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Chinese basic education and experience from three regions (Shanghai, Guangdong, Sichuan)[4]

Introduction

Basic education is the foundation for people to gain more knowledge in the process of growing up and living. High buildings rise from the ground. What does basic education exert to cultivate the people is the foundation for building a house. Therefore, basic education is such an important and basic project to improve the quality of people. Since China's reform and opening and the re-introduction of the college entrance examination in the late 1970s, basic education has continuously improved and developed with more and more attention. China started to participate in the Program for International Students Assessment PISA[5] in 2009. Up to now, China has participated in four sessions of PISA with relatively good grades[6]. The results of the PISA can help to examine the education quality, fairness and development efficiency, establish and improve an education monitoring indicator system, and promote education reforms for both China and the other countries in the world. The progress of China's basic education and education with Chinese characteristics has contributed to China's all-round development, which also provided references for other countries. In the meantime, PISA's analysis of China and other countries also reflect the parts of China's basic education that need to be promoted and emphasized.

As a matter of fact, people outside of China-may only be surprised by the high scores of Chinese students in competitions such as PISA and hold the opinion of the stereotype about Chinese students' well performances in Mathematics. However, people are usually not very familiar with the actual situation of Chinese education, especially in the aspect of the basic education field. Based on the education system with Chinese characteristics and our personal experience in the field of basic education, we sort out and expound comprehensively the reasons why China has achieved the educational achievements and demonstrate how basic education schools

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[4] The authors would like to reveal their thank to Mrs. Cecilia Vida for her insightful thoughts, comments or feedbacks on this paper.
[5] The Programme for International Student Assessment (PISA) is a worldwide study by the Organization for Economic Co-operation and Development (OECD) in member and non-member nations intended to evaluate educational systems by measuring 15-year-old school pupils' scholastic performance on mathematics, science, and reading.
[6] China gets the ranks of 1th (Shanghai 2009), 1th (Shanghai 2012), 10th (Beijing-Shanghai-Jiangsu-Guangdong 2015), 1th (Beijing-Shanghai-Jiangsu-Zhejiang) respectively.
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play an effective role. By identifying the developments and achievements in educational reform, we recognize that it is inevitable to analyse the social environment and the social current situation behind education to better explain this.
Through analysing PISA results from the past 11 years and personal experience, we recognize special features about basic education in China, such as the subject curriculums specifying academic subjects, the classes duration being short (40 minutes per class), after-school classes making up a large part in school life, the involvement of technological facilities in class-leading an advanced role and the influences from parents or families. The socioeconomic backgrounds also contribute to high achievement in China, with the decent returns on investment in education; individuals are more likely to put effort to study comparing with the counterparts who are living in countries that gain less by educating themselves. Students from disadvantaged families can change their position by studying, therefore parents and teachers or other educational roles would spare no effort to support them until they are receiving a college education. Moreover, with the advocates from the government to develop and finance the education sector, schools including universities are in no way a luxury good for students, which is meant for students from poverty backgrounds. In this paper, we mainly focus on Shanghai, Guangdong and Sichuan these three provinces and cities in China to analyse and illustrate Chinese basic education.

What is more, the education system in China particularly the tertiary education field has made great improvements in technical science learning and ICT talents; we need to develop some new progress in order to meet the challenges of the educational system in the future like acquiring digital skills. Therefore, cultivating talents who can adapt to the development trend of science and technology and setting up courses related to ICT is significant at present, since by achieving skills of new technology we can put on a par with international standards.

To study the superficial and underlying connections of China's achievements in basic education (such as the strength of teachers, social class, education mode, etc.) and use some of the basic education methods with Chinese characteristics or alternatives, we would like to make a contribution to develop the overall education of the world and provide lessons that could be possibly avoided. At the same time, we can also see some of our shortcomings and areas in need of improvement through testing, horizontal and vertical comparison of teaching results, such as the balance of social resource development behind, the gap between male and female achievements, etc.

A brief introduction of the three places

Shanghai is one of the four municipalities, directly under the central government, and it is the second populated cities. As shown in Table 1, Shanghai's GDP made up 4.04% of the total in China; therefore, it is China's international economic, financial, trade, and shipping, and technological innovation center, national logistics hub. Guangdong province, which is in the coastal region of southern China, is the most prosperous province in China. Guangdong's GDP has placed first in the country for 30 consecutive years and has been China's largest economic province. It's economic aggregate accounts for 1/8 of the country and has surpassed the equivalent of the upper-middle-income countries and the level of medium developed countries. In 2019, Guangdong province reached a regional GDP of 10767.11 billion yuan (about $1612.1 billion), a rise of 6.2% over the previous year. Sichuan province is located in the interior of southwestern China, covering an area of 486000 km^2. As of the end of 2019, the permanent population was

about 84 million; the regional GDP was 4661.58 billion yuan (around $697.9 billion which is 4.94% of the national total GDP). Compared with Shanghai city and Guangdong province, the main difference might be aroused from the economic ability, population composition, natural terrain advantages and restrictions, and population mobility. The GDP per capita is 55774 yuan (around$8351), $13993and $23527 for Sichuan province, Guangdong province and Shanghai city respectively.

Table 1. Comparison of GDP and GDP per capita[7]

	GDP	GDP per capita	proportion of the whole country
Shanghai	$571.3 billion	$23,527	4.04%
Guangdong	$1612.1 billion	$13,993	11.4%
Sichuan	$697.9 billion	$8,351	4.94%

Source: National Bureau of Statistics of China
http://wap.stats.gov.cn

Teaching achievements in three places

We will first describe the education strength of three places for whether a region's educational level is high or not largely depends on its education strength, which is determined by teaching results. Each teaching achievement is the joint effort of countless schools and scientific research units. The teaching achievements are hardly born from a region that educational strength is not so strong. Since 2014, the most outstanding teachers have been honored with the National Highest Teaching Achievement Award by publishing excellent achievements. It is worth noting that this honoring is equal to the 'Nobel Prize' in the Chinese education sector and is also the highest authoritative award recognized by the government at the national level. The top winners of the award offer a glimpse into the educational strength of each province and city. In table 2 below, we can see the provinces and cities that won the most prizes. This paper mainly studies Shanghai city, Guangdong province and Sichuan province, we highlight them in yellow.

[7] Note: here, the exchange rate is 1USD=6.679CNY

Table 2: Ranking of National Teaching Achievement Awards in Basic Education[8] in 2014 and 2018

rank	in the year 2014		in the year 2018	
	Provinces and Cities	total number of awards	Provinces and Cities	total number of awards
1	Jiangsu Province	57	Jiangsu Province	58
2	Beijing City	40	Shandong Province	49
3	Zhejiang Province	39	Shanghai City	42
4	Shanghai City	36	Beijing City	40
5	Guangdong Province	31	Guangdong Province	35
6	Shandong Province	28	Zhejiang Province	28
7	Sichuan Province	25	Guangxi Zhuang Autonomous Region	22
8	Tianjin City	22	Fujian Province	21
9	Chongqing City	18	Henan Province	19
10	Hubei Province	12	Chongqing City	18
11	Hunan Province	12	Sichuan Province	18

Source: China Education News Network
http://s.enaea.edu.cn/h/gjjzyfwpt/jxcg/

As you can see from the table 2, in China, Shanghai can basically represent the highest level of education, while Guangdong province can represent higher than the average level of education, and the province of Sichuan can represent the medium level.

Table3. Size of Education in 3 places

type of data	number of schools			graduates			student enrollment			number of full-time teachers			student-to-teacher ratio		
provinces	Shanghai	Guangdong	Sichuan	Shanghai	Guangdong	Sichuan	Shanghai	Guangdong	Sichuan	Shanghai	Guangdong	Sichuan	Shanghai	Guangdong	Sichuan
Vocational Secondary Schools	23	444	419	6,100	318,500	327,843	19,900	867,300	820,060	3,500	44,100	48,342		20	17
Regular Junior Secondary Schools	833	3,614	3,716	136,200	2,186,676	782,139	590,700	7,449,334	2,618,120	75,400	286,437	204,939	10	26	13

[8] National Teaching Achievement Awards in Basic Education: on July 5th 2014, the Ministry of Education of the People's Republic of China announced the winners of the first National Teaching Achievement Award in Basic Education. It has been held for two sessions since 2014. A total of 417 and 452 achievements were awarded in 2014 and 2018, respectively.

Primary Schools	721	10,300	5,730	150,300	1,372,700	919,381	800,200	9,883,700	5,554,589	64,400	530,300	329,927	14	19	17
Kinder-gartens	1,627	18,953	13,396				571,400	4,491,100	2,608,595	70,600	292,900	217,286		15	12

Bibliographies:

Yearbook of 2019 from Shanghai Bureau of Statistics, Guangdong Bureau of Statistics and Sichuan Bureau of Statistics

http://tjj.sh.gov.cn/tjnj/zgsh/tjnj2019en.html

http://stats.gd.gov.cn/gdtjnj/content/post_3098041.html

http://web.sctjj.cn/tjcbw/tjnj/2019/zk/indexch.htm

Table 3 provides a comparison of three places in terms of the educational size, which is contrasted to the number of schools, graduates, student enrolment, number of full-time teachers, and student-to-teacher ratio; it will be further explained in this article.

Education in Shanghai

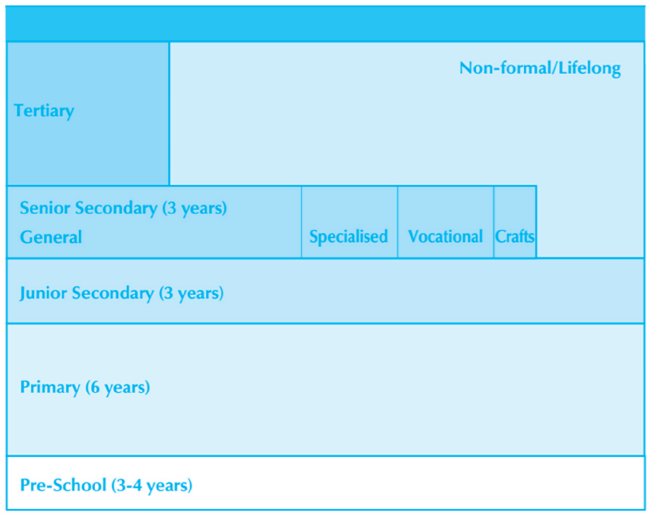
Education in Shanghai is instructed under the Chinese Ministry of Education and directly managed by Shanghai Municipal Education Commission. The education structure in Shanghai starts from basic education (also known as compulsory education in China) includes primary education (first through fifth grades) and secondary education (sixth through ninth grades).

The overall picture of levels in China's education system [9](Shanghai follows the same system) is presented in Graph 1 below. Usually, children spend 3 or 4 years in kindergarten (pre-school), following by 6-year primary school education. Then, most (95.2%) of the students will step forward into junior secondary school (middle school) in China. There will be an exam called Zhong ka to decide if the student can be admitted by general senior secondary schools, vocational, specialized schools. Around 57.6% of students will be recruited into general senior secondary schools. Similarly, an exam called gao kao will decide the candidate for advanced education. 41.4% of high school graduates nationwide can sail through into universities in 2020, comparing with 87% in Shanghai.

Shanghai's education system have evolved to be the best in the nation in access, equity, and quality. Enrolments in the nine-year basic education has remained about 99.9 percent in the past few years, slightly higher than the national average of 99.7 percent in the past few years. The promotion rate among junior middle graduates was 99.4 percent in 2018 compared with 95.2 percent nationwide.

[9] China's education system: it is the general education system in any province in China.

Graph 1. China's education system levels



Source: Shanghai Bureau of Statistics
http://tjj.sh.gov.cn/tjnj/zgsh/tjnj2019en.html

One important feature of Shanghai's education is, migrant children, resulting from dramatic urban sprawl within China, whose parents are not originated in shanghai but stay in shanghai, their access to school usually is deterred by no local hukou[10](residence permit) thus, legally excluded from public education in addition to disadvantageous Social Economics Status. They accounted for 50.2 percent, in 2019 among 1.5 million basic education students in Shanghai. Shanghai enrolled 77 percent of those migrant children in neighbourhood public schools and 23 percent in private schools with the government covering all tuition and fees.

After nine years of compulsory education, students are continuing their studies into two different tracks, academic or vocational based on their grades from the junior secondary education graduation exam (Zhong kao). The former one is senior secondary (3 years), which contains regular secondary senior schools, cultivates the elite students and paves the way for world class universities.

Within each grade, there are amounts of classrooms which hold the same classes offered by the teachers until students finish this year's academic studies, that is different from the usual teaching style in the west where students are going to different classrooms for different classes. The general subjects include Chinese, math, English, crafts, art, music, physical education, information technology, and natural science. Moreover, primary school students take eth-

[10] Hukou (Chinese: 户口; lit.: 'household individual') is a system of household registration used in mainland China. A household registration record officially identifies a person as a permanent resident of an area and includes identifying information such as name, parents, spouse and date of birth.

ics and social studies, and secondary school students take science, physics, chemistry, biology, history, geography, fine art and political science and ethics.

Table 4. Key characteristics of Shanghai education (2018-2019)

	kindergartens	primary	Regular secondary	secondary vocational
number of schools	1627	721	833	23
number of full-time teachers	70,600	64,400	75,400	3,500
student enrollment	571,400	800,200	590,700	19,900
student-to-teacher ratio		14	10	
graduates		150,300	136,200	6,100

Source: Shanghai Bureau of Statistics
http://tjj.sh.gov.cn/tjnj/zgsh/tjnj2019en.html

Education in Guangdong

Guangdong's permanent population ranks first in China, accounting for 8.13% of the country's total population, with a population density 4.35 times that of the country. Moreover, Guangdong is a highly educated province, with a total of 35,043 schools of basic education, including kindergartens, and a total of 22.14 million people enrolled. Education affairs in Guangdong are comprehensively administered by the Department of Education of Guangdong Province, including preprimary education, nine-year compulsory education, and regular senior secondary school education. Guangdong's cultural and educational undertakings continue to develop in 2019, and the number of students in the basic education and compulsory education stage continues to increase. See Graph 2 and Table 5 below, based on data obtained from the department of education, in 2019, there were 10.334 million primary school students in the province and 5.73 million regular secondary schools, a rise of around 5% and 3% respectively over the same period last year. It is worth noting that the number of primary school students in the province has continued to increase since 2010 and has grown by 1848.8 thousand from 2010 to 2019, an increase of 21.79%. What is more, the number of primary school students in Guangdong is one-tenth of the country's total. This relates to two factors: first, the total permanent population of Guangdong has been ranked first in the country for several years. The massive population base has naturally attracted an amount of primary school students; secondly, there are many non-registered populations in the permanent population of Guangdong, which means that the influx of people to Guangdong is very high. Due to the rapid transfer of talent over the last two years, amounts of high-quality jobs have come to Guangdong, and they are only in the age group of parents of primary school students. In addition, the number of students taking compulsory education has gradually risen in recent years. For the part of 6-year of primary school, the percentage of children enrolled in primary school increased from 99.7 percent to 100 percent; and for the 3-year junior secondary school part, it increased from 95.51 percent to 96.5 percent.

Graph 2. Trend of total Enrollments in primary and regular secondary schools during main years

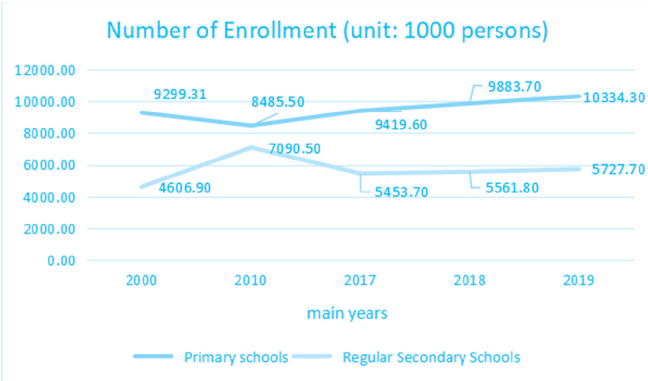


Table 5. Main education indicators from 2000 to 2019

Item	2000	2010	2017	2018	2019
Number of Total Enrollment (1000 persons)					
Primary schools	9299.31	8485.50	9419.60	9883.70	10334.30
Regular Secondary Schools	4606.90	7090.50	5453.70	5561.80	5727.70
Gross Enrollment Rate of Senior Secondary Schools (%)	38.70	86.20	96.48	96.18	96.88
Percentage of Graduates of Primary School Entering Junior Secondary School[11] (%)	96.15	95.51	96.04	96.18	96.50
Percentage of School-age Children Enrolled (%)	99.70	99.95	99.99	99.97	100.00

Source: Guangdong Bureau of Statistics
http://stats.gd.gov.cn/gdtjnj/content/post_3098041.html

[11] Percentage of graduates of primary schools entering junior secondary schools: according to the Ministry of Education, the percentage of graduates of primary schools entering junior secondary schools is calculated as the number of new enrollments of local junior secondary schools divided by the number of graduates from local primary schools and the trans-provincial flow of students are without consideration.

Education in Sichuan

Sichuan is one of the provinces which contain all the 56 ethnic groups, with more than 5 million populations of the minorities. The landforms of Sichuan Province are very different from east to west, and the topography is complex and diverse. It is in the transition zone between the Qinghai-Tibet Plateau and the middle and lower Yangtze River plains. Chengdu city (the capital city of Sichuan) is the economic centre of the southwest part of China, which is appealing to plenty of young educated labour. Shanghai and Guangdong, however, are more popular and appealing to labour due to their coastal and economic features. Overall, the basic education of Sichuan province can show the average level of Chinese education and the above reasons can well explain the difference or the gap between the three places.

Table 6. Basic information about basic education in Sichuan (2018) unit: 1

	number of schools	graduates	student enrollments	Teachers and Staff	student-to-teacher ratio
Regular High Schools	**768**	**479,939**	**1,389,51**	**99,647**	**13.9**
Secondary Vocational Schools	**419**	**327,834**	**820,060**	**48,342**	17.0
Regular Junior Secondary Schools	**3,716**	**782,139**	**2,618,120**	**204,939**	**12.8**
Primary Schools	**5,730**	**919,381**	**5,554,589**	**329,927**	**16.8**
kindergartens	13,396		2,608,595	217,286	12.0

Source: *Yearbook of 2019* **from Sichuan Bureau of Statistics 2019**
http://web.sctjj.cn/tjcbw/tjnj/2019/zk/indexch.htm

Table 6 above shows the basic information in Sichuan about basic education in 2018. Both private schools and public schools are regular schools. Most of the private schools are boarding schools which might offer more extra curriculums to students in their spare time such as the weekends or the evenings of weekdays. Most of the public schools follow strict time schedules that offer spare weekends for students themselves. However, it is very likely that the parents would like to go to other training centres for preparing the activities or curriculums for the students in case they fall behind. *Annual Report on New Types of Education Suppliers*[12] shows that the overall participation rate of students' off-campus training in elementary and middle schools is as high as 48.3%, including participation in subject tuition or interest-expanding training like learning some kinds of musical instruments. The average expenditure of students participating in off-campus training is about 5,616 yuan. According to estimates of the scale of students at all levels, the overall scale of the national off-campus training industry has reached more than 490 billion yuan.

[12] *Annual Report on New Types of Education Suppliers* written by Wang Rong released in 2018 contains the relative analysis on basic education.

In order to have a better real look at the basic education in Sichuan, China, we collect a piece of authentic experience from a student coming from Sichuan.

Personal experience of a student from an average city in Sichuan province:

I am a student from a fourth tire city[13] called Suining in Sichuan province and I spent my entire basic education period there. The basic education in China (without the kindergarten period) is composed of 6 years of primary school, 3 years of middle school and 3 year of high school. The nine-year compulsory education covers the first two parts of basic education. As for the kinds of schools, there are public schools, private schools, boarding schools, non-boarding schools and the mixture of the previous two.

Where I studied is a public primary with a relatively good reputation in my hometown. The main subjects with final exams at that time were Chinese, Math, English, science and Ideological and Moral Education[14]. Subjects like Art, music, basis of IT are also parts of the curriculums. The free time for pupils is usually the most since I remember I could take 2 days off every week. Regarding the facility used in the class, multimedia was introduced in 2010 when I was a fourth-grade student. And before that, the original chalk and blackboard were used. Although there are activities like traveling or visiting museums together in schools, the teachers mainly focus on my academic performance which my parents could not offer since they forgot the relevant knowledge. In my spare time, I learned traditional dance on weekends which was encouraged by my mother and I had some after-school curriculums for my homework in the night of week-days since most of my classmates joined that class. Parents pretty like arranging some extra curriculums such as dancing, martial arts, taekwondo and musical instruments, especially these physical training which can help students to stay strong and healthy. During my primary school period, I think it is full of joy and without too much stress and totally planned and cared by my parents.

I spent my middle school and high school in the same public school in my home city. The schedule of my middle school became quite intensive compared with the previous education stage since we started our class at 7: 30 AM and ended at around 9 PM with only one day (Sunday) off weekly. Middle school time is the period with most subjects to study, history, Biology, Politics, Geography, Physics, Chemistry and surly the main courses since primary school. In addition to English, I needed to learn a second foreign language, which can be Japanese (the language I chose), Korean, Spanish and French. This is mainly because the second foreign language has become a subject for the National College Entrance Examination[15], which means that students can choose another foreign language to have the exam instead of English. What is more, the interests for students in some other foreign languages also increased dramatically these years.

[13] Level of cities (from the first tire to the fifth tire) in China is evaluated by the concentration of commercial resources, urban hubs, urban residents' activity, diverse lifestyles and future plasticity. First tire cities: Beijng, Shanghai, Guangzhou, Shenzhen. New first tire cities :(tire 1.5): Chengdu (the capital of Sichuan), Hangzhou, etc.

[14] The name of the course Ideological and Moral Education was changed into Morality and the Rule of Law which covers the contents such as civilized and polite education, socialist democracy and legal system enlightenment education and ialectical materialism views of enlightenment education.

[15] The National College Entrance Examination (NCEE) is an academic examination held annually in the People's Republic of China.

I think this period started to show more of the students themselves. Students including me started to find more hobbies in the spare time which is also very connected to our education performance. For example, students who like Chinese antiquity might perform well in Chinese, History and other arts subjects. And the students like animation can be talented at drawing or choose Japanese as the exam subject which might be connected to careers in the future. I did not go to another training centre for curriculums at that time, as well as most of classmates due to the intensive schedule in school. By the way, my little cousin who just entered middle school in Chengdu city (the capital city of Sichuan) need to have three courses on the main subjects in training centres on weekends, since he does not have the course in the school at night and on Saturday while most of his classmates do. In a word, the middle school period is the self-knowing period and no matter how different the time schedule of different schools is, the overall time for learning is almost the same since parents are not willing to let their children fall behind others.

The high school can be compared to the print session since the goal of the National College Entrance Examination is coming. The time schedule and subjects almost remain the same in the first year, while the range of subjects narrowed since I arrived the first big decision about my NCEE—choosing the Liberal Arts subject (Politics, History, Geography and the three main curriculums) or the Science subject (Physics, Chemistry, Biology and the three main curriculums). Both subjects are connected to different majors and different labour market needs. My class prepared plenty of activities, such as dramas, poem recitation and speech contests, but surely the academic routine learning came first. The high school period is also the time for us to have national competitions in order to pass the independent recruitment test of universities. For example, if one student is talented at math and participated in some competitions and won awards, he or she is eligible to have a test from their targeted university to see if they can enrol there with 20 extra marks added to the NCEE marks though restricted within related majors. Personally speaking, the period of my high school is the best memory that I cherish which can remind me that I can overcome such a strong intensive life.

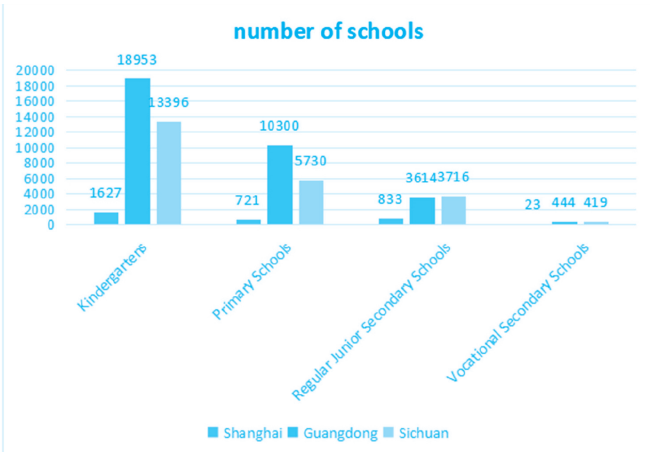
Data Comparison

From the data in Table 3, we draw graphs to compare the number of schools, student enrolments and student-to-teacher ratios in three places.

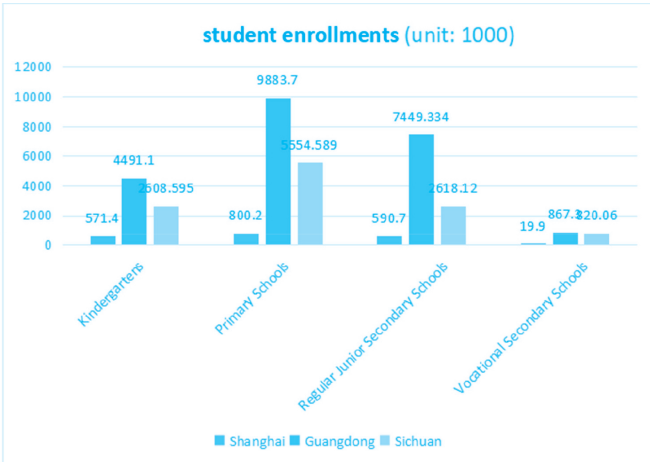
To comprehensively understand the relationship between education development and other factors such as economic achievement, population, and the allocation of funding, Wang Shansheng[16] had made several conclusions from his paper. Firstly, regions with higher levels of overall education development and educational opportunities also have higher levels of economic development; while the level of educational investment is higher in the eastern, economically developed regions (Shanghai, Guangdong), and education investment in the economically underdeveloped provinces in the west (Sichuan) are higher than the more developed provinces in the central region; Combined with the results shown above in Table2, it is adequate to prove that the three provinces and cities are all in the top-tier education achievement in China.

[16] Wang Shansheng, Gao Bingcheng and Chen Ruping. "Research on the Comprehensive Development Level of General High School Education in China." Educational Research 9 (2013): 58-66.

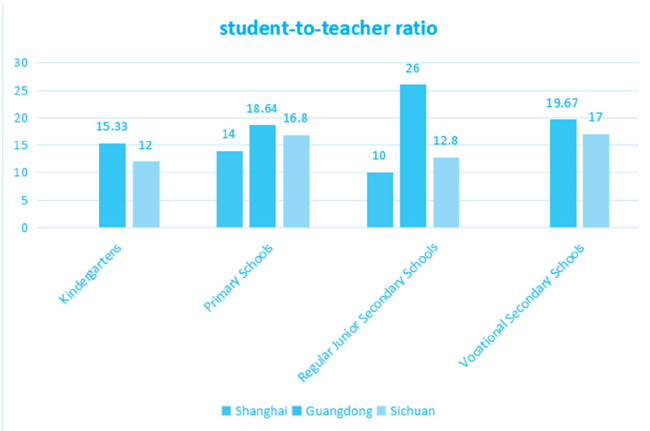
Graph 3. Comparison of number of schools in terms of various schools



Graph 4. Comparison of student enrollment in terms of various schools

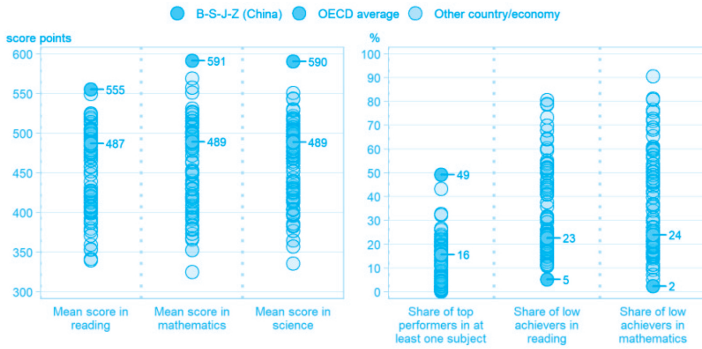


Graph 5. Comparison of student-to-teacher ratio of various schools



PISA

Graph 6. Snapshot of performance in reading, mathematics and science



Note: Only countries and economies with available data are shown.
Source: OECD, PISA 2018 Database, Tables I.1 and I.10.1.

Table 7. Learning time per week in regular school lessons, by subject

	Regular language-of-instruction lessons		Regular mathematics lessons		Regular science lessons		Foreign language lessons		Total learning time in regular lessons		Difference between language-of-instruction lessons and foreign language lessons	
	Hours	S.E.	Hours	S.E.	Hours	S.E.	Hours	S.E.	Hours	S.E.	Dif.	S.E.
OECD average	3.7	(0.0)	3.7	(0.0)	3.4	(0.0)	3.6	(0.0)	27.5	(0.0)	0.1	(0.0)
B-S-J-Z (China)	4.6	(0.1)	5.0	(0.1)	5.5	(0.1)	4.6	(0.1)	31.8	(0.2)	0.0	(0.1)

Source: PISA 2018 Results
https://oe.cd/cyprus-disclaimer

The previous introduction of Chinese basic education and the data of the three representative provinces and city illustrate the picture of basic education in special Chinese style. Now let us take a further look at the results of this kind of basic education. The Programme for International Student Assessment (PISA) is a worldwide study by the Organization for Economic Co-operation and Development (OECD) in member and non-member nations intended to evaluate educational systems by measuring 15-year-old school pupils' scholastic performance on mathematics, science, and reading. China has started to participate in this since 2009 and has relatively good results continuously.

Graph 6 above shows the results of performance in reading, mathematics and science in PISA 2018. Students in B-S-J-Z (China) scored higher than the OECD average in reading, mathematics and science. Compared to the OECD average, a larger proportion of students in B-S-J-Z (China) performed at the highest levels of proficiency (Level 5 or 6) in at least one subject; at the same time, a larger proportion of students achieved a minimum level of proficiency (Level 2 or higher) in at least one subject.

See Table 7 above compared with other countries and regions participating in the PISA test, the overall level of Chinese school learning time are far above the OECD average. The average learning time in regular schools of B-S-J-Z (China) is 31.8 hours per week, which ranked the fourth. On average, students in B-S-J-Z (China) averagely spend 4.6 hours per week in reading, 5 hours per week in Maths, and 5.5 hours per week in Science, respectively. Compared with other countries or regions, it ranked seventh, eighth, and third, respectively.

A brief analysis of Chinese relatively good basic education:

From the PISA results, data and descriptions above, we can see that basic education in China has a relatively good performance. We briefly analyze the reasons behind it from the aspects of the schools and the social background.

From the perspective of schools:

First, the exceptional contributions of teaching stem from excellent teachers. As shown in Table 2, the highest-ranking awards reflect the recognition of excellent educational standards of teachers. Some schools may have performance expectations or educational achievement criteria for teachers; thus, these requirements may have motivational effects on the ability of teachers.

Furthermore, from Table 7 above, we can see that regular schools of basic education require students to have plenty of learning time at school. The total learning time in regular schools is so long that basic education students typically spend a long time in the classroom to study.

Moreover, on the aspect of constructions and equipment, the hardware configuration is adequate in most schools of basic education. In order to meet the teaching needs and enhance teaching qualities, schools provide advanced technologies and perfect hardware specifications, such as multimedia, library, lecture theatres, sports facilities and other facilities.

From the perspective of social background:

To start with, the parents or even all the family members attach great importance to the study of the student. Most parents have a positive attitude towards their children's learning and care about their children's learning and life in all aspects, ranging from the selecting of the appropriate schools to the extension of extracurricular activities. In addition, the development of new types of education in the education industry is considered to the catalyst of prosperous basic education.

Besides the progress of regular schools, major training institutions and related popular science products exhibitions for school-age children are in the ascendant[17]. These new types of education not only extend the learning time of students but also broaden the learning range of students. For example, tutoring for Mathematical Olympiad after class not only consolidates students' knowledge of mathematics, but also allows students to develop deeper logical thinking skills. For another example, learning a musical instrument can exercise students' ability to concentrating.

What is more, as we all know, it is necessary to pass the National Unified Examination - NCEE, which exams the comprehensive ability of students, to obtain offers from universities of different levels in China. Moreover, China has a large population and many students, which means a more intense competition for exams and employment in future labor market. For socially advantaged families, parents will go all out to provide their children with better learning quality and knowledge. For socially disadvantaged families, improving students' comprehensive learning ability might be the only way to make sure the kids win and sour the future competitions. In all, parents are playing an important role in motivating kids to study since education is expected to receive a high return, such as a higher probability to get employment.

[17] Annual Report on New Types of Education Suppliers shows that the overall participation rate of students' off-campus training in elementary and middle schools is as high as 48.3%.

Areas that Chinese education has done well in and the methods to improve education better

As the features mentioned above, Chinese education achieves three distinguished goals. The first is that it enables students to acquire knowledge as much as possible in a short time, resulting from the intensity of study time and the regular time schedule. Students are used to learn knowledge on the regular basis. Then, it cultivates mass amounts of professionals since the subjects covered in the Chinese education system are diverse and practical, laying a solid foundation for developing the country in the next few decades, especially stem subjects. The last one is fair, going to school and receiving decent education is not a privilege rather, it is basic right for every student in China. More importantly, the educational disparities in different provinces and cities are not obvious, meaning that students are accessible to high-quality education equally, which is precious as the economic development inside China is variously different given the difference of the GDP total in Shanghai and in Sichuan.

The results of PISA showed that the gender equality of test results in China is relatively low compared with its other grades, which means that the test scores of Chinese girls are higher than that of boys on average. So, the attention of schools, government education departments, researchers and parents are needed. We should work together to take measures to reduce the impact of gender factors on student examinations. What is more, we still need to take other measures to strengthen the equality of basic education. It is true that going to school and receiving decent education is a basic right and there is almost no education quality difference between different provinces and cities, while we are still supposed to care for the socially-disadvantaged students since it is very likely that the higher the social status background is the better the student perform in academics. This means that our country still needs to pay more attention to ensure and reinforce social class equality in basic education. Lastly, the grades of reading are not that as good as other subjects like Science or Math. Therefore, teachers and principals of schools, the government's educational administration, as well as parents, should indeed actively reform and strengthen students' reading achievement and literacy, and help them better successfully cope with the challenges in the future.

Conclusion

As shown in the previous part, we presented data from a different perspective to show the education development in three representative provinces or municipalities, respectively Shanghai, Guangdong and Sichuan. By showing teaching achievement, the size of education and its economic scale, we can analyze the reasons behind China's ranking high in PISA results. First, schools are equipped with high-quality teachers and fundamental facilities which can also guarantee the long-time study time at schools. Then, more importantly, parents who are eager to encourage their kids to have excellent academic performance are key to education development due to that they devoted much time and financial support to help kids. We hope this passage could give an overall view of Chinese basic education and inspire other countries to come up with more advanced and efficient policies to promote education. After all, education is the only way to impart not only knowledge but also human culture.

References

The results and the information of PISA, https://www.oecd.org/pisa/

The information on GDP , National Bureau of Statistics of China, https://wap.stats.gov.cn

National Teaching Achievement Awards in Basic Education, http://s.enaea.edu.cn/h/gjjzyfwpt/jxcg/

The data of the basic education in three places, Yearbook of 2019 from Shanghai Bureau of Statistics, Guangdong Bureau of Statistics and Sichuan Bureau of Statistics, http://tjj.sh.gov.cn/tjnj/zgsh/tjnj2019en.html, http://stats.gd.gov.cn/gdtjnj/content/post_3098041.html and http://web.sctjj.cn/tjcbw/tjnj/2019/zk/indexch.htm, respectively.

China's education system, http://tjj.sh.gov.cn/tjnj/zgsh/tjnj2019en.html

Annual Report on New Types of Education Suppliers written by Wang Rong released in 2018 contains the relative analysis on basic education.

Gao Bingcheng and Chen Ruping. "Research on the Comprehensive Development Level of General High School Education in China." Educational Research 9 (2013): 58-66.