

Comparative Analysis of Domestic and International Educational Models: A Case Study of China and the Czech Republic

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Abstract: Education is an important driver of national development and social progress, attracting global attention and driving reforms to adapt to the changing socio-economic landscape. This study compares and analyses education models in China and the Czech Republic, highlighting the significant impact of cultural, historical, social, political, and economic factors on education. Additionally, it delves into the pivotal role of political and economic factors. This paper argues that the country's political environment, history, and culture will have an impact on the formation of the educational environment, the establishment of educational models, and the development of education. By comparing the two countries, this paper puts forward relevant suggestions for the development of education. This paper believes that first of all, it is necessary to improve the education model according to the national situation, clarify the educational goals, and cultivate comprehensive and sustainable development talents. At the same time, this paper encourages international educational cooperation to improve educational standards and prepare students for a globalized future.

Keywords: Comparative analysis, educational models, China, Czech Republic

1. Introduction

Education has perpetually stood as a pivotal pillar supporting national development and a fundamental catalyst for societal advancement. Furthermore, it commands substantial attention within the global arena, prompting nations to continually explore and enhance their educational paradigms to align with evolving socio-economic dynamics. Over the past few decades, countries such as the People's Republic of China (hereafter referred to as China) and the Czech Republic (hereafter referred to as the Czech) have undergone significant reforms in their educational models. These reforms seek to elevate educational quality, foster student development, and address the imperatives of globalization. This study endeavors to juxtapose the educational model reforms in China and the Czech Republic, elucidate their repercussions on the education system and students, and derive valuable insights and inspiration from their experiences.

2. Comparative Analysis of Differences: China vs. Czech Educational Models

This section conducts a comprehensive comparative analysis of the educational models in China and the Czech Republic, highlighting the disparities in their education systems, structures, goals, philosophies, methods, teaching approaches, policies, and regulations. These distinctions offer insights into the respective educational landscapes of the two nations, reflecting their distinct cultural, social, and economic contexts.

2.1. Comparison of Education Systems and Structures

Divergences in the education systems and structures of China and the Czech Republic underscore the differing educational philosophies and priorities of these countries.

In terms of educational hierarchy, China's system is notably intricate, encompassing early childhood education, primary school, junior high school, high school, undergraduate education, master's, and doctoral programs. It underscores the significance of prolonged learning and opportunities for further study, with the college entrance examination system wielding substantial influence in determining access to higher education. According to Ludíková and Malinovská, the differences in the education systems and structures of China and the Czech Republic underscore the varying educational philosophies and priorities of these countries [1]. In contrast, the Czech education system is characterized by its streamlined structure, comprising basic education, secondary education, and higher education. This framework prioritizes the equilibrium between comprehensive student development and career advancement, affording students the flexibility to choose diverse career paths during their secondary education.

When it comes to educational resource allocation, China grapples with significant disparities in the allocation of educational resources, with first-tier cities typically benefiting from greater resources and opportunities, while rural and remote areas contend with resource inadequacies. This results in unequal educational opportunities and regional educational disparities. Conversely, the Czech Republic boasts a more balanced distribution of educational resources, with relatively consistent infrastructure and teacher allocations across schools. This egalitarian approach mitigates disparities rooted in social class and geographic location, ensuring broader access to high-quality education.

2.2. Comparison of Educational Goals and Philosophies

Li states that "Educational objectives and philosophies in China and the Czech Republic diverge, reflecting the cultural, social, and economic contexts unique to each nation" in their comparative research on special education degree plans between the Czech Republic and Mainland China [2].

In terms of educational goals, China's educational objectives underscore academic achievement and the dissemination of knowledge. The Chinese education system fosters an environment that encourages students to excel on the international stage, cultivating a substantial cadre of engineers, scientists, and professionals. This emphasis on academic competitiveness is palpably manifested through the college entrance examination system. Conversely, Czech educational goals are more comprehensive, prioritizing holistic individual development and societal responsibility. The Czech education system centers on nurturing students' creative and critical thinking abilities, and cultural literacy, and encourages active participation in social and cultural spheres.

According to Li, Chinese educational philosophy is characterized by discipline, collectivism, and an emphasis on family values in the context of special education degree plans between the Czech Republic and Mainland China [2]. Students typically grapple with stringent academic expectations and competitive pressures, with the education system striving for efficiency and excellence. In contrast, the Czech educational philosophy places greater emphasis on student autonomy, innovation,

and democratic engagement. The education system encourages students to articulate their opinions, foster independent thinking, and actively participate in society.

2.3. Comparison of Educational Methods and Teaching Approaches

2.3.1. The Approach in China

The pedagogical methods and teaching approaches in China and the Czech Republic exhibit notable distinctions across classroom education, academic research, and educational practice.

By Peng, the educational model in China encompasses a range of theoretical paradigms, each characterized by distinctive attributes, specifically designed to suit particular educational settings [3]. The primary theoretical models within China's educational landscape are as follows:

The transmit-receive teaching model occupies a pivotal position in Chinese education, emphasizing the role of teachers as knowledge transmitters, while students assume the role of knowledge recipients. This model places a significant emphasis on the acquisition of foundational knowledge and the study of traditional subjects such as mathematics, languages, and sciences.

2.3.2. The Approach in the Czech Republic

The Czech educational model encompasses a diverse array of theoretical paradigms, each resonating with the educational attributes of different stages. The principal theoretical models inherent in the Czech education model are as follows.

The programmed teaching model emphasizes adherence to predefined teaching plans and materials. Teachers play a central role in the instructional process, and students progress through materials in a structured manner. This model underscores the systematic and orderly nature of teaching.

By contrast, the discovery teaching model encourages students to acquire knowledge through independent exploration and experimentation. Students are prompted to pose questions and seek solutions, with teachers providing support and guidance. This approach underscores student initiative and exploration. Shifting to the mastery learning model underscores individualized learning and profound comprehension. Students are required to achieve mastery in specific domains or subjects through repeated study and practice, with a focus on self-monitoring and reflection. Furthermore, the implicit teaching model emphasizes informal learning and cultural inheritance within the educational process. Students acquire knowledge and skills through participation in social and cultural activities, with a keen emphasis on fostering cultural literacy and social responsibility.

Generally, in the context of classroom education in China, didactic teaching predominates. Teachers deliver knowledge in a didactic manner, expecting students to absorb and memorize substantial information. While this approach prioritizes the acquisition of foundational knowledge, it may inadvertently stifle critical thinking and creative capacities among students. Conversely, classroom education in the Czech Republic emphasizes interaction and student involvement. In terms of educational goals, China's educational objectives emphasize academic achievement and the dissemination of knowledge. Teachers actively encourage students to pose questions, engage in discussions, and solve problems, thereby nurturing critical thinking and fostering self-directed learning.

2.4. Comparison of Educational Policies and Regulations

Differences in educational policies and regulatory frameworks in China and the Czech Republic reflect distinct approaches to education management and oversight by their respective governments.

In terms of educational governance, China's educational system is characterized by a relatively centralized structure. The national education department wields significant control over educational

policies and standards, resulting in national-level policies that exhibit a degree of uniformity and integration. Conversely, the Czech Republic's educational governance is relatively decentralized, with educational decision-making authority dispersed across local governments and school management levels. This decentralization permits districts and schools to formulate educational policies and plans tailored to their unique needs and characteristics.

Shifting to financial support for education, the Chinese government allocates substantial financial resources to the education sector, particularly in support of basic and higher education. However, due to its large population, resource disparities persist, posing challenges to resource allocation. On the other hand, the Czech government also values education but benefits from a smaller population and land area, facilitating more streamlined resource allocation and management. This contributes to a relatively balanced distribution of educational resources.

In summary, significant disparities exist between the education models in China and the Czech Republic, encompassing education systems, goals, methods, policies, and regulations. These distinctions are emblematic of the unique cultural, social, and economic contexts that shape each nation's approach to education. A thorough understanding of these disparities offers valuable lessons and insights for global education reform, fostering international education cooperation and knowledge exchange. Subsequent chapters will delve deeper into the impact of these differences on the education systems and students of the two countries, providing implications and reference points for other nations.

3. Analysis of Factors Contributing to Differences

3.1. Influence of Cultural, Historical, and Social Factors on Educational Models

The marked disparities between China's and the Czech Republic's educational models are deeply ingrained and find their origins in the intricate interplay of cultural, historical, and social factors within each nation. The following analysis elucidates the influence of these factors on the distinctions in educational models between the two countries.

Firstly, culture wields a profound influence in shaping educational models. According to Wozniaková, in her teaching experience with Czech and Chinese university students in Business Economics, it was observed that Chinese students tended to adopt a more passive approach to learning. They often remained silent during classes, did not ask questions, and accepted information and knowledge presented by the teacher. This behavior characterized them as passive participants in the classroom [4]. Chinese culture underscores collectivism, veneration of family values, and reverence for authority. This cultural heritage forms the foundation for China's education system, which places a premium on discipline, competition, and academic excellence. Students are encouraged to adhere to authority and strive for scholastic supremacy, manifesting in the fiercely competitive and academically rigorous environment epitomized by the college entrance examination. In contrast, Czech culture accentuates individualism, autonomy, and democratic values. This cultural ethos impels the Czech education system to emphasize students' self-directed learning, autonomous thinking, and active participation in societal affairs. Students are encouraged to express their opinions freely and respect diverse viewpoints, which find expression in the dynamic interactions and open discourse within the educational landscape.

Secondly, historical events and evolutions have played a pivotal role in shaping educational models. China's modern history is marked by tumultuous upheavals. Conversely, the Czech Republic's historical trajectory, while characterized by its share of wars and political transitions, has entailed comparatively fewer interruptions to its education model. The Czech Republic established a relatively stable educational framework in the mid-20th century, accentuating comprehensiveness and equilibrium in education.

Lastly, social factors, including economic status, social structure, and geographical context, exert a discernible influence on educational models. China, as the world's largest developing nation, grapples with substantial educational needs and formidable competitive pressures. Its extensive population engenders a complex distribution of educational resources, perpetuating challenges such as urban-rural disparities and educational inequality. In contrast, the Czech Republic's relatively modest size, along with the dispersion of educational resources, fosters a more balanced educational system. This social structure facilitates the streamlined management and allocation of educational resources, promoting equitable educational development.

3.2. Impact of Political and Economic Factors on Educational Models

Political and economic factors wield a significant influence on the formulation and evolution of educational models. The distinct political and economic contexts of China and the Czech Republic have engendered divergent trajectories for their respective education systems.

Considering political factors, the political framework in China emphasizes centralization, unity, and stability. The state exercises considerable control over educational policies and standards, enabling swift enactment of education reform and development initiatives. The political leadership's staunch emphasis on and support for education has propelled China's educational ascendancy, elevating the nation's educational stature. Conversely, the Czech political system embraces a more democratic ethos, entailing relatively minimal government intervention in educational affairs. Consequently, educational reforms in the Czech Republic typically necessitate protracted political consultations and decision-making processes, susceptible to the impact of political shifts.

When taking economic factors into account, China's remarkable economic growth has underpinned substantial resource allocation to education. As the nation's economy burgeoned, investments in education surged, culminating in enhanced educational quality and heightened academic standards among students. Economic affluence has concurrently bolstered families' capacity to support their children's education, consequently elevating student academic performance. On the flip side, the Czech Republic contends with a comparatively smaller economy and relatively finite educational resources. Insufficient government investment in education may result in teacher shortages and the maintenance of aging educational infrastructure. Nonetheless, the Czech Republic sustains a high-quality education system, indicative of its profound regard for education. According to a study conducted by Nocar, et al. on the utilization of educational hardware and software in mathematics education at elementary schools in the Czech Republic, they explored the factors contributing to the effective implementation of modern teaching methods, including the efficient use of contemporary digital technologies and digital learning materials [5]. In conclusion, the divergences between China's and the Czech Republic's education models are a product of the multifaceted interplay of cultural, historical, social, political, and economic factors. These factors are inextricably interwoven and collectively shape the orientation and priorities of each nation's education system.

4. Recommendations

4.1. Recommendations for Improving Educational Models

China can glean insights from the Czech education model by intensifying its focus on nurturing students' comprehensive qualities. Considering the profound influence of culture, China's education system should pay more attention to cultivating students' comprehensive qualities instead of just implanting academic knowledge. This requires encouraging students to participate in cultural, artistic, and sporting activities and developing their critical thinking, creativity, and social responsibility. At the same time, China's education can continue to emphasize the balance between academic and professional development, encouraging students to choose a career path that aligns with their interests

and abilities [6]. It should incentivize students to select career paths congruent with their proclivities and capacities.

According to Ren F and Meng Y, both China and the Czech Republic should endeavor to enhance the quality of education [7]. China can mitigate students' excessive academic burdens and encourage teachers to embrace more interactive and pragmatic pedagogical methods. Concurrently, it must bolster the equitable allocation of educational resources, ensuring that both rural and urban students have access to high-quality education.

According to Brom, C., et al., during the COVID-19 lockdown in the Czech Republic, the government swiftly implemented a set of measures in response to the situation [8]. The Czech Republic can bolster the training and professional development support for educators while elevating teachers' educational credentials and pedagogical competencies. Furthermore, it must attend to students' mental well-being by offering requisite psychological support and counseling services.

Educational reform remains pivotal to ameliorating education models. China should continue to champion education reforms designed to attenuate the influence of examinations and motivate students to participate more robustly in practical and project-based learning. It should intensify innovative research about educational and pedagogical methodologies, assimilate international best practices, and enhance the adaptability and innovativeness of education. The Czech Republic can promote greater collaboration between schools and enterprises, forging the integration of vocational education and practical exposure. Furthermore, it must prioritize the integration of information technology, elevating the digital acumen of education, and furnishing students with increased online learning opportunities and cross-border educational experiences.

4.2. Future Trajectory and Prospects of International Educational Cooperation

The future of international educational cooperation should be anchored in the following focal points. Reflecting on the insights from the first part of the analysis, the future of international educational cooperation can be shaped in a way that leverages the strengths of both China and the Czech Republic. Firstly, it is imperative to enhance educational exchanges and partnerships between China and the Czech Republic, fostering additional collaborative initiatives encompassing student exchanges, teacher professional development, and research collaborations [9]. Secondly, heightened collaboration with international educational organizations and institutions should be pursued. According to Slowík et al., During the implementation of their project, the authors tested new support tools for students at risk of school failure in seven mainstream partner schools in the Pilsen region, which aligns with the need for increased collaboration with international educational organizations and institutions [10]. China and the Czech Republic can engage in partnerships with international educational entities to share educational resources and best practices. This entails active involvement in global education research and development endeavors.

Lastly, emphasis must be placed on fostering cross-cultural and international education. This encompasses the cultivation of students with cross-cultural backgrounds, augmenting their global outlook and competitive edge. Simultaneously, the promotion of digitalization and online learning in education will enhance the accessibility and flexibility of global educational cooperation.

In sum, despite disparities in their education models, China and the Czech Republic stand to gain from deepened international education cooperation and exchanges. Through mutual learning and collaboration, both countries can elevate their educational standards, nurture globally-minded, innovative individuals, and fortify their readiness for an increasingly globalized society.

To sum up, many factors need to be considered to improve the education model, among which cultural factors are one of them. As mentioned earlier, culture has had a profound impact on the Chinese and Czech educational models. Therefore, this paper recommends that appropriate measures

be taken to better meet the needs of students, improve the quality of education, and cultivate competitive individuals.

5. Conclusions

This study, conducted through a comparative analysis of education models in China and the Czech Republic, elucidates key findings, articulates recommendations for educational enhancement, and explores the future trajectories of domestic and international education models. Primarily, the variations in education models underscore the impact of cultural, historical, and social factors. The research findings illuminated the significant role of government policies and economic circumstances in shaping the education models of both countries. Distinct cultural traditions and historical events have molded the educational philosophies and methodologies in both nations, while societal structures and economic contexts also contribute to the character of the education model. Furthermore, the political system and economic circumstances exert a vital influence on education models. Government policies concerning education and the extent of economic backing significantly affect educational quality and resource allocation. Political decision-making processes and the structure of the political system further influence the trajectory and pace of education reform.

In the forthcoming years, the education models of China and the Czech Republic will face a confluence of challenges and opportunities. On the domestic front, both nations can adapt to evolving societal demands and economic developments by deepening education reform, elevating educational quality, and cultivating global talent. On the international stage, these countries can fortify educational cooperation and exchanges, thereby contributing substantively to the evolution of the global education system.

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