

Research on the Reform of Chinese College Entrance Examination System

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Abstract—Chinese examination system can be traced to one thousand years ago. Its first purpose was to select the talent. Due to unfair distribution of educational resources, social hierarchy and other reasons, though it plays a critical role in social stability over the course of history, there still exist inevitable limitations. In the face of the questioning of the college entrance examination by all walks of society, what we have to do is to make rational analysis from an objective perspective. This article, based on the evolution of examination system in ancient China, the reform of Chinese contemporary college entrance examination as well as some research on examination system of other countries, is to explore how to perfect the college entrance examination system, distribute educational resources fairly, teach students in accordance with their aptitude and promote the all-round development of students. Thereby we can form an examination - education virtuous circle, correctly cultivate and select talents and maximize the use of social resources.

Keywords: Chinese examination system, talent selection, educational resource allocation, college entrance examination reform

I. INTRODUCTION

"The history of an exam is a history of constant debate and repeated waste[1]. " Chinese examination system has been developing and changing continuously for more than one thousand years (from the imperial examination system in the feudal period to the separate college admission system in the republic of China to the unified college entrance examination system in The People's Republic of China), but the essence of its talent selection has never changed. Chinese examination system has drawn much attention since its birth, from "The scholars" to thousands of topics about the college entrance examination. Dong Zhongshu in the Han dynasty took examination as the main means of training and selecting talents in his "Give good and virtuous countermeasures". He was also the first to use the word "examination". In Sui dynasty the Chinese civil examination system appeared, and flourished and completed in Tang dynasty. The "integral method" appeared in the school of Song dynasty, which could evaluate students' academic work and conduct comprehensively. In the early Ming and Qing dynasties the school education system is more perfect than that of the previous dynasties, they executed "integral method", and at the same time implemented the "practice system" (That is, after studying theory and laws ,

students in the imperial college will be assigned to practice in various institutions)[2]. The innovation of the imperial examination system made it last for thousands of years, and provided talents for the bureaucracy of China's feudal society. But did it select the brightest and best[3]? Or is the training of Chinese talent under this system successful? Scholars of all ages have made in-depth and detailed re-researches on this problem.

After the founding of The People's Republic of China, Chinese college entrance examination system experienced the fate of being abolished. Since 1977, Chinese college entrance examination has been exploring and developing amid twists and turns. Until today, the college entrance examination has been developing steadily, but at the same time, it also shows its epochal character and limitations. In recent years, with the gradual rise of the call to abolish the one test for life, people are also increasingly looking forward to the emergence of a fairer college entrance examination system[4]. In 2010, the "Outline of the national medium and long term education reform and Development plan (2010-2020)" put the reform of the college entrance examination system in a prominent position, taking the formation of the "Classification examination, comprehensive evaluation, multiple admission" system as the core goal of the college entrance examination reform [5]. At present, China's education reform is in the stage of comprehensively deepening, the reform of college entrance examination is one of the focus of the current reform of education and even the overall reform of society[6]. Various provinces are also constantly exploring new examination modes, such as 3+X, multiple examinations and comprehensive evaluation[7]. But can these reforms really achieve the purpose of fair selection of talents in the college entrance examination? The entrance examination plays multiple social roles and is a major influence on society[8]. To some extent, it determines the standard of cultivating students in society, embodies the national education level, and also shoulders the mission of cultivating innovative talents[9].

The question of whether everybody is indeed equal before the system of grades has been at the epicenter of debates on examination reform since its reinstitution[10]. Giving everyone an equal opportunity to participate in higher education and to compete for society's resources is the foundation for the existence of the college entrance examination system[8]. But

how to ensure the fairness of the new college entrance examination reform class? At present, social class differentiation is obvious. Although the college entrance examination enrollment proposition, admission mechanism, selection criteria and methods have made progress in scientific exploration, the actual operation of entrance examination for secondary school or college reform often falls into the paradox of science and fairness[6]. But the wheel of history rolls forward with an irresistible force, in the future, the operations of college entrance examination, which primarily served to select or eliminate examinees, will be transformed into a process that displays talent and comprehensively assesses students[11]. As a bridge between high school and university, the college entrance examination connects education and society at one end, involving the vital interests of thousands of families, because the college entrance examination is actually related to everyone's choice of career and future life style[9].

In "learning to survive", UNESCO pointed out that the equality of education is not to level the students, but to provide a personalized education, so that each student can give full play to their own advantages. Therefore this paper will explore the examination system in China since ancient times, take the college admission examination system in Britain, America and other countries as reference, and analyze the pros and cons of the college entrance examination in China, discuss the direction of the college entrance examination reform, so as to realize the individualized development of students under the standardized unified ex-amination.

II. LITERATURE REVIEW

As the saying goes, "Look at the past and learn from the past", Chinese examination system has gone through thousands of years, and scholars of all dynasties have different thoughts on Chinese examination system. In recent years, people pay more attention to the imperial examination system and the college entrance examination, no longer only focus on its advantages, but from a more objective and in-depth perspective to evaluate the imperial examination system and college entrance examination, and hope to find out a path that is the most fair and most consistent with China's national conditions. It has been a consensus of many researchers that the study of the college entrance examination system must have a historical perspective. In a sense, the re-understanding of the imperial examination system exactly provides a new perspective for the study of the current college entrance examination system, which enables people to view the defects of the college entrance examination system with a more rational attitude, and facing up to the positive role of the college entrance examination in social life and higher education will provide an objective theoretical basis for the in-depth reform of the college entrance examination system[1]. Therefore, to discuss the college entrance examination, Chinese imperial examination system is inevitable.

In 1992, professor Liu put forward the theory of "Imperial examination", which "vindicated" the imperial examination and made people have a fair and objective understanding of it [12]. Then hundreds of articles depict the college entrance examination and imperial examination system from different angles including the comparison between imperial

examination system and college entrance examination system, reform of imperial examination and college entrance examination, the fairness of imperial examination and college entrance examination, imperial household registration and the college entrance examination in different places, the cultural role of imperial examination and college entrance examination, the evaluation of imperial examination and college entrance examination, the social influence of imperial examination and college entrance examination, examination papers of imperial examination and college entrance examination, imperial examination, college entrance examination and western examination system, imperial examination, imperial examination, college entrance examination and school, the invigilation of imperial examination and college entrance examination, the imperial examination and college entrance examination for ethnic minorities [13], from the number of articles published on these topics, it can be seen that the academic circle pays more attention to the social function and fairness of the examination and the college entrance examination. From 1992 to 2017, 234 related articles were published on CNKI, covering a wide range of research contents and diversified research perspectives, there were both macro analysis of the relationship between the imperial examination and the college entrance examination from a historical perspective, and micro analysis of the dilemma faced by the college entrance examination from a realistic perspective [12]. The study of imperial examination system is mainly to provide references for the contemporary college entrance examination reform. Wang in the "Upon the Transformation of China's Ancient Test System and its Enlightenment on Today's Reform of the National Entrance Examination to Colleges" pointed out that due to the ancient examination system reversed the two functions of "cultivating talents" and "selecting talents", the educational function has become a subsidiary of the political function. To reform the examination system, it is necessary to make the examination return to its essential function, and truly become a system to promote the development of school education and talent development, rather than just a tool for talent selection.

In addition, Cheng, Wei and other scholars mainly traced the evolution of China's examination system, and described the comparison of Chinese and foreign examination system. Some scholars such as Zhang, Song viewing China's college entrance examination reform from the development trend of the world, have pointed out that China's current college entrance examination system has many disadvantages in terms of examination contents and methods, and put forward measures for the reform and innovation of China's college entrance examination system. Some scholars make suggestions on the reform of college entrance examination from the angle of fairness, such as Liu in "Where should the National College Entrance Examination Go?" put forward that the reform of college entrance examination involves many interests, the reform should explore the road suitable for China's national conditions; WANG Feng in a study "Ethical Impartiality Reform of College Entrance Examination Enrollment -- a Case Study of Jiangsu Entrance Examination Reform", discussed the fairness of education and how to further construct the ethical impartiality mechanism of college entrance examination system; Some scholars start from the relationship between education and college entrance examination to carry out

relevant researches. For example, Wang studies the reform of college entrance examination from the perspective of basic education, discusses the relationship between the current college entrance examination and basic education, and puts forward some ideas on the reform of college entrance Examination. Zhang and Huang understand and perspective the new college entrance examination reform from the relationship between social class structure and education reform, and reveal the root of the dilemma of college entrance examination reform in "The Besieged College Entrance Examination: the Solution of the Dilemma behind the Paradox of the New College Entrance Examination Reform". Some scholars focus on the future of the college entrance examination, such as Zeng's "A Probe into the Reform of Chinese College Entrance Examination System and its Future Trend", Yuan's "Exploring and perfecting the college entrance examination system with Chinese characteristics in the reform" and so on. These scholars not only have in-depth thinking on the college entrance examination, but also put forward different ideas for the reform of the college entrance examination, which have a high level of reference.

From the researches of these scholars, we can see that in the history of China, the Imperial examination system plays its positive roles, the imperial examination promoted the folk reading ethos[14], made great contributions in ancient education and the selection of talents, and has had a profound impact. It breathed vitality into the heritage of ancient cultures. At the same time, the core of the imperial examination system is the fair competition and the selective admission which is the vitality of the imperial examination system and also the standard of the current college entrance examination.

III. MATERIAL AND METHOD

Entrance examination is not the only criterion for admission to American colleges and universities, and entrance examination results are only one of the requirements for applicants in some universities. At present, there are two kinds of exams recognized by most universities and having a large influence throughout the United States: "SAT" and "ACT" [15]. The SAT measures the cognitive and analytical skills that students develop in and out of school, and there is not much direct correlation with the general content of school education. In addition to the intelligence factor, SAT also pays close attention to the non-intelligence factor of candidates[1]. "ACT" consists of four parts of English, mathematics, science and foreign language reading, based on the content of high school courses (English, mathematics, science) studied by candidates, directly measuring the abilities and skills necessary for college learning, such as the analysis, solving of problem, critical evaluation of written materials, and the range of questions in the Language and Mathematics section[16]. American research universities require High school grades; ACT or SAT scores; Secondary school performance rankings and teacher recommendations; Arts candidates should provide papers, Science candidates provide works, arts and science candidates should both provide other studies, abilities and social activities proof. After the popularization of higher education, the standard of enrollment admission in colleges and universities is multi-layered, and different levels and types of colleges and

universities need different enrollment and admission standards to meet various educational specifications and objectives, various social and economic development requirements, as well as different intelligent structures, personality specialties and academic level of different students [15].

The British admissions examination system has a long history, unique characteristics and great influence. After the development and evolution, the UK has established the current admissions examination system of colleges and universities with distinctive characteristics, which has become a model imitated by many countries or regions and has great influence in the world. After years of development and reform, the British University Enrollment examination system is unique in many aspects, such as the separation of examination, enrollment, admission, a more perfect public examination system, a wide range of subjects in examination, giving students a great choice, paying attention to the comprehensive examination of students, and the decision of admission dependent on university. These are of great practical significance to the reform and innovation of the college entrance examination system in China. At the time of admission, British colleges and universities take the performance of the applicants' Advanced Level of General Education Certificate (A-levels) or equivalent certificate as an important admission condition, and comprehensively evaluate the General Certificate of Secondary Education (GCSE), which reflects the academic achievement in the compulsory education stage, the student's usual academic achievement record, the teacher's comment, principal's recommendations and personal statements, etc.[17]. There is a fair and excellent admissions examination system in the United Kingdom, British university entrance examination mainly has the General Education Certificate Examination (GCSE) and the Advanced Level Examination (A-LEVELS), the college Entrance examination system standard is strict, at the same time the UK has the hierarchical enrollment system not only facilitates the students to choose the suitable school, but also ensures that the social tasks undertaken by the schools are completed: Students in the United Kingdom take two "college entrance exams", one for the 16-year-old after graduating from high school, one for the examination at the end of the A-level courses at the age of 18, and the two results will be the main indicators of college admissions[18]. The UK has a unique "Conversion System of College Admission Score", which quantifies the reference of all aspects of the examinee and obtains a specific score. Then the school judges the score based on the sum of the scores obtained by each aspect of the student, and adopts the certificate system with additional comprehensive evaluation [19]. It can be seen that the United Kingdom is not simply a test for life, British colleges and universities can open the door to accept the entry of a variety of levels of students, although it has entered the era of popularization of higher education, enrollment standards are still hierarchical, in the transition to the process of popularization of higher education, students are more and more likely to receive higher education, but not to the point of arbitrary school choice. Every school, especially those known for its elite education, always maintains a certain degree of independence and maintains its unique position[18].

From the college entrance examination system in these countries, it is not difficult to find that, when admitting students, they attach importance to the comprehensive factors such as students' high school academic performance, teachers' comments, personality and recommendation by the principal or teachers, and take primary education as an important reference [20].

The starting point of the examination is to select talents and stimulate the development of education everywhere. However, it has been an inevitable phenomenon since ancient times that most of the advanced scholars come from the rich and noble families or the scholarly families. The most important reason is that these families have enough funds and higher platforms. Is it too difficult for students from poor and humble families to become outstanding? This seems to be the case, they do not have the resources and platform for them to show their skills, and no predecessors to guide their direction. Today, the unequal distribution of educational resources remains the biggest obstacle to limiting poor disciples. This is why we need to discuss the college entrance examination, not only the college entrance examination system itself, but also the education and talent selection in China and even the world. The examination can only reflect one's knowledge level, but cannot judge one's morality, ability and quality. In the process of college enrollment in many western countries, examination only exists as a test method, and people do not attach too many additional functions to it. The score of college entrance examination is only one aspect of reference[21]. But on the other hand, such selection system will magnify the above problems and challenge the fair-ness of rural examinee groups to some extent, because they are at a disadvantage in terms of access to educational resources. Corruption of the process of selecting students for admission, especially the practice of giving preference to upper-class students, also incited the righteous indignation of the public[8]. How can we strike a balance in this dilemma? How can we improve the quality education of students under the premise of safeguarding fairness and make the selection of talents in college entrance examination more meaningful requires us to explore new ways in the continuous reform.

IV. DISCUSSION

The vitality of the college entrance examination lies in the reform: the college entrance examination, as a competitive system of educational opportunities, must keep pace with the times and make reform and innovation its routine and characteristics. The reform of college entrance examination should be designed in a long-term way and become the baton of education reform, combine examination sub-jects, let the student have certain choice right[22]. In view of the existing problems in Chinese college entrance examination, we will discuss how to reform them to make Chinese college entrance examination more dynamic.

Most colleges and universities in China are not clearly positioned, and the purpose of talent selection is not strong. In addition, education authorities are unable to provide a flexible layered examination selection mechanism for colleges and universities at different levels[20]. The distribution of educational resources is uneven, the gap in education resources

between east and west, rural and urban is large, the expectation of education for rural students decreases, which leads to the abandonment of college entrance examination. At present, there are still some rural areas where students have to make an arduous journey to go to school. In addition, the overall trend of college entrance examination enrollment is low in the western regions, and the ratio in the western rural areas is even lower. Therefore, the development of higher education in the western rural areas is faced with many difficulties[21]. The current college entrance examination proposition is confined to the teaching syllabus, which centers on "conception of knowledge" and despises the ability cultivation. The admission standard is dogmatic. For a long time, the "one size fits all" system of college entrance examination lays too much emphasis on fairness and ignores the display of personality and specialty[23]. It hinders the development of people's personality and potential and is not conducive to the cultivation of people's innovative spirit. The unified screening standard, which pursues commonness, actually negates the diversity of talent cultivation, stifles the personality of talents and inhibits the play of students' various unique potentials[24]. The current college entrance examination is still a selective examination, which over-emphasizes its function of selection and screening, weakens its function of evaluating students and becomes a tool for screening and elimination [14].

Many people are calling for the abolition of the national college entrance examination system at a time when its shortcomings are becoming increasingly apparent. However, as there is no school evaluation and talent selection system that can replace the examination in the world, the examination system is still the most fair and reasonable system today [2], it is the inevitable choice of the historical tradition and realistic demand of China's education development. China has a large population, higher education re-sources are relatively scarce. In this special national context, the college entrance examination system emerged at the historic moment, developed into a relatively scientific and reasonable talent selection mechanism, and relatively reflected the principle and spirit of "fairness". It has sent tens of millions of senior talents to the society and made important contributions to China's modernization[1]. However, opponents believe that the college entrance examination is the culprit for the difficulty in implementing quality-oriented education, the overburden on students and the lack of autonomy of institutions of higher learning in talent selection[22], multiple social competition focuses on the competition in college entrance examination, which intensifies the fierce competition in college entrance examination [25]. From the perspective of the college entrance examination mode, the current liberal arts and science subjects do not really ease students' academic burden, but make students' psychological burden tend to increase[1].

V. SUGGESTION AND CONCLUSIONS

College Entrance Examination is an important part of higher education system and must be adapted to the development of today's society. Selection of outstanding talent is a basic and primary function of the university entrance exam, scientifically selecting talent is the first requirement for the college entrance examination function. According to the

current world development trend, we need to put an end to the measurement of candidates based solely on test scores, but should try to develop a diversified enrollment examination system and establish a comprehensive evaluation system. To strengthen the unified examination of learning ability and innovation ability, in this regard, the reform of college enrollment examination system in our country should strengthen the unified examination of students' learning ability and innovation ability, and promote the all-round development of candidates.

Teaching-oriented colleges and universities lay particular emphasis on the cultivation of students' knowledge and skills, so they can adopt the national entrance examination system for admission. Research-oriented universities lay particular emphasis on the development of ability and the cultivation of creativity, so they should adopt a more flexible way of independent enrollment to select talents needed by the university. The enrollment of teaching and research colleges and universities needs the mode of combining national unified examination with independent enrollment of colleges and universities, and even this part of colleges and universities should strengthen the characteristics of independent education, so as to select and cultivate talents urgently needed in the society. The new college entrance examination must strip away the redundant function of college entrance examination and only retain its test function and education function, so as to realize the test essence and humanity regression of college entrance examination.

For the development of higher education in under-developed rural areas, we should pay attention to improving local access opportunities, helping the children of families with socio-economic status to make a smooth transition from secondary to higher education, advocating that the whole society should pay more attention to the education process rather than the results. Meanwhile, we should raise the educational expectation in rural areas and increase the educational funds for poor areas. On the basis of unification, we must actively explore diversified examinations. The college entrance examination should take full account of students' potential and individuality, pay attention to the development of colleges and secondary education, and carry out diversified examinations.

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