

The Problems and Countermeasures of China's College Entrance Examination System: An Overview Study

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Abstract—This study explores three major problems within China's college entrance examination system: Regional differences, family background diversification, and gender inequality. In terms of regional differences, the inequality between different regions leads to the inequality of college entrance examination opportunities, and the study suggests that the government should allocate resources, set up incentive mechanisms, and provide online education resources to solve this problem. Differences in family background have an important impact on students' performance and preparation for college entrance examinations, so it is recommended that educational subsidies be provided, social support systems built, and free family education carried out. The issue of gender inequality requires more in-depth research and improvement, including the implementation of gender equality policies, gender education campaigns, and the establishment of gender gap monitoring systems. The study also suggests ways to reduce academic pressure and improve innovation, including diversifying curricula, promoting diverse ideas, strengthening communication between schools and families, introducing comprehensive quality tests, and expanding vocational education. These solutions are aimed at improving China's Gaokao system to make it fairer and more comprehensive, providing students with better educational opportunities and possibilities for future development. The theoretical significance of the study is to enrich the theoretical system of the college entrance examination system reform and provide valuable references for policy formulation, to make the system more in line with China's educational needs and social development requirements. Considering the resourcefulness of this topic and the limitations of fieldwork, this paper chose the literature research method as the research method.

Keywords—college entrance examination, system, problems, countermeasures, China

I. INTRODUCTION

China's college entrance examination is a selective examination for high school graduates and students who have basically the same qualities. It aimed to host a fair competition and provide young people with higher living standards in the future, however, sometimes, the outcome

may backfire. There are plenty of problems brought by this exam, and people started to suffer from the defect of it instead of enjoying the benefits. From those incidences such as suicide cases published on the internet and in newspapers, it turns out that it is the stress that leads to these problems. According to this topic, many assumptions and theories were developed through the process. For example, some scholars believe that the root cause of the pressure of the college entrance examination and test-based education in China is the result of discriminatory schooling controls in China [1]. These controls have greatly suppressed and limited the development of private higher education, and have categorized China's public universities into a hierarchy with a very small number of high-quality universities [2]. This initiative has artificially not only created a substantial scarcity of high-quality higher education resources in China, but has also further narrowed the range of effective choices for Chinese high school students to select high-quality universities in the country, and severely exacerbated the oversupply of high-quality higher education resources [3].

Based on the above discussion, this article focuses on analyzing the shortcomings of China's college entrance examination and exploring possible solutions. This study focuses on the development history, deep logic, and internal characteristics of the college entrance examination system to explore the unfairness, illogicality, and imperfection of the system, and based on this, it proposes countermeasures to eliminate these shortcomings. This study is of great significance. For Chinese high school students, the college entrance examination is only a very short fragment of their lives, but it is somehow an important fragment. For some candidates from the lower social strata, the college entrance examination is the most important opportunity for them to change their fate [4]. If such an important opportunity is still mixed with all kinds of shortcomings and becomes unfair, then these people who expect to change their fate through the college entrance examination will still have to live at the bottom of the social stratum, and they will not be able to turn around for generations, which will only make the polarization of China's education more and more serious [5].

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This paper contains seven sections, following this introductory section, the second to the fourth section review the history, rationale, and characteristics of the College Entrance Examination (CEE) in China. Based on the review, the fifth and sixth sections discuss the weakness within the CEE system in China and explore the possible solutions to overcome the weakness. The last section concludes the paper by summarizing major statements, investigating the limitations and suggestions for further research, and examining the implications of the study.

II. GAOKAO: A HISTORICAL OVERVIEW

The National Unified Examination for Admission to Ordinary Schools of Higher Education (hereinafter referred to as the College Entrance Examination) is a nationwide examination designed to select students suitable for admission to ordinary schools of higher education. Every year, the College Entrance Examination is held in June and is open to full-time graduates of ordinary senior high schools and citizens of the People's Republic of China with equivalent academic qualifications. The scope of enrollment for the college entrance examination includes two major categories: Science, technology, agriculture, and medicine (including sports), and literature and history (including foreign languages and arts).

The origins of China's current college entrance examination system can be traced back to the imperial examination system of pre-modern Chinese society more than 1,300 years ago. This system was once considered an effective way to select talents and profoundly influenced East Asian countries. However, in 1905, to promote new education and cultivate practical talents, the Qing court abolished the imperial examination system and introduced the Western school examination system. It was not until 1977 that China's central government organized the reinstatement of the college entrance examination, a move that received widespread coverage, with the People's Daily's front-page headline detailing this major reform in higher education enrollment, news of which quickly spread throughout the country. Later, in 1999, the Ministry of Education promulgated the Action Plan for Revitalizing Education for the 21st Century, a document that provided a comprehensive plan for achieving the ambitious goals and tasks of socialist modernization across the century, with special emphasis on the implementation of the strategy of developing the country through science and education. From that year, colleges and universities began to expand their enrollment on a large scale, and in 2003, the Ministry of Education approved the first batch of 22 colleges and universities to carry out independent enrollment pilot projects. Since then, independent enrollment has become a new enrollment method, and the number of colleges and universities qualified for independent enrollment has gradually increased, and the enrollment methods have also diversified, including self-organized tests, the principal's real name recommendation system, and the independent enrollment joint examination.

In 2008, China introduced the Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010–2020), which explicitly stipulated that the enrollment rate in general higher education would reach 15 percent of young people of school age. In only five or six years, the enrollment scale of universities has nearly tripled, and education has gradually shifted towards 'mass education', gradually replacing the 'elite education' model [6]. However, at the same time, college graduates are generally facing challenges such as insufficient vocational skills and employment difficulties, which has triggered a rethinking of the enrollment expansion policy.

In 2018, the Ministry of Education issued a deployment on the enrollment of ordinary colleges and universities, requiring that the admission rate of the college entrance examination in central and western regions and populous provinces be increased and that colleges and universities belonging to the central departments should tilt towards provinces with relatively low admission ratios [7]. In addition, national college entrance examination bonus points programs such as special students in sports, secondary school students' Olympic competitions in disciplines, science and technology competitions, provincial outstanding students, and outstanding deeds in ideological and political character have been completely abolished.

In 2019, the central government organized a national television and telephone conference on the safety of the general college entrance examination, further emphasizing the fairness of the college entrance examination system and the organization of the examination. In 2023, many provinces that used to adopt independent examination questions began to use nationally standardized test questions, for example, Zhejiang Province began to use nationally standardized Gao Kao papers for the language, mathematics, and foreign language subjects in its Gao Kao examinations [8].

In summary, the establishment of China's modern college entrance examination system stems from two important historical traditions: first, the influence of the imperial examination system, which emphasizes talent selection, and second, the introduction of the ideas and methods of the modern Western examination system, which emphasizes fair competition [9].

III. GAOKAO: THE CONTENT AND RATIONALE

The design of China's current college entrance examination system follows two core guiding concepts: first, it follows the overall framework of the '3+x' program, with 'x' as the point of innovation; second, it is coordinated with the concept of the new curriculum reform to build a basic, diversified, hierarchical, and comprehensive curriculum structure. Secondly, it is harmonized with the concept of the new curriculum reform to build a curriculum structure that is 'basic, diversified, hierarchical and comprehensive'. The specific design ideas of this system are mainly reflected in the following four aspects:

First, the college entrance examination adopts the model of '3 + Academic Level Test + Comprehensive Quality Assessment', with the three panels being independent of each other but interrelated. This solution breaks through the disadvantages of the previous college entrance examination, which was limited to cultural tests only, and helps to promote the balanced development of students in terms of morality, intelligence, physical education, and fine arts while respecting the individual development of students [10]. The move also helped to reduce the test-taking tendency of secondary education by adopting segmented, sub-methodical, and sub-itemized assessment methods, which increased students' selectivity and reduced their learning burden [10].

Secondly, language, mathematics, and foreign languages (usually referring to English) are taken as unified examination subjects, highlighting the core status of basic subjects. At the same time, additional questions are included in the language and mathematics subjects to meet the needs of students' personalized development and to stimulate their potential. In addition, the introduction of a foreign language listening test develops students' listening and speaking skills and enhances their international competitiveness.

Thirdly, the Academic Level Test is a comprehensive test of senior secondary students' learning in school. Its design idea follows the following principles: First, in terms of subject setting, it consists of three main blocks, which constitute a comprehensive evaluation system for senior secondary students. The Academic Level Test is based on the requirements of the senior secondary school curriculum, and the areas of art, sports, and research studies are shifted from academic level assessment to comprehensive quality assessment. Therefore, the Academic Level Test is only set up for compulsory subjects, while the testing of technical subjects is done by secondary schools themselves.

Secondly, in terms of content composition, the Academic Level Test has set compulsory and elective subjects among the other five subjects, which is in line with the requirements of the new curriculum reform program. The setting of elective subjects expands the field of compulsory subjects, and elective subjects also include the content of compulsory subjects to reduce the number of subjects and times students are tested [11]. For example, the practice of selecting 1 subject in history and physics emphasizes the fundamental status of history and physics subjects in the field of liberal arts and sciences in higher education, while giving students a certain degree of choice, reflecting the principle of combining fundamentality and selectivity.

Thirdly, in terms of organization, the testing time for compulsory subjects is 75 minutes and that for elective subjects is 100 minutes, so the overall testing time is not excessive. In addition, there are two testing opportunities for the compulsory subjects and the validity period of the results is three years, which increases the testing opportunities for students and helps them rationalize their time and the order of subject testing.

Fourthly, in terms of scoring, the Academic Level Test adopts a graded scoring system, thus alleviating the phenomenon of 'competition in scores'. The grades of compulsory subjects are converted based on raw scores, and the problem of differentiation is solved by controlling the difficulty of test questions. The grade differences of elective subjects are converted through the grading of scores, which to a certain extent avoids the problem of unequal scores that may arise among subjects.

Finally, from the point of view of the utilization level, the academic level test is closely related to students' voluntary application. Considering the diversity of colleges and specialties, the test program sets minimum requirements for levels and specialties, and colleges and universities can also set additional requirements on this basis. The incentive policy of giving extra points for admission has been adopted for students who perform well in academic level tests, and the academic level test grades have become the threshold for distinguishing admission batches and specialties, playing a key role. At the same time, colleges and universities also have the right to put forward specific grade requirements, fully demonstrating the importance of the Academic Level Test in college enrollment and admission.

Turning to the Comprehensive Quality Assessment is based on students' growth records and adopts a 'pass + grade' index system to grade moral character, civic literacy, communication, and cooperation. Among them, moral character, civic literacy, and communication and cooperation are the most important. Among them, moral character and civic literacy are necessary conditions for volunteering; learning ability, sports and health, aesthetics, and performance of an A grade, and the other three are qualified, colleges and universities in the same conditions can be prioritized for admission, are D grade, colleges and universities may not be admitted, which reflects the comprehensive quality assessment of the usefulness. In addition, the program also established the principal integrity commitment, project sampling, accountability, and other systems, and strives to implement the comprehensive quality assessment work objectively and effectively.

IV. GAOKAO: THE CHARACTERISTICS

The college entrance examination system currently in place in China exhibits a highly systematic approach, organically combining a few elements, including scores and grades, uniform and selective testing, uniform admission, and independent enrolment, while being closely linked to the new curriculum reform, and displaying the following three main features.

First, the college entrance examination system has realized the integration of uniformity and diversity. The meaning of uniformity is twofold: First, the program takes uniform test scores as the main admission requirement. Second, language, mathematics, and foreign language are used as unified examination subjects, and their unified examination results are used as the main basis for drawing score lines, making filing and

admissions, ensuring the uniformity of the basic subjects and the equivalence of examination scores, thus highlighting the fairness and impartiality of the examination system [12]. Diversity is mainly reflected in the subject combinations, which emphasizes that in addition to the three subjects of language, mathematics, and foreign language as the unified subjects of Gaokao, other high school study subjects will be examined in the Academic Level Test and linked to admission to colleges and universities, generating a variety of subject combinations and reflecting the diversity of the examination. In addition, it also involves the diversity of evaluation. In addition to Gaokao, the program also provides two opportunities for the Academic Level Test, which makes up for the shortcomings of 'one test for life' [13].

Second, the Gaokao system realizes the unity of basicity and development. On the one hand, the current program of the college entrance examination stipulates language, mathematics, and foreign language as compulsory subjects, and makes principal regulations on the content and mode of assessment, emphasizing the basic nature of these three subjects in the cultivation of higher education professionals. On the other hand, the '3+x' program as well as the independent but interconnected Academic Level Test and Comprehensive Quality Assessment constitute a comprehensive evaluation system [14, 15]. The scope of the program's investigation of students goes beyond the limitations of scores, expanding to an all-round investigation of morality, intellectuality, physicality, and aesthetics; the diversity of the sub-evaluation and different ways increase the selectivity of students, which is conducive to the overall development of the students and their personality and is also conducive to the comprehensive implementation of quality education in secondary schools. At the same time, the program takes the comprehensive quality assessment as the basis for admission to colleges and universities based on merit, which highlights the importance of students' innovative consciousness and innovative ability.

Third, the college entrance examination system reflects the autonomy of college enrollment. According to the current college entrance examination program, colleges and universities can independently determine the grade requirements for students' academic level tests according to the knowledge structure requirements of different majors. This organically combines the three main bodies of secondary schools, examination departments, and colleges and universities, which helps colleges and universities of different levels, types, and characteristics to propose personalized admission methods to meet the needs of students in different colleges and universities [10]. Therefore, the program has the orientation of high-end diversified (key higher institutions), middle-end stable (general higher institutions), and low-end open (specialized or private vocational institutions) college enrollment reform, which provides a wide range of space for college enrollment reform.

Reviewing the relevant literature, this section aims to explore in depth the historical origin, special connotation, internal logic, and specific features of China's college entrance examination system. A comprehensive review of this system can provide a more solid foundation for the in-depth analysis in the next subsection, especially in examining its potential problems and exploring feasible countermeasures.

V. PROBLEMS

Although the Gaokao system has played an important role in selecting and admitting students, it also faces a series of problems and challenges, such as the pressure of teaching to the test and the uneven distribution of resources, which require further in-depth research and improvement. This section focuses on the potential problems and drawbacks in the long-term development that the Gaokao system may bring and explores possible directions for reform [14].

A. *Wide Educational Inequality*

Equality in education is a core component of the democratization of education, aiming to ensure that everyone enjoys the same rights and opportunities for education in law and in fact, regardless of political, economic, cultural, ethnic, faith, gender, geographic, and other restrictions. Considered the cornerstone of social equity and justice [16], equality in education is not only about the development opportunities of individuals but also about the development and stability of the national society. However, as times change, the educational inequality brought about by China's college entrance examination system has become more and more significant [17, 18].

First, one of the obvious problems in China's college entrance examination system is geographical differences. The uneven distribution of educational resources among different regions has led to unequal opportunities in Gaokao [19]. In some developed regions, schools have more educational resources and high-quality educational conditions, and students are therefore more likely to achieve excellent results. In contrast, students in some impoverished areas face limited resources and educational opportunities, and it is more difficult for them to obtain quality education. Such geographical differences directly affect students' competitiveness in the college entrance examination, and inequality gradually surfaces.

Second, differences in family backgrounds also produce inequalities in the college entrance examination system. Family economic conditions and cultural background have a significant impact on a student's academic performance and preparation for the college entrance examination. Students from affluent families usually have access to more educational resources, such as home tuition and various types of training programs, thus enhancing their competitiveness. On the contrary, students from poor families or rural areas may face the challenge of insufficient resources, which may affect their academic performance. This difference in family

background leads to unequal access to the college entrance examination, which is an urgent issue to be addressed [20].

In addition, the Gaokao system also suffers from gender inequality. Although China's education policy emphasizes gender equality, some studies have shown that female students' performance in Gaokao may be affected by certain gender biases. There are differences in the admission criteria for male and female students in some college majors, while certain majors where male and female students are clustered have unbalanced gender ratios. This issue of gender inequality requires more in-depth research and improvement.

B. Huge Academic Pressure

The intense competition in China's college entrance examinations has become a focus of social attention, putting enormous pressure on students and families to take the test. This phenomenon appears frequently in Chinese news reports, such as a case that was reported on Xinhua.com. The case highlights the negative impact of the college entrance examination system on students' physical and mental health, using Mark (a pseudonym) as an example.

Mark, a student about to take the college entrance exam, comes from an ordinary family but has always done well. However, since entering high school, his life has become intense and stressful. This is because schools are constantly increasing the difficulty and number of subject tests to increase the promotion rate. Mark must memorize a large amount of knowledge after school every day and attend various training classes and mock tests to excel in the college entrance exam. To support him, his family invested a lot of money and time, hired tutors and pre-test counseling, and even sacrificed their leisure time and quality of life.

However, this intense life of preparing for the examinations put a tremendous strain on Mark's physical and mental health. He often suffered from insomnia, loss of appetite, depressed mood, and even began to experience anxiety symptoms. He often felt unable to escape the pressure of his studies and worried that he would not be able to fulfill the expectations of his family and society. At the same time, his parents were also under pressure and had to sacrifice their leisure time and quality of life to support his preparation for the examinations.

As the college entrance examinations approached, Mark's anxiety and nervousness reached a peak and he even experienced physical symptoms. His doctor eventually diagnosed him with depression and anxiety and he had to stop preparing for the examinations for some time to receive treatment. This not only cost him valuable preparation time but also made him extremely worried about the outcome of the college entrance examination.

This case triggered a deep reflection on the shortcomings of China's college entrance examination system. The highly competitive environment of the college entrance exam has put students and families under heavy pressure of teaching to the test, leading to an explosion of mental health problems. Students often feel

overwhelmed and fear that they will not be able to cope with the social expectations and their families. Parents invest a great deal of resources to help their children, but this can also lead to damage to their health and quality of life.

The results of Gaokao have a huge impact on the future of Chinese students, as they directly determine whether students will be able to enter their desired colleges and universities. This phenomenon leads to an extreme concentration of stress in the college entrance examinations, and students often feel tremendous psychological pressure because they know that their college entrance exam results may determine their future career and social status. Analyzed and interpreted in the light of relevant literature, this psychological pressure mainly stems from the following contradictions.

First, the contradiction between the pressure of higher education and comprehensive development. To pursue high scores, many students devote most of their time and energy to preparing for examinations, which leads to their insufficient cultivation in other important areas, such as sports, arts, and hobbies. This situation may affect their overall development. For example, students may lose the opportunity to participate in sports activities, fail to develop teamwork and leadership skills, or fail to develop their creativity and innovation [21]. This is an important issue for a comprehensive quality education perspective.

Second, social competition and career prospects. Chinese society is highly competitive, and the results of the college entrance examinations are widely recognized as the key to entry into top universities and future career success. As a result, students and parents often feel compelled to prioritize Gaokao. However, this disproportionate focus may overlook other important qualities such as creativity, innovation, and leadership, which are equally crucial in future careers.

Thirdly, there is a tension between mental health and test anxiety. Excessive focus on GCSE preparation may harm students' mental health. Prolonged academic stress and anxiety may cause students to experience stress symptoms such as insomnia, depression, and anxiety. This is not only harmful to the physical and mental health of individuals, but may also hurt society, as mental health problems may hinder students' academic and social development.

C. Weak Creative Focus

The college entrance examination system favors tests of subject knowledge and examines mainly test-taking skills rather than actual comprehensive qualities. This may make students lack practical application skills and innovation ability, and they face the problem of mismatch between employment and vocational skills after graduating from colleges and universities. It is mainly reflected in three aspects.

First, there is an imbalance between knowledge transfer and comprehensive quality. The college entrance examination system usually focuses on the assessment of subject knowledge, which is designed to assess students' mastery of specific subject areas [22]. However, this focus may cause students to neglect the cultivation of

comprehensive qualities, such as creativity, critical thinking, and communication skills. This excessive focus on knowledge transfer may weaken students' ability to solve problems and cope with complex situations in real life. For example, it has been reported that some of China's college graduates face skill deficiencies in the job market because they focus mainly on knowledge acquisition at the college level and neglect the cultivation of practical application skills. This has led to a disconnect between college graduates and the job market, requiring additional training and adaptation periods.

Second, there is a disconnection between test-taking skills and practical needs. The college entrance examination mainly examines test-taking skills, which means that students are often trained to be experts in coping with specific examinations. However, such test-taking skills do not necessarily meet the needs of actual society and the workplace. Students may excel in test-taking, but feel at a loss when it comes to solving real-world problems and meeting work challenges. Some reports indicate that some Chinese college graduates experience difficulties adapting to the workplace because they lack practical problem-solving experience and innovation. This reflects that the Gaokao system has certain deficiencies in developing students' practical application skills [23].

Third, the examination addresses insufficient innovation ability and competitiveness. In modern society, innovation ability is crucial to the competitiveness of individuals and countries. However, the college entrance examination system is usually less effective in assessing and developing students' innovative potential. This can lead to an educational model that encourages students to memorize rather than stimulate their creative thinking. For example, the Chinese government has been advocating an innovation-driven development strategy in recent years, but whether the Gaokao system is sufficiently supportive of students' creative abilities remains a controversial issue. Some scholars and educators have called for reforming the college entrance exam to better reflect students' creative potential.

VI. COUNTERMEASURES

A. Pursuing Equality

In response to the problems of regional differences, family background differences, and gender inequality in China's college entrance examination system, this study proposes some suggestions and programs to solve the problems as follows.

Three main solution strategies can be adopted to address the problem of inequality between regions. First, resource allocation: The government can increase its investment in educational resources in poor areas to ensure that schools in these areas can provide high-quality education. This includes providing more teachers, teaching materials, facilities, and technical support. Second, set up incentives: encourage excellent teachers to teach in impoverished areas by providing certain incentives, such as allowances and title promotions, to

attract more experienced educators to these areas [24]. Third, providing online educational resources: Utilizing internet technology to provide online educational resources to expand the coverage of education so that students in poor areas can have access to high-quality education.

Three main solution strategies can be adopted to address the problem of inequality in family background. First, granting education subsidies: The government provides targeted education subsidies to help students from poor families obtain more training and education resources. Second, building a social support system: Establish a stronger social support system, including the provision of services such as psychological counseling, academic tutoring, and career planning, to help students overcome the challenges of their family background. Thirdly, provide free family education: Launch family education programs to help parents (especially those in less economically developed areas) understand how to better support their children's learning, and provide training in family education skills.

Three main strategies can be adopted to address gender inequality. First, implement gender equality policies: Strengthen gender equality policies in the field of education to ensure that male and female students are treated equally in college entrance examinations and enrollment, and eliminate gender discrimination. Second, conduct gender education and publicity: Conduct gender equality education and publicity to raise awareness of gender equality in society, including teachers, students, and parents. Third, conduct monitoring and feedback: Establish a monitoring system for gender differences, continuously track the impact of gender in the college entrance examination and enrollment, and take necessary improvement measures based on the results.

B. Lessening Pressure

This study proposes the following solutions to the problem of excessive academic pressure caused by the college entrance examination. First of all, to solve the problem of the contradiction between the pressure of higher education and comprehensive development, schools should insist on offering interest courses in addition to the traditional cultural courses such as language, mathematics, English, and science, such as ball games, musical instruments, dances, painting, and other diversified clubs, which do not conflict with the time of the cultural courses, but also can better cultivate the interests of the students, and promote the all-around development. Secondly, the state should also introduce corresponding policies, and strive to improve the quality of education, so that children and adolescents in moral, intellectual, physical, and other aspects of all-round development, to improve the quality of the whole nation, and to cultivate ideal, cultured, and disciplined socialist construction talents to lay the foundation.

Secondly, to address the issue of social competition and career prospects, schools should organize meetings and lectures to help students and parents establish a pluralistic concept, so that they will understand that the college entrance examination is important, but it is not

the only way and choice leading to success and ideals, and that good grades are good, but at the same time, other aspects should not be neglected. Today, Chinese society needs talents with strong overall ability and high comprehensive quality, so no matter what path to success they choose, they should pay attention to the cultivation of their scientific and cultural knowledge, socialist ideology, and morality, as well as physical and mental health and other qualities.

Finally, to address the contradiction between mental health and test anxiety, it is necessary to strengthen the communication between schools and parents as well as between parents and their children. Schools should hold regular parent-teacher conferences, chaired by teachers, to emphasize to parents the importance and necessity of quality education for success, and to cooperate with the school to create a relaxing and pleasant learning environment and atmosphere for students. Give students more encouragement, less criticism, more care in learning and life, etc., to promote students' physical and mental health and learning progress. Parents and their children should strengthen communication and exchange, timely understanding of the psychological state of the nucleus and its psychological problems, and the school work together, on the right remedy to cultivate healthy psychological quality of the candidates, to alleviate the pressure of the college entrance examination.

C. Improving Innovation

Three main strategies can be adopted to address the imbalance between knowledge transfer and comprehensive quality in the college entrance examination system. First, curriculum reform: Introduce more comprehensive quality education content into the senior high school curriculum, including courses that foster creativity, critical thinking, and communication skills. This can be achieved through the introduction of elective courses or special programs. Second, carry out project-driven learning: Encourage students to participate in practical problem-solving projects, scientific research projects, social practice, etc., to cultivate their comprehensive quality and practical application ability [25]. Third, conduct comprehensive quality assessment: Gradually introduce comprehensive quality assessment programs, such as interviews, writing, project presentations, etc., into the college entrance examination system to comprehensively assess students' qualities and abilities.

Two main solution strategies can be adopted to address the problem of weak applied skills training. First, expanding vocational education: Developing more vocational education programs related to actual occupational needs to help students acquire practical applied skills and improve their competitiveness in the workplace. Second, create internships and practice opportunities: Cooperate with enterprises and industries to provide students with internships and practice opportunities so that they can accumulate experience and skills in a real work environment.

Three main solution strategies can be adopted to address the problem of insufficient innovation ability.

First, develop innovative courses: Offer innovation and entrepreneurship courses to encourage students to think about and solve practical problems and cultivate innovation ability. Second, set up competitions and projects: encourage students to participate in research competitions, innovation projects, science, and technology entrepreneurship, etc., and provide support and rewards to stimulate the sense of innovation. Third, promote education evaluation reform: Introduce diversified evaluation methods in school education evaluation, including academic performance, comprehensive quality, innovative achievements, etc., to reduce over-reliance on test scores. Fourth, encouraging lifelong learning: Emphasizing the importance of lifelong learning and encouraging students to continue to learn and improve their abilities beyond the school stage.

VII. CONCLUSION

This study first explores three drawbacks of China's gaokao system, namely Wide educational Inequality, Huge academic pressure, and Weak creative focus. 18 recommendations are made to address these drawbacks.

To solve the problems of inequality in China's college entrance examination system, this study proposes a series of solutions. For geographic inequality, it is suggested that the government allocate resources, set up incentives, and provide online education resources. For family background inequality, it is recommended that education subsidies be granted, social support systems be built and free family education be provided. Regarding gender inequality, it is recommended that gender equality policies be implemented, gender education be publicized and a monitoring system for gender differences be set up.

To address the problem of excessive academic pressure caused by the college entrance examination, this study proposes the following solutions. Firstly, to solve the problem of the contradiction between the pressure of higher education and comprehensive development, schools should insist on providing courses of interest other than traditional culture courses, and the state should also introduce corresponding policies and endeavor to improve the quality of education, to make children and adolescents develop comprehensively. Secondly, to address the issue of social competition and career prospects, schools should provide lectures to help students and parents establish a diversified concept. Finally, to address the conflict between mental health and test anxiety, there is a need to strengthen communication between schools and parents as well as between parents and children.

To address the problem of insufficient innovation, this study proposes the following solutions. To address the imbalance between knowledge transfer and comprehensive quality in the college entrance examination system, curriculum reform can be carried out, project-driven learning can be carried out, and comprehensive quality assessment can be conducted. To address the problem of weak applied skills training, vocational education can be expanded to create internship and practice opportunities. To address the problem of

insufficient innovative capacity, innovative curricula can be developed, competitions and projects can be set up, and educational evaluation reform can be promoted.

The limitation of this study is that no practical survey was conducted to obtain primary data. While the literature study provided valuable existing literature, it was not able to obtain new data and information. In the future, I plan to create a questionnaire about the drawbacks of the college entrance examination, targeting students and their teachers who are about to face the college entrance examination, and asking questions like “What are the negative effects of the college entrance examination on you?” or “What is your current state of mental health on a scale of 1 to 5?” and so on. By printing and disseminating these questionnaires to the relevant subjects through the media, the data collected will be summarized to provide a more in-depth and realistic study of the drawbacks of the college entrance examination.

This study is of great significance to the in-depth understanding of our college entrance examination system. Examining the problems and proposing countermeasures can provide valuable references for the reform of the college entrance examination system. At the theoretical level, this study enriches the theoretical system of the study of the reform of the college entrance examination system. Exploring the evolution of the college entrance examination system from restoration, adjustment, and development reveals the stage-by-stage ideas and value orientation embedded in it. This not only gives the college entrance examination system a more vivid policy life but also enables the college entrance examination system with Chinese characteristics to give more obvious play to its advantages. In addition, the study also has the significance of digging deeper into the internal logic of China’s college entrance examination system. Through deeper analysis, it provides a valuable theoretical reference basis for the reform of China’s college entrance examination system.

CONFLICT OF INTEREST

The author has claimed that no conflict of interest exists.

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