

Challenges and Limitations Arisen from China's Mass Higher Education Shift and Its Expansion Policies: Perspectives of Students, Institutions and Society

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Abstract. The Chinese government has taken numerous policy measures to develop its higher education system since Reform and Opening Up. Their commitment to expanding access to higher education has led to a remarkable increase in the number of universities and enrollment rates. However, this expansion has prompted many challenges and limitations. This research paper presents the multifaceted challenges and limitations faced by Chinese higher education expansion from the perspectives of students, institutions, and society. From the perspective of students, the first challenge brought by the more extensive access to higher education is the increased competition in K-12 education. In order for their children to be more competitive, students' parents invest a considerable amount of money in extracurricular tutoring which has brought a considerable financial burden to the student's family. From the institutional perspective, the rapidly increasing number of students brought the institution various challenges including limited resources, space, and faculty members. Lastly, from the perspective of society, there are many challenges and limitations regarding increasing access to higher education including the failure to improve social mobility, excessive labor in the job market, etc. Through a comprehensive examination of the challenges and limitations of Chinese higher education, this paper clarifies the complexity of the Chinese higher education system and offers insights into potential strategies for improvement.

Keywords: Chinese higher education; Mass higher education; K-12 education; Expansion.

1. Introduction

Before digging into Chinese current higher education, this paper will briefly talk about how the Chinese government has evolved and modified its policies and strategies over time. Since the establishment of the People's Republic of China, signaling the success of the socialist revolution in mainland China, the Chinese government has been exploring strategies to advance its higher education. The Chinese government initiated its effort by establishing a centralized higher education system aligned with the Soviet model until the model was abolished with the deterioration of relations between the PRC and the former U.S.S.R. During this period, Chinese higher education institutions underwent profound reorganization and reconstruction. As mentioned by Wu and Zha, comprehensive universities were reorganized based on specific specialized knowledge, and the individual departments within these universities also became more specialized during the reform [1]. Despite that the Soviet model in the Chinese higher education system had been already abolished, the influence of the Soviet model remains in the Chinese higher education system including excessive departmentalization and over-specification [2]. Between 1967 and 1976, the Cultural Revolution caused severe damage to higher education in China, making it one of the most devastated sectors in the country. Two years after the Cultural Revolution, China initiated Reform and Opening Up, and Chinese higher education restarted its reforms and adopted knowledge and practices from developed countries [1]. Over the decades, the Chinese government has continued to evolve its higher education system by incorporating and adapting elements from other educational models to its diverse social and economic needs. The late 20th and early 21st centuries witnessed a notable rise in international endeavors in Chinese society as well as in the Chinese higher education system [3].

Alongside the expansion of Chinese higher education since 1978, there have been a series of initiatives enacted by the Chinese government to not only transform into mass higher education but also improve its global influence in research and academia. Three of the most known initiatives are Project 211, Project 985, and Double First-Class University Plan. These initiatives have been instrumental in China's ambition to elevate the quality and global competitiveness of its higher education system. In 1995, the Ministry of Education (MOE) launched Project 211 to elevate the research capabilities of approximately 100 prime universities to meet the demands of the 21st century [4]. Launched in 1999, Project 985 refined 39 universities from the initial "211" institutions, with the Ministry of Education, aiming to allocate limited resources to these institutions to propel China toward world-class status [4]. In 2015, the Chinese State Council introduced the "Double First-Class University Plan," to replace Project 211 and 985 and at the same time, elevate basic research and establish China as a prominent player, possibly even a leader, in international academic research [5]. By providing a substantial budget, resources, and support, these initiatives have propelled China's higher education system toward greater prominence and recognition around the world.

In addition to improvement in global prominence and recognition, the Chinese government's effort in higher education also contributes to the transition into mass higher education. There has been a remarkable increase in the number of college students and that of higher education institutions. According to Ding, Wu, Yang, and Ye, the number of undergraduate freshmen increased from 1 million in 1998 to nearly 7 million in 2012 [6]. As mentioned by Piracha, Tani, Zimmermann, and Zhang, the number of public universities increased from 500 to 2500 and at the same time, private universities also saw a similar fivefold rise, growing from a few to a total of 500 between 1998 and 2019 [7]. There are also diverse types of higher education institutions in China such as public-private cooperative universities and Sino-foreign cooperative universities.

Massification and Internalization of Chinese higher education have indeed yielded numerous positive outcomes. However, this expansion has prompted many challenges and limitations for students, institutions, and society. By delving into each perspective in detail, this research paper provides a comprehensive analysis of the multifaceted challenges and limitations that have emerged alongside China's higher education expansion.

2. Challenges and Limitations from the Student Perspective

The Chinese higher education expansion has given rise to various challenges and limitations for students as well as their parents. China's commitment to expanding higher education access has led to a considerable improvement in democratizing higher education, but access is still quite limited given the current small higher education scale and huge population in China. Therefore, this limited increase in access to higher education has brought various challenges to students as well as their families. These challenges and limitations reflect most on K-12 education in China given higher education's profound impact on the whole education system.

2.1. Increased K-12 Education Competition

The expansion of higher education in China over the past few decades has had profound effects on the entire education system, from elementary school to post-secondary education. Central to this transformation is the National College Entrance Examination, commonly known as the Gaokao, an exceptionally competitive standardized examination that determines a student's eligibility for admission to Chinese universities. While this expansion has brought about positive changes, it has also given rise to significant challenges, particularly for K-12 students and their families. The Gaokao is known for its intense competition, and it has a comparatively lower pass rate when compared to standardized exams commonly used in Western countries [8]. Rather than assess students holistically, the Gaokao only assesses students based on their scores in different subjects such as Chinese, Mathematics, Foreign languages, and many other sciences and humanities. Despite its constraints on comprehensive assessment, the Gaokao is still seen as not only a method of social filter but also as a

significant avenue through which ordinary students can upgrade their social status [9]. Therefore, Chinese students and their parents have invested substantial time to get higher grades and secure a seat in college. This competition associated with Chinese Gaokao thereafter significantly influences Chinese K-12 education. The Gaokao's reputation for competition and its role as the primary determinant for college admissions have placed immense pressure on K-12 students. This pressure has, in turn, fostered an intense focus on academics and standardized test preparation from an early age. The emphasis on standardized tests, particularly the Gaokao, has led to an educational landscape that places a heavy emphasis on rote memorization. Students are frequently tasked with memorizing vast amounts of information to excel in exams, leaving little room for creativity or critical thinking in different subjects. This pedagogical approach can stifle students' intellectual curiosity and hinder their ability to think critically and solve real-world problems. K-12 students are constantly under pressure to excel in exams and therefore may experience severe physical and mental health problems. Issues such as sleep deprivation, anxiety disorders, and even depression have become increasingly prevalent among young students.

2.2. Financial Burden

In addition to physical and mental burdens brought by the increasing competition in K-12 education, the highly competitive Chinese Gaokao has also brought the student's family a considerable financial burden which is typically attributed to extracurricular tutoring. According to Xue and Fang, the average expenditure on extracurricular tutoring for compulsory education students was 2311.97 CNY with the highest average expenditure in the eastern region at 3022.07 CNY, followed by the central region at 2432.43 CNY, and the western region at 1625.56 CNY in 2016 [10]. These tutoring services provide students with focused instruction and practice exams aimed at improving their performance in the highly competitive exam. As the Gaokao's stakes are incredibly high, many families view extracurricular tutoring as an essential investment in their child's educational future. The financial burden on families can also extend to cover various educational expenses, including study materials, specialized tutoring, and preparatory courses, all aimed at enhancing a student's chances of success in Gaokao. These expenses are not merely remarkable but can accumulate very quickly, further increasing the financial burden on families striving to secure a spot for their children in higher education institutions. This financial investment reflects the importance placed on securing a spot in higher education institutions.

The highly competitive nature of the Chinese Gaokao has introduced a significant financial burden on students and their families. The costs associated with extracurricular tutoring, study materials, and preparatory courses reflect the importance placed on securing a place in higher education institutions. While the Gaokao remains a critical determinant of educational and career prospects in China, the financial sacrifices required to navigate this system underscore the need for a more equitable and supportive educational environment that can alleviate some of these burdens on students and their families.

3. Challenges and Limitations from the Institutional Perspective

The rapid expansion of higher education in China has undoubtedly broadened access to university education for a growing number of students. However, this expansion has brought about significant challenges and limitations from an institutional perspective, particularly related to limited resources including insufficient campus space, overcrowded dormitories, and faculty shortage. As colleges and universities strive to accommodate the increasing student population, they grapple with constraints in terms of campus space, dormitory facilities, and the availability of qualified faculty members.

3.1. Insufficient Campus Space

Limited campus space has emerged as a significant challenge in the expansion of Chinese higher education, presenting universities with considerable challenges in accommodating the surging number of students. As institutions strive to fulfill the growing demand for quality education, they

often find themselves grappling with overcrowded classrooms, which in turn has significantly negative implications for both students and faculty. The scarcity of adequate classroom space has led to overcrowded classrooms in many Chinese universities. This phenomenon is particularly normal in universities located in urban areas. They are very attractive to various applicants, but their surroundings are already taken by businesses, houses, etc. As a result, universities admit more students than their physical infrastructure can comfortably accommodate. Overcrowded classrooms create myriad challenges for both students and faculty. In these environments, students may find it difficult to concentrate and actively engage in the learning process. Limited physical space and the sheer number of students can hinder interaction between students and teachers, making it challenging for instructors to conduct dynamic and interactive lessons.

3.2. Overcrowded Dormitory

Additionally, many universities also face a shortage of dormitory space provided for students and this problem has become a pressing concern because of its adverse impact on students' lives. Some universities even offer 8-occupant dorms which lead to substandard living conditions. This issue has numerous negative impacts on students' life on campus. One of the most immediate impacts of overcrowded dormitories is the lack of personal space and privacy. Students living in tightly packed dorms often find themselves with minimal room to store personal belongings or even move comfortably within their living quarters. The absence of privacy can be particularly distressing, as it leaves students with limited opportunities to decompress, study, or engage in personal activities without interference from their roommates. In addition, Overcrowded dormitories are frequently characterized by a high level of noise and disturbances. With numerous students sharing a single living space, it becomes challenging to maintain a quiet and conducive environment for studying and rest. Noise disturbances can have a detrimental impact on students' concentration, leading to reduced academic performance and increased stress levels. Besides, sharing a confined space with multiple roommates can also lead to conflicts and interpersonal tensions. Differences in lifestyle, schedules, and habits can give rise to disagreements, leading to strained relationships among roommates. These conflicts further contribute to the stress and discomfort experienced by students living in overcrowded dormitories. Maintaining personal hygiene in overcrowded dormitories can be a significant challenge. Limited access to bathroom facilities and crowded common areas can make it difficult for students to maintain cleanliness and sanitation. This problem is particularly severe during the COVID-19 pandemic when health and hygiene precautions are of paramount importance.

3.3. Faculty Shortage

The shortage of qualified faculty members in the context of the rapid expansion of Chinese higher education represents a critical challenge for institutions and underscores the multifaceted issues associated with this expansion. This shortage has a detrimental effect on the quality of education, faculty workload, and the overall effectiveness of the educational system.

As the demand for higher education has surged in China, universities have struggled to recruit and retain a sufficient number of qualified faculty members. The shortage encompasses both academic staff with advanced degrees and expertise in various fields. This scarcity has implications for universities across the country, especially those aiming to maintain high academic standards and offer diverse academic programs. Additionally, the shortage of qualified faculty members places an immense burden on existing teachers. Faculty members find themselves stretched thin, immersed with heavier workloads as they attempt to meet the growing demand for education. Larger class sizes, more courses to teach, and increased administrative responsibilities often lead to overworked and stressed educators. Finally, the shortage of qualified faculty members and the increase in class sizes can undermine the quality of education provided by Chinese universities. Larger classes may limit opportunities for interactive and experiential learning, which are crucial for the development of critical thinking and problem-solving skills. Therefore, students may receive a less enriched and less personalized educational experience.

The rapid expansion of higher education in China has widened access to higher education for numerous students. However, it has also exposed several challenges and limitations at the institutional level. Limited campus space, overcrowded classrooms, dormitory space shortages, and a scarcity of qualified faculty members collectively highlight the complexities and resource restrictions associated with this expansion.

4. Challenges and Limitations from the Societal Perspective

Finally, this paper will analyze what challenges and limitations Chinese society may encounter from the rapid Chinese higher education expansion. While higher education expansion has increased access to universities, the promise of improved social mobility has not always materialized. Besides, issues related to mismatches between education and employment opportunities have become increasingly prevalent. In addition, Higher education in China has the potential to challenge traditional cultural and societal values.

4.1. Socioeconomic Disparities and Limited Social Mobility

As mentioned earlier Chinese parents spend substantial money on extracurricular tutoring which puts the student from a wealthier family at a constant advantage over others in college admission. According to Ding, Wu, Yang, and Ye, students from higher socioeconomic backgrounds enjoy significant privileges when it comes to accessing prestigious higher education institutions [6]. Students from higher socioeconomic backgrounds often enjoy substantial privileges and advantages when it comes to accessing quality education resources. These privileges encompass not only access to extracurricular tutoring but also extend to quality K-12 education, individualized support, and a number of educational opportunities that may not be obtainable to students from less wealthy backgrounds. The result of this issue is a profound disparity in access to prestigious higher education institutions. For example, students from lower socioeconomic backgrounds, despite their potential and capabilities, may find themselves at a persistent disadvantage when competing for limited university positions. This reinforces social stratification, as access to high-quality higher education becomes a privilege predominantly enjoyed by those with financial means. Ultimately, the perpetuation of social stratification in higher education hinders the broader goal of social mobility. China's investment in expanding higher education was driven, in part, by the aspiration to create a more equitable society where education serves as a vehicle for individuals to improve their social and economic circumstances. However, the prevalence of extracurricular tutoring and the advantages it confers make privileged students the only favored boat in the rising tide.

4.2. Mismatch Between Education and Employment

Moreover, many university graduates have difficulties finding a job that aligns with their academic majors. This issue stems from a variety of factors including a mismatch between the knowledge and skills acquired during their academic studies and the specific requirements for available job opportunities. One interesting topic related to this is "Overeducation", which refers to a situation in which the educational qualifications of workers surpass the requirements of their jobs, resulting in the inefficient utilization of labor resources [11]. Several factors contribute to the prevalence of overeducation among university graduates in China. One key factor is the rapid expansion of higher education, which has led to a surged number of graduates entering the job market. The supply of highly educated individuals has outpaced the demand for positions that require advanced degrees, leading to an oversaturation of the labor market. Additionally, there may be a mismatch between the knowledge and skills acquired during academic studies and the specific requirements of available job opportunities. Some graduates may find that the jobs they secure do not fully utilize the specialized skills or knowledge they acquired during their university education. The consequences of overeducation are multifaceted and extend to both individuals and society as a whole. According to Ma, Baek, Qi, Li, and Liu, overeducation is prominent and leads to a myriad of problems including reduced job satisfaction among workers and reduced earnings [11].

4.3. Shift in Traditional Values

Finally, higher education in China has the potential to challenge traditional cultural and societal values in several ways. While Chinese culture is rich and diverse, some traditional values and beliefs may be influenced or even transformed by the expansion of higher education. Here are some ways in which higher education may challenge traditional Chinese cultural and societal values. Traditional Chinese culture places a strong emphasis on collectivism, where the needs and goals of the community or family often take precedence over individual desires. Higher education, particularly in the context of globalization and exposure to Western ideas, can foster individualism. Students may develop a greater sense of independence, personal ambition, and individual identity, challenging the collectivist values deeply rooted in Chinese society. In addition, Chinese education has historically been characterized by rote memorization and conformity to established norms. Higher education can introduce students to critical thinking, problem-solving, and innovation, encouraging them to question traditional beliefs and practices. This may challenge the reverence for tradition and authority that is prevalent in Chinese culture.

The rapid expansion of higher education in China has brought both opportunities and challenges to society. While it has increased access to universities, it has also highlighted issues related to socioeconomic disparities in educational access, the mismatch between education and employment opportunities, and the potential challenges posed on traditional beliefs. Addressing these challenges is critical for China to ensure that its higher education system remains a driving force for social mobility, economic development, and social cohesion.

5. Conclusion

The mass higher education shift and expansion policies in China have brought about a range of challenges and limitations that have impacts on students, institutions, and society. The historical context of Chinese higher education, shaped by Soviet influences and subsequent reforms, has laid the foundation for the complexities faced today. Therefore, it is crucial for future research to investigate their influence on today's Chinese higher education. While expansion efforts have increased access to higher education, they have also given rise to issues such as intense competition driven by the Gaokao, leading to academic pressure, reliance on standardized testing, and financial burdens on students and their families. The institutional perspective highlights challenges related to limited campus space, overcrowded classrooms, inadequate dormitory conditions, and a shortage of qualified faculty members. From a societal standpoint, the expansion has not always fulfilled the promise of improved social mobility, with students from higher socioeconomic backgrounds enjoying advantages in accessing prestigious institutions. Additionally, mismatches between academic qualifications and job requirements have led to the problem of overeducation, resulting in reduced job satisfaction and earnings for graduates. Finally, Higher education in China has the potential to challenge traditional cultural and societal values in various ways. As a result, China must consider comprehensive strategies for improvement in its higher education system. This includes reevaluating the role of standardized testing, enhancing the quality of K-12 education for all, expanding scholarship opportunities, investing in educational infrastructure, and fostering greater alignment between educational programs and workforce demands. By doing so, China can create a more equitable, high-quality, socially mobile, and coherent higher education system that better serves the needs of its diverse student population and society at large.

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