

Research Topic: The Differences Between the Chinese Education System and the IB Programme and the Effect on Students

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Abstract. This study aims to provide an assessment of the distinctive approaches between the Chinese education system and the International Baccalaureate (IB) Programme that focuses on the impacts on high school students. The research is based on three particular aspects: the curriculum structure, respective teaching methods, and assessment approaches. The study identifies the unique characteristics considering the advantages and disadvantages of the two educational systems. A comparative analysis is determined to the relationship between the influential development of the students and the educational methods of the university on career prospects. The findings show that despite exceptionally good academic results and content knowledge, the Chinese education system tends to secure rote learning and high-pressure environments. Similarly, the IB Programme encourages critical thinking, global citizenship, and interdisciplinary inquiry, however, at very high costs and demands making it inaccessible to the student's self-management. Therefore, the conclusion suggests that each system has a peculiar advantage and disadvantage, with major implications for students' development and career prospects. These findings assist in the discussions of reforming education for better preparation of students globally.

Keywords: Chinese education system, IB program, high school students.

1. Introduction

The comparative study of diverse educational systems has become an interesting topic of discussion in a world where everything is interconnected. The empirical study analyzes several constructive remains with the evolution in globalization and technological development that has been influential towards the landscape of learning [1]. These developments have been crucial in critically examining the different approaches to schooling and their respective impacts on the cognitive and professional development of students. Similarly, different studies have indicated a comparative analysis between the general characteristics of national educational models. Such analysis often focuses on highlighting the cultural, historical, and political underpinnings of those implemented educational models. However, there are several constructive remains of in-depth analysis that stand on an empirical ground of study. As a result, conducting such assessments is necessary to systematically compare the pedagogical methods through distinctive educational frameworks to evaluate the consequences for learners.

Educational systems differ to a great extent in different parts of the world, with each describing a different approach toward learning and development in children. Chinese education system characterized by exam-focused learning and knowledge retention has been praised for raising high performers in academic achievement with the revealing proof of the highest positions in international tests such as the PISA [2]. However, the opponents have claimed that this type of system is likely to discourage thinking critically, creatively, and collaboratively – all these qualities that are highly valued in the job market of the modern world [3]. On the other hand, the IB Programme acknowledges an interdisciplinary, inquiry approach to learning and an understanding and appreciation of global citizenship and has been acknowledged to foster different competencies among the learners. However, the cost of the program and the push for self-control that is required in the program may raise issues of accessibility and equity. Overall, even as both systems have respective strengths, they also lend

their challenges to students differently, depending on the needs of each student and the setting in which they are applied within society.

From this context, this study seeks to analyze the comprehensiveness of the key differences between the Chinese education system and the International Baccalaureate (IB) Programme and identify the respective implications of these educational programs for high school students. It has been found that existing studies lack an in-depth comparative analysis of the distinctive approaches that examine the general characteristics of the Chinese and IB educational systems. This study addresses this particularly salient gap in existing educational research. It provides an analysis based on the increasing mobility of students across borders for shaping experiences and outcomes. Overall, analysis of these paradigms helps in understanding the implications of strategic educational policies that guide student choices and prepare young people worldwide.

The existing research gap forms the premise of the present study to provide a comprehensive analysis of the Chinese education system and the IB Programme. It is based on a synoptic analysis of the systems which will identify the peculiarities, reasons for their development, and the advantages and limitations of each. The research outlines the two different educational models that influence students' performance and development besides their future employment opportunities with helpful pointers to the policymakers, teachers, and parents in the field of global education systems. Therefore, it is hoped that this study will chart a novel approach in comparing these two modes of schooling to enhance the understanding of the possible effects of different models of education. The result can contribute to the stream of policy-making and educational reforms and can help families choose the best track for their child's development and further life.

2. Characteristics of the Chinese High School System

The Chinese system of high school education is widespread for its academically highly demanding environment. This system is primarily a test-oriented approach, especially the Gaokao – the national college entrance examination [4]. This system has been influenced by the general cultural practice of this country the recent period of its economic development and the increase in the number of people who would wish to further their education to the university level.

2.1. Advantages of Chinese High School Systems

A significant advantage of the Chinese high school system aims at providing an equal opportunity for education to all citizens irrespective of their origin, class, and place of residence. The Gaokao is instrumental in admission into the university and gives students from all sorts of backgrounds an equal opportunity to compete [4]. It has been significantly responsible for establishing many of the underprivileged students into some of the respected universities in the country considering power and productivity. Furthermore, Chinese high school courses are well respected for their vast content and academic difficulty. This institutional development ensures a platform with a satisfactory knowledge base for students with a major focus in mathematics, sciences, and humanities [5]. Furthermore, figure 1 formulates an analysis based on the emphasis of Chinese students on content knowledge has led to top sources in global tests like PISA. the diagram provides statistical evidence on the performances of students in top subjects such as Mathematics, Reading, and Science. The solid foundation of academic disciplines that Chinese high school students master can be helpful for their further education and activities and may become a good start for professional growth.

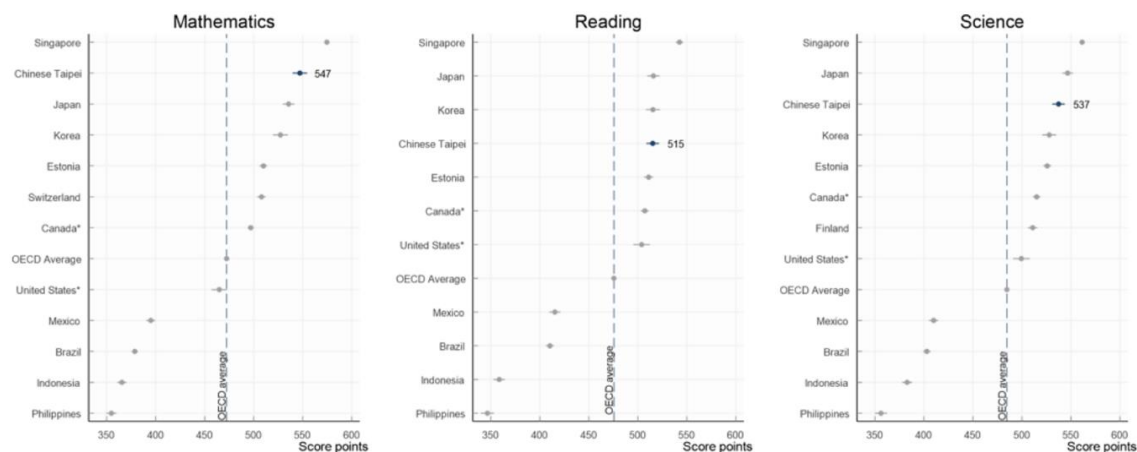


Figure 1. Performance of Chinese Students in mathematics, reading and science in PISA 2022 [6]

2.2. Disadvantages of China's High School Systems

The foundational framework for education has been targeted with significant criticism. The encouragement of rote learning leads to memorization and focusing on exams to achieve high scores [7]. Such approaches cause a lack of established critical thinking and creativity among the students. The focus of these approaches mainly concentrates on memorization and lacks a deeper understanding of the particular subject. This pressure is regarded as critical as Gaokao dictates the fate of the student in terms of the educational and career path often taken by students [4]. The importance of these tests puts the children in a vital position of learning. Different horizons, communication, exchanging innovative ideas, and creativity are greatly affected by the platform [8]. Total preoccupation with assessment outcomes may harm students and hinder them from developing their interests, trying out many things, and developing their personalities.

Moreover, the education system of Chinese high schools has been accused of not providing adequate training for soft skills, communication, collaboration, and other similar skills. The tougher competitive situation has also increased the rate of suicide and mental health damage among students. The competitive and self-serving character of the system might limit the learner's capacity to learn how to communicate and solve conflicts – skills that are highly sought after in the contemporary workplace and world [9]. This inability to build interpersonal skills might hamper Chinese students' chances during the growing mandate of globalization and cultural sensitivity.

Overall, the Chinese high school system can be characterized as an extensive and rather developed system of education, which, nonetheless, has its advantages and disadvantages. On the positive note the Government has aimed and achieved it in providing equal education and academic excellence but on the negative aspect, it has been accused of being very strict with its policy on standard measurements and very little on the otherwise development of the students [10]. When China continues to advance and aspire to shift to a more high-quality development track, it will be imperative that the policymakers as well as educators how they need to guide the education system to sustain its benefits in the long run as well as how they can effectively balance between academic achievements and development of a quality human capital that is competitive globally.

3. Characteristics of the IB curriculum system

The International Baccalaureate (IB) Programme is a globally recognized educational framework that has gained widespread popularity and acclaim in recent years. Developed to foster the paradigms of inquiring, knowledgeable, and caring young people initiating to creation of a better and more peaceful world [11]. The IB curriculum offers a distinctive approach to learning that stands in contrast to more traditional national education systems.

3.1. Advantages of the IB curriculum system

One of the primary strengths of the IB Programme is the emphasis on formulating a wide range of competencies among students to understand the mere acquisition of subject-specific knowledge. The curriculum is designed to encourage critical thinking, research skills, and independent inquiry. These skills enable the learners with the tools to tackle complex real-world problems [12]. Assessing through a variety of assessment methods, including elongated essays, individual and group projects, and presentations, the IB students are allowed a demonstrate mastery in both academic content and essential skills that are needed for the 21st-century career market.

Moreover, the IB Programme fosters an international-mindedness and intercultural understanding that stands to establish as a distinguishing feature. Students become vulnerable to a wide range of perspectives that encourage the engagement in cross-cultural dialogue which is required to finish a compulsory course into the nature of knowledge [13]. This holistic approach to education prepares IB graduates to explore the expansion of interconnected global landscapes that construct highly attractive candidates for universities and employers around the world.

3.2. Disadvantages of the IB curriculum system

The IB Programme has also its merits and demerits or strengths and weaknesses. There exist several weaknesses of the system; one of the most obvious is its high costs, and students from less privileged backgrounds may find it hard to afford. Many IB schools have high tuition fees, as well as fees for taking the IB exams and other related materials. These costs can be a barrier for some people who cannot afford them [14] (Table 1). Besides, the delivery of the topics within the curriculum promotes self-study and research that might be challenging to some learners, particularly those with poor personal management and self-organization skills, and poor working attitudes. This causes a hindrance to the flow of work and creates a scope for delay. This is intensified by the academic intensity that STEM program engages the learners in before they are awarded their certificates, the strict extracurricular activities, and community service in terms of the number of hours to be spent among other issues.

Table 1. Annual IB School Fees [15]

	Diploma program	Middle year programme	Primary years program	Standalone childcare centers offering the PYP	Career-related programme
USD	12,660	10,920	9,260	4,350	1,160
CHF	12,370	10,674	9,041	4,244	1,562
GBP	7,700	6,640	5,630	2,640	980
SGD	15,210	13,110	11,120	5,220	1,930
EUR	9,150	7,890	6,690	3,140	1,160

Therefore, to conclude it can be stated that the IB curriculum system is a distinct system of education and the most acclaimed one. It focuses on the cultivation of the international citizens of the world [16]. However, the application of self-organized learning and the highly personalized approach of digital resources pose issues in affordability, the need for student initiative and independence, and exclusivity that should be addressed by the governmental and educational systems as well as the parents. As the IB Programme moves deeper into the global frontier, it will become more important to deal with these constraints to ensure the Programme is equally valuable to as many students as possible.

4. Comparison between the Chinese high school system and the IB curriculum system

With the global community moving to embrace globalization and the qualities that come with twenty-first-century employment, the comparison of education systems has assumed significant

importance as an area of learning and debate. In the course of this dialogue, there is an attempt is made to compare and contrast the Chinese high school system and the International Baccalaureate curriculum which serve as the basis of learning for students all over the world.

4.1. The intensity of competitiveness

Chinese high school system puts huge pressure on higher expectations from pupils through various high-stakes assessments. The fight for the few available universities is stiff, whereby more than 13 million pupils are expected to sit for Gaokao and apply for universities in 2023 [17]. This level of competition is more intense in the Chinese system than in the International Baccalaureate (IB) program where students are encouraged to fight for courses within their institutions or limited to a few international students. Consequently, it has been proven that the Chinese system is very competitive which enables a student to excel on academic and professional tests. Nevertheless, raising competition has elicited concern about fostering high performance and considering other attributes of students such as critical thinking abilities, creativity, and interpersonal skills. While the application of integrated thinking is encouraged in the IB program, the preparation for the Gaokao test leads to a lack of such important skills. Thus, a high level of competition creates an unhealthy attitude rather than experiencing a group-oriented learning environment.

4.2. The challenge of The IB curriculum system

The IB curriculum system is comprehensive, complex, and diversified requiring students to participate in interdisciplinary research projects, community service learning, and international citizenship construction. This approach is ideal for developing many competencies colleges and companies require in the international economy [12]. In competency with the Chinese high school system, the main focus is subjected to test-taking skills and procedural knowledge. Students in Chinese high schools are expected to memorize information with the primary focus on passing exams which causes a lack of critical thinking.

These standards put great stress on the organization and structure of the learning process. Furthermore, it also established pressure on student discipline and individual time management skills, which are more challenging than formal teacher-centered learning. Most Chinese high school students have a structured curriculum, however, the different courses offered in the IB program may be considered comprehensive. The approach taken by IB may enhance teamwork even though it does not equip students for the competitiveness required in most careers [14]. Furthermore, high schools in China prepare their students for competitiveness by offering an environment that emulates it. Similarly, it may render the learners placeless and unlikely to be aware of local issues or national circumstances. Therefore, it can be established that both systems face significant issues, but the IB system focuses on distinct abilities, and individual learning from a global perspective. Hence, learning is more complex and challenging compared to the Chinese high school systems which mostly just prepare students for examinations.

The detrimental effects of exams can overshadow other aspects of students' lives, and IB students may struggle outside the IB community. Most of the subjects taught in the program may be seen as comprehensive. However, this encompassing might prevent the curriculum from providing students with the needed depth in certain disciplines, which would help them build up the gaps in their general knowledge. The working of IB in collaboration might have the effect of engendering teamwork while failing to equip the students for the cut-throat nature of most professional fields [14]. However, the IB's global orientation may benefit from widening students' visions, it can also be a source of students' disconnection from local concerns and national conditions.

4.3. The Distribution of Educational Resources

The high-stress examination, the Gaokao, has been the anchor of the educational system for the Chinese high school. However, the IB curriculum system provides a versatile and integrated interdisciplinary approach to the students. Several measures were implied for making significant

choices of learning in schools of arts, science, and technology. The implementation of such policies gave an alternative route for Chinese students to pursue learning with passion and talent [4]. Furthermore, there has been an expansion of choices for Chinese students such as International Baccalaureate, Advanced Placement (AP), etc. These are global curriculum systems that provide international learner recognition and are particularly available to high-performing students. Additionally, some students choose overseas high schools which expand the educational opportunities. These changes ease the pressure from the Gaokao and give students an international approach to learning. However, lack of funds is associated with the costs of such programs and overseas education. The traditional education system has been proficient in equipping students with the necessary skills for excelling in examinations and inter-school events. However, a crisis occurs due to adequately preparing learners for real-world challenges. In contrast, international curricula signify the development of skills such as critical thinking, respect, and personal growth that offer a comprehensive approach to preparation for addressing global issues. However, such programs remain inaccessible raising the question of fairness in education.

5. Conclusion

Overall, this study found that competition has increased significantly within the Chinese high school system due to an increase in the number of Gaokao entrants over recent years. It indicates that concentrating solely on exams and rankings can act as a disadvantage to students' overall growth. Thus, this kind of crisis limits the student's ability to develop critical thinking, creativity, or survival interpersonal skills. This discovery underlines the need for educational reforms in China that analyze academic achievements with personality development. The expensive fees charged by the IB Programme have raised severe questions over its affordability and equality, hence, it may exclude those from underdeveloped backgrounds. Engaging in a critical evaluation of these two contradictory systems, the research offers an interesting and useful model for guiding policymakers, educators, and families by incorporating the complex arena of global education. Therefore, to conclude information on the reforms in education can be used to guide students and parents on the schools to choose and promote creating all-inclusive contexts for learning that are transformative.

Although this study gives valuable insights into the comparative strengths and weaknesses between the Chinese education system and that of the IB Programme, however, it has some limitations. The reliance on existing literature and secondary data may not capture nuances of the reality experienced by students in both educational systems, leading to a potential bias. This study simply analyzes a broad comparison with very little depth about regional variations in both systems, further limiting generalization. Furthermore, the existence of such limitations may allow the research to be directed toward evaluating the socioeconomic effects that student outcomes from within both systems. Similarly, it also evaluates the regional variations across China, and IB schools act to modulate the general effectiveness found in these approaches to education. In conclusion, this analysis of China's high school system against the IB program has illustrated a variety of educational approaches that examine the need for holistic evidence-based initiatives that nurture globally competent and well-rounded individuals for future generations.

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