

Trends and Challenges in Education Management Reform in China: A Policy Review

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Abstract: China has pursued extensive education management reforms to modernize its education system and improve administrative efficiency. Although many initiatives have been launched over the past four decades, the overall effectiveness and sustainability of these reforms remain uneven. This study aims to provide a comprehensive review of major policy directions, emerging management trends, and ongoing challenges in the context of China's evolving education governance. A qualitative policy and literature review was conducted using national education reform documents, ministerial reports, and peer-reviewed publications from 1985 to 2024. Key sources were analyzed to identify dominant policy themes, administrative strategies, and systemic constraints affecting education management implementation. The analysis reveals three major trends: (1) gradual decentralization of administrative authority to schools and local governments, (2) increased emphasis on data-driven and performance-based decision making, and (3) expansion of digital and technological tools for management and evaluation. Despite these advances, significant challenges persist, including rural-urban disparities in administrative capacity, limited professional development for school leaders, and gaps between policy design and local-level implementation. China has achieved notable progress in modernizing its education management system, yet systemic and structural constraints continue to limit policy impact. Strengthening capacity-building for local administrators, improving resource equity, and developing more adaptable reform frameworks are critical for achieving sustainable governance improvement. The review contributes evidence-based insights for scholars and policymakers seeking to understand and enhance education management reform in China.

Keywords: Education management; China; policy reform; decentralization; governance

1. Introduction

Over the past four decades, China has embarked on a continuous and multi-layered process of education reform, aimed at aligning its national education system with the needs of a rapidly transforming society and economy (Liu, 2023). These reforms have not only focused on curriculum, pedagogy, and access but have increasingly emphasized the modernization of education management practices, particularly in terms of decentralization, administrative efficiency, and school-level accountability (OECD, 2016; World Bank, 2020). As China transitions from an industrial to a knowledge-based economy, the effective governance and management of educational institutions have become critical for ensuring equity, quality, and responsiveness across all levels of the system (Xiao et al., 2025).

Education management in China has evolved from a highly centralized, bureaucratic model rooted in command-and-control practices to a more complex governance structure that incorporates elements of decentralization, school autonomy, and data-driven decision-making (Tan, 2015, Mok, 2016). This shift has been driven by both internal policy imperatives and external influences, such as globalization, digital transformation, and increasing demands for educational accountability. At the national level, strategic reforms such as the "Modern Education Governance System" proposed in China's Education Modernization 2035 plan emphasize institutional innovation, leadership development, and outcome-based management as key levers for sustainable improvement (Ministry of Education of the People's Republic of China, 2019).

Despite notable policy advancements, the implementation of education management reforms in China remains uneven. Persistent challenges such as regional disparities in governance capacity, limited managerial training for school leaders, and gaps between national policy design and local execution continue to constrain progress (Wong, 2010, Wang, 2018, Zhang and Muhammad, 2025, Qian and Walker, 2021). In particular, rural and under-resourced regions often struggle to implement complex reforms, resulting in systemic inequalities and fragmented progress across provinces (Sepadi, 2025, Hou et al., 2025).

This paper seeks to contribute to the growing body of literature on education governance by critically reviewing the policy trajectory, emerging trends, and enduring challenges in China's education management reform agenda. The study adopts a qualitative approach, drawing on policy analysis and literature review methods to synthesize existing knowledge and identify both achievements and constraints. By doing so, the paper aims to inform scholars, policymakers, and practitioners engaged in reforming education systems in China and comparable contexts.

2. Methodology

2.1 Review Approach

This study employed a narrative literature and policy review approach to explore the trends and challenges of education management reform in China. A narrative review is appropriate for synthesizing knowledge across diverse sources, including policy documents, conceptual frameworks, and empirical studies, to provide a comprehensive understanding of a broad and

evolving subject (Ferrari, 2015). Unlike systematic reviews, which are more rigid in scope and selection criteria, the narrative method allows for contextual interpretation and critical discussion of policy directions within the socio-political and educational landscape of China.

The review focuses on identifying: 1) Major education management reform policies since the 1980s; 2) Peer-reviewed academic studies that analyze these reforms; 3) Key themes and recurring challenges in implementation. This approach was selected due to the complex, multi-level nature of education governance in China, which involves interactions between central, provincial, and local authorities, and is deeply embedded in China's broader administrative and political system.

2.2 Data Sources and Selection Criteria

Two primary categories of sources were reviewed: (1) Official policy and government reports, and (2) Peer-reviewed scholarly literature.

a) Policy Documents and Reports

Policy texts were selected based on their relevance to national and subnational education reform strategies, with a particular focus on education management and governance. Key documents included: 1) Education Modernization 2035 (Ministry of Education, 2019), 2) National Medium- and Long-Term Education Reform and Development Plan (2010–2020), 3) Annual reports and policy guidance from the Ministry of Education of the People's Republic of China, 4) Reports from international organizations such as the World Bank, OECD, and UNESCO, which have conducted independent analyses of Chinese education reform. These documents were retrieved from official government portals and international development agency websites.

b) Academic Literature

Peer-reviewed journal articles were sourced through databases such as Scopus, Web of Science, Google Scholar, and CNKI (China National Knowledge Infrastructure). Inclusion criteria were: 1) Published between 2005 and 2024, 2) Focus on education management, governance, leadership, or policy implementation in China, 3) Published in reputable international or Chinese academic journals, 4) Written in English or Chinese.

The following search terms were used in various combinations: "education management China," "education governance reform," "school leadership China," "policy implementation in Chinese education," and "decentralization of education China." After screening abstracts and removing duplicates, 35 peer-reviewed articles and 12 national or international policy reports were selected for detailed analysis.

2.3 Analytical Framework

The selected materials were reviewed thematically. Recurrent patterns were identified through coding techniques commonly used in qualitative content analysis (Miles, 1994, Ridder, 2014). Themes were grouped into two overarching categories: 1) Emerging trends in education management reform, 2) Challenges and constraints in implementation. This thematic analysis

allowed for both a historical overview and a critical interpretation of the current state of education management in China.

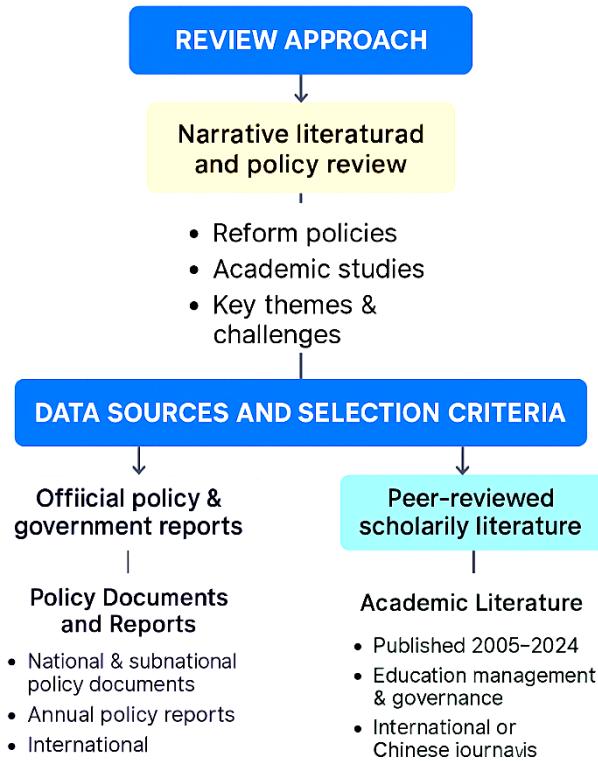


Figure 1. Narrative Literature and Policy Review on Education Management Reform in China

3. Literature Review

The literature on education management reform in China reflects a complex interplay between national policy priorities, governance structures, and institutional practices. Key themes emerging from the existing body of research include: (1) the evolution of education governance models, (2) the decentralization of administrative control, (3) the rise of data-informed and performance-based management, and (4) ongoing implementation challenges, particularly in rural and under-resourced regions.

3.1 Evolution of Education Governance in China

China's education governance has undergone significant structural shifts since the late 20th century, moving from a centralized, bureaucratic model to a more fragmented and hybrid system involving multiple layers of authority (Tan, 2015). The early post-reform period of the 1980s and 1990s was marked by a decentralization agenda that transferred administrative responsibilities from central to local governments, particularly in financing and school management (Rong and Shi, 2001, Rong-guang and Shi-jie, 2010). This process was further accelerated by the 2010–2020 National Medium- and Long-Term Education Reform and Development Plan, which aimed to

establish a more responsive, diversified, and locally accountable education system (Ministry of Education, 2010).

While these reforms have contributed to increased flexibility at the local level, scholars argue that decentralization has also resulted in significant disparities in education quality and resource allocation across provinces (Wong, 2010, Liu and Hallinger, 2024, Chi and Bustillo, 2021). These disparities pose critical challenges to the equity and consistency of education reform implementation.

3.2 Decentralization and Local Autonomy

Decentralization in China's education system has not equated to complete autonomy at the local or school level. Rather, it reflects a form of "decentralized centralism," where local authorities are granted operational responsibilities but are still held accountable to top-down national mandates (Mok*, 2005). This governance model, while theoretically promoting innovation and responsiveness, often leads to implementation fatigue and conflicting accountability structures for school leaders (Li, 2024, Walker and Qian, 2022, Xue et al., 2020).

Moreover, research shows that the capacity of local governments to manage education reform varies greatly, especially between urban and rural areas. In underdeveloped regions, local education authorities often lack professional training and institutional support, which undermines the quality of governance and limits the effectiveness of reform (Zhao and Zhong, 2025, Zhao, 2020).

3.3 Data-Driven and Performance-Based Management

One of the defining features of recent reforms is the incorporation of data-informed management practices, such as student performance tracking, school evaluation systems, and resource auditing tools (OECD, 2016). These tools are intended to increase transparency and accountability, and to support evidence-based decision-making in schools and district-level education offices.

However, there is concern among researchers that an overemphasis on performance indicators may narrow the educational mission, leading to an increase in administrative burden and a focus on measurable outcomes at the expense of holistic education (Tsang et al., 2021, Tan, 2024). The rise of digital management systems and AI-based educational platforms has also introduced new questions about data privacy, equitable access, and technological readiness in less developed regions (Zhang et al., 2025, Zhao et al., 2025).

3.4 Implementation Gaps and Structural Challenges

Despite policy ambitions, many reforms face what Hawley and Fullan (2007) refers to as the "implementation gap" the difference between policy intention and what happens in practice (Hawley and Fullan, 2007). In the Chinese context, this gap is exacerbated by uneven capacity at the school and district levels, a lack of leadership training, and bureaucratic inertia within the education system (Liu and Hallinger, 2018, Li and Liu, 2022).

School principals in particular are often caught between fulfilling administrative tasks mandated by the education bureau and leading school-level improvements (Hallinger and Bryant, 2013a, Hallinger and Bryant, 2013b). These role conflicts hinder strategic innovation and limit opportunities for transformational leadership.

3.5 International Influences and Local Adaptation

China's education reforms have been shaped by global policy trends, including the rise of New Public Management (NPM), school-based management (SBM), and performance accountability systems (Dello-Iacovo, 2009). However, scholars caution that policy borrowing must be adapted to local contexts, as direct adoption of Western governance models can lead to cultural and institutional mismatches (Cheng, 2010). Efforts to promote school autonomy or participatory governance, for instance, often conflict with hierarchical norms and centralized planning structures deeply embedded in Chinese administrative culture.

Table 1. Summary of Key Themes, Findings on Education Management Reform in China:

Section	Key Themes	Summary	References
Evolution of Education Governance	Structural shifts, decentralization, equity challenges	Since the 1980s, China has moved from centralized to more decentralized models, especially in school financing and management. Reforms increased local flexibility but led to regional disparities in education quality and resources.	Tan (2015); Rong & Shi (2001); Rong-guang & Shi-jie (2010); Ministry of Education (2010); Wong (2010); Liu & Hallinger (2024); Chi & Bustillo (2021)
Decentralization and Local Autonomy	Decentralized centralism, capacity gaps	Decentralization grants local operational control, but accountability remains top-down. Local implementation suffers due to uneven capacity, especially in rural areas.	Mok (2005); Li (2024); Walker & Qian (2022); Xue et al. (2020); Zhao & Zhong (2025); Zhao (2020)
Data-Driven and Performance-Based Management	Accountability tools, digitalization, risks	Reforms emphasize performance tracking and evaluation systems. While promoting transparency, they risk narrowing educational focus and raise concerns about data privacy and technological disparities.	OECD (2016); Tsang et al. (2021); Tan (2024); Zhang et al. (2025); Zhao et al. (2025)
Implementation Gaps and Challenges	Policy-practice gap, leadership strain	There's a gap between national policy goals and school-level practice, exacerbated by lack of training, leadership conflict, and bureaucratic inertia.	Hawley & Fullan (2007); Liu & Hallinger (2018); Li & Liu (2022); Hallinger & Bryant (2013a, 2013b)
International Influences and Local Adaptation	Policy borrowing, cultural fit	Global education reform trends influence Chinese policy, but misalignment with local culture and governance structures often undermines their success.	Dello-Iacovo (2009); Cheng (2010)

4. Findings and Discussion

This section presents the key findings from the reviewed literature and policy documents, organized into two broad themes: (1) emerging trends in education management reform, and (2) persistent challenges that continue to hinder effective implementation. Each theme is discussed in light of China's broader educational goals and administrative context.

4.1 Emerging Trends in Education Management Reform

4.1.1 Trend 1: Decentralization and Local Administrative Autonomy

A major trend in Chinese education reform is the **decentralization of governance**, particularly the transfer of administrative and financial responsibilities from the central government to provincial and local authorities. Since the 1980s, reforms have promoted the devolution of power to allow local governments and schools to tailor educational strategies to regional needs (Ministry of Education, 2010; OECD, 2016).

This shift has allowed for increased responsiveness to local contexts, especially in economically advanced regions such as Jiangsu and Guangdong. Local education bureaus have gained discretion in areas such as school staffing, budgeting, and curriculum enrichment. However, this trend has also introduced complexities related to coordination, resource inequality, and policy coherence across regions, which will be discussed further in section 4.2. Decentralization has created opportunities for innovation and localized reform, but requires robust coordination mechanisms and capacity-building to avoid fragmentation and inequality (Mok, 2005; Yuan & Leithwood, 2020).

4.1.2 Trend 2: Rise of Data-Driven and Performance-Based Management

Chinese education authorities have increasingly adopted data-driven decision-making tools and performance-based management systems to monitor and evaluate schools and education personnel (OECD, 2016; Tan, 2020). The Ministry of Education now uses large-scale national assessments, school inspection reports, and digital platforms to track academic performance and administrative efficiency.

These practices aim to enhance transparency, promote evidence-based governance, and hold school leaders accountable for outcomes. The development of platforms such as the "Smart Education of China" initiative also reflects this digital push. The integration of technology and data analytics into education management aligns with global trends in New Public Management (NPM), but may lead to over-standardization and narrow definitions of success (Tan, 2020; Zhang & Lu, 2021).

4.1.3 Trend 3: Leadership Professionalization and Capacity-Building

Recent policies emphasize the importance of professionalizing educational leadership, particularly school principals, as a key factor in improving school management and implementing reform (Liu & Hallinger, 2021). Leadership development programs have been

piloted in several provinces, with a focus on strategic planning, instructional leadership, and administrative accountability.

National policies such as Education Modernization 2035 explicitly highlight the need for skilled leaders to drive reform at the grassroots level. However, implementation remains uneven across regions. Leadership development is increasingly recognized as a lever for sustainable reform, but requires ongoing investment, clear evaluation standards, and institutional support (Hallinger & Bryant, 2013).

4.2 Persistent Challenges in Implementation

Despite these promising trends, the review reveals a series of structural and practical challenges that continue to constrain reform effectiveness.

4.2.1 Challenge 1: Regional Disparities and Unequal Capacity

China's large geographical and economic diversity results in significant regional disparities in education management capacity. While wealthier regions have the infrastructure, staff, and expertise to implement reforms, less-developed provinces struggle with basic administrative tasks and compliance with national mandates (Tsang & Yu, 2002; Zhao, 2016).

The "decentralized centralism" model has exacerbated these gaps, as local autonomy without adequate support leads to inconsistent implementation quality. A one-size-fits-all policy approach is ineffective in a country as diverse as China. National reforms must be tailored with differentiated strategies and financial support based on local needs.

4.2.2 Challenge 2: Policy-Implementation Gaps

A recurring theme in the literature is the gap between policy design and on-the-ground implementation. School leaders often face competing demands on the one hand, fulfilling administrative targets set by the education bureau, and on the other, leading pedagogical innovation and school-based development (Liu, 2018; Fullan, 2007).

In many cases, policies are introduced without sufficient pilot testing, training, or feedback mechanisms, leading to confusion or superficial compliance at the school level. Implementation planning is often underdeveloped in Chinese education reforms. Future policy should be accompanied by scalable pilots, local consultation, and phased rollouts.

4.2.3 Challenge 3: Managerial Overload and Bureaucratic Inertia

The adoption of performance-based systems and digital reporting requirements has led to increased administrative workload for school leaders. Many principals report spending excessive time on paperwork, monitoring, and evaluation tasks, rather than focusing on instructional leadership (Tan, 2020; Liu & Hallinger, 2021).

Moreover, the traditional bureaucratic culture of top-down control limits the scope for innovation and collaborative leadership practices, particularly in public schools. Without rethinking the

balance between accountability and autonomy, education management reform risks becoming a technical exercise rather than a transformative one.

4.2.4 Challenge 4: Limited Stakeholder Engagement

Reform efforts in China are often **technocratic**, focusing on administrative processes while giving limited voice to teachers, parents, and communities (Dello-Iacovo, 2009). This top-down approach can result in resistance, low morale, or poor alignment between reform goals and local needs.

While stakeholder engagement is mentioned in policy documents, in practice, participatory governance remains weak. Sustainable reform requires broader stakeholder buy-in and mechanisms for inclusive decision-making. School-based management and parent involvement remain underdeveloped in many regions.

4.3 Synthesis and Policy Implications

Taken together, the trends and challenges identified in this review illustrate that while China has made significant strides in modernizing its education management system, its governance model remains in transition. Effective reform requires not only the adoption of new tools and structures but also cultural change, capacity development, and a shift toward more participatory, flexible governance.

Key policy implications include: 1) The need for differentiated policy support based on local context, 2) Investments in leadership training and support systems, 3) Simplification and streamlining of administrative tasks, 4) Introduction of feedback mechanisms to reduce implementation failure

5. Conclusion and Recommendations

5.1 Conclusion

This policy review has examined the evolving landscape of education management reform in China, identifying both the promising developments and the systemic challenges that shape policy implementation across regions. Over the past four decades, China has made substantial progress in modernizing its education governance system, marked by trends such as decentralization, the integration of digital and data-driven tools, and a growing focus on leadership capacity-building. However, despite these advancements, the study highlights several persistent issues that undermine the effectiveness and equity of reform outcomes. These include regional disparities in governance capacity, policy-implementation gaps, managerial overload, and limited stakeholder engagement. These challenges suggest that structural reform alone is insufficient without parallel investment in local administrative capacity, participatory governance mechanisms, and implementation support systems. The Chinese case reflects a broader international lesson: that education management reform is not merely a technical redesign of administrative structures, but a deeply political and cultural process that requires long-term commitment, context-sensitive strategies, and inclusive leadership at all levels.

5.2 Recommendations

Based on the review findings, several key recommendations are proposed to strengthen education management reform in China. First, enhance local capacity and equity by providing targeted funding, professional training, and tailored implementation support for under-resourced regions. Second, invest in leadership development through continuous training and regional support networks that emphasize instructional leadership and community engagement. Third, simplify administrative processes to reduce managerial burdens and allow school leaders more autonomy to focus on teaching and learning. Fourth, embed implementation frameworks into reforms by including pilot programs, stakeholder feedback, and practical toolkits to ensure effective local adoption. Fifth, promote participatory governance by involving teachers, parents, and communities in school decision-making through formal structures such as councils or advisory boards. Finally, monitor reforms holistically, using indicators that capture equity, well-being, and innovation rather than relying solely on performance metrics. In essence, the success of China's education management reform depends on balancing central guidance with local flexibility, combining technical improvements with cultural sensitivity, and fostering long-term capacity for sustainable and equitable educational development.

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Conflicts of Interest

The authors declare no conflicts of interest.

References

CHENG, K.-M. 2010. Shanghai and Hong Kong: Two distinct examples of education reform in China. *Organisation for economic co-operation and development, strong performers and successful performers in education: Lessons from PISA for the United States*, 83-115.

CHI, J. & BUSTILLO, E. V. 2021. *Investment and Interventions to Improve the Quality of Education Systems*, Routledge.

DELLO-IACOVO, B. 2009. Curriculum reform and 'quality education' in China: An overview. *International journal of educational development*, 29, 241-249.

FERRARI, R. 2015. Writing narrative style literature reviews. *Medical writing*, 24, 230-235.

HALLINGER, P. & BRYANT, D. 2013a. Mapping the terrain of educational leadership and management in East Asia. *Journal of educational administration*, 51, 618-637.

HALLINGER, P. & BRYANT, D. A. 2013b. Accelerating knowledge production on educational leadership and management in East Asia: A strategic analysis. *School Leadership & Management*, 33, 202-223.

HAWLEY, W. D. & FULLAN, M. 2007. Educational reform as continuous improvement. *The keys to effective schools: Educational reform as continuous improvement*. Corwin Press.

HOU, J., YU, D., SONG, H. & ZHANG, Z. 2025. Urbanization in Resource-Based County-Level Cities in China: A Case Study of New Urbanization in Wuan City, Hebei Province. *Sustainability*, 17, 6335.

LI, J. 2024. *Exploring the Impact of School Leadership on Teacher Well-being in Three High-performing Case Study Schools in China*. UCL (University College London).

LI, L. & LIU, Y. 2022. An integrated model of principal transformational leadership and teacher leadership that is related to teacher self-efficacy and student academic performance. *Asia Pacific Journal of Education*, 42, 661-678.

LIU, S. & HALLINGER, P. 2018. Teacher development in rural China: How ineffective school leadership fails to make a difference. *International Journal of Leadership in Education*, 21, 633-650.

LIU, S. & HALLINGER, P. 2024. The effect of department leadership on teacher professional learning in China: A multilevel moderated mediation model. *Educational Management Administration & Leadership*, 17411432241232541.

LIU, W. 2023. *China's 40 Years of Reform*, Springer.

MILES, M. B. 1994. Qualitative data analysis: An expanded sourcebook. *Thousand Oaks*.

MOK, K. H. 2016. Massification of higher education, graduate employment and social mobility in the Greater China region. *British Journal of Sociology of Education*, 37, 51-71.

MOK*, K. H. 2005. Riding over socialism and global capitalism: Changing education governance and social policy paradigms in post-Mao China. *Comparative Education*, 41, 217-242.

QIAN, H. & WALKER, A. 2021. System leadership for promoting collective responsibility and communities of learners: Insights from China. *Leading education systems*. Emerald Publishing Limited.

RIDDER, H.-G. 2014. Book Review: Qualitative data analysis. A methods sourcebook. Sage publications Sage UK: London, England.

RONG-GUANG, Q. & SHI-JIE, L. Research on comprehensive evaluation of enterprises knowledge management capabilities. 2010 International Conference on Management Science & Engineering 17th Annual Conference Proceedings, 2010. IEEE, 1031-1036.

RONG, X. L. & SHI, T. 2001. Inequality in Chinese education. *Journal of Contemporary China*, 10, 107-124.

SEPADI, M. D. 2025. Teachers' understanding of implementing inclusion in mainstream classrooms in rural areas. *Education Sciences*, 15, 889.

TAN, C. 2015. Education policy borrowing and cultural scripts for teaching in China. *Comparative Education*, 51, 196-211.

TAN, C. 2024. A Foucauldian analysis of research Assessment in a postcolonial context: the example of Hong Kong. *Journal of Education Policy*, 39, 660-678.

TSANG, K. K., TENG, Y., LIAN, Y. & WANG, L. 2021. School management culture, emotional labor, and teacher burnout in Mainland China. *Sustainability*, 13, 9141.

WALKER, A. & QIAN, H. 2022. Developing a model of instructional leadership in China. *Compare: A Journal of Comparative and International Education*, 52, 147-167.

WANG, T. 2018. School leadership and professional learning community: Case study of two senior high schools in Northeast China. *Global Perspectives on Developing Professional Learning Communities*. Routledge.

WONG, J. L. 2010. What makes a professional learning community possible? A case study of a mathematics department in a junior secondary school of China. *Asia Pacific Education Review*, 11, 131-139.

XIAO, S., SHENG, J. & ZHANG, G. 2025. Rising tides of knowledge: exploring China's higher education landscape and human capital growth. *Journal of the Knowledge Economy*, 16, 4392-4421.

XUE, S., BUSH, T. & NG, A. Y. 2020. Leadership Preparation in China: Providers' Perspectives. *Research in Educational Administration & Leadership*, 5, 990-1036.

ZHANG, K. & MUHAMMAD, M. 2025. Performance Evaluation Systems for School Leaders in China: Policies and Practices. *Uniglobal Journal of Social Sciences and Humanities*, 4, 58-65.

ZHANG, Y., ZHANG, M., WU, L. & LI, J. 2025. Digital transition framework for higher education in AI-assisted engineering teaching: Challenge, strategy, and initiatives in China. *Science & Education*, 34, 933-954.

ZHAO, X., ZHANG, S. & LU, F. 2025. The Impact of Digital Environmental Governance on Green Transformation: Theoretical Mechanism and Empirical Test from China. *Sustainability*, 17, 157.

ZHAO, Y. 2020. Two decades of havoc: A synthesis of criticism against PISA. *Journal of Educational Change*, 21, 245-266.

ZHAO, Y. & ZHONG, R. 2025. From Meritocracy to Human Interdependence: Redefining the Purpose of Education. *ECNU Review of Education*, 20965311251351988.