Analysis of the Differences between the Chinese and British General High School Education Systems

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Abstract. Due to the national conditions and historical background, China and the United Kingdom have many differences in education systems. Education system in China is mainly centered by teachers, emphasizing the leadership status of educators and paying attention to the basic knowledge with strict rules. British education system focuses on students' practice based on their own exploration with interest, paying attention to personality cultivation and advocating innovation ability. With the rapid development of international education, various problems in the process of education development in China and the United Kingdom gradually emerge. This paper mainly discusses the advantages and disadvantages of the general high schools education in China and the United Kingdom by comparison. Among them, the diversification of general high school education has the greatest impact on the current development of education, and effective measures need to be taken to improve it. Although there are many differences between China and the United Kingdom in both the concept and the mechanism of their education system, their same goal is to improve personal and social development. The two countries can complement each other's strengths and further improve education reform according to the comparison.

Keywords: Chinese education, British education, general high school, education system, differences.

1. Introduction

Education has always been a hot topic in current society, and the differences of the education systems between countries tend to be the focus of comparison. Among them, the education systems in China and the United Kingdom are generally similar. However, after entering universities, the feedback from Chinese and British students gradually begins to diverge, which may be a consequence of the differences in the practice of secondary education between those two countries. In this paper, literature method and comparative method are used to study the manifestation, causes, and results of the differences between the general high school education systems in China and the UK, exploring the strengths and weaknesses of the different education systems in the two countries and discussing their possibilities for further development.

2. Definition

In the international classification of education systems, a country's education system is usually divided into three parts: primary education, secondary education, and upper secondary education. Furthermore, secondary education is divided into two levels of secondary education: high and low level of the secondary education. And the education system applied in high schools, which is discussed in this paper, belongs to the category of the high level of upper secondary education. The differences between the general education system and the education system is that it is general and can be distinguished from the type of education whose main purpose is vocational and technical education [1]. In the "General High School Curriculum Program (Experimental)" promulgated by the Chinese Ministry of Education in 2003, it clearly stated that "general high school education is a basic education for the general public that further improves the quality of the nation on the basis of nine-year compulsory education". In the UK, there is no unified concept of general high school. But it is

easy to find that general education at the age of 16-18(19) years old in the UK is more in line with the nature and characteristics of the high school general education system [2].

3. Results

3.1 Educational Subjects

The differences between Chinese and British general high school education systems can be reflected in the differences of educational subjects. In China, the subject of education tend to be centered on the educators, who are inclined to act as the leader of their students. They are likely to give tasks and orders to students, exerting pressure and giving strict supervision with a very high power over students. There is even a saying said that once a teacher, always a father. However, in the UK, there is no obvious hierarchical relationship between educators and students. Educators tend to act as a facilitator, providing auxiliary guidance and help. Educators and students are equal to each other.

3.2 Educational Content & Methods

Secondary education in China	Secondary education in the UK		
12-year education system	13-year education system		
There are generally 6-10 courses in junior and senior high school	GCSE includes 8-12 courses, and A-level generally only includes 3 courses		
The size of classes is generally 40-60, where the teaching form is mainly of large classes. Get high scores with exams is the aim of teaching, a large number of extracurricular homework will be assigned in usual, and there are additional lessons after school.	The class size is only 3-15. There are rich extracurricular practises and other activities (visiting factories, university laboratories, museums and even going abroad for exchanges, attending courses in universities, etc.). There is a certain amount of homework after class, but most of them are not compulsory focussing on the comprehensive cultivation and balanced development of students' moral, intellectual, physical, artistic and other interests and hobbies.		
Focus on facts and knowledge	Focus on independent thinking and analysis		
Multidisciplinary holistic education	Professional, in-depth and more detailed education		
Most of the test questions are: What is it? When did it happen? Where did it happen? Who created it?	Most of the test questions are: How does it happen? Why did it happen?		

Fig 1 Comparison of the characteristics of Chinese and British education systems [8]

Chinese and British general high school education systems are very different in terms of content and methods. Chinese teachings are mostly held in large classes with strict norms and discipline, where educators mainly teach written knowledge and have a strong professionalism. Students are

trained for examinations, which may be relatively detached from their real life [3]. The content and time of Chinese students' learning are heavy and fixed, thus, few after-school activities are allowed to be taken part in [4]. As a result, students have less time for free exploration on their own, and their education in spirituality may be lacking. Teachings in the UK, on the other hand, are mostly held in small classes. Moreover, students' disobedience in the Uk is recognized as a reasonable expression of their self-will [5]. The teaching content is also more abundant, with three types of courses offered in the UK state secondary schools. They are namely core, foundation, and additional courses, accounting for 30-40%, 45%, and 10% of total class time respectively [6]. This provides the students with more flexible choices and leaves ample time for after-school activities, focusing on the students' exploration of their interests in various aspects, cultivating their self-efficacy and practical skills. British teaching tends to propose and solve problems based on real-life situations, and its content not only meets the needs of students themselves, but also connects the needs of society with them. It "promotes the spiritual, moral, cultural, mental and physical development of students in school" and "prepares students for the opportunities, responsibilities and experiences of adult life" [7].

3.3 Educational Purposes

The feedback and purpose of teaching in Chinese and English GCSEs are also very different. Chinese teaching is normally tested by the closed-book exams. High school education ends with the entrance examination,"the exam that will determine a lifetime", which will be the standard for universities admitting students. This is a reflection of the fact that Chinese education is aimed at selecting talents and changing the status of social life. Thus, Chinese teaching tends to emphasize on students' memory and test-taking ability. In the UK, classroom tests tend to be diversified and assessed in various forms, such as creative work, essay writing, course design, etc. The grading criteria focus on innovation and criticality in students' thinking. By the end of high school education, students are normally marked by A-Level exams, which are held twice a year for each course, with the opportunity to retake them[9]. In addition, British universities normally admit students on the basis of their GCE A-Levels, which greatly reduces the burden on students, since they do not have to deal with school-based exit exams while preparing for entrance exams to higher-level schools. Meanwhile, making it a substitute for the graduation certificate is of great benefit for students to fully develop their strengths, interests, and potential [10]. Thus, the aim of education in the UK is to focus on the importance and comprehensiveness of students' personal development. However, while the wide range of examination subjects provides students with a variety of choices, it also has the obvious disadvantage of causing some students to avoid courses that require hard work to obtain their certificates easier[10]. In recent years, the UK governments and the education sectors have made difficult reforms to reverse this situation.

3.4 Supervision

Being influenced by the different purposes, there are also differences in the presentation of supervision in the educational process between China and the UK. Chinese supervisors mainly focus on unilateral monitoring by supervisors, and the results are only circulated internally with little public participation. It plays the role more in inspection, identification, and consolidation. British supervisors focus on multi-party cooperation and communication, the results are transparent and open, which are monitored by the society. It plays the role more in service and evaluation, which can help improve the teaching level more effectively.

The process of supervision	Supervision in China	Supervision in the UK	
Before: Supervisory member	All appointed supervisors (full-time, part-time), and other people	In addition to the recruited registered inspectors and supervisors,	
Supervisory member	are less involved.	there are also lay inspectors.	
Process: public participation	Parents, supervised schools and communities are less involved, and most of them are unilaterally inspected by supervisors.	Attaching great importance to cooperation and communication with parents and communities, and being able to listen to multiple opinions.	
After: Supervision report	Focussing on internal communication, it provides reference for superior departments, which is not very effective for improve teaching quality.	It is published in public and supervised by the public wirh high transparency, fairness, and great influence. It has direct feedback andgives effective guidance on educational decision-making	

Fig 2 Comparison table of public participation in the Chinese and British education supervision process [11]

4. Causes

4.1 Culture Background

Educational activities determine the national character, and the national character reflects the cultural character. National character is a reflection of specific historical circumstance, which is deeply influenced by the cultural background. China has been deeply influenced by Confucianism since ancient times, which implicitly requires people to respect teachers and authority. For example, in the Analects of Confucius, there are the saying that "a disciple should be filial and fraternal when he enters, and when he leaves, he should be fraternal", and "a gentleman should be concerned about the root, and the root is established and the way is born. Filial piety and fraternal duty are also the basis of human beings". Both of them emphasize that respecting teachers and elders is the essence of being a human being. In the Northern Song Dynasty, the educator Yi Cheng said, "A scholar must seek a teacher, and one must be careful in following a teacher". The famous modern Chinese thinker Sitong Tan also wrote, "The most important thing to learn is to respect teachers. All of these reflect the respectful status of teachers in Chinese culture from ancient times to the present". As a result, students in the Chinese regard their teachers as authorities, which leads to their tendency to obey the teacher's arrangements and the rules, making it difficult for them to form their own independent thinking. And due to the consistency of the teaching, students lack the ability to see problems from a flexible perspective, which tends to form a situation of cramming education. On the other hand, the nature of British social thought is post-modernist, which has experienced the industrial and bourgeois revolutions and formed a cultural trend of criticism rather than construction. Individualism has long dominated British ideology, emphasizing the importance of human freedom and the individual, with the "virtue of self-independence" and "personal independence". The idea mainly suggests that individuals should pursue their own interests without being influenced by external forces or institutions, and that only considering the needs and happiness of individual that the true realization of self-worth can be achieved. Furthermore, it also advocates a self-disciplined and autonomous personality[12]. The ancient Greek philosopher Protagoras proposed that "man is the measure of all things" as a form of expression of individualism. British thinkers Hobbes believed that the essence of man is individualistic and eternal, the most basic human nature and natural rights, making individualism absolute and complete. Nietzsche took the individual as the basis of value and the only criterion for evaluating society. Britain has a tradition of freedom, and individualism is the core and basic principle of the cultural value system. In addition, liberalism is the dominant ideology in the modern West, with the acceptance of rights and freedoms as well as the democratic concept of equality and the concept of the market. This has led to an anti-essential, anti-foundational, and anti-

authoritarian commonality in people's thinking, believing that there is no such thing as truth and objective knowledge in the world [13]. Thereforre, students are subjectively more creative and accustomed to looking at things critically, and educators respect the right of the students of self-discovery, promoting the development of a student-centered educational philosophy.

4.2 National Condition

China is a developing country with a large population and insufficient resources. For the aspect of education, the faculties and teaching facilities are in shortage while facing the large population of students. Thus, large-sized class management has to be implemented, making it difficult to teach each student according to his or her ability or to guide students to discover their own strengths and weaknesses in different ways. For the job-seeking aspect, a large number of job-seeking groups face the dilemma of job shortage. The recruiter can only hold a unified test to screen a large number of applicants at once, and the hired party can only improve the ability to take the test and increase the chances of being selected through the stereotypical study. And that is to say, lengthening the study time and strengthening the targeted learning of professional knowledge in a short period of time. On the contraty, the UK is a developed country. The industrial revolution has led to a significant increase in the level of British economy, and has been at the forefront of the world. Relatively, its resources are more abundant in all aspects. For the education aspect, it has a low birth rate, leading to a small school-aged population. Its ample resources can be used to implement small-sized class management, which is very conducive to educators tailoring their teaching to their students. And the educational funding sources is also diversified, such high economic level is sufficient to support further educational measures, such as the extension of extracurricular activities, the construction of laboratories for students to do research.

Fac navina		
ree-paying		
Public Schools		
Others		

^{*}This form is provided by Professor Gareth Price of Sheffield Haarlem University.

Fig. 3 Types of Schools in UK [14]

There are also many private schools, which tend to have better resources and focus more on each individual student.

4.3 Policies

In order to meet the purpose of cultivating talent in Chinese education, the educational policies tend to have political complexion, which means educating for the sake of social revolution. It is greatly influenced by the will of the government, emphasizing the importance of the leadership of the Chinese People's Communist Party. And it normally has uniform standards and requirements within a certain period [15]. Especially in the early stage of its formation and promotion, there is a tendency to focus on quantity but neglect quality, or only some of the key high schools were taken into account. Thus, it cannot carry out the characteristic teaching and comprehensive teaching efficiently, resulting in the lack of diversity and the tendency to homogenization in teaching. Students tend to lack their personalization, and the imbalance and inequality in educational resources emerge.

The	Basic	External	Policy-oriented learning		
development purpose intervention		Alliance of	Alliance of	Alliance of	
process purpos	J J		governments	schools	families
Stage 1: Focussing on the formation and promotion of the high school system	Prioritising the efficiency in the pursuit of fair results	Social environment: During the period of economic reconstruction, there's extreme demand for talents, it requires to train the talents more and faster Key Policy: Key High School Construction	Providing more funds, teachers, facilities and student sources to key schools	Priority is given to key high schools, and teaching efficiency is paramount	Chasing for the key schools and classes
Stage 2: Popularize it massively, and expand the enrolment opportunities	Expanding the scale that emphasises the fairness from the beginning	Social environment: Economic development has accelerated, and efforts need to be made to solve the problem of school shortages Key policy: Scaling up the education	Gradually popularize high school education and dispose resources for vulnerable areas and vulnerable groups	Key schools get stronger and stronger, while the lower level of schools get weaker and weaker, causing serious imbalance in education	The demand for high- quality educational resources is increasing, and high school selection fees emerges
Stage 3: Improve and Balance the quality	Focusing on the fair development of its nature	Social environment: The demand for innovative and compound talents is increasing, and the increasing public's pursuit of high-quality high school education Key policies: Reformation of college entrance examination, and diversified development of high schools	The government-based education funding system has been gradually established to help general high schools achieve high-quality popularization	Developing character- istically and reforming the education methods	Pursuing appropriate education, paying attention to career development, beginning to choose subjects and universities.

Fig 4 The development context and characteristics of China's general high school education policy [16]

By 2010, the "National Medium and Long-Term Education Reform and Development Plan (2010-2020)" proposed to "promote the diversified development of general high schools" in order to expand the educational resources of high quality to meet the development needs of students and society. However, under the constraints of Chinese national conditions, high schools must adhere to the direction of socialism and the educational policies of the Party and government. They must assume the responsibilities and obligations in accordance with the Education Law and the Higher Education Law [17]. In the UK, the policy states that, equality does not mean that every student should be mechanically given the same learning environment and conditions. It is the provision of different environments and conditions that are more appropriate to the different individual needs and characteristics for students should be the true expression of equality. In short, equality that focuses on individuality is the true equality [18]. As early as 2003 in the UK, the Department for Education and Skills (DfES) issued a White Paper on education entitled "Higher Standards, Better Schools: More Choice for Parents and Pupils", explaining the significance of personalized learning. And the Education Secretary at that time, Ruth Kelly, also said that, "Personalized learning is the key to tackling the achievement gap between pupils from different social and ethnic backgrounds. It means teach each child and young person in accordance with their aptitude, strengthening their personal abilities and expanding their aspirations. It will create more opportunities for every child, regardless of family background." In 2006, the UK Department of Education published "Blueprint 2020", which

says that, "Personalization is about moral purpose and social justice, because children from the most disadvantaged groups are the least likely to achieve good grades and the least likely to participate in higher education or training. "[19].

5. Conclusion

As it can be seen, Chinese general high school education system has a centralized management system that emphasizes administrative power to drive the operation of the whole system. It has created the characteristics of standardized grade assignment and single mode of entrance examination selection, making the teaching convergence a major problem for the development of Chinese general high schools. In contrast, the British education system, with its emphasis on autonomy and the free choices and competitions based on its marketability, has achieved a high-quality development by declassifying schools, reducing the hierarchy gap between schools, and enhancing student autonomy. And it results in a diverse development of schools and the management with unique local characteristics. The analysis of the development trend of private education and state public education around the world shows that the essence of education is homogeneous, which is determined by the status, role and function of education. From this, it can be seen that the resulting convergence is feasible and necessary, and it has become an important feature of the international education system reform in the late 20th century. However, the convergence also causes the situation that the differences between universities are narrowing, which means the decline of individuality. Harmful convergence not only leads to a narrow development path for students, but also leads to a waste of national educational resources. It will bring about a lack of the diversity and innovation of talents, and fail to meet the needs of personal and social development. How high schools can reserve innovative talents for universities and society to promote national innovation development in the complex international environment is the issue that general high school education should focus on.

Therefore, the trend of general high school education should remain somewhat diversified. It can be seen that state control and management of education is the fundamental to its rapid development, and education legislation is the main measure to ensure its development. Both the Chinese education system and the British education system should set up more targeted policies and use those regulations to ensure the development of general high school education properly and efficiently. The British education system can duly learn from the Chinese education system. It may be effective to strengthen the central government management when necessary. It can also take more assertive measures led by the government's will, such as integrating the over-diverse subjects with tough reformation ways, prohibiting students from speculating. The Chinese education system should also learn from the British education system. It may need to redefine the concept of secondary education, so that the teaching can be centered on students and developed more flexibly and fully. And it can reform the cost-sharing system of secondary education, diversifying the sources of education funding and making it more abundant. It also should focus on establishing and open and transparent monitoring mechanism for teaching to improve the quality of secondary education system, which should be operated jointly with multiple sectors and the public. Furthermore, it can promote the commercialization of secondary education appropriately, establishing the market consciousness and trying to cooperate with enterprises in a proper way. Both countries should complement each other's strengths and abandon their extant weaknesses in the education systems to reap a better development, contributing to the progress and improvement of the international education system.

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