

An Overview of Development of Higher Education Access in China

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Abstract

As a crucial component of higher education system, the models of student admissions differ worldwide due to diverse historical, traditional, and cultural factors. This paper presents a documentary study which seeks to identify some key developmental milestones of access to higher education in China. The paper begins with an outline history of the evolvement of admission system from the imperial era to the present. Subsequently, some reforms and issues of enrolment approaches at both undergraduate and postgraduate levels are discussed. Finally, the primary characteristics of the higher education enrolment system are proposed. Overall, this paper is expected to offer some insights into the development of current admission trends and an orientation on which Chinese policy-makers and educational administrators may wish to focus their efforts.

Keywords: Higher education, China, Admission, Enrolment, Student

1. Introduction

Before entering the era of massification, Chinese higher education used to follow an elite model. Admission difficulties made Chinese people consider the threshold of higher education as a *dragon gate*, a metaphor from a Chinese legend: *a humble carp fish jumps over the gate and becomes a sacred dragon*. It is commonly used as an allusion to a candidate who succeeds due to enormous effort (Zeng, 1999). Over the last two decades, higher education in China has experienced unprecedented progress. While offering more opportunities for students to access higher education, Chinese universities have also created many innovative approaches for their selection. However, this selection has experienced a long evolution and is still facing many problems in contemporary society. This documentary study focuses on different aspects of the higher education enrolment system in China. It aims to make the stakeholders aware of the areas where efforts could be made to improve this system in the future.

2. Evolvement of the Higher Education Enrolment System in China

2.1 Outline History of Higher Education Admission

In terms of the history of China (see Table 1), the formation of higher education system can be traced back to Ancient Period (2100 BC) (Yu, 2005). However, in fact, formal discussions about the enrolment system of traditional Chinese higher education were not initiated until the Imperial Period (221BC - 1911AD). In Imperial China, whether the emergence of the *Imperial Examination* (Note 1) (605 AD) or the development of *Academies* (Note 2) (960AD - 1127AD), student enrolment was manifest in the integration of the school admissions and the official selection process. This had become a prominent feature of traditional Chinese higher education access (Zhou, 2006). The period from 1911 to 1949 in Modern China was a foundation era of the national college examination form (Yang, 1992). Chinese higher education selection not only adapted attractive features of Western educational patterns to the Chinese context, but also developed their own traditional education strengths. As time marched on, the truly transition and boom era of higher education admission finally came in the 1950s. Between the 1960s and 1970s, it first experienced a change from the recruitment model of *worker, farmer and soldier* (Note 3) (Hayhoe, 1984) to the National College Entrance Examination selection. Subsequently, because higher education in China has made great strides since the 1980s, the enrolment system has gradually become multi-levelled. Currently, it has contained many new recruiting methods, reformed versions of entrance examinations, and other relevant elements such as funding and admission equality.

2.2 Characteristics of Admission Development

Although there have been various regulations and restrictions with constant changes regarding accessing higher education throughout Chinese history, two characteristics can still be noted in these changing conditions and requirements. These characteristics reflect the main trend of the changes in entrance qualifications. The first is that the restriction of social status has been gradually removed formally to achieve equality in higher education enrolment. With the progress of society, many students from the lower class are now permitted to access higher learning institutions. The threshold of the hierarchy has become much lower. In Ancient China (2100BC – 221BC), only the aristocrats had the right to receive formal education. The situation had a positive transition in the Imperial Period (221BC – 1911AD). Both aristocrats and ordinary people were able to learn in the colleges, but their opportunities were still unequal. Only in the era of the Republic of China (1949AD - present) was the restriction on social status abolished by legislation, which meant that equal entrance to higher education was formally achieved. There seemed to be some counter movement in history, like the *worker, farmer and soldier* enrolment model in the late 1960s, but the intellectual requirement weighed more in the enrolment qualifications until finally becoming the main selection standard.

The second characteristic is the degrees of flexibility and diversity in students' entry. It is not only a reflection of the progress of society and culture, but can also have a great impact on economic and political development. For instance, the Tang Dynasty (618AD - 907AD) and Ming Dynasty (1368AD - 1644AD) were the most developed eras in Chinese history. Because the number of higher learning institutions and their students has increased dramatically, entrance was much more flexible and diverse than that of other historical periods. Similarly, due to the rapid improvement of the contemporary Chinese economy, the expansion of admission provides an effective path to the Chinese mass higher education. Specifically, this relatively flexible enrolment of the universities facilitated the widening participation in higher education.

3. Undergraduate Enrolment Approaches

Up till now, passing examinations is still the main approach for undergraduates wishing to access the universities and colleges. Among various examination forms, national college entrance examinations have the absolute dominance. In this section, two noticeable reforms of undergraduate enrolment will be addressed. The first is the reform of the national college entrance examinations, because various reforms have never stopped since its restoration in 1977. The second is the rise of other enrolment exceptions.

3.1 College Entrance Examinations

Overall, College Entrance Examinations experienced a three-stage reform since its reinstatement. In 1977, the subject setting of examinations followed the previous divisions of arts and science before the Cultural Revolution. The examinations in the arts category were composed of politics, Chinese, mathematics, history, geography, and foreign languages, while the science and engineering examinations consisted of politics, Chinese, mathematics, physics, chemistry, biology, and foreign languages (Hayhoe, 1984). With the development of the examination system and the fierce competition between candidates, however, this setting made it increasingly difficult to select excellent students for universities (Zheng, 2008). In 1995, a new model, the '3+2' (Note 4), was introduced and rapidly implemented in a wide range of provinces.

When this examination subject setting reached its peak, the criticisms of people from all circles became increasingly acrimonious. Zheng (2008) argued that the examinations had made the whole of Chinese education rigid and inflexible, which could seriously weaken the quality of education and eventually mean that people would lack creativity. Under such pressure, the Ministry of Education proposed a new scheme '3+X' (Note 5) in 1998 to integrate three optional subjects into a comprehensive paper ('X') to promote high quality education and train innovative personnel. In 2003, in accordance with the new national curriculum reform, this programme was fully implemented nationwide. At the same time, the requirement of widening participation in higher education promoted the establishment of independent colleges and made many provinces obtain their autonomy in examination proposition (Liu, 2008).

3.2 Other Recruitment Approaches

In parallel with the reform of the college entrance examinations, new and creative recruiting approaches were gradually introduced into undergraduate admission. Firstly, some exceptional students, on quite a small-scale, could be admitted without examinations, or recommended by their senior high schools. They are the ones who display the *three-good student* (Note 6) consistently in their school careers and distinguish themselves by winning academic competitions at or above the city level. This system allows the students who are exceptional in one subject to go to university when they would otherwise be excluded. Nevertheless, this enrolment approach also introduced some

misconducts in assessment of applicants' qualifications due to the *networking* tradition in Chinese culture (Liu, 2008; Zheng, 2008).

For rural and minority areas, there is a special category of enrolment called *locally committed recruitment placement* (Lewin & Wang, 1991). Students in this category of enrolment are sponsored by local county governments. They were accepted with examination scores 10% - 20% below the national minimum at institutions and in subject areas determined by the county according to its economic plans. This is a supporting policy to minimise the gap between the majority and the minority, but it also causes some reverse discrimination against the majorities. In 2007, as an extension of this enrolment policy, Ministry of Education promulgated another similar policy called *Tuition-free Teaching College Students*. This policy provided undergraduate students who are from remote areas with free teacher education so that these areas could have quality-assured teachers in their local schools.

Since 2003, another innovative approach - *college autonomic admission* - appeared and gradually developed in many top universities (G. Liu, 2003). Its predecessor was the art talent enrolment organised by these top universities. Now, enrolment was replaced by this new approach and extended to all kinds of subjects. The difference between this new approach and the recommendation system is that it is not decided by the senior secondary schools or local educational ministries. On the contrary, it depends on the students themselves. If high school students attempt to apply for certain universities, they only need to take the examinations held by those universities. In terms of universities, decentralisation of the enrolment power entitles them to have more autonomy in recruiting students according to the social and market needs. Through the autonomic admission approach, universities have recruited many students who are outstanding in certain special academic fields. In terms of students, they can access the universities based on their own choices and special talents. Autonomic admission, in fact, maximises their enthusiasm to pursue higher education. As a result, this new approach has been adopted by an increasing number of Chinese universities (Zheng, 2008; Zhang, 2010).

3.3 Summary

Figure 1 shows the changes of undergraduate enrolment approaches since the restoration of College Entrance Examination in 1977. On the whole, it can be seen that these reforms have formed a multi-level access to current undergraduate education in China. However, based on the current situation in China, the unified examinations cannot be easily replaced by other methods. This is because in students' perceptions, examinations still provide a relatively fair approach to select them.

4. Postgraduate Enrolment Approaches

Figure 2 presents the evolvement of postgraduate enrolment approaches in Chinese higher education. The history of Chinese postgraduate education does not date back very far, but China has gradually become one of the major countries for postgraduate education. From 1978 to 1988, the admission system was in its infancy and the whole recruitment process was characterised by exploration. The postgraduate student admission quota of China's colleges and universities was weighted heavily towards science subjects (Sidel, 1983). However, many provisions and requirements were formulated to ensure the equity of postgraduate enrolment and chosen the best students.

Since 1989, Regulations on Academic Degrees defined the levels of postgraduate education and linked them with a degree system. At the current stage, Master's degree student admissions are composed of three independent parts: national entrance examinations that are conducted much like those of undergraduates (55% - 60%); exam-waived recommendations (25% - 30%) and special examinations for part-time students (15%) (F. Liu, 2003). Doctoral degree students' enrolment is different from that of Master's degree students in examinations. There are no unified national entrance examinations for selecting doctoral degree programme applicants. Universities and research institutions hold their own examinations for candidates, while exam-waived recommendation is still valid at this recruitment stage (Wang, 2003).

4.1 Funding Controversy: public-financed vs. self-financed

At postgraduate level, inequality of enrolment is first reflected in the students' financial support. In China, postgraduate education funds have to be partially funded out of the national budget, and a dual-track fee collection system is indispensable (Shen & Du, 2000). Hence, according to the methods of tuition fees, full-time postgraduate students are divided into public-financed and self-financed categories (Chen, 2006) based on their achievements of entrance examinations.

The quota of public-financed postgraduate students is usually very small while that of the self-financed students is continuously expanding. With the enlarging enrolment scale of commoners, many problems emerge under the dual-track system of tuition charges for graduate education, leading to all kinds of unfair phenomena. The most obvious one is the disparity of enrolment opportunity. All candidates try to *grab* the public-financed quota, which

definitely leads to fiercer academic competition. What is more, the policy (Ministry of Education [MOE], 1990) that recommends postgraduate students automatically to obtain the public-financed qualifications makes the situation even worse. Furthermore, this fee collection system also demotivates the self-financed students. Even though they work diligently and achieve higher academic grades at postgraduate level, they cannot change their financing status. Because of this, their academic enthusiasm is very likely to be affected as time passes.

In order to keep the financial balance and achieve equality of enrolment opportunity, it appears that the ideal way should be to cancel the diversity of tuition charges and transform it into a scholarship system. In 2007, ten universities as pilots began a scholarship system trial for replacing this diversity of tuition charges. Experience shows that the new scholarship system had many positive effects on motivating students and solving the severe shortage of higher education funds (Xinhua News, 2006). Although this scholarship system is still on trial so far, it is likely to accelerate the progress of achieving educational financial equality at postgraduate level.

4.2 Selection Controversy: examination vs. recommendation

The Ministry of Education promulgated an exam-waived recommendation policy for Chinese graduate institutions to recruit more outstanding candidates in 1985 (Wang, 2007). Accordingly, a few excellent undergraduates have since been able to continue their Master's studies by open application instead of through the traditional examination process. This approach has disrupted the monopolisation of the unified examination process and been actively debated in Chinese popular public media forum (Sina News, 2008).

As mentioned at the beginning of this section, China's postgraduate enrolment system mainly includes three selection approaches over the last two decades. Whereas postgraduate recruitment in China is primarily determined by the national unified entrance examinations, some contradictions, like the *multi-method selecting process* versus *the sole selecting approach* (Chen, 2006), have already seriously affected postgraduate education. Plenty of evidence indicates that the exam-waived recommendation seems to have become increasingly popular over the last decade (Sina News, 2008). It is enlightened by foreign application systems, breaking the monopolisation of unified examinations. It is not only regarded as an indispensable supplement to current Chinese postgraduate admission system, which accelerates the cultivation of graduates, but, more importantly, it is brought in line with international postgraduate admission practice and gives more discretionary power to the graduate schools.

Despite the fact that some loopholes still exist, like academic *inbreeding* and difficulty of quality guarantee, this policy helps an increasing number of outstanding undergraduates to acquire graduate entry qualifications. To some extent, this enrolment approach is very useful for the improvement of postgraduate education as long as a better social credit system and a *strict-out* assessment system could be established.

5. Primary Characteristics of the Higher Education Enrolment System in China

The above discussions suggest that there are several primary characteristics of the Chinese higher education enrolment system. Firstly, this system is deeply influenced by the *test culture*, which originated from the examinations for civil servant selection in ancient China. This *test culture*, similar to other types of culture, often changes due to social changes, cultural collisions and educational exchanges; or develops by learning from the historical heritage. The metamorphosis of the college entrance examinations and the postgraduate entrance examinations is a typical case of this, based on the lessons of the ancient imperial examination system. They absorb its unified test form, the concept of fair selections and the beneficial examination administration. During the process of borrowing from the western education systems in the late Qing Dynasty (221BC – 206BC), the higher learning institutions implemented an individual enrolment policy. To some extent, it satisfied the demand for professional training, but also made a negative impact on the structure of higher education, the allocation of regional access opportunities and socio-economic development. These negative impacts have continued to the present. The uneven distribution of higher education resources, and the enrolment gap between the eastern and western regions (urban and rural areas), reflect these negative impacts. However, these negative factors have also prompted the reform of the college entrance examinations in order to guarantee the fairness of the candidates' selection. Nowadays, both examinations play vital roles in the maintenance of the higher educational rights of candidates from less developed regions. Their functions should not be underestimated.

Secondly, along with the changes in the college enrolment policies, access to higher education has also undergone several changes since 1949. Before 1977, the allocation of enrolment opportunities mainly struggled with the concepts of *family background* and *competence*. From 1949 to 1951, China's higher education recently completed its rehabilitation and reconstruction. Because of the weak foundation and uneven development of higher education, college enrolment was still the institution for elite training. *Open to the public* was just a formal slogan. The selection mechanism inclined towards *competence*. With the introduction of the Soviet educational model (Note 7) and China's internal political factors, a unique origin as the higher education admission criterion appeared. The

college entrance examination system was abolished. The cancellation of examinations means that academic achievement was no longer the standard for higher education entrance. It also indicates that the relatively fair competition system was undermined. The marked political background became the selection standard. This admission system had been continued until 1977, with the resumption of the college entrance examination. *Competence* as the selection criteria was again put on the agenda of admission. In recent years, China's higher education has made a historic leap forward. The scale of higher education is rapidly growing and the enrolment rate is continuously increasing. Higher education has entered a mass scale. The mass higher education process promotes total access opportunities, and provides a strong guarantee of the equality of access. However, due to the limited economic and social development, there are still numerous problems relevant to the equity and equality of higher education enrolment, especially the imbalance between different regions.

Thirdly, higher education enrolment proceeded to the confrontation stage between *test score* and *competence*. Since the college entrance examinations were restored, scores - as an objective standard - broke the previous unequal distribution of higher education. Because of the competitive selection, students blindly pursued high scores. They memorised facts and took examinations repeatedly, purely to access their ideal universities or research institutions. However, various contradictions gradually emerged. Students with high scores may not necessarily be high quality ones. Meanwhile, this approach also made high schools neglect the comprehensive training of their students. Therefore, many new approaches are used for undergraduate enrolment, such as recommendations, talent admission and autonomic recruitment. Postgraduate admission stressed the interview aspect in order further to test the students' academic competence. These important measures deepen the reform of the enrolment system and could be called a crucial development in higher education.

6. Conclusion

The famous Chinese comparativist Gu (1984) claims that higher education is a most important dimension of Chinese modernization. Its success or failure will determine China's fate in the 21st century. It might be fair to claim that prospective students should no longer worry about the threshold of higher education because of a 25% gross enrolment rate (nearly 80% in developed cities) (Wu & Zheng, 2008). However, the meaning of the metaphor dragon gate has transformed from a quantitative challenging to a qualitative dilemma. Numerous higher school students still have to jump over the *dragon gate* to compete even better educational resources.

Therefore, higher education enrolment should make efforts to achieve a higher degree of equity and equality. It not only focuses on examinations, but also links to other educational and social factors. The central and local governments should stress their influence in promoting higher education enrolment. Likewise, the higher learning institutions should also maintain the fairness of admission. It is legitimate to conclude that the improvement of the enrolment system may push Chinese universities to the forefront of higher education transformation and aid globalisation in the future.

References

- Chen, B. (2006). Thoughts of Higher Education Enrolment Inequality. *Heilongjiang Education*, 12, 9-10. [Online] Available: http://d.wanfangdata.com.cn/Periodical_qqhrdxxb-zxshkxb200702058.aspx
- Eberhard, W. (1977). *A History of China*. Ewing, NJ: University of California Press.
- Gu, M. (1984). The Development and Reform of Higher Education in China. *Comparative Education*, 20(1), 141-148. <http://dx.doi.org/10.1080/0305006840200113>
- Hayhoe, R. (ed.) (1984). *Contemporary Chinese Education*. London: Croom Hecm.
- Lewin, K., & Wang, L. (1991). Access to The University Education in the People's Republic of China. *Educational Development*, 11(3), 231-234. [http://dx.doi.org/10.1016/0738-0593\(91\)90023-2](http://dx.doi.org/10.1016/0738-0593(91)90023-2)
- Liu, F. (2003). Analysis on Current Graduate Enrolment. *Forum on Contemporary Education*, 1, 36-38. [Online] Available: http://caod.oriprobe.com/articles/12783380/xian_xing_shuo_shi_yan_jiu_sheng_zhao_sheng_zhi_du_zhi_si_kao_h tm
- Liu, G. (2003). Some Thoughts towards the Reform of Autonomic Admission in Higher Educational Institutions. *Exploring Education Development*, 23(10), 29-30. [Online] Available: http://d.wanfangdata.com.cn/Periodical_jyfzyj200310009.aspx
- Liu, L. (2008). *Access Higher Education in China: Jumping over the dragon gate*. Unpublished MSc dissertation, University of Oxford.
- Ministry of Education. (1990). *The Educational Yearbook of China*. [Online] Available:

<http://www.moe.gov.cn/edoas/website18/level3.jsp?tablename=318&infoid=5026>

Shen, Y., & Du, Z. (2000). The Situation of Educational Funds in China and the Establishment of a Tuition Collection System for Graduate System. *Current Issues in Chinese Higher Education: Education and Skills*. France: OECD.

Sidel, M. (1983). Graduate Education in the People's Republic of China: New Steps, New Challenges. *Higher Education*, 12(2), 155-170. <http://dx.doi.org/10.1007/BF00136634>

Sina News. (2008). *Special Education Reports: The Handbook of Exam-Waived Graduate Admission*. [Online] Available: <http://edu.sina.com.cn/kaoyan/graduatebs/index.html>

Wang, X. (2003). *Education in China since 1976*. Jefferson, NC: McFarland & Co.

Wang, T. (2007). Standardisation and Exploration of Recommending Exam-Free Postgraduate System. *Journal of Qiqihar University (Phi&Soc Sci)*, 22(3), 66-70. <http://dx.doi.org/CNKI:ISSN:1008-2638.0.2007-02-066>

Wu, B., & Zheng, Y. (2008). *Expansion of Higher Education in China: Challenges and Implications*. China Policy Institute, University of Nottingham. [Online] Available: <http://www.nottingham.ac.uk/cpi/documents/briefings/briefing-36-china-higher-education-expansion.pdf>

Xinhua News. (2006). *The cancellation of the Diversity of Tuition Charge*. [Online] Available: http://news.xinhuanet.com/edu/2006-07/11/content_4817360.htm

Yang, X. (1992). *Chinese Examination History Resources Selection*. Hefei: Huangshan Press.

Yu, Q. (2005). An Analysis of the Relationship between China Ancient Schools and Official Selecting. *Educational Journal*, 1(5), 68-81. <http://dx.doi.org/CNKI:SUN:XKJY.0.2005-05-008>

Zeng, K. (1999). *Dragon Gate: Competitive Examinations and Their Consequences*. New York, NY: Cassell.

Zheng, R. (2008). Chinese College Entrance Examination: Review of discussions and the value orientation of reforms. *Frontier of Education in China*, 3(1), 137-148. <http://dx.doi.org/10.1007/s11516-008-0009-3>

Zhang, Y. (2010). The Independent Recruitment Reform in Higher Education Institutions: Motivations, Challenges, and Approaches. *Beijing University Education Review*, 8(2), 30-42. [Online] Available: http://d.wanfangdata.com.cn/Periodical_bjdxjypl201002004.aspx

Zhou, J. (2006). *Higher Education in China*. Singapore: Thomson.

Notes

Note 1. The imperial examination (Keju) was an official examination system designed to recruit state's bureaucrats in Imperial China.

Note 2. Academies (Shuyuan) were private higher educational institutions where scholars could learn, teach and study Chinese classics in Imperial China.

Note 3. In 1966, due to political requirements, a new admission policy was proposed by the Chinese central government to recommend workers, farmers and soldiers to colleges. This policy aimed to guarantee the benefits of the working class.

Note 4. '3' is the number of main subjects of the examinations. They are Chinese, Mathematics, and English (foreign languages). '2' refers to two optional subjects which are selected by the candidates in terms of their learning fields. Those who select the disciplines of science, engineering, agriculture, and medicine will fill their '2' with physics and chemistry, while those who select arts and history need to take their optional examinations in politics and history.

Note 5. It is similar to the '3+2' model, but three optional subjects (physics, chemistry and biology for Science students; politics, history and geography for Arts students) are integrated into a comprehensive paper ('X').

Note 6. 'Three-good' student is a student who is excellent in morality, physical exercise and academic performance.

Note 7. Soviet educational model was exerted in Chinese higher education from 1949 to 1958 due to the political and economic requirements of the New China. This model was highly centralised in educational administration and focused university students' learning on the subjects of Science, Engineering and Technology.

Table 1. The progression of China Eras

Prehistory Period	Ancient Period	Imperial Period	Modern Period
before 2100BC	2100BC – 221BC	221BC – 1911AD	1911AD - present

Source: Eberhard, W. (1977). *A History of China*. Ewing, NJ: University of California Press.

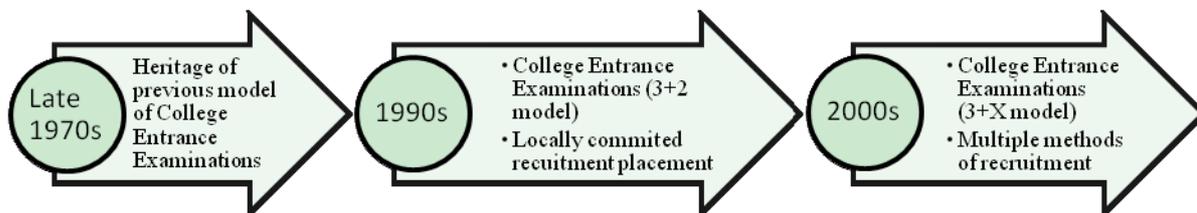


Figure 1. The changes of undergraduate enrolment approaches since 1977

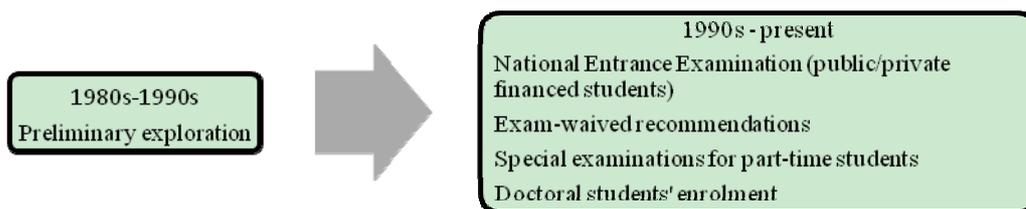


Figure 2. The changes of postgraduate enrolment approaches since 1978