student learning, super teachers, and educational equity. *Journal of Xinjiang Normal University (Edition of Philosophy and Social Sciences)*, 2, 125–136. https://doi.org/10.14100/j.cnki.65-1039/g4.20230801.001

Yang, X. Z., & Liu, X. (2023). Learning style of information technology course of compulsory education: Digital learning. *Curriculum, Teaching Material and Method*, 8, 139–144. Retrieved from https://d.wanfangdata.com.cn/periodical/Ch9QZXJpb2RpY2FsQ0hJTmV3UzIwMjQxMTA1MTcxMzA0Eg9rY2pjamYyMDIzMDgwMjMaCDR6bHhvMThn

Yao, J. H., & Shen, L. (2024). *Educational problems and reflections on 'score-based class placement' in Chinese schools*.

Zhang, H., Wang, Y., & Liu, Q. (2022). The impact of double reduction policy on educational equity in China: A policy analysis. *Journal of Educational Policy and Reform*, 35(2), 120–135.

Zhao, H. (2022). The role of digital technology in promoting educational equity: A study in the context of China's policy reforms. *Digital Education Journal*, 10(2), 45–60.