

# How does the College Entrance Examination polices cause social inequality in China?

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Abstract. The College Entrance Examination is the exam for entry to a university in China. With time's development, the College Entrance Examination policies have been gradually reformed. However, a series of policy reforms have resulted in the creation of social inequities. This article examines how the College Entrance Examination policy has produced social inequality in the eastern coastal region of China and compares the before and after of the College Entrance Examination reform. This essay was conducted by interviewing a student in China who had experienced the college entrance examination reform and a student who had experienced the College Entrance Examination without the reform policy. It is concluded that the new reform of the college entrance examination policy will exacerbate the creation of social inequities.

**Keywords:** College Entrance Examination, inequality, education policy, China

## 1 Introduction

The Chinese College Entrance Exam (Gaokao in Chinese) is the exam for entry into college in China. To expand university access based on the merit principle, the Chinese government created the National College Entrance Examination in 1952. Since 2007, the examination has been the primary means for Chinese students to enter Chinese universities [1]. As China's population increases, an increasing number of students take the college entrance exam. This results in intense competition among students for access to higher education programmes. The Chinese College Entrance Examination is an examination with a long history. Nonetheless, the process of policy reform and development produces inequality over time. Numerous articles have analysed the social inequalities in contemporary Chinese society, which renders the College Entrance Examination unjust in terms of access to higher education. According to Gloria Xiao Yu Liu and Charles C. Helwig, the significant economic gap between urban and rural areas in China enables students in urban areas to have access to superior learning resources, resulting in a performance gap on the College Entrance Examination [2]. On the other hand, Chris Hamnett suggests regional disparities in HEA (Higher Education Act) due to differences in asset investment in higher education [3]. Numerous articles link social

inequality to the inequity of the College Entrance Examination, arguing that social inequality is responsible for the unfairness of the College Entrance Examination and even of higher education. However, few articles analyse how the College Entrance Examination produces social inequality; therefore, this article will discuss it from that point of view. In the work, we explored how social inequity is created, mainly from the perspective of the College Entrance Examination policies. This article uses qualitative method to interview two students who have experienced changes to the College Entrance Examination policy before and after their views on the College Entrance Examination policy. The conclusion is that the College Entrance Examination can produce inequities and that the policy change may lead to more inequitable effects.

## 2 Literature review

## 2.1 Background of the College Entrance Examination (Gaokao)

Since the establishment of the New China in 1949, the College Entrance Examination has evolved into the unified national examination that is required for admission into Chinese universities. At the moment, it is a unified national test that is taken by students who have graduated from high school. The College Entrance Examination is a significant role in determining whether or not high school graduates in China will continue their education [4]. This is due to the fact that if students earn low results on the College Entrance Examination, they will have a difficult time entering one of China's most prestigious institutions. Some students even go so far as to repeat their senior year in order to get another shot at the College Board exam the following year.

The College Entrance Examination policy has undergone consistent changes and modifications. Prior to 2014, the Chinese college entrance exam was based on the "3+x" paradigm, which separated Science and Liberal arts subjects [5]. The "3" represents the required subjects, namely Chinese, Mathematics, and a Foreign Language, while the "x" represents the student's choice between Science and Liberal arts. Students who select Science will also be required to take courses in physics, chemistry, and biology. Politics, history, and geography are required courses for Liberal arts majors. Since 2014, there has been a new examination policy for the College Entrance Examination. Each province across China has a different policy. For example, Zhejiang has "3+3" and "7+3" examination policies. This means that senior students in Zhejiang must take three exams - Chinese, mathematics and foreign language - and choose three other subjects from a list of seven to be taken as optional subjects in the College Entrance Examination. The College Entrance Examination is a national examination, usually held at the beginning of June each year, and usually lasts about three days [6].

For the increasingly competitive examinations, much of this is due to the influence of meritocracy on people in Chinese society. The Chinese have a firm idea of meritocracy, which refers to the selection of more talented and knowledgeable people, and in education, Chinese universities have taken to selecting people with higher scores in the College Entrance Examination examinations Higher scores are accepted because they believe that high test scores represent intelligent people[7]. Therefore, to get a better

education, many social inequities have become severe over the years since the College Entrance Examination existed.

Li suggests that the College Entrance Examination policy and regional economic disparities exacerbate the disadvantages of disadvantaged students [8]. Moreover, China's geographical imbalance is reflected in its educational system. The difference in educational standards and facilities between urban and rural institutions is substantial. resulting in unequal access to education and disparities in College Entrance Examination scores [9]. Due to regional economic reasons, some provinces with high economic development will subsidise schools. Schools can have more funds to purchase educational infrastructure to help students have a better learning environment. At the same time, as the economy develops, some highly knowledgeable people will be more willing to come to economically developed areas to apply for teachers, making the provinces with good economies have more educational talent and students have educational advantages. Hamnett notes that the distribution of universities in China is extremely unequal, citing Beijing as an example, which is home to many of China's top universities, including Peking University and Tsinghua University [10]. Applicants who reside in one of two cities or provinces with a high concentration of top universities and a low College Entrance Examination threshold are given preference in the admissions process for these universities. The cities with the highest scores on the College Entrance Examination are Beijing, Tianjin, and Shanghai [11]. This is largely due to the fact that these three locations provide a rich and diverse education, resulting in increased student learning.

Moreover, due to the social and social reproduction environment, students' personal beliefs, which are influenced by their upbringing and the environment in which they grew up, are taken to school and eventually manifest in their academic performance [12]. Prosser notes that only a tiny percentage of people have access to prominent universities and can leverage their social status or financial resources to expand their children's educational opportunities [13]. Disparities based on race and gender are just two of the many additional issues included in societal inequalities. However, there needs to be more literature on how social inequity is affected by the College Entrance Examination itself so that this essay will focus on the policy aspect of the College Entrance Examination. In order to narrow the scope further, the article will start with the eastern region of China, which is more economically developed than the western region, and where each region has a different College Entrance Examination policy.

## 3 Method

## 3.1 Research design

This article uses the interview method of the qualitative method, and the target of this interview is the views of students who have gone through the latest reform of the College Entrance Examination policy. As the aims and conclusions of this study have little to do with numbers, a quantitative approach will not be used. However, qualitative research has the disadvantage of being too subjective. This research will analyse the data objectively to avoid and minimise the creation of subjective opinions.

### 3.2 Cases

This interview aims to compare the views of two students who have gone through the old and new College Entrance Examinations to explore how the College Entrance Examination policy has created social inequality and whether the new policy will exacerbate such disparities. The first student interviewed is Lu, a freshman from Jiangsu Province, China, who has just passed the new College Entrance Examination. Lu went through a new College Entrance Examination policy. The new policy used in his province is "3+2+1", with "3" being the Chinese, mathematics and foreign language (including English and other non-Chinese languages) of the unified College Entrance Examination in China, and "1" is the "Preferred Subject" which requires the selection of one of the two subjects of Physics and History, and "2" is the "Re-selected Subject" which involves the appointment of four subjects of Ideology and Politics, Geography, Chemistry and Biology. His choices were Chinese, Mathematics, English, History, Politics and Geography. The second student was Chen, who had experienced the unreformed College Entrance Examination. Chen is from a public high school in Shenzhen, Guangdong Province, China. She took her College Entrance Examination in 2015. In 2015, the College Entrance Examination was divided into Science and Liberal arts. Students who chose Science had to take six exams: Chinese, Mathematics, English, Physics, Chemistry and Biology. Students who choose Arts must take six subjects -Chinese, Mathematics, English, History, Geography and Politics. Chen chose Liberal arts. Although these two students had different years of entrance examinations and experienced different patterns of College Entrance Examinations, they both coincidentally chose subjects with a liberal arts bias, which makes it easier to compare their backgrounds.

#### 3.3 Data collection

This research will collect data in the form of interviews. Firstly the two interviewees do not know each other, so there is no premise of mutual discussion. As both interviewees are adults, they are fully aware of the research topic and agree to be interviewed before the interview. The interviews will be conducted by telephone, so the interviewees will not be pressured to accept the interview. The whole interview will be recorded with a tape recorder, and this has been agreed upon by the two students interviewed. The interviews will be conducted in a semi-structured format. The semi-structured interview can be varied according to the purpose of the study, and it also has the flexibility to be suitable as a data collection method for this study [14]. In addition, given the language aspect, the entire interview will be conducted in Mandarin Chinese, and the final interviewer will translate the responses into English.

### 3.4 Discussion

Thematic analysis is a qualitative research method that generally describes and identifies recurring themes in reports [15]. In addition, thematic analysis is flexible and using this method to analyse the points raised by the two students in the interview seemed a

reasonable approach [16]. The interviewers transcribed and translated the responses from the transcripts from Chinese to English. The keywords were extracted from the responses of both interviewees by categorisation. Both respondents mentioned 'choice', 'tuition' and 'school and teachers. The interviewer will present the responses of both interviewees in table 1.

Table 1. Interview (Ownerdraw)

	LU	CHEN
Choice	I can choose the subjects that interest me for the exams. Although my choice is the same as the previous Arts subject, at least I have a choice. I think such a choice can provide some help for students' future career interests.	I chose Liberal Arts. Although I am personally interested in biology, I don't like physics and chemistry in science, so I had to choose arts.
Tuition	All the people in the class were taking extra after-school tuition classes outside of school. I took large class lessons because one-to-one tuition was too expensive, but some of my classmates who are rich they had one-to-one after-school tuition. Indeed, they would learn more carefully than we did.	My parents got me a great tutor for maths during the holidays in my senior year, and with his help, I improved a lot in maths. I had tutors around me, but not everyone in the class went. There were also tutors from our own school who tutored secretly.
School and teachers	The schools would merge classes, and my friend couldn't choose the small language he wanted to study. This is a terrible idea.	Some teachers will have students who are particularly concerned and will give small classes, but this may be where the parents have paid for the teacher to help with tuition.

In Lu's view, China's College Entrance Examination, as a selective examination, can help the country select higher-level talents, which benefits the country. Before the change in the College Entrance Examination policy, he needed to study hard for each subject, which meant getting the average score to meet his target. After the change in the College Entrance Examination policy, he can choose the subjects he feels more comfortable with to study in-depth instead of spending his energy equally on other subjects. For example, after deciding on his choice of subjects in his second year of study, he will take his strengths and weaknesses, reduce the time spent on revision for the subjects he is good at, and work on the subjects he is not good at, and check the gaps after each mock test. In other words, the new College Entrance Examination policy

helps seniors to focus more on some subjects, and it also helps them to develop their interests in the future. Lu's family takes a grave view of his examinations and will enrol him in additional after-school tutorials to support his further studies. This is not uncommon in their city, as all students in their class have extra tutoring after school. However, due to the different financial situations of the families, Lu could only attend large classes. However, some students from well-off families would opt for one-to-one private tuition after school. This situation continues over time and causes some inequities to occur in the class. Although every student in the class takes remedial lessons, those who can afford private lessons will grasp and understand more points than those who take large classes and thus score high in the College Entrance Examination.

In addition, Lu raised questions about the new College Entrance Examination policy with regard to his school. He suggested that due to the new policy, although students are free to choose the subjects they want to study, not all students will want to study popular subjects. Some students may choose to study a less popular subject, such as Japanese as a minor language, rather than English, which many students would choose. This can lead to a situation where there are too few students to make up a class. However, in such cases, the school may decide to merge the classes, i.e. forcing the students to choose another subject, thus denying them further and deeper academic development.

In contrast, Chen, who experienced the old College Entrance Examination, also had many thoughts on how she took the College Entrance Examination at that time. Chen believes that the College Entrance Examination at that time primarily limited students' interests and choices, as senior students could only choose between Science and Liberal Arts. Many students were not good at all the subjects in both options; for example, Chen was good at Biology and consistently scored very low in Geography. However, she did not want to choose other subjects in Science, so she was limited to developing further in Biology.

Based on the responses of Lu and Chen, this essay concludes that the College Entrance Examination policy does create different degrees of social inequity by categorising the three common points in their responses. Firstly, under the influence of meritocracy, senior students seek additional after-school tuition services to increase their scores, based on the principle of meritocracy. Due to differences in social status and economic conditions, each student's family can afford to pay for tuition differently. Families with well-off seniors will enjoy higher tuition than families with lesser means. They may score several points higher in the College Entrance Examination. This creates social inequity. Although all seniors take the same exam on the same knowledge content, the different backgrounds of students can produce different gaps.

According to Lu's answer, the school's 'merging' behaviour is also a social inequity and an inequitable distribution of resources. The College Entrance Examination policy change has left the school's resources too late to replenish and adjust. The school can only distribute the available resources to most students. For those students whose needs are niche, the school cannot provide personalised services, which is also a lack of resource allocation. Chen's school did not have this phenomenon as described by Lu, as she was still taking the old College Entrance Examination policy. Therefore by comparing the exam policies of the College Entrance Examination, it can be concluded that

the exams produce social inequities that occur, as seen in the senior students who are tutored. However, by comparing the new College Entrance Examination policy with the old one, the new policy further exacerbates social inequity. Also, it brings about an inequitable distribution of resources.

On the other hand, this study has many areas of improvement and shortcomings. Firstly, there were only two interviewees in this study. Although they were from two public high schools in the eastern coastal region of China, their responses did not represent all students in the eastern coastal region of China. The sample for this study is too small and not very convincing. Also, because the interviews were recorded by telephone, the interviewers could not conduct a formal face-to-face interview with the interviewees, and many emotional or gestural details could not be noticed. In addition, there are many provinces in the coastal region of China, and each province has different policies on the College Entrance Examination. If this study is to be further developed, the follow-up interviewer would need to find more senior students, and attention would need to be paid to the gender of the sample, such as the same number of male and female students for further analysis, as well as a more comprehensive regional distribution.

## 4 Conclusion

The College Entrance Examination policies are constantly being revised and improved. In many cases, the revisers take into account the needs of China's senior students, and these policies help them. However, in many cases, the emerging policies have also produced social inequities in different situations. It is difficult to correct this phenomenon, but hopefully, in the future, those who revise the College Entrance Examination policies will consider several aspects to reduce the social inequities that arise from them.

### Reference

- 1. Davey, G., De Lian, C., & Higgins, L. (2007). The University Entrance Examination System in China. Journal of Further and Higher Education, 31(4), 385–396.
- 2. Liu, G. X., & Helwig, C. C. (2020). Autonomy, social inequality, and support in Chinese urban and rural adolescents' reasoning about the Chinese College Entrance Examination (gaokao). Journal of Adolescent Research, 37(5), 639–671.
- 3. Farley, A., & Yang, H. H. (2019). Comparison of chinese gaokao and Western University undergraduate admission criteria: Australian Atar as an example. Higher Education Research & Development, 39(3), 470–484.
- 4. Li, W. (2008). Education inequality in China: Problems of policies on access to Higher Education. Journal of Asian Public Policy, 1(1), 115–123.
- Farley, A., & Yang, H. H. (2019). Comparison of chinese gaokao and Western University undergraduate admission criteria: Australian Atar as an example. Higher Education Research & Development, 39(3), 470–484.
- High school website (2023) The specific schedule of the college entrance examinations Examination subjects and order. http://www.gaosan.com/gaokao/565937.html

- 7. Olivos, F. (2021). Motivation, legitimation, or both? reciprocal effects of parental meritocratic beliefs and children's educational performance in China. Social Psychology Quarterly, 84(2), 110–131.
- 8. Li, W. (2008). Education inequality in China: Problems of policies on access to Higher Education. Journal of Asian Public Policy, 1(1), 115–123.
- 9. Wang, L. (2012). Social Exclusion and education inequality: Towards an integrated analytical framework for the urban–rural divide in China. British Journal of Sociology of Education, 33(3), 409–430.
- Farley, A., & Yang, H. H. (2019). Comparison of chinese gaokao and Western University undergraduate admission criteria: Australian Atar as an example. Higher Education Research & Development, 39(3), 470–484.
- 11. Li, J., & Xue, E. (2021). An analysis of the enrollment policy of College Entrance Examination. Education Policy in Chinese High Schools, 127–153.
- 12. Smith, J. F., & Skrbiš, Z. (2017). A social inequality of motivation? the relationship between beliefs about academic success and Young People's educational attainment. British Educational Research Journal, 43(3), 441–465.
- 13. Prosser, H. (2018). Provoking elite schools' defences: An Antistrophon. Discourse: Studies in the Cultural Politics of Education, 41(4), 532–544.
- Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. Journal of Advanced Nursing, 72(12), 2954–2965.
- Al Maghaireh, D. F., Abdullah, K. L., Chan, C. M., Piaw, C. Y., & Al Kawafha, M. M. (2016). Systematic review of qualitative studies exploring parental experiences in the neonatal intensive care unit. Journal of Clinical Nursing, 25(19-20), 2745–2756.
- 16. Clarke, V., & Braun, V. (2016). Thematic analysis. The Journal of Positive Psychology, 12(3), 297–298.

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