

The Old and New Course Selection Methods in Chinese High School: Analysis from Gender Perspectives

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Abstract: After the Ministry of Education and the State Council in China enacted the regulations about the educational revolution in 2014, the new way of course selection in Chinese high schools gradually spread. At the same time, due to the obvious shortcomings of the old course selection method, it is progressively replaced by the new one. Based on the educational revolution, problems such as gender stereotypes still existed and they can influence students' choice on course selection. This article compares two ways of course selection and analyses factors that can influence students' course choices. In the two different ways of course selection, except for students' interests, gender stereotypes from teachers and parents are the main factor affecting students. Meanwhile, these gender stereotypes will always exist in the choice of college majors and future jobs. In the new way of course selection, there is a certain degree of improvement. Therefore, based on the new and better way of course selection, schools and parents should avoid gender stereotypes, guide students to choose suitable courses and meet the personalized development of students.

Keywords: the college entrance examination, course selection methods, gender

1. Introduction

During 2000 and 2014, the division of science and art was gradually implemented nationwide after making experience in Guangdong Province. In the process of implementing the policy, shortcomings have gradually emerged. A few studies show that the division of science and art is not conducive to the improvement of the overall quality of people, the implementation of quality education, and the proliferation of exam-oriented education [1-3]. In 2014, the Ministry of Education and the State Council enacted two regulations (Guidelines from the Ministry of Education on the Implementation of Academic Proficiency Examinations for Senior High Schools and Implementation Opinions of the State Council on Deepening the Reform of the Examination and Enrollment System). Hence, Shanghai and Zhejiang became the first province and cities to implement the new mode of the College Entrance Examination. In 2017, the new model of the college entrance examination was made universal nationwide in stages in a planned way [4-5]. In this period of transformation between the old and new models, some new problems about the two models gradually arouse the attention of some researchers. Some researchers admitted that the new model of the college entrance examination has advantages that the previous model did not have. For example, the new model of the college entrance examination can promote educational equity and

help students develop their personalities [3,6]. Meanwhile, the new model of the college entrance examination maintains the continuity and stability of the college entrance examination and allows students to carry out career planning as early as possible [7]. During the process of students choosing the subject, the problem that is the same as the previous model still existed. That is teachers and parents may use their experience and gender stereotypes to influence students' choices. In the old model of the college entrance examination, there was a common phenomenon. There were more girls in liberal arts and more boys in science. The impact is mainly manifested in influencing students' willingness to freely choose liberal arts and science subjects [8]. Besides, the teachers and parents can influence their choice, students have gender stereotypes in the division of arts and science [9]. Overall, two important themes emerge from the studies discussed so far. One is that most people hold a positive attitude toward the new model of the college entrance examination. The other one is that by the time of educational reform, people seemed to think that the division of science and art is an examination-oriented education and is not conducive to the overall development of students. So far, there has been very little discussion about whether gender stereotypes still influence students. Hence, in this study, there will be a comparison between two different examination models to see whether the new model of the college entrance examination can break gender stereotypes, and make education more equitable and conducive to the overall development of students. The comparison includes the class design, the influencing factor of students' subject choice, and the influence of students in their future development.

2. Curriculum Design and Course Selection Methods

2.1. Curriculum Design and Course Selection Methods of the Old Model of the College Entrance Examination

The old model of the college entrance examination is "3+X". "3" represent three required courses: Chinese, Mathematics, and English. "X" means the Integrated Curriculum of Arts or the Integrated Curriculum of Sciences. The Integrated Curriculum of Arts includes History, Politics, and Geography. The Integrated Curriculum of Sciences includes Chemistry, Biology, and Physics. The formerly mode of "3+X" is "3+Comprehensive subjects", which is first trialed in Guangdong Province. In the same year, the "3+X" mode is implemented in Shanxi, Jilin, Jiangsu, and Zhejiang provinces. The next year, this mode was Gradually promoted to the whole country. Before the educational reform, the "3+X" is the most widely applicable exam mode in China.

In order to make students fully understand every subject and have a suitable choice of courses in senior two, students are supposed to learn nine subjects: Chinese, Mathematics, English, History, Politics, Geography, Chemistry, Biology, and Physics in senior one. In senior two, there is the division of arts and science. For the courses that students are not selected for, students need to pass the qualification examinations in senior two. After passing qualification examinations, students will no longer study these subjects in high school. For example, suppose a student chooses liberal arts. In that case, that means this student takes history, politics, and geography as his or her subjects for the college entrance examination, and he or she needs to pass the qualification examination of chemistry, biology, and physics. After all the students make their choice, there will be a new grouping of classes according to their choices. In other words, students who choose liberal arts will form a class and students who choose science will form a class. In particular, the teaching content of mathematics will be easier in liberal arts classes. Because students of arts and students of science will do two sets of exams with different difficulty levels during the college entrance examination.

Under the influence of the long-term division of arts and sciences, the old education model is becoming increasingly controversial. Although the old model of the college entrance examination was feasible under the educational background at that time, numerous educators like Wang and

Feng hold that the division of arts and sciences is not conducive to implementing quality education, and it exacerbates the proliferation of exam-oriented education [1]. This mode hinders the personalized development and improvement of the comprehensive quality of students and is no longer suitable for current educational goals.

2.2. Curriculum Design and Course Selection Methods of the New Model of the College Entrance Examination

The new model of the college entrance examination has two modes: “3+3” and “3+1+2”. The first three of these two modes all mean three required courses: Chinses, Mathematics, and English. The second “3” of the “3+3” mode means that students need to choose three subjects among six subjects as their subjects for the college entrance examination. There is a total of twenty subject combinations for students to choose from. In “3+1+2” mode, “1” means students need to choose between history and physics. “2” means after choosing history or physics, students have to choose two courses among politics, geography, biology, and chemistry. There are twelve choices for students in “3+1+2” mode.

Same as in the previous model, students need to learn all nine courses in senior one and have to take the qualification examination for the unselected courses in senior two. Two things are different from the old model. The first one is the scoring rule. The scoring rule in the old model is that all accounts are calculated based on original scores. In the new model, Chinese, mathematics, English, physics, and history are included in the total score based on the original score. The remaining two subjects are included in the total score based on grade conversion scores. The second difference is the way of school. Students are divided into different classes according to their choice of history or physics. Students in the same class have the required course and history or physics together. For the other two courses, students must go to the other classroom to have a class with different classmates. It is similar to how classes are conducted at the university. Meanwhile, the different learning contents of mathematics are canceled. All the students will do the same math paper in the college entrance examination.

The influence of the new examination model on students is generally the advantages outweigh the disadvantages. First, teachers can have a more targeted teacher for students. There will be a higher quality of the class. Second, there is the transition from students’ passive choice to autonomous choice. On the one hand, it can stimulate students’ desire to learn and enhance their self-recognition remodeling. On the other hand, students can develop more comprehensively and individually [6].

3. External Factors Affecting Students’ Choices

According to Du, students are more susceptible to external factors when choosing subjects [10]. External factors include many aspects. For example, the influence of family and teachers. This part will analyze these two aspects from the gender perspective. No matter in the old examination model or in the new examination model, gender stereotype is always the dominant factor that affects students. First is the influence of family. The influence of family also can be divided into two types. That is active and passive. For the active type, due to the influence of the parents and students do not have clear life planning, students may want to have the same job as their parents in the future [6]. Hence, students may choose the related subjects without persuasion from parents or they may choose subjects that parents can help them [11]. For the passive type, parents may force students to choose subjects according to their life experiences and gender stereotypes. In their life experiences, most girls should learn art and most boys should learn science. On the one hand, it is disrespectful to students; on the other hand, it undermines the child’s motivation to learn.

The second is the influence of teachers. The gender stereotypes from the high school teacher may have a passive effect on students [8]. Students spend most of their time with teachers, so teachers play an important role in choosing students. Because many students are in a class, teachers may not do a targeted plan for every student. Hence, most teachers' suggestions are based on their experiences that most girls learn the art and most boys learn science.

In the old model of the college entrance examination, if a boy student prefers to learn art but his parents force him to choose science, he will not learn what he likes in the high school stage. In the later stage of his study, there will be a few chances for him to learn what he likes systematically. In the new model college entrance examination, there can be an opportunity for students to choose subjects in the field they like when their parents or teacher force them to choose history or physics. In the future, no matter whether in choosing majors or in finding jobs, students can learn what they like instead of being forced to select subjects. In this case, it also prevents the problems of students' learning motivation. The new examination model, to some extent, breaks the problem that gender stereotypes dominate students' choices and provides more opportunities for students.

4. The Impact of Students' Choice of Subjects on the Future

Enrollment, training, and employment are the three most important aspects of higher education [8]. Because of the limitation of the previous examination model, students' talents are not fully utilized. And in the Outline of the National Medium and Long-Term Education Reform and Development Plan (2010-2020), there is a clear statement that high school education is a critical period for the formation and independent development of students' personalities, and has special significance for improving national quality and cultivating innovative talents [12]. Hence, compared with the old model, the new model of the college entrance examination respects students' choices and promotes the diversified development of students.

4.1. The Impact on University Major Selection

In the old model of the college entrance examination, after the division of art and science, students who learn art no longer learn chemistry, biology, and physics. Students who learn science no longer learn history, politics, and geography. It inevitably leads to defects in the comprehensive quality of students. This is also one of the main reasons for the lack of comprehensive talent in China. In the university major selection, for example, the major of science even do not provide opportunities for students who learn arts. Also, parents and teachers will influence students' significant choices because of gender stereotypes. The scope of students' learning is greatly limited. Moreover, the old examination model may aggravate the utilitarianism of students [2]. In the long run, education may become exam-oriented education. The purpose of students' learning may change from enriching themselves with the knowledge to using knowledge to enter college. This is not conducive to forming correct ideological values.

In the new model of the college entrance examination, because of the flexibility of the "3+3" and "3+1+2" modes, the range of majors that students choose has greatly increased. The limitation of art and science significantly reduce. Meanwhile, this model can reduce the impact of gender stereotypes on subject selection. Because most students learn subjects that are both in art and science fields. It avoids the traditional impression that there are more girls majoring in arts and more boys majoring in science. Therefore, gender stereotypes can be improved.

4.2. The Impact on Future Job Selection

Because of the limitation of the division of art and science, there will be a chain reaction in students' development. When students choose between art and science, there will be a limitation in

students' choice of major in universities. After they graduate, there will be professional constraints coupled with gender factors when they find jobs. The problem of gender discrimination is more serious in society than in schools especially when people find jobs. Besides, in the information age, more science talents are needed to promote the development of China. These are the reasons for the saying that girls are difficult to find employment.

After the implementation of the new model of the college entrance examination, there are mature courses for students' future planning to help them find their interests and identify their future development direction. Hence, they may have clear objectives facing numerous options when they find jobs. In recent years, China has enacted policies to protect women's employment, and the new college entrance exams have somewhat reduced the impact of gender stereotypes on students. Compared with the situation that some students were limited in finding jobs because of their gender and major in college, the employment situation for students is moving in a positive direction.

5. Conclusion

The country's requirements for talent are constantly updated, and education is constantly changing with the development of the times. Comparing two different models of the college entrance examination, the problems in the old examination such as the gender stereotype have greatly improved in the new model of the college entrance examination. In the old examination model, influenced by gender stereotypes, parents and teachers may force students to make a choice. Students have little opportunity to change the far-reaching impact of this course selection method on their future development. In the new examination model, because of the diversified and flexible choices of subjects, students can at least choose one subject that they favor. Although the impact of gender stereotypes still exists in this model, students may have more options and the limitation of gender and majors have gradually reduced.

Overall, the implementation of the new model of the college entrance examination is in line with the development status in China. First, it can cultivate composite-type talents. Students can be influenced by sensibility while cultivating rational thinking. Second, it promotes educational equity. The new examination breaks the gender stereotypes that only girls learn arts well and only boys learn science well, giving teachers and parents a new concept of education. Third, it respects students' choices and promotes their overall development. In the new examination model, students can choose subjects that they are eager to learn, no matter it is in the art area or science area. It also solves the problem of students' motivation to learn.

Educational models are constantly changing. Changes in educational models always attract the attention of a large number of scholars. In the future, educators should learn from the previous model, make full use of the strengths of this model, avoid the impact of gender factors on education, and continuously improve the weaknesses that arise. In the long run, students can have comprehensive and individual development.

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