

Research on Innovation and Flexibility of Senior High School Education System

Yining Shen^{1,a,*}

¹*Foreign Language College, Zhejiang Wanli University, Ningbo, Zhejiang, China*
a. 2023011392@zwu.edu.cn

**corresponding author*

Abstract: Chinese senior high school exam-oriented education has been continuously influenced by the Chinese traditional education system for thousands of years which is often based on scores and rankings as the core competition points. In modern times, constant education reform and learning from the continuous improvement and improvement finally evolved into the current exam-oriented education system. Under the exam-oriented background, it has its own unique excellent characteristics, but it also has some shortcomings which mainly embody at the lack of innovation and flexibility, the severe situation of students' psychological behavior under great pressure and other small aspects. This paper will analyze the education system from these aspects, and puts forward relevant suggestions for improvement in view of the problems existing in exam-oriented education: pay more attention to students' academic performance and comprehensive quality and ability, and build a Chinese-style quality-oriented education suitable for Chinese senior high school students. Additionally, it is better to introduce related technology to assist in order to learn from the existing basis and constantly innovate. Only in this way can China promote a balanced development of China's education.

Keywords: Exam-Oriented Education, Innovation, Education Development

1. Introduction

Currently, under the influence of the traditional and solidified Chinese educational thought system, exam-oriented education has always dominated the development of China's education system, especially in the teaching mode of senior high school. The predecessor of the exam-oriented education system should be the ancient imperial examination system, with scores and rankings as the core competition points, and examination skills and memory ability as the guidance to play a fair role in educational selection. Additionally, social demand and competition, the unification of educational evaluation, and the pressure to get further education have contributed to the current educational status quo.

At present, the focus of the college entrance examination is mainly on the level of examination results. However, when students apply for employment, the eyesight of enterprises are also focused on the applicant's academic background which gradually forms the concept of the elite university first.

This makes the view of high exam score would lead to a better future deeply rooted in the hearts of students and parents. This is also the source of students' psychological problems.

After years of exploration, many researchers believe that the true essence to deal with the problem of one-sided examination in senior high school lies in the reform of college entrance examination. This reform adds selectivity and diversity to senior high school teaching, but it still can't change this test-taking habit [1]. The lack of innovation and students' psychological concerns is actually a big disaster for education and students themselves.

Neither side can deny the advantages and disadvantages of today's examination-oriented education, including its efficient but unitary nature in selecting talents. This article will concentrate on the pros and cons of today's exam-oriented education and make a detailed analysis of these characteristics and give appropriate suggestions. Take the good and discard the bad, for the purpose of achieving the goal of suitable for Chinese senior high school students and take full consideration of curriculum flexibility and innovation, students' mental health status, and the adaptation of curriculum objectives.

2. The Characteristics and Influence of Senior High School Teaching System under the Background of Exam-Oriented Education

2.1. The Characteristics of High School Teaching Mode under the Background of Exam-Oriented Education

2.1.1. Status Quo of Exam-Oriented Education

Under the continuous influence of the traditional Chinese education concept, the senior high school education under the exam-oriented education has always covered a huge explicit and implicit competition orientation. Previously, high school exam-oriented education was regarded as a stable and huge competitive market for entrance examinations, and training institutions of different scales and individual tutors are popping up. And under the influence of parents' and students' view of a better future comes from high academic performance, more and more high school students voluntarily or under the arrangement of their parents accept after-school tutoring. Gradually making use of extracurricular time to attend after-school tutoring has become a normal thing that every high school student has to do. Since the implementation of the double reduction policy, various institutions have turned to the direction of senior high school education training. Moreover, More and more training resources are given to senior high schools to enhance their competitiveness.

Moreover, nowadays, the teaching content of exam-oriented education in high school closely revolves around the exam outline and the past years' exam paper, and pays attention to the combing of knowledge points and the training of problem-solving skills. The consolidation and tradition of exam-oriented education, coupled with the great pressure of high school study and the emphasis on performance ranking, will also have a certain impact on students' psychological problems. Fortunately, the education system is gradually diversified, including traditional classroom teaching, classroom interaction, group discussion, sample analysis and so on. At the same time, after the COVID-19 pandemic in 2020, online classes have also become an efficient mode of education. In other words, over the years, the development of Internet technology has triggered the development of online education. Online course platform, learning tablet and subject assistance application software provide rich resources and active teaching services.

2.1.2. Advantages

As history greatly developed, China's educational policy and talent selection system have also undergone certain changes during the past ten years. And the education system optimized year by year is becoming more mature. Recently, the education proposal jointly proposed by various departments is intended to establish a personalized high school education mechanism, requiring students themselves as the center, from the aspects of education concept, education model, teaching

curriculum and teacher qualifications and so on to build an appropriate education program [2]. Compared with the exam-oriented education in junior high school, senior high school pays more attention to students' logical thinking ability, problem-solving ability and innovation ability, which lays a solid foundation for future academic development. In addition, extracurricular activities and social practice have become an indispensable part of comprehensive quality education with the continuous upgrading of the system.

In early 2014, the new college entrance examination reform was implemented successively in Shandong, Zhejiang and other regions. The implementation of this approach gives students a great deal of choice and the opportunity to think about tradeoffs. The "3+3" or "3+2+1" subject selection mode and the "professional-oriented" admission mode make the subjects selected by students closely related to the major of future university study and the general direction of future employment. On the one hand, it gives students the choice instead of being bound by a given subject, on the other hand, this program will push senior high school career planning education to a new height. Senior high school career planning is a bridge to career education for senior high school students in China [3].

2.1.3. Disadvantages

Taking Zhejiang as an example, the problems faced by the senior high school education system under the background of exam-oriented education are endless. The first problem lies in students' interest in the course [4]. Interest is the best teacher. For students themselves, they need to choose the subjects they are interested in as their college entrance examination subjects, and for teachers, they need to set up courses that can arouse their interest to listen to to teach for the sake of reaching efficient purposes. However, the "3+3" selection mode of the college entrance examination makes students have to face the dilemma of choosing the subject they are interested in or the subject with high scores [5]. According to statistics, a large proportion of students have such a situation. For example, some students who have a great interest in learning physics will be happier and easier to learn in the future, but due to the difficulty of physics itself, it was not better than some humanities subjects in exam scores, so some students may finally give up physics as the subject of college entrance examination. While some students choose subjects they don't like because these subjects have advantages in the future job market. Nevertheless, some unpopular subject combinations in many schools do not set up classes, but there are many classes with a combination of pure liberal arts and pure science [1]. In 2024 and the upcoming 2025 college entrance examination, a large number of students are forced to choose subjects they are not good at under the "Physics and Chemistry Required" policy. This is the current situation that cannot be changed in the context of exam-oriented education [6]. This also makes it impossible for students to obtain the optimal solution of balancing interest and achievement in the result-oriented context, which has a great impact on students and education itself.

Second, it is the problem of cohesion of teaching content in junior and senior high schools. In China's exam-oriented education system, the teaching content of various subjects in junior and senior high schools has a certain repetition and cohesion relationship, but many teachers do not make good use of this feature in the teaching process to improve efficiency or lay a solid foundation. Otherwise, the whole year of junior high school examination review is also one of the factors causing this problem. So, the third problem is the time cost, and many teachers think that three-year middle schools and three-year high schools are not optimal solutions [7]. For top students, some schools have proposed the "2+2+1" model, that is, two years of middle school, two years of high school and one year of college entrance examination review system. This is the most efficient way for top students, on the one hand, it saves time cost, on the other hand, it makes good use of cohesion to ensure that students have a solid foundation. For moderately qualified students, the three-year high school is not enough time, especially in Zhejiang. Zhejiang continues to take the first college entrance examination (shoukao) in every year in early January for subjects other than Chinese and mathematics. This means

that students need to complete all three years of high school courses and one round of review before then, and then have two and three rounds of review in the remaining time to prepare for the all-subject college entrance examination in June. Perhaps they would be better off getting rid of shoukao or moving to a four-year high school. Furthermore, very little time will make students lose many practical opportunities, such as: physics, chemistry, biology experiments, etc. Teachers can only let students master the knowledge through video or courseware. And such teaching mode will also have a certain impact on students' psychological behavior.

2.2. The Effect of Curing Mode on Students

2.2.1. Psychological Influence

With the development of modern education, and the traditional system still has an important influences on it, the academic pressure of high school students continues to increase significantly, which is mainly reflected in personal emotions and behaviors.

There was a study on 800 high school students in Shijiazhuang, the main results are as follows: First, the academic pressure of Chinese high school students under the examination is generally high, and their emotional and mental health tends to be moderate. Second, effective emotional regulation strategies play an intermediary role between students' psychology and academic pressure. Third, the core of improving students' mental health lies in the correct expression of emotions [8].

Exam-oriented education is a mechanism to judge a student's ability level through scores, rankings and competition. As the grade grows, the expectations of parents, schools and themselves are gradually raised. In such an environment, it is extremely easy for students to focus all their attention on the objective number of grades, thus feeling the pressure of learning and the anxiety of covering the ground. Many teenagers in this age group equate their self-worth and sense of belonging with exam results, and they will be Mired in self-denial and believe that only good results in the exam have value, which is also the key to improving the mental health level of adolescents in China. According to the 2023 Blue Book of National Depression, depression patients under the age of 18 account for 30% of the total number, or about 28.5 million people. The rate of depression among adolescents was 24.6 percent, and high school students accounted for 40 percent of them. Moreover, the psychology of compromise to reality (that is, the reality can only choose on the road arranged by the school or parents), the psychology of chasing efficiency, the psychology of fear of difficulty, and the psychology of conformity are crushing the hearts of students step by step and smashing them [1].

2.2.2. Behavioral Influence

The psychological stress and health problems caused by academic pressure have concrete manifestations in external behaviors. Depression is only a very small part of it, the appearance of weariness, even running away from home, suicide, etc., are the main behavior. Annual teen suicide data is about 100,000. On average, there will be two defunct die by suicide every minute, and another eight people tried to kill themselves but failed. In the ranking of causes of suicide, excessive study pressure was the first (45.5%). It can be seen that the senior high school education system under the exam-oriented education system has more disadvantages than merits for students in Chinese senior high school in this respect.

Examination-oriented education can lead students to study with a continuous learning attitude, but to a certain extent, it obliterates children's spirit of exploration and thinking. Maybe some reward system can give them some motivation, but this is temporary, and there is no possibility of sustainable development. In addition, in recent years, the Ministry of Education has promoted well-round education, emphasizing the all-round development of morality, wisdom, physical education, art and labor, but in reality, it is difficult to fully implement this kind of education in the background of exam-

oriented education. That is to say, students will sacrifice other aspects of development to get good grades in order to cope with the exam, resulting in a shortage of comprehensive ability. This may be reflected in a large number of inadequate social adaptability, which will affect social development over time in the future.

3. Achieve Innovation and Flexibility

3.1. Modern Science and Technology Drive Innovative Education

If one element is to be chosen as the most distinctive feature of the 21st century, it must be technology. Nowadays, with the rapid development of science and technology, using the characteristics of The Times, namely the current advanced advantages, to promote innovative education is the most immediate strategy to deal with the difficulty of fully implementing quality education under the exam-oriented education, solve students' learning interests, and promote teachers' teaching efficiency. Innovative education is essentially a reorientation of educational functions. It is a comprehensive and structural educational development reform under the background of exam-oriented education, which brings about all-round divergent educational innovation such as morality, wisdom, sports, art and labor. Initially, it should cultivate the innovative spirit of students. As the subject of receiving education, students' subjectivity and initiative are indispensable in the process of receiving education. In the process of understanding, perfecting and constructing the knowledge system, the formation of innovative spirit is the key to help students to think independently, explore actively and innovate bravely. As for the construction of innovative thinking, it is based on classroom innovation, and for knowledge imparts, innovative and flexible teaching methods should be adopted. Based on the technology of The Times, the integration of artificial intelligence into the educational environment will bring potential progress in the field of education [9]. The output of cognitive reorganization by technology needs long-term accumulation and exploration. Technological tools have the potential to transform. Educational software such as coggle, Nearpod and PHET can stimulate students' self-reflection skills to a certain extent at a relatively high level [10]. Teachers can adopt heuristic teaching, questioning and stimulating method, independent inquiry method, etc., to cultivate students' innovative consciousness and ability. Plus, it is very convenient to use mind mapping to help students build knowledge frameworks. Many teachers will use the software coggle in the teaching process, set up group discussions in class, give each group an incomplete concept map containing knowledge points, and require students to supplement the complete concept map through group discussion. While teacher gives feedback and guidance after the homework is submitted. In such a learning process with knowledge output and input assisted by technology, students' learning and exploration ability can be gradually upgraded.

The real value of the combination of teaching and technology lies in the variety of learning resources and tools it provides to help them better acquire knowledge and develop skills. In addition, technology can provide a personalized learning experience, with instruction tailored to students' needs and interests.

3.2. Learn From and Combine with Reality

About the Chinese education system is definitely not invariable, it must be constantly learning from, combined with the actual situation of our country to reform.

In order to break the deadlock of the difficult diversified development of exam-oriented education, the curriculum setting of "compulsory + elective + plan" in American high schools is worth learning. Core courses are compulsory, courses in various fields are provided as electives to help students develop their interests and talents, and activities such as sports, clubs, communities and volunteer activities are set up to cultivate social ability [11]. Therefore, education reform is of great necessity.

Among them, strengthening the multiple evaluation system is the most feasible part, and gradually weakening the decisive role of college entrance examination scores in college entrance examination. The introduction of multiple evaluation indicators such as high school academic level examination and comprehensive quality evaluation is conducive to the implementation, implementation and upgrading of well-round education, optimizing students' learning experience, happiness and sense of belonging, and laying a full and solid foundation for entering society in the future. So that students in the recruitment occasions have greater personality strengths, social practice experience and interview performance of non-academic factors such as advantages.

4. Conclusion

The exam-oriented education in Chinese senior high school has its significance and influence as a long-standing education system. The method of selecting talents by examination which has been preserved for a long time in history has ensured educational equity and talent demand to a certain extent. Nevertheless, excessive emphasis on scores and rankings also leads to the lack of students' innovative practice ability, and there is also a huge psychological and behavioral pressure affecting physical and mental health.

In this technological era with the rapid development of science and technology, the innovation of teaching software and teaching methods stimulates students' learning initiative and creativity, and plays a enhancing role in cultivating students' innovative practical capability.

Moreover, education continues to reform, through learning from different educational system models to take their essence, and constantly optimize the allocation.

In conclusion, China's education has its advantages as well as many challenges. And education reform is imperative. The reform of senior high school education should focus on establishing a more comprehensive, scientific and reasonable education system to upgrade the comprehensive and healthy development of China's education sector.

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