Research on the Enrollment System of Colleges and Universities

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Abstract

China's college entrance examination system has been implemented for a long time, and its disadvantages are becoming increasingly apparent. The college entrance examination system was progressively stretched in the function of selecting talents. At the level of the evaluation system, there are still some defects, such as insufficient of predictability in evaluation content, insufficient of scientificity in the evaluation methods, simplification of the main body of the evaluators, etc. Western countries have accumulated some experiences in the history of higher education enrollment and selection. The open enrollment and selective enrollment systems in the United States, the certificate-based admission system in the United Kingdom and Singapore, the two-stage examination system in Japan, and the ABI examination system in Germany have certain reference values for the reform and development of the evaluation system of China's enrollment and examination system.

Keywords: Evaluation System; Enrollment System; Colleges and Universities

1. INTRODUCTION

This paper will conduct a literature survey from the direction of several typical admission systems: the coexistence of open and selective enrollments in the United States, the certificate-based admission system in the United Kingdom, and the two-stage admission system in Japan. As each established enrollment and examination system is affected by a certain historical background and cultural environment, it is necessary to understand the historical development process.

2. THE HISTORY AND CURRENT CONDITIONS OF FOREIGN UNIVERSITIES ADMISSION SYSTEMS

This review mainly refers to and arranges the entrance examination systems of the United States, Britain, Singapore, Japan, Germany, and other countries, and arranges the following contents from the aspects of admission conditions, evaluation contents, advantages, and disadvantages. The United States has an admission system with the coexistence of open enrollment system and selective enrollment systems, which focuses more on fairness and efficiency [3]. Singapore and the United Kingdom have similar entrance examination systems, both of which are certificate-based university entrance examinations. The slight difference is that Singapore has localized the British system and developed it into a more flexible system with multiple standards. Since the centralized structure of education in France and Germany is similar to China's national uniformity test, the trend of admission systems in France and Germany also needs to be included in the scope of reference.

2.1. American open and selective admissions systems

The admission system of American colleges and universities coexisted from the colonial screening system to the certificate admission system to the comprehensive selection system to the later open and selective enrollment systems and is based on the development mission of each historical period. In the long historical period, the United States has encountered problems such as pragmatism education, the improper connection between secondary education and higher education, the imperfect structure of higher education, and the popularization of higher education. At different stages of education, the United States has not only absorbed the advantages of the admission systems of Britain, Germany, and other countries but also developed community colleges with local characteristics. Overall, we should consider fairness and efficiency, diversity and choice, and meet the needs of multi-level talents training. The individual school selection system adopted by the United States from the colonial period to the civil war in 1861 is basically the elite education of the privileged class. Due to the different admission methods of each school, with the expansion of the number of students, the scope of enrollment has been limited to a certain extent, and students in different districts cannot realize cross-district mobility. After the civil war, under the social influence of laissez-faire and individualism, the land grant movement promoted the establishment of agricultural and technological colleges [4]. However, the problem of the connection between secondary education and higher education has become increasingly serious, so American universities have begun to adopt the certificate enrollment system to make up for the connection problem. In 1870, the University of Michigan first began to adopt the enrollment practice of the certificate

admission system, imitating the system of German universities that only accepted German high school students [5]. The single certificate-based enrollment system can no longer meet the diverse needs of colleges and universities for talents. Before World War II, large-scale conscription and war services attracted a large number of young people to join the army. After the war, the federal government passed the veterans act, which gave birth to the popularization of American Higher Education [6].

Standardized Test SAT and ACT Test

There are mainly three types of university admission tests in American Universities: SAT, ACT, and AP. The SAT overcomes the defects of the previous IQ test. Although it is still an ability test, it focuses more on logical reasoning, problem analysis, and critical thinking than the past knowledge mastery test. SAT I mainly focuses on academic abilities, such as critical thinking, logical reasoning, deductive calculations, etc. This model is more in line with the evaluation standards of colleges and universities for students' potential abilities. SAT II has been improved, and the test content is consistent with that of the middle school curriculum. Some studies have proved that SAT II has considerable predictive value for the growth of college students, second only to middle school grades [7]. SAT II is an academic achievement test, which mainly tests the knowledge learned in senior high school and its application ability. Based on SAT I, many universities also require the scores of professional tests (SAT II) in several disciplines. The SAT is a standardized test. Many scholars began to emphasize that it cannot accurately predict students' GPA level and growth indicators in Colleges and universities. Therefore, ACT academic achievement test came into being. The test content is directly based on the curriculum content learned by the students in high school. It mainly tests the candidates' skills in English, mathematics, reading, and science, and focuses on the writing test of conception and writing ability as an optional test content. It overcomes the inconsistency between SAT I and the content of middle school textbooks and affirms the students' personal efforts.

2.2. British and Singapore certificate-based admissions examination systems

In 1951, the General Education Certificate system (GCE) was implemented in Britain, marking the establishment of the British certificate-based university entrance examination system. The high level is the A-level test, which can be used to enter the university or engage in a specific job. The intermediate level is the O-level test, which is a passing test. The scholarship level is an S-level test, which is more competitive. After years of revision and improvement, the Minister of Education announced in the lower house of parliament that students began to study the 16-year-old unified examination course, namely the General Certificate of Secondary Education

Examination Course (GCSE) in the autumn of 1986. At the same time, the "Education Reform Act" passed by the British Parliament stipulates that all public school students must take an examination at the end of compulsory education. After several years of adjustment, the college entrance requirement is to have at least five general education certificates. In the first case, 2 subjects must reach the advanced level A-level (A-E) level, and 3 subjects must pass the O-level (CSE first-class, later GCSE C or above); the second situation is that 3 subjects reach the advanced level A-level (AE), and 2 subjects pass the O-level (CSE first-class, later GCSE C level or higher) level [8].

There are only three universities and five Polytechnics schools in Singapore. In the early stage, Singapore's admission system was originally derived from the British certificate-based admission system, but they gradually found that the students admitted through this system cannot think independently, do not have certain practical and operational abilities, and cannot meet the country's demand for a variety of talents. Therefore, based on the original foundation, Singapore has carried out the reforms, from relying solely on A scores to a comprehensive evaluation method, introducing two new contents, R reasoning test and project work [9], and adding extra-curricular activities as a reference. At the same time, the proportion of A-level tests is reduced, and it is required to obtain three A-level tests, one of which must be the content of other disciplines. The biggest advantage of Singapore's admission system is that it has multiple levels and standards. The students can determine the test content according to their discipline direction. The content of science and engineering test is different from that of liberal arts students. The students of different levels can obtain different education certificates and have rich sources of students, which is a multi-gradient directional test selection for students by discipline [10].

2.3. German admission examination system

There are three types of admissions to universities in Germany. The first is a non-restricted major. Any student who has passed their high school graduation examination (Abitur) can apply. This major accounts for 45% of University majors. The second is for locally restricted majors, if the number of applicants exceeds the expected number of admissions of the year, colleges and universities can initiate the screening process by themselves. The third is a national restricted major, including four undergraduate majors in medicine, pharmacy, dentistry, and veterinary medicine, and two postgraduate majors in biology and psychology. These majors are usually popular majors with a large number of candidates, so they are uniformly distributed by the University quota allocation center, 20% is determined by the average score of the ABI test, 20% is determined according to the waiting time, and 60% is determined by colleges and universities for independent enrollment. As Germany is a federal

system, each state has its own Ministry of Education; each state has a different syllabus and different levels of education quality. Therefore, the ABI exam based on each state's examination syllabus does not have a unified standard reference for horizontal comparison. In recent years, the call for a unified syllabus and national ABI examination has become louder and louder. Federal states such as Bayern, Bavaria, Saxony, and other states have reached an agreement on a unified ABI exam, and a unified entrance exam will become the direction of the development of the admission system in German universities.

The evaluation standard of independent enrollment in Germany mainly refers to the ABI test results, which also includes the usual results in the second two years of middle school, involving the basic results of a single subject of the selected major, the learning ability test related to the major and a selection interview. The sovereignty of the enrollment examination system in Germany is mainly at the state level, and there is no unified national examination, which is different from the unified college entrance examination system in China.

2.4. Two-stage examination evaluation system in Japan

The entrance examination of Japanese Colleges and universities is divided into two stages. The first stage is the national academic ability examination, which is called the central examination. The leading idea of the examination is not to let the examination become a difficult barrier for candidates. The exam content is the courses learned in senior high school, focusing on the mastery of curriculum knowledge and the development of personal abilities. The second stage is the test carried out by each university according to its own characteristics and discipline needs. Finally, the comprehensive scores of the two scores combined in an appropriate ratio will be used as the main evaluation criterion for enrollment. The second stage of the examination is divided into the following forms: individual academic ability inspection and each university make its own questions according to its own characteristics. The AO test, which, mainly evaluates the senior high school materials and examines the students' comprehensive ability, including the reasons for registration and papers written by the candidates, and is assessed in combination with the interview. The students, who are recommended for admission by the headmaster or who have been passed the test and have some special skills; A special examination to select vocational high school students; Special examination for some overseas students after World War II.

Japan's enrollment examination system takes into account both selection and fairness, avoiding the situation of "one exam for a lifetime". Even the central examination has the selectivity of a variety of disciplines. Each discipline has an elective part, and candidates can choose freely. This is different from the situation in China. Our

elective module no longer sets a subdivided elective direction. At the same time, middle schools have certain recommendation power, and colleges and universities have the autonomy to conduct special selection according to their own characteristics and subject specialties. In the selection process, fairness and freedom are taken into account in the setting of time and frequency. The candidates' participation times and participating colleges and universities can be selected. To the greatest extent, it avoids the disadvantage of screening talents only based on scores and exerts the evaluation function on both sides of the main body of the enrollment examination.

3. CONCLUSION

Based on the general situation of the enrollment and examination system in the above countries, we can find some common characteristics.

3.1. Diversification of evaluation subjects

In China's comprehensive evaluation and admission system, including the college entrance examination system, middle schools, as well as middle school teachers, cannot participate in the entire process of admission evaluation. There are teacher recommendation letters in the United States, the level of middle schools is also taken into account in Germany's ABI test indicators, and the format of recommendation letters is also included in Japan. In addition, it is a general trend for colleges and universities to have greater autonomy. Germany directly delegates 60% of the country's restricted professional quotas to universities for their own allocation; Singapore directly sets different examination systems according to different disciplines in Colleges and universities. The United Kingdom has changed its history and it is relying on the university itself to consider the quality of students, and carry out reforms from top to bottom; Japan has set up a second distinctive test organized by various colleges and universities. All the above examples show that the final examination absolutely needs to be changed. The evaluation subjects will not only be quantitative test questions, but the future development should be more inclined to the comprehensive evaluation of the linkage between colleges and middle schools.

3.2. Synthesis of evaluation criteria

The Chinese evaluation standard is basically to determine the outcome. Even for the comprehensive quality evaluation itself, the main evaluation standard is the college entrance test results. The academic level test of auxiliary evaluation is also a standardized test, and in essence, it does not get rid of the scores. The disadvantages of this evaluation system have long been recognized in the college enrollment system of various countries. The United States directly judges the reliability of various

screening systems based on predictability. The evaluation standard is not to screen the best people, but to screen the people who are most likely to grow into the best. Therefore, ACT and AP tests have been produced in the United States, because the prediction results of SAT for College Students are not satisfactory. Germany incorporates the average results of the second two years of middle school into the evaluation criteria for college admissions. The UK examines the non-academic experience, relevant skills, and even the previous education environment. Singapore's pre-reform certification system introduced the evaluation criteria of operational ability and independent thinking ability. Even Japan, a country that attaches equal importance to standardized testing, has gradually changed the first test into an examination of ability. Therefore, the evaluation criteria are gradually becoming comprehensive, with critical thinking, creativity, discipline differentiation and screening, personal growth environment, and other factors are gradually introduced into the evaluation system.

3.3. The Development of evaluation perspective

The major selection of Chinese colleges and universities is determined by filling in volunteers after the college entrance examination. Colleges and universities themselves can only determine whether they have a discipline foundation or discipline specialty according to the college entrance examination results and the examinee's single-subject scores. In Germany, there is a career guidance link before university admission. In Japan, the second stage of the examination is also screened based on the discipline and considers the students' reasons for applying. In Singapore, the examination is divided directly according to the discipline, and each certificate examination and in the UK is freely selected according to individual interests and Specialties. These practices are of reference significance compared with the current situation that universities and colleges students still need to change their majors after the majors are determined. It can even be said that they advance the entire life planning of students and eliminate unnecessary examination content. In the high school stage, various majors and future career directions should be popularized, supplemented by a more freely subdivided course selection method, taking into account basic education and focusing on the future development of individuals. In addition, the separation of academic and practical requirements in the evaluation criteria is also a major trend. More accurate positioning and diversion will be a standard for a perfect enrollment system in the future.

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