The Pillars of Excellence: A Global Perspective on China's High-Performing Basic Education System

Chunyan Wu *

Sichuan Normal University, Chengdu, China

* Corresponding Author Email: 1249936464@qq.com

Abstract. China's basic education system, underpinned by the Nine-Year Compulsory Education, has become a leading example of educational excellence on the global landscape. This paper commences with a comprehensive survey of the diverse educational models and the challenges they face globally, subsequently honing in on the unique architecture of China's educational system. It scrutinizes China's strategic emphasis on education as a critical human capital investment, supported by a robust governance structure and a society that highly prizes educational achievement. The paper integrates insights from established theories, including human capital theory, input-output models, institutional theory, and the capability approach, to dissect the multifaceted factors contributing to China's educational success. Additionally, it evaluates the broader policy implications and the potential applicability of China's strategies to educational reform efforts worldwide. The essay concludes with a global perspective, suggesting that while the Chinese model is uniquely tailored to its context, its core principles of strategic investment and cultural alignment with educational objectives can offer valuable insights for educational enhancement initiatives on a global scale.

Keywords: Compulsory Education, Human Capital Investment, Global Educational Reform, Strategic Educational Framework.

1. Introduction

The global landscape of education is marked by a diversity of systems, each with its unique set of challenges and successes. Among these, China's basic education system has emerged as a prominent example of high performance, capturing the attention of educators and policymakers worldwide. The country's rapid economic growth and cultural emphasis on education have been instrumental in shaping its educational achievements.

Despite the evident success, there remains a debate on the specific factors that contribute to the high quality of China's basic education. While some attribute it to the nation's strong political will and economic investment, others point to its cultural heritage and the strategic governance of its educational policies. The complexity of educational quality makes it a multifaceted issue that requires a nuanced understanding.

How can we account for the high quality of China's basic education system? What theoretical frameworks and empirical evidence can help us understand the interplay between national governance, societal support, and school-level practices that have led to this outcome?

This essay aims to address these questions by examining the theoretical frameworks that measure educational quality and by identifying the key factors at the national, societal, and school levels that have contributed to the excellence of China's basic education system. Using a comparative education lens, the study delves into the specific strategies and practices that have been effective in China, offering insights that may be valuable for other nations striving for educational reform.

2. Concept Clarification

For a nuanced examination of China's educational system, it is essential to establish a comprehensive understanding of the concepts of "basic education".

Fundamentally, basic education is regarded as an inalienable right, guaranteeing that every individual, irrespective of their background, is entitled to a foundational level of scholastic instruction

(United Nations, 1948). Beyond mere access, basic education serves as the developmental foundation, providing the cognitive and social skills necessary for individuals to engage with more advanced educational opportunities and to participate fully in society (UNESCO, 2015). Culturally, basic education plays a key role in transmitting societal norms, values, and traditions. It is a period when cultural identity is formed and where the values of a society are instilled in the next generation (Hofstede, 1980). In a legal and policy context, basic education is often defined by the specific years or stages of education that are mandated by law. In China, this is typically the nine-year compulsory education system, which includes both primary and junior secondary education (Ministry of Education of the People's Republic of China, 2019).

For the purpose of this essay, the term 'basic education' specifically refers to China's Nine-Year Compulsory Education system, which typically encompasses children aged 6 to 15, covering the stages of primary education and junior secondary education. This period is critical for establishing the academic and social foundation for students and is a focal point for both the quantity and quality of educational experiences. The term "basic education" is used to underscore the fundamental role this stage plays in preparing students for advanced learning and full societal participation, in line with China's educational policies and objectives.

3. Literature Review

With a clear conceptualization of basic education, we can now apply various theoretical frameworks to dissect the system's effectiveness. These frameworks will serve as our analytical tools, providing insights into the strategies and practices that have propelled China's educational achievements. Our analysis will be informed by a blend of quantitative data and qualitative case studies, enriched by official statistics, policy documents, and scholarly research. This multifaceted approach will offer a nuanced perspective on the factors contributing to the success of China's basic education system.

3.1. Theoretical Foundations and Educational Investment

The literature on educational quality offers various theories that provide different perspectives on understanding the complex interplay between educational inputs, processes, and outcomes.

Becker's (1964) human capital theory posits education as an asset beyond a mere public service, framing it as an investment in human potential, which is fundamental to economic growth and individual productivity. This concept is particularly illuminating when examining China's strategic approach to education. This investment perspective is particularly illuminating when examining China's strategic approach to education. By treating education as an investment in its people, China has embarked on educational initiatives that have yielded a highly skilled workforce and fostered economic prosperity. In China, this principle is evident in the nation's strategic investment in educational resources. Government expenditure on education has seen a significant increase, rising from 2.7% of GDP in 2007 to 3.3% in 2021 (World Bank, 2021).

Hanushek and Woessmann's (2011) focus on the efficiency of educational processes, where inputs like funding and teacher quality translate into measurable outputs such as student achievements, offers a valuable framework for assessing educational effectiveness, provides another lens through which to view China's educational strategies.

3.2. Governance, Policy Impact, and Holistic Education

Governance, as argued by Wang and Lin (2017), can either facilitate or hinder educational achievement. China's institutional framework is a case in point. It includes the "National Plan for the Development of Teachers", which aims to elevate the professional status and quality of the teaching force. The "Some Opinions on Deepening Educational Reform and Comprehensively Enhancing the Quality of Primary and Secondary Education" policy outlines a series of reforms designed to enhance educational quality. Furthermore, the establishment of the National Education Supervision

Commission demonstrates China's dedication to maintaining educational standards and ensuring compliance. Collectively, these institutional measures reflect China's strategic approach to governance as a means of shaping and improving educational outcomes.

The Compulsory Education Law has played a pivotal role in nearly universalizing access to primary and junior secondary education. Additionally, the "double world-class project" has targeted improvements in higher education quality and efficiency by focusing on top-tier universities and disciplines. These strategic investments and policies underscore China's commitment to educational excellence as a pathway to national development.

Sen's (1999) capability approach, which extends beyond economic outcomes to consider a broader spectrum of educational quality, brings a comprehensive lens to our understanding of education's role in society. This approach values education for its potential to enhance individuals' capabilities, freedoms, and life choices. In China, this philosophy is reflected in the country's holistic educational approach, which seeks to equip individuals with a diverse set of skills. The educational curriculum is designed to foster moral, intellectual, physical, and aesthetic development, aiming to produce well-rounded citizens (Ministry of Education of the People's Republic of China, 2016). The "Healthy China 2030" plan, with its focus on school health promotion and physical education, further illustrates China's commitment to enhancing students' capabilities in all areas of development (State Council of the People's Republic of China, 2016). In summary, China's educational strategy is underpinned by a vision of education as a means of empowering individuals and, by extension, the society.

By integrating insights from these theoretical frameworks, this essay aims to provide a holistic understanding of the factors that contribute to the high quality of China's basic education system. The literature review serves as a foundation for the subsequent analysis of China's educational strategies and practices, offering valuable insights for global educational reform.

4. Factors Contributing to China's High-Performing Basic Education System

4.1. National Level Factors

To really understand how education works at its best, we need to look at the big picture—the national level. The way a country sets up its education system and how it invests in it can make a huge difference. In China, the way they organize, plan, and spend money on education has a big impact. Let's take a closer look at three key areas that China focuses on to make its education system strong and fair for all.

4.1.1. Comprehensive Education Governance System

Institutional theory posits that effective educational governance is key to success. China's blend of centralized control and local autonomy aligns with this principle. The "Outline of China's National Plan for Medium and Long-Term Education Reform and Development (2010-2020)" delineates the strategic goals and policies that guide the nation's educational trajectory. This document is instrumental in shaping the overarching framework within which local educational bodies operate.

To provide a clearer depiction of this structure, an organizational structure (see Figure 1) illustrates the hierarchical organization of China's education system.

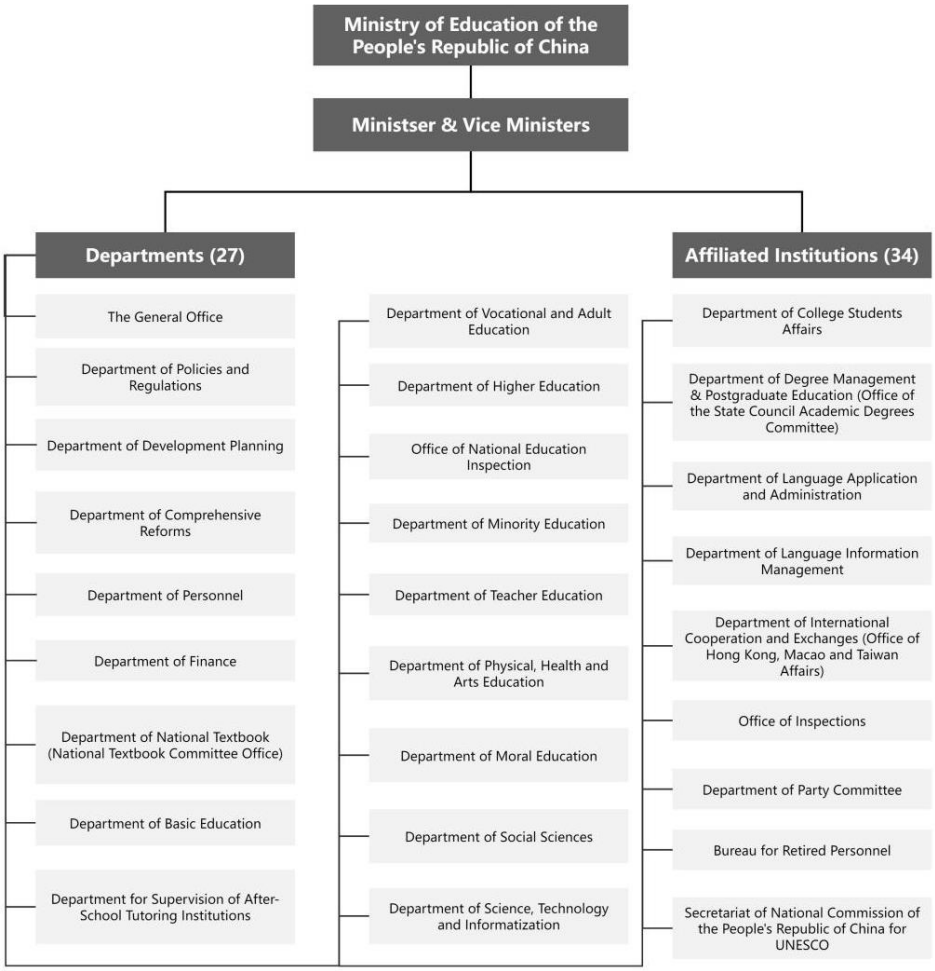


Figure 1. The organizational structure of the Ministry of Education of the People's Republic of China

The organizational chart provides a visual representation of the comprehensive education governance system in China, which is an exemplar of the institutional theory in practice. The chart clearly delineates the Ministry of Education at the apex, with the Minister and Vice Ministers leading the strategic direction of the educational policy. Beneath this central authority, various departments are tasked with specialized responsibilities, ensuring a systematic approach to governance. For instance, the Department of Higher Education is charged with overseeing universities and colleges, while the Department of Basic Education focuses on primary and secondary schools. The Department of International Cooperation and Exchanges facilitates global partnerships, promoting a dynamic and inclusive educational environment. Meanwhile, the Department of Science, Technology, and Informatization drives innovation and technological advancement in education.

This tiered structure, with its blend of centralized guidance and localized implementation, underscores China's commitment to a robust educational framework. It ensures that while the central government sets the broad educational agenda, as outlined in the "Outline of China's National Plan for Medium and Long-Term Education Reform and Development (2010-2020)", local educational bodies have the autonomy to tailor educational practices to meet the specific needs of their communities.

The effectiveness of this governance model is evident in the consistent improvement of educational outcomes across China, as it allows for a balance between maintaining national educational standards and responding to local educational needs. The chart not only illustrates the hierarchical organization but also the interconnectedness of various components within the system, highlighting the collaborative efforts required to achieve the strategic goals set forth in the national plan.

4.1.2. Linking Educational Planning to Macroeconomic Objectives

Human capital theory stresses the significance of long-term educational planning for national development. China's strategic educational planning is deeply integrated with its macroeconomic objectives, as emphasized by the consistent growth in public expenditure on education. The "Five-Year Plans" provide a structured framework for educational development, with specific targets for access, quality, and equity in education, as outlined in the "National Education Development Plan".

One critical aspect of China's educational planning is the consistent growth in public expenditure on education. As reported in the "China Statistical Yearbook," there has been a steady increase in the allocation of resources to education as a percentage of GDP. This upward trend exemplifies the dedication to investing in its educational infrastructure and underscores the long-term vision encapsulated in the "National Education Development Plan."

In 2020, China's national fiscal expenditure on education reached 4.22% of GDP, a significant marker of the country's commitment to educational advancement. This investment not only signifies a financial pledge but also translates into tangible improvements in educational facilities, teacher training, curriculum development, and student support services. The allocation of resources is strategically directed towards achieving the targets set forth in the Five-Year Plans, ensuring that educational development is aligned with the nation's broader economic and social objectives.

By linking educational planning to its macroeconomic strategies, China has been able to create a synergistic relationship between educational development and national growth. This approach has facilitated a comprehensive and coordinated effort to improve educational outcomes, which in turn, contributes to the cultivation of a skilled and knowledgeable workforce capable of driving innovation and economic progress.

4.1.3. Emphasis on Educational Equity

Amidst China's educational landscape, the commitment to equity is a cornerstone principle, deeply intertwined with the ethos of empowering individuals and broadening their life choices, as advocated by Sen's capability approach. The "Compulsory Education Law" stands as a legislative embodiment of this commitment, ensuring that all children have access to eight years of free, foundational education, thereby leveling the playing field for educational opportunities across socioeconomic backgrounds.

This pursuit of educational equity extends to the allocation of financial resources, as evidenced by the "Educational Finance Statistics." The data reveal a strategic pattern of increased per-student funding, which is indicative of a concerted push towards balancing educational resources equitably among various provinces. This approach is particularly evident in the significant growth of per-student public budget education funds in 2022.

Deliberate efforts to achieve equity in educational resource allocation are evident in the "Educational Finance Statistics," which demonstrate an increase in per-student funding across various provinces. This strategic allocation of resources aims to narrow the gap in educational opportunities and outcomes for students in different regions, particularly in the foundational years of basic education.

In 2022, the per-student public budget education funds saw notable increases, with the Xinjiang Uygur Autonomous Region experiencing the fastest growth at 33.09% for kindergartens. This significant boost in funding underscores a commitment to providing equitable access to early childhood education, which is a critical component of the basic education stage. Similarly, a substantial 8.85% increase in funding for primary schools in Tianjin reflects a concerted effort to improve educational infrastructure and quality in the early years of schooling.

These targeted investments reflect China's dedication to ensuring that all children, regardless of their geographical or socioeconomic background, have access to quality basic education. By prioritizing equity in the allocation of educational resources, the country is taking meaningful steps to empower its young citizens and set them on a path of lifelong learning and development.

4.2. Societal Level Factors

Moving beyond the national framework, we turn our attention to the societal factors that significantly influence the quality of education. These factors, deeply embedded in the social fabric, play a crucial role in shaping educational outcomes. They encompass economic support, cultural heritage, and educational assessment reforms, all of which contribute to the overall educational experience. In China, these societal elements are particularly noteworthy for their impact on fostering a robust and equitable education system. The following sections will explore how these societal factors are intertwined with and enhance the educational landscape in China.

4.2.1. Robust Economic Support: A Foundation for Educational Excellence

Economic theories of human capital development suggest that investment in education leads to long-term economic benefits (Schultz, 1961). The "National Education Development Plan" articulates a commitment to increasing education spending, reflecting the understanding that education is a key driver of economic growth.

To provide a tangible representation of this strategic insight, Figure 2 presents a chart showing the remarkable growth in the number of graduates from China's Nine-Year Compulsory Education system. The data, collected from 2019 to 2023, highlights the increasing number of graduates from both primary and junior secondary schools, measured in tens of thousands of persons (China National Bureau of Statistics, 2020).

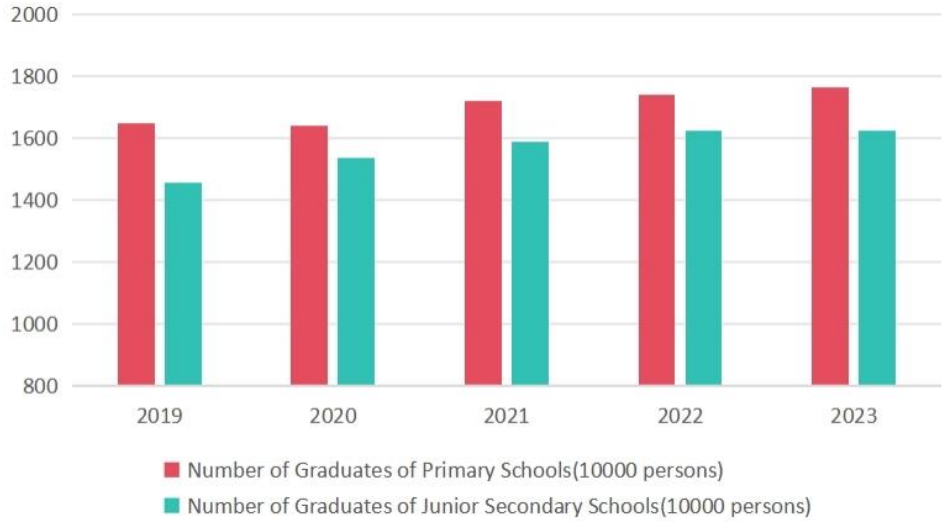


Figure 2. Growth in the Number of Graduates from Compulsory Education in China (2019-2023). (China National Bureau of Statistics, 2020)

The upward trend in the number of graduates, as depicted in the chart, is a testament to the effectiveness of viewing education as an investment.

This growth is not an isolated phenomenon but part of a broader commitment to education, particularly in the fields of science and technology. This commitment is evident in the annual rise of research and development (R&D) personnel. For instance, according to the World Intellectual Property Organization (WIPO), China has appeared as one of the major players in R&D activities in recent years. Chinas share in the total R&D expenditure increased from 24.6% in 1992 to 62.6% in 2010 (WIPO, 2021). Moreover, the correlation between educational attainment and income levels has fostered a society that is not only more affluent but also more productive (OECD, 2020), highlighting the transformative power of education as an investment. In essence, China's investment in education has yielded a workforce that is not only skilled but also a driving force behind the country's economic success.

According to the "China Statistical Yearbook 2022," education expenditure as a percentage of GDP has steadily increased, reaching 5.2% in 2021, indicating a strong economic foundation for educational initiatives (National Bureau of Statistics of China, 2022).

4.2.2. Rich Cultural Heritage

Culture is a country and nations soul. A study published in the "Comparative Education Review" found that cultural capital, including Confucian values, significantly influences educational attainment in China (Steele, 2010). Cultural confidence is a foundational and profound force that propels the progress of a nation and its people.

The socialist culture with distinctive Chinese characteristics is deeply rooted in the rich tapestry of China's exquisite traditional culture, which has been cultivated over the millennia of Chinese civilization. It has evolved from the revolutionary and progressive socialist culture that emerged alongside the Chinese people's revolutionary, constructive, and reformative endeavors, led by the Party. Furthermore, it is firmly grounded in the extensive and profound practice of socialism with Chinese characteristics.

The "Outline of China's National Plan for Medium and Long-Term Education Reform and Development (2010–2020)" integrates moral and civic education, aligning with the cultural emphasis on holistic development.

4.2.3. Educational Evaluation and Assessment Reform

The "Several Opinions on Deepening Educational Reform" policy document calls for a shift from a narrow focus on academic scores to a more comprehensive evaluation of student capabilities.

A report by the "OECD Education at a Glance 2020" indicates that China has been implementing reforms to reduce student stress and improve the quality of education by focusing on a broader range of skills (OECD, 2020).

4.3. School Level Factors

As we shift our focus from the societal to the school-level factors, it becomes evident that the everyday environment where learning takes place has a profound impact on educational outcomes. These factors, ranging from the school's physical and emotional atmosphere to the quality of its teaching staff, are integral to the student experience. In China, deliberate efforts have been made to cultivate a positive and safe school environment and to develop a high-quality teacher corp. The following sections will explore how these school-level factors contribute to the overall quality of education in China, setting the stage for academic success and personal growth for its students.

4.3.1. A Positive and Safe School Environment

In today's world, where conflicts such as the Russia-Ukraine and Israel-Palestine disputes are prevalent, the international situation is increasingly severe, and the issue of peace is more critical than ever. In this context, the creation of a safe school environment is not only a local concern but a global imperative. While some countries are grappling with the implications of policy changes, such as the recent legalization of marijuana in Germany, others, like China, are making significant efforts to ensure the safety and well-being of their student populations.

In contrast, China has been focusing on building a robust school safety framework. The Chinese government has emphasized the importance of school safety as a fundamental aspect of public safety and social harmony. Policies such as those outlined in the "Guidance on Strengthening School Safety Risk Prevention and Control System Construction" issued by the State Council highlight the country's commitment to creating a safe and secure learning environment for students.

The Chinese approach to school safety is comprehensive, covering everything from physical infrastructure to emergency response protocols. Measures include improving the quality of school buildings, enhancing risk assessment and intervention strategies, and integrating safety education into the curriculum. The government has also called for the establishment of a school safety area system, where strict regulations are enforced to ensure the safety of students both within and outside the school premises.

While each nation's context is unique, the importance of a safe and nurturing school environment as a foundation for peace and development is a universal truth. In conclusion, as the world navigates through complex social, political, and health challenges, the need for a safe and secure school

environment is more evident. Countries like China are leading by example, demonstrating that with a strategic and comprehensive approach, it is possible to foster a learning environment that protects and nurtures future generations.

4.3.2. High Commitment, High Standards: The Quality of China's Teaching Corps

The OECD's Teaching and Learning International Survey (TALIS) provides a comprehensive framework for assessing and comparing the quality of teachers across different countries. TALIS data offers insights into various aspects of teacher quality, including professional development, working conditions, and the impact on student learning outcomes.

According to TALIS 2018 data, teachers in China are more likely to participate in professional development activities compared to the TALIS average. Specifically, 90% of teachers in China reported participating in at least one form of professional development in the year before the survey, which is higher than the TALIS average of 72%. This indicates a strong emphasis on continuous learning and improvement among Chinese teachers.

When it comes to working conditions, TALIS reveals that teachers in China spend less time on teaching-related tasks outside of classroom instruction than their counterparts in the United States and the United Kingdom. On average, Chinese teachers reported spending 36.1% of their workweek on non-teaching tasks, compared to 45.5% in the U.S. and 42.3% in the U.K. This suggests that Chinese teachers may have more time to focus on instruction and student engagement.

Furthermore, TALIS data shows that Chinese teachers have a higher sense of self-efficacy, which is the belief in their ability to successfully perform their jobs (OECD, 2018). In China, 84% of teachers reported feeling confident in their ability to address diverse student needs, which is above the TALIS average of 77%. This confidence can translate into more effective teaching practices and better student outcomes.

In comparison, the U.S. and the U.K. have reported lower percentages of teachers feeling confident in addressing diverse student needs, which could impact the quality of education provided to students, particularly those from different cultural or socio-economic backgrounds.

It's important to note that while TALIS provides valuable data for international comparison, each country's educational context is unique, and multiple factors contribute to the quality of the teaching workforce. The high participation in professional development, lower percentage of time spent on non-teaching tasks, and higher self-efficacy among Chinese teachers, as indicated by TALIS data, suggest a strong foundation for a high-quality teacher corps in China.

5. Conclusion and Discussion

This essay has shed light on the multifaceted success of China's Nine-Year Compulsory Education system, highlighting the strategic integration of educational planning with national development and the emphasis on teacher quality and student engagement.

5.1. Strategic Educational Investment

The consistent growth in public expenditure on education, as reflected in the "China Statistical Yearbook," and the alignment of educational planning with macroeconomic objectives have been pivotal in fostering a skilled workforce. This strategic investment not only signifies financial backing but also translates into tangible improvements in educational infrastructure and teacher training, contributing to the nation's economic progress.

5.2. Comparative Insights and Theoretical Alignment

International comparisons, especially with OECD's TALIS data, underscore the effectiveness of China's educational strategies. The high participation of Chinese teachers in professional development and their focus on instruction reflect the principles of educational efficiency, where resources are efficiently converted into student achievements.

5.3. Adaptability and Future Directions

While the Chinese model offers valuable insights, its adaptability to other contexts requires careful consideration due to cultural and structural differences. Future research should explore the contextualization of China's educational principles to other settings, ensuring effectiveness and equity.

5.4. Global Implications for Educational Reform

The Chinese experience emphasizes the importance of a strategic approach to education that is aligned with cultural values and national goals. As the global educational landscape evolves, the Chinese model can inspire a reevaluation of educational priorities, encouraging the development of contextually appropriate strategies that enhance academic and personal outcomes for students.

Final Reflections In conclusion, China's Nine-Year Compulsory Education system exemplifies the potential of a well-orchestrated educational framework that is in harmony with broader national objectives. The success of this system serves as a beacon for global educational reform, suggesting that a strategic, comprehensive, and culturally aligned approach can lead to significant improvements in educational quality and student success.

5.5. Final Reflections

In conclusion, China's Nine-Year Compulsory Education system exemplifies the potential of a well-orchestrated educational framework that is in harmony with broader national objectives. The success of this system serves as a beacon for global educational reform, suggesting that a strategic, comprehensive, and culturally aligned approach can lead to significant improvements in educational quality and student success. As the world seeks to improve educational outcomes, the Chinese experience offers a valuable perspective that can inform and inspire global efforts towards educational reform and excellence.

However, the replicability of China's strategies must be considered within the unique socio-political and economic contexts of other nations. The cultural nuances and governance structures that underpin China's success may not be directly transferable. Therefore, while the Chinese model provides a valuable reference, it necessitates adaptation to local conditions and cultural sensitivities.

Looking ahead, the international community can benefit from a holistic approach to education that emphasizes not only academic achievement but also the development of well-rounded individuals. As the global landscape of education evolves, fostering a collaborative dialogue that encourages the sharing of best practices and the development of contextually appropriate strategies is imperative.

References

[1] United Nations. (1948). Universal Declaration of Human Rights. Retrieved from https://www.un.org/en/universal-declaration-human-rights/.

[2] UNESCO. (2015). Education 2030 Framework for Action. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000245656.

[3] Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, CA: Sage Publications.

[4] Ministry of Education of the People's Republic of China. (2019). China Education Statistical Yearbook. Retrieved from http://www.moe.gov.cn/.

[5] Becker, G. S. (1964). Human capital: A theoretical and empirical analysis, with special reference to education. The Journal of Political Economy, 70 (5), 1 - 50.

[6] China National Bureau of Statistics. (2020). Education statistics. Retrieved from http://www.stats.gov.cn/english/.

[7] World Intellectual Property Organization. (2016). World Intellectual Property Indicators. Retrieved from https://www.wipo.int/edocs/pubdocs/en/wipo_pub_econstat_wp_32.pdf.

[8] OECD. (2020). Education briefly 2020: OECD indicators. OECD Publishing. Retrieved from https://doi.org/10.1787/69096873 - en.

[9] Hanushek, E. A., & Woessmann, L. (2011). The economics of international differences in educational achievement. The Economics of Education Review, 30 (1), 27 - 40.

[10] World Bank. (2021). Government expenditure on education (% of GDP). Retrieved from https://data.worldbank.org/indicator/SE. XPD. TOTL. GD. ZS.

[11] Ministry of Education of the People's Republic of China. (2020). Nine-Year Compulsory Education Law. Retrieved from http://www.moe.gov.cn/.

[12] Ministry of Education of the People's Republic of China. (2015). The double high plan. Retrieved from http://www.moe.gov.cn/.

[13] Wang, Y., & Lin, A. (2017). Educational governance in China: Centralization, decentralization, and beyond. Educational Research for Policy and Practice, 16 (1), 1 - 14.

[14] Sen, A. (1999). Development as freedom. Oxford University Press.

[15] Ministry of Education of the People's Republic of China. (2016). Curriculum standards. Retrieved from http://www.moe.gov.cn/.

[16] State Council of the People's Republic of China. (2016). Healthy China 2030. Retrieved from http://www.gov.cn/.

[17] Schultz, T. W. (1961). Investment in human capital. The American Economic Review, 51 (1), 1 - 17.

[18] National Bureau of Statistics of China. (2022). China Statistical Yearbook. Retrieved from http://www.stats.gov.cn/.

[19] Steele, M. (2010). Confucian education in contemporary China. Comparative Education Review, 54 (1), 86 – 111. https://doi.org/10.1086/649419.

[20] OECD. (2020). Education briefly 2020: OECD Indicators. OECD Publishing. https://doi.org/10.1787/69096873-en.

[21] OECD. (2018). "Teachers' Self-Efficacy." In TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners. OECD Publishing. Retrieved from https://www.oecd-ilibrary.org/education/talis-2018-results-volume-i_304a50fa-en.