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Essay

Rational Reflection on Educational Equality: Discussion on the Issue of Educational Equality Triggered by University Tuition Fees

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Abstract: The expansion of university enrollment and the implementation of tuition fees have become focal points of discussion in both current educational practices and theories. While increased university enrollment offers more opportunities for higher education, the high cost of tuition fees has pushed economically disadvantaged students to the brink of discontinuing their studies, prompting widespread concerns about educational equality.

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1. Introduction

From the establishment of the People's Republic of China until the mid-1980s, higher education in the country was provided free of charge. However, in the late 1980s, universities began admitting self-funded and sponsored students in addition to state-funded students. In 1989, universities began charging tuition fees for all students. The increasing proportion of self-funded students and the widening gap in tuition fees between self-funded and state-funded students drew attention to the issue of educational equality. The transition of China's higher education from entirely state-funded free education to the concept of paying for university education began with the integration of admissions and tuition fees in some universities in 1993, followed by the complete integration of university admissions in 1997, and further expanded enrollment in 1999. The notion of "paying for university education" gradually gained acceptance. However, the emergence of financially disadvantaged students in universities and the high tuition fees have led to discussions about whether this phenomenon truly reflects educational equality.

Different Perspectives on Educational Equality Some experts argue that the integration of universities, the implementation of tuition fees, and the overall expansion of enrollment have increased educational resources and opportunities for higher education. From a broader and long-term perspective, this promotes the realization of educational equality.

Statistical data from the year 2000 indicates that the national undergraduate enrollment in regular higher education institutions reached 268.3 million, accounting for 64.6% of the total number of candidates. This is a significant contrast to the fact that in 1987, only 2 out of every 100 high school graduates had access to higher education. Thus, the integration of universities and the expansion of enrollment have indeed contributed to educational equality.

As personal income levels rise, individuals' capacity for investing in education increases as well, making the fee system beneficial for human capital investment. Equality exhibits distinct contemporary characteristics, and under market economic conditions, higher education fees should reflect both equal educational consumption and equitable distribution of educational investment. The absence of university tuition fees would hinder achieving equal educational opportunities for all.

In the 1960s and 1970s, due to the significant role higher education played in economic development, countries worldwide invested substantial resources in developing their higher education systems, leading to rapid expansion. However, the growing scale of higher education led governments to realize that no government budget could fully satisfy citizens' demand for higher education. Consequently, cost-sharing mechanisms involving students, families, and society to support higher education development became an important international trend in higher education finance. Notably, since 1980, the "cost-sharing" theory proposed by Johnstone, the president of New York University, gained acceptance, advocating for the sharing of education costs among different stakeholders.

Moreover, experts offer various theories as the basis for university tuition fees. The "personal return rate" theory posits that education's outcomes manifest as an increase in capabilities. Those who receive higher education attain greater benefits in their future work, leading to higher returns on education. Following the principle of "who benefits, pays" in a market economy, beneficiaries should bear the costs they incur. Similarly, the theory of the "nature of higher education products" categorizes education as a quasi-public good, bringing social benefits and enhancing overall societal capacity. Individuals who receive higher education also tend to earn higher incomes, have better job opportunities, and access more favorable positions. This quasi-public nature of higher education implies that tuition fees should be jointly borne by the state, society, and individuals.

In the context of China's modernization process since reform and opening up, the increasing strength of national comprehensive capabilities, and rising income levels of residents, higher expectations have been placed on higher education. The contradiction between the urgent need to expand the scale of universities and insufficient funding has become more prominent. Simultaneously, parents are increasingly eager for their children to succeed academically, leading to a willingness to invest in education. However, the government's all-encompassing higher education financial system clearly cannot meet the rapidly expanding demands of higher education. To alleviate the pressure of limited public resources, ensure the further expansion of higher education scale, and diversify higher education resource allocation, the government's inevitable choice has been to focus public investment on basic education and implement tuition fees in higher education. This decision is influenced by economic and overall considerations.

However, another group of experts believes that the lack of robust accompanying measures for university tuition policies has resulted in educational inequality for students from low-income families in terms of access to higher education opportunities and public funding support. The integration of admissions and tuition fees in universities has placed economically disadvantaged students under greater financial pressure, which, to some extent, affects their demand for higher education. Additionally, varying income levels among families influence students' choices of universities and majors. Surveys reveal that students from lower-income families are more likely to choose agricultural, forestry, and geological universities, lower-tier institutions, and majors like education and agriculture. In contrast, students from higher-income families tend to choose comprehensive and engineering-focused universities, along with majors in foreign trade, journalism, communication, arts, management, economics, law, and medicine. This demonstrates that without sufficient financial support for students from low-income families, they are denied equal opportunities and suitable higher education experiences. While universities are ranked, fees remain uniform. The lack of a corresponding higher education fee support system is evident in the generally uniform fee standards. Especially as the state subsidizes higher education, directing significant funding towards prestigious universities and popular majors, resulting in good treatment and relatively low fees for graduates. Thus, the level of tuition fees is not significantly related to the reputation of the university. Peking University and Tsinghua University are considered the best universities, yet they do not have the highest tuition fees. On the contrary, tuition fees are quite high in many non-prestigious institutions, and the fee levels of second-tier colleges exceed ten thousand yuan.

Incomplete support measures mean that students face various problems after enrollment. For genuine equality and to prevent financial constraints from leading students to drop out, the state

must implement a series of effective student aid measures. As experts have pointed out, implementing a university tuition fee system without simultaneously establishing an effective student assistance system not only fails to achieve comprehensive fairness in distributing public resources within the higher education system but could also lead to even greater irrationality in distribution. The current measures universities have started, such as awards, loans, assistance, subsidies, and reductions, are insufficient for this purpose.

Despite limited funding for higher education, its efficiency in resource utilization is not high. In recent years, the role of tuition fees in university operational funding has become increasingly important. Due to the rising cost of education, the growth of government funding has been far less than the demand from universities for funds. Many schools receive only 50% of their operational funding from government appropriations, making tuition fees a significant channel for fundraising. With the increase in tuition fees, the proportion of tuition fees in universities' regular expenditures continues to rise. It went from 12.1% in 1993 to 23.4% in 1999, reaching 27.7% in 2000 and 31.4% in 2001. Compared to the international average for public higher education (around 25%), this is already at a relatively high level. But how efficient is the use of these valuable funds? An economist from a university pointed out that universities are the least concerned about economic efficiency, and many of them waste resources on a large scale.

Another solution to the financial obstacles can be encouraging young students considering applying for scholarships and fellowships overseas to be financially self-supported. Though challenging, I do believe the education about this concept can be beneficial to students in the long run. Take myself as an example, I am a first generation and/or low income (FGLI) student originally from poverty, human resource weakness and economic vulnerability. I have never thought about how I can support my kid to study in developed countries someday. However, I do help my kid to get prepared in every respect that would benefit his program application overseas. Luckily, he got a generally PhD fellowship from Hong Kong government and then a Postdoc offer from Harvard in the USA. Of course, he is well-accomplished and has published 16 papers in high-impact journals before Harvard, such as Nature Reviews^{1,2}, American Chemical Society (ACS)^{3,4}, Cell Press⁵⁻¹¹, Wiley¹² and Royal Society of Chemistry (RSC)¹³⁻¹⁶. His success proves that financial barriers may be overcome with the help of fundings overseas. I do encourage young students to dream bigger and find opportunities to be self-funded.

People have long anticipated the elimination of disparities and inequalities in education to achieve equality in education. From Confucius' concept of "education without discrimination" to Quintilian's idea of "imparting all knowledge to all people," the ideals of educational equality have been emphasized. However, there is a certain gap between these ideals and reality. While education has made significant progress, providing more people with access to higher education, the merging of universities and the high cost of education have discouraged numerous underprivileged students. Without necessary measures from the government and universities, this could lead to a significant loss of talent, causing incalculable economic and social damage.

2. The Essence of Educational Equality Lies in Equal Opportunities for Education

A good education system ensures equal access to education, equal treatment during the educational process, and equal opportunities for academic success. First and foremost, ensuring equal access to education is crucial. On one hand, universities have implemented consolidation and tuition fee systems, gradually reducing inequality through mechanisms like "self-financed students" and "negotiated tuition." This has expanded educational resources, allowing more people to enjoy higher education and creating a "win-win" situation for both the education sector and learners. As the fee system develops comprehensively, this equality is expected to extend to the entire society, ultimately achieving equality in access to higher education for all citizens. However, it should be noted that since the reform of the tuition fee system in universities, there has been an increasing number of students who excel academically but cannot afford university education. Many of these students come from impoverished families in rural and economically disadvantaged areas. The

current uniform fee policy fails to address the differing financial backgrounds of students, which hampers true educational equality.

Secondly, efforts should be made to ensure equal opportunities throughout the education process. China's vast territory has led to significant disparities in development between different regions. Students from impoverished backgrounds in less developed areas often lack the same quality of teaching staff, experimental facilities, and learning conditions as their counterparts in more affluent regions. Universities must recognize this and create targeted conditions to progressively develop the intellectual and practical skills of these students. Additionally, efforts should be made to eliminate the self-doubt that often plagues financially disadvantaged students. Teachers should consider the expectations and attitudes of these students and believe in their ability to improve their circumstances through their own efforts, enabling them to realize their full potential.

3. The Principle of Equal Educational Rights Should Be Considered

"Equal educational rights" refer to equality of opportunity in education, analogous to political and economic equality. Since the late 1980s, the implementation of tuition fees in China's higher education has led to a steady increase in fees over the years. The disparity between rising tuition fees and relatively stagnant household income has led to concerns. It is essential to take into account the practical income levels of rural families and the ability of urban families with low incomes, which is essential for preserving the right to education. Measures such as scholarships, loans, work-study positions, grants, and fee reductions have been introduced to address this issue. Differential treatment based on individual circumstances is necessary to maximize the benefits for those at the most disadvantaged positions in society.

4. Conclusion

Achieving educational equality encompasses equal access to education opportunities, equitable treatment throughout the educational process, and recognizing and addressing the varying financial circumstances of students. These principles should guide educational policies to ensure that education truly serves as a means of empowerment and upliftment for all, regardless of their background or circumstances.

References

1. Liu, J. & Tang, B. Z. How to drink like a liposome. *Nat. Rev. Chem.* **7**, 5–6 (2023).
2. Liu, J., Spruijt, E., Miserez, A. & Langer, R. Peptide-based liquid droplets as emerging delivery vehicles. *Nat. Rev. Mater.* **8**, 139–141 (2023).
3. Liu, J., Zhorabek, F. & Chau, Y. Nucleic Acids Modulate Liquidity and Dynamics of Artificial Membraneless Organelles. *ACS Macro Lett.* **11**, 562–567 (2022).
4. Liu, J., Zhorabek, F., Dai, X., Huang, J. & Chau, Y. Minimalist Design of an Intrinsically Disordered Protein-Mimicking Scaffold for an Artificial Membraneless Organelle. *ACS Cent. Sci.* **8**, 493–500 (2022).
5. Liu, J., Feng, R. & Chau, Y. Large-sized but ready to enter: Micron-sized liquid droplets for versatile intracellular delivery. *Matter* **5**, 1637–1639 (2022).
6. Liu, J., Zhorabek, F. & Chau, Y. Biomaterial design inspired by membraneless organelles. *Matter* **5**, 2787–2812 (2022).
7. Liu, X., Liu, J. & Zhu, C. NIR-II organic dyes: Get brighter and see clearer. *Matter* **5**, 3583–3585 (2022).
8. Liu, J., Perry, S. L., Tang, B. Z. & Tirrell, M. V. Liquid capsules for gastrointestinal drug delivery. *Matter* **5**, 3107–3109 (2022).
9. Liu, J. From chemistry to dentistry: Paving my uncommon way to Harvard School of Dental Medicine as a materials scientist. *Matter* **5**, 2393–2396 (2022).
10. Liu, J. How art impacts my science. *Matter* **5**, 4105–4106 (2022).
11. Liu, J., Zhang, T., Liu, X. & Tang, B. Z. Give crucibles to a prokaryote. *Matter* **5**, 2540–2542 (2022).
12. Liu, J. *et al.* Multifaceted Cargo Recruitment and Release from Artificial Membraneless Organelles. *Small* **18**, 2201721 (2022).
13. Ni, R., Liu, J. & Chau, Y. Ultrasound-facilitated assembly and disassembly of a pH-sensitive self-assembly

- peptide. *RSC Adv.* **8**, 29482–29487 (2018).
14. Zhorabek, F. *et al.* Construction of multiphasic membraneless organelles towards spontaneous spatial segregation and directional flow of biochemical reactions. *Chem. Sci.* **14**, 801–811 (2023).
 15. Liu, J. *et al.* Molecular logic operations from complex coacervation with aggregation-induced emission characteristics. *Mater. Horizons* **9**, 2443–2449 (2022).
 16. Liu, J., Ni, R. & Chau, Y. A self-assembled peptidic nanomillipede to fabricate a tuneable hybrid hydrogel. *Chem. Commun.* **55**, 7093–7096 (2019).

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