

Education in China

December 17, 2019

Mini Gu, Advanced Evaluation Specialist, Rachel Michael, Manager of Knowledge Management and Training, Claire Zheng, Team Lead, and Stefan Trines, Research Editor, WENR

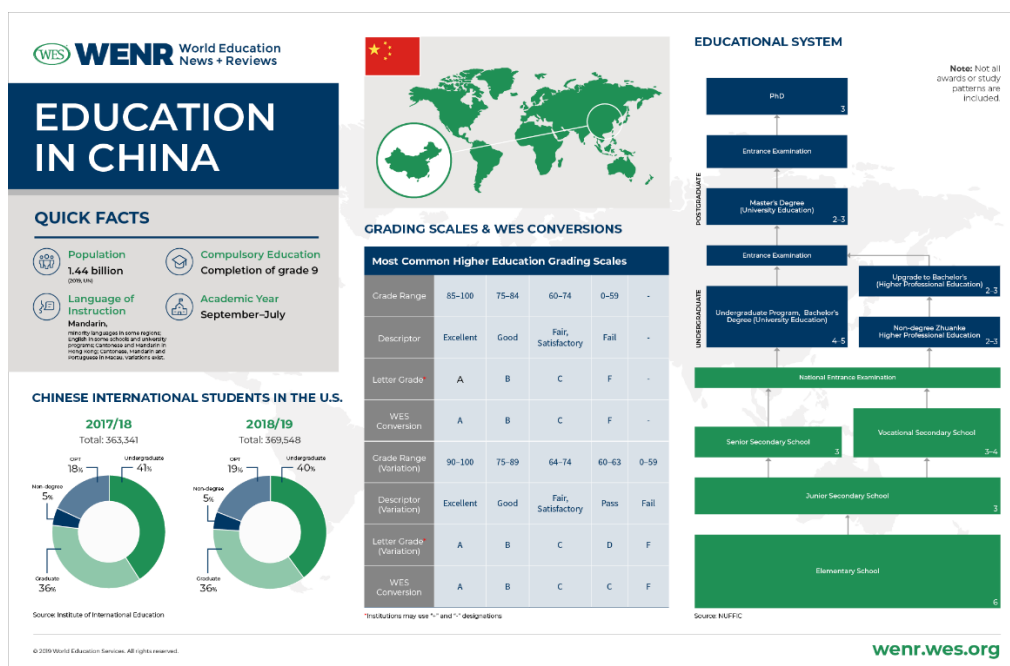


INTRODUCTION

The speed of China's emergence as one of the world's most important countries in international education has been nothing short of phenomenal. Within two decades, from 1998 to 2017, the number of Chinese students enrolled in degree programs abroad jumped by 590 percent to more than 900,000, making China the largest sending country of international students worldwide by far, according to [UNESCO statistics](#). This massive outflow of international students from the world's largest country—a nation of 1.4 billion people—has had an unrivaled impact on global higher education.

The presence of large numbers of Chinese students on university campuses in Western countries is now a ubiquitous phenomenon. There are three times more Chinese students enrolled internationally than students from India, the second-largest sending country. The expenditures and tuition fees paid by these students have become an increasingly important economic factor

for universities and local economies in countries like the United States, Canada, and [the United Kingdom](#). In Australia, for instance, 30 percent of all international students were Chinese nationals in 2017. These students generated close to USD\$7 billion in onshore revenues helping to make international education Australia's [largest services export](#).



China's own education system has simultaneously undergone an unprecedented expansion and modernization. It's now the world's largest education system after the number of tertiary students surged sixfold from just 7.4 million in 2000 to nearly 45 million in 2018, while the country's tertiary gross enrollment rate (GER) spiked from 7.6 percent to 50 percent (compared with a current average GER of 75 percent in high income countries, per [UNESCO](#)). By common [definitions](#), China has now achieved universal participation in higher education.

Consider that China is now training more PhD students [than the U.S.](#), and that in 2018 the number of scientific, technical, and medical research papers published by Chinese researchers exceeded for the first time those produced by [U.S. scholars](#). China now spends more on research and development than the countries that make up the entire European Union combined, and it is soon expected to overtake the U.S. in research expenditures [as well](#).

Chinese higher education institutions (HEIs) currently pump out around [8 million graduates](#) annually—more graduates than the U.S. and India produce combined. That number is expected to grow by another [300 percent](#) until 2030. Needless to say, this massification of higher education has been accompanied by an exponential growth in the number of HEIs. The BBC [reported in 2016](#) that one new university opened its doors in China each week. Altogether, China now has 514,000 educational institutions and [270 million students](#) enrolled at all levels of education.

What's more, China's top universities now provide education of increasingly high quality. Long absent from international university rankings, top-tier universities are now increasingly represented among the top 200 in rankings like those of the *Times Higher Education* (THE). Fast-ascending flagship institutions like Tsinghua University and Peking University are now considered to be among Asia's most [reputable institutions](#) and appear in the top 30 in both the THE and [QS world university rankings](#). In fact, Chinese universities' quality improvements and other factors have helped turn China itself into an important destination country of international students from Asia, Africa, and elsewhere.

RAPID ECONOMIC GROWTH

All these developments are part and parcel of China's spectacular economic growth since the adoption of Deng Xiaoping's economic [liberalization reforms](#) in 1978. No other country in history underwent a more rapid and large-scale process of industrialization than China—an enormous transformation that within decades turned the country from an impoverished agricultural society into an industrial manufacturing powerhouse. Between the 1980s and today, China's economy expanded at an average rate of approximately [10 percent](#).

Despite this massive growth, China is still classified as a developing country by most measures. For instance, its GDP per capita—USD\$9,770 [in 2018](#)—is still comparatively low because of prevailing disparities in wealth distribution in the vast and unevenly developed country. While rising fast, [average income levels](#) in China are still comparable to those of Cuba or the Dominican Republic. That said, China in 2011 became the world's second-largest economy and is on the brink of overtaking the U.S. as the largest economy, if it [hasn't overtaken it already](#). The country now has the world's highest number of skyscrapers and the [largest airport](#) on the planet.

China's middle class, likewise, has been growing at a breathtaking pace—a trend that helped fuel the recent leaps in higher education participation and outbound student mobility. By some estimates, the number of urban middle-class households in China—defined as those earning between USD\$9,000 and USD\$34,000 a year—will increase from just 4 percent in 2000 to 76 percent, or more than 550 million people, [by 2022](#). Closely interrelated, “China's urban population skyrocketed from 19 percent of the total population in 1980 to 58 percent [in 2017](#).” What is remarkable about this transformation is that it has thus far not affected political stability. Unlike in other East Asian societies like South Korea or Taiwan, where economic modernization was followed by a push for democratization by newly emerging middle classes, China's Communist Party (CCP) remains firmly in control.



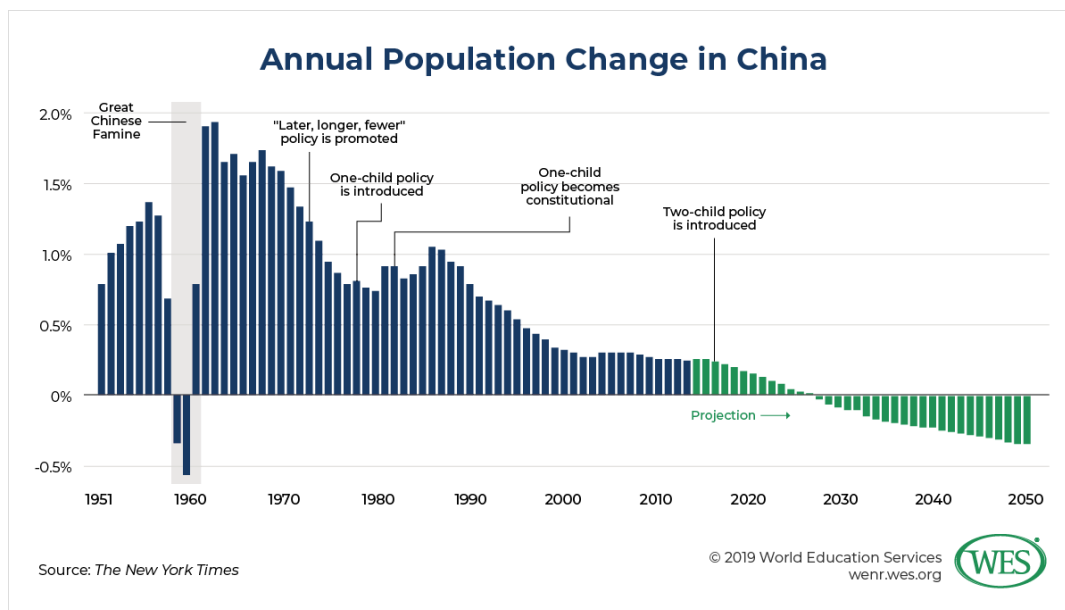
DEMOGRAPHIC DECLINE AND OTHER PROBLEMS

That is not to say that China won't encounter challenges on its path toward further development. Like other East Asian nations, China is now facing demographic decline and population aging. Despite the abolishment of China's longstanding and rigid one-child policy in favor of its two-child policy in 2016, the country's population is expected to begin contracting by 2027 due to factors like decreasing fertility rates, which recently dropped by [12 percent in 2018](#).

This demographic shift has already resulted in labor shortages with the workforce shrinking by 25 million workers [between 2012 and 2017](#). On the flip side of this shortage of mid-level technicians, growing numbers of university-educated Chinese remain [unemployed](#) or underemployed amid an ever-expanding pool of [university graduates](#). Many educated youngsters now find it increasingly hard to find good jobs, because their skills don't match the needs of the Chinese labor market and, thus, are not in demand. Except for graduates in highly sought-after fields like engineering or information technology, rising numbers of university graduates end up working in the informal sector or in [low-paying jobs](#), potentially a socially destabilizing development.

In response to these problems, the Chinese government is not only pouring massive resources into the modernization of Chinese universities and research institutes, it is also seeking to expand the country's [vocational training system](#). However, China's export-driven economy is presently experiencing a significant [slowdown](#) amid the trade war with the U.S.—China's largest trading partner—and a [sluggish global economy](#), and other factors. While current economic growth rates still exceed 6 percent, any economic slowdown with negative implications for employment is of

great [concern to the CCP](#), whose political legitimacy largely rests on delivering increased economic prosperity.



SURGING OUTBOUND STUDENT MOBILITY

China's rapid social changes had an enormous global impact on international education. Both the massification of higher education and the swift emergence of a fast-expanding middle class have created a pool of hundreds of thousands of more affluent education consumers who are able to afford an overseas education, and fueled an unprecedented outflow of Chinese international students.

There are different reasons why so many Chinese students head overseas. For one, many Chinese view an international education as a means of expanding their academic horizons, gaining intercultural skills, and obtaining a [top education](#). There's a perception among many Chinese that Western universities, particularly U.S. institutions, produce more innovative graduates and critical thinkers than Chinese HEIs.[\[1\]](#)

Academic and financial barriers, meanwhile, are no longer the obstacles they once were, so that more Chinese students can more easily fulfill their academic ambitions to study abroad. In fact, large numbers of Chinese international students, many of whom come from China's [top-tier academic institutions](#), are exceptionally well prepared to enter the best universities in countries like the United States. More than 6 percent of the [student body](#) at Harvard University, for instance, is currently made up of [Chinese students](#). Chinese doctoral candidates, likewise, "accounted for 34 percent of all first-year international doctoral students in the United States" in 2016.[\[2\]](#)

While language barriers can be a problem, Chinese students increasingly have the language skills to successfully study in English-speaking countries. There's now an entire industry of schools that directly prepare students for an overseas education, many of them using English as the medium of instruction or bilingual curricula. According to [current statistics](#), China has more than 800 international schools that teach either wholly or partially in English, many of them teaching foreign curricula, such as U.S. or U.K. curricula or the International Baccalaureate.

More and more younger Chinese also study directly at [high schools](#) in Western countries. According to a [recent report](#) by Sina Education and the Chinese study abroad agency Jinjilie Study, fully 23 percent of China's international students studied at the upper-secondary level in 2017.

While many Chinese families, particularly those from the less developed, inland provinces, are dependent on scholarships or loans to send their children overseas, the vast majority of Chinese students are [self-funded](#) and able to pay for an international education. Despite the high tuition costs and living expenditures in countries like the U.S., 59 percent of Chinese graduates of U.S. universities polled in a [recent WES survey](#) expressed satisfaction with the value of the education they obtained in the United States.

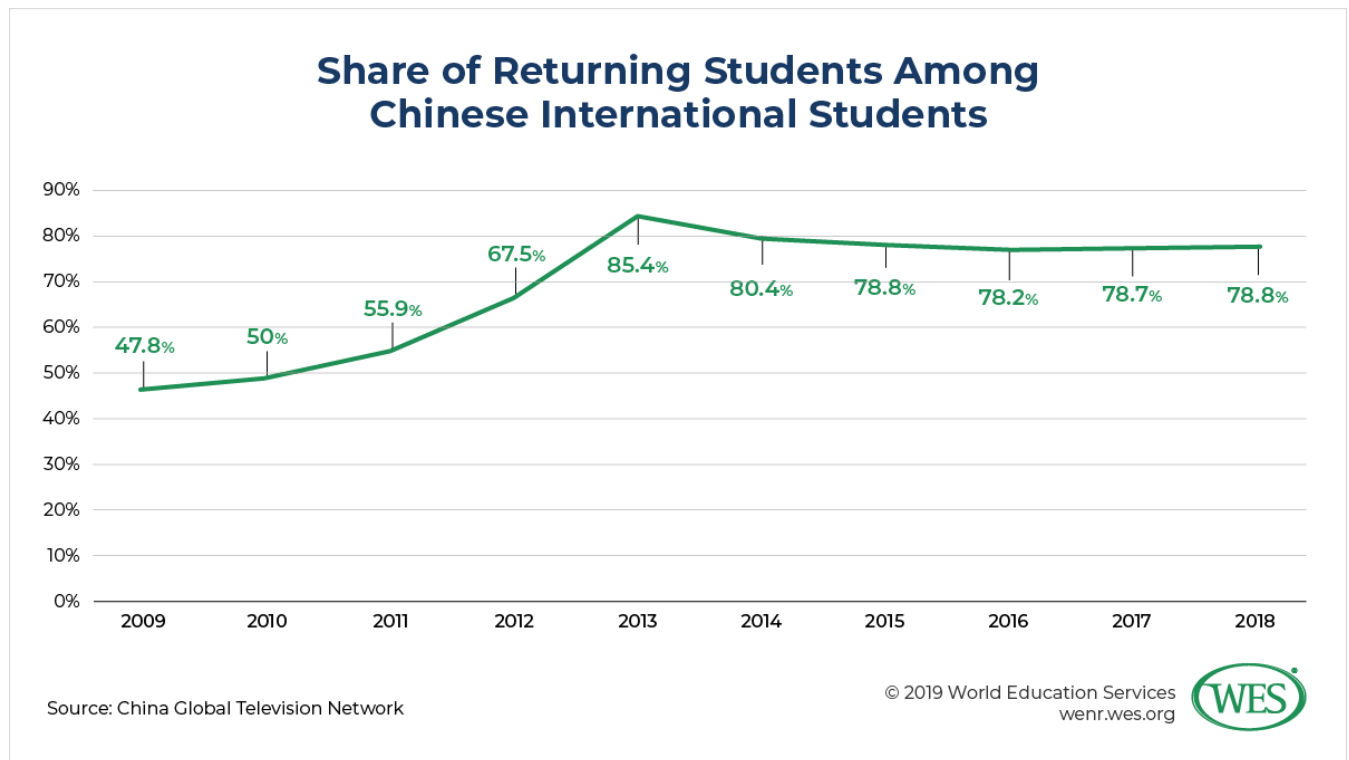
And this trend is no longer just confined to households headed by well-paid senior professionals in major top-tier cities. Rising numbers of working-class families are sending their children to [study abroad as well](#). Chinese [market research](#) suggests that while most international students come from economically developed regions and tier-one and tier-two metropolises, the potential for greater outbound mobility from lower tier cities is still tremendous.

Another reason Chinese decide to study abroad is to avoid the country's extremely challenging [university entrance test](#), known popularly as *gaokao* and often referred to as China's "examination hell." The test is so stressful that some students commit suicide [during the exam](#). Given the extremely competitive admission procedures of top Chinese universities and the fact that only a minuscule fraction of gaokao test takers gain admission into these schools, an overseas education can be an attractive alternative.

Other students view an international education as an option to better their employment prospects on the competitive Chinese labor market, where a foreign degree was long a golden ticket to well-paid jobs. Studying overseas with the goal of eventually immigrating to Western countries is another motivator. Fully 87 percent of Chinese doctoral candidates studying in the U.S. between 2005 and 2015, for instance, intended to stay in the country [after graduation](#). Chinese nationals, many of them international students on Optional Practical Training visas, filed 296,313 petitions for H-1B visas between [2007 and 2017](#).

However, these trends are now decelerating; the number of Chinese students returning home after graduation is growing fast. According to *ICEF Monitor*, "Official government statistics show that 339,700 Chinese students went abroad during 2011, with 186,200 overseas graduates returning to China that same year. In 2016, 544,500 Chinese students went abroad while 432,500

returned from [overseas study](#).” Between 2009 and 2018, the percentage of students returning home after graduation jumped from 48 percent to [80 percent](#).



Tightening visa and immigration restrictions in the U.S. are one reason for the slowing of China’s brain drain. But perhaps more importantly, there are now more well-paid employment opportunities available in China’s growing economy. Not only is the government incentivizing Chinese academics to return home by offering funding and [research opportunities](#), there are also ample opportunities for STEM graduates in China’s booming tech sector. As Bloomberg journalist David Ramli [writes in the Taipei Times](#):

“US-trained Chinese-born talent is becoming a key force in driving Chinese companies’ global expansion and the country’s efforts to dominate next-generation technologies such as artificial intelligence (AI) and machine learning. Where college graduates once coveted a prestigious overseas job and foreign citizenship, many today gravitate toward career opportunities at home, where venture capital is plentiful and the government dangles financial incentives for cutting-edge research.”

That said, far from all returning students find golden opportunities back home. Outside a few economic sectors, a foreign degree has largely lost the sheen and earning power it once had, especially if graduates return without work experience. Not only is the labor market flooded with internationally educated graduates, the increasing quality of graduates from China’s top universities has also evened out the playing field, diminishing the return on an expensive international education. Consider that in 2017, internationally educated graduates earned on average only USD\$71 more per month than domestic graduates and may have difficulty finding jobs because of stiff competition and weak [social networks](#).

These developments cast doubts on the future scope of outbound student mobility from China, especially since the size of China's college-age population is projected to shrink by some [40 percent](#) between 2010 and 2025. Given the overdependence of many Western universities on tuition fees paid by Chinese students, the prominent international education scholar Philip G. Altbach [recently warned](#) of a coming "China crisis" in global higher education amid domestic transformations in China and rising political tensions between China and Western countries. In fact, after averaging 19 percent annually over the [past decades](#), annual growth rates in outbound student flows, while still high, have in recent years already fallen by [several percentage points](#).

GLOBAL OUTBOUND NUMBERS

After decades of relative isolation under Maoist rule and the closure of Chinese universities during the Cultural Revolution, outbound student mobility from China took off in the last two decades of the 20th century. In 1998, the earliest year for which UNESCO provides data on outbound degree-seeking students, China was already the largest exporter of international students followed by South Korea, India, Malaysia, and Germany. In that year, there were slightly more than 134,000 Chinese enrolled in degree programs abroad, compared with about 62,000 South Koreans ([UNESCO estimation](#)). Since then, the number of Chinese students has grown by 592 percent to reach 928,000 in 2017—a number that represents 17 percent of all international degree students worldwide. More than a third of these students are enrolled in the U.S., the most popular destination country by far. The next popular destination countries in 2017 were Australia, the U.K., Japan, and Canada.

The U.S. Remains the Top Destination Country Despite Slowing Growth

According to the [Open Doors data](#) of the International Institute of Education (IIE), China in the 2009/10 academic year overtook India to become the largest sending country of international students in the United States. Since then, the number of Chinese students has spiked to 369,548 in 2018/19, which means that close to 34 percent of all international students in the U.S. are now Chinese nationals.

Like most international students in the U.S., Chinese students are concentrated in New York and California, but they study on campuses all over the country—44 percent of the international students in Ohio, for instance, are Chinese, [according to IIE](#). Forty percent of Chinese students are enrolled in undergraduate programs, 36 percent in graduate programs, and close to 5 percent in non-degree programs; 19 percent pursue Optional Practical Training. Computer science and mathematics, engineering, and business are the most popular majors among this student population.

Studying in the U.S. is a dream of many Chinese youngsters. However, while the number of Chinese students in the U.S. increased by 1.7 percent in 2019, the growth rate of enrollments has slowed noticeably in recent years. Consider that growth used to average 20.9 percent between 2009/10 and 2014/15. This slowdown is ringing alarm bells for U.S. universities, some of which are now witnessing double-digit declines in Chinese student enrollments. To mitigate the effects of this trend, the University of Illinois' Gies College of Business went so far as to take out a

USD\$61 million insurance policy to financially protect itself against the potential [loss of Chinese students](#).

There are several factors that are likely to contribute to this stagnation. For one, domestic developments in China outlined above are bound to have a significant impact. But it's also the rising political tensions and trade war between the U.S. and China, as well as new visa restrictions imposed by the Trump administration, that drive the slowdown. The geopolitical conflict ripples through U.S. higher education in several ways. For example, in 2018 the U.S. government shortened the length of student visas for Chinese graduate students in aviation, robotics, and advanced manufacturing from five years to one year, citing concerns about intellectual property theft and [Chinese espionage](#). A [report](#) by the White House Office of Trade and Manufacturing Policy accused the Chinese government of infiltrating U.S. companies and university campuses to transfer technology, intellectual property and know-how.

Accounts of stricter vetting and denials of Chinese nationals' student visa applications have already become increasingly common. In one recent incident, nine Chinese students were denied entry in Los Angeles and deported despite holding [valid visas](#). More draconian screening procedures are [under consideration](#); White House advisor Stephen Miller is reportedly even proposing to stop issuing visas to Chinese students [altogether](#). Current [plans](#) to further restrict eligibility criteria for OPT and H-1B visas are all but certain to have a detrimental effect on student inflows from China and other countries.

The Chinese Ministry of Education (MOE) has responded to these developments by discouraging its citizens from studying in the U.S., stating that U.S. policies “hurt the dignity of Chinese students.” The ministry noted that the “visa applications of some Chinese hoping to study in the United States have recently been restricted, with an extended reviewing process, shortened validity periods and increased rejection rate, which has affected their plans to study in the United States, or the completion of their [study there](#).”

These tensions have left an impression on Chinese students and causes growing numbers of them to turn their back on the United States. Consider that [87 percent](#) of high school college counselors in China surveyed by Amherst College in 2019 stated that the U.S. government's “unpredictable policies toward Chinese students” are the most important factor for Chinese students and parents. Xiaofeng Wan, associate dean of admission and coordinator of international recruitment at Amherst College, described these sentiments as follows: “The constant anti-immigrant rhetoric from the Trump administration, talk of banning student visas for all Chinese students and suggestions that ‘almost every [Chinese] student that comes over to this country is a ‘spy’ don't resonate well with people on the other side of the globe. The constant stream of negative news has exacerbated the growing worries about the wisdom of the U.S. as a [study destination](#).”

In another survey, [52 percent](#) of Chinese students agreed that “not being able to obtain a job in the United States postgraduation would prevent them from pursuing business school there.” That said, an equally important factor are fears related to gun violence and the highly televised mass shootings in the U.S.—an issue that ranks high in many surveys of Chinese students. Sixty-seven

percent of Chinese international students polled by WES in a recent survey[\[3\]](#), for instance, stated that they were worried about gun violence. One student was recently apprehended at the airport because he had a [bulletproof vest](#).

All these developments cast doubt on the future growth of Chinese student enrollments in the U.S., particularly since other countries like Australia and Canada are actively vying for Chinese students. Although it may sound almost like a cliché by now, U.S. institutions will have to brace for potential downshifts in international student flows from China.

Recruitment Agents in China

According to a recent WES survey[\[4\]](#), more than half (54 percent) of Chinese students come to the U.S. with the help of recruitment agents who assist them with preparing applications and essay writing. By some estimates, there are 10,000 registered and unregistered agents in various Chinese cities. Many of these agents provide prospective international students with valuable services, such as identifying appropriate institutions and programs, submitting transcripts, or sometimes even providing training for language tests. Some students come from “small centers in rural parts, their family doesn’t speak English, and they’re making one of the largest transactions of their life.... They’re spending a lot of money and a huge amount of faith. They need to talk to someone to get information, and schools aren’t set up [to provide](#)” this type of counseling.

On the downside, some of these agents take advantage of students and charge exorbitant fees. What’s more, unethical practices, such as the falsification of records or ghostwriting of essays, can also be a problem. In 2016, for instance, China’s largest private education company, New Oriental, was [sued in the U.S.](#) for submitting fraudulent college applications after a Reuters investigation alleged that it had engaged in “writing application essays and teacher recommendations, and falsifying [high school transcripts](#).” Amid such reports, some U.S. institutions are now relying on [video interviewing](#) when evaluating Chinese applicants. It should be noted, however, that such problems are hardly confined to China. Australia’s government, for instance, felt compelled to establish a National Code of Practice for Providers of [Education and Training](#) to rein in corrupt agents, fraud, substandard admission standards, and questionable recruitment practices by education providers seeking to cash in on the boom in international student mobility from China, India, and elsewhere.

Australia

Australia’s position as the third most popular international study destination worldwide is to a large extent owed to the influx of Chinese students. Between 2002 and 2018, the number of Chinese enrolled in Australian institutions spiked by 434 percent, from 47,931 to 255,896, according to the [Australian Department of Education](#). These statistics, which include students in

tertiary education, vocational education, language training, secondary education, and non-awards programs, indicate that 30 percent of international students in Australia are Chinese. When looking at tertiary education alone, that percentage is even higher—38 percent.[\[5\]](#)

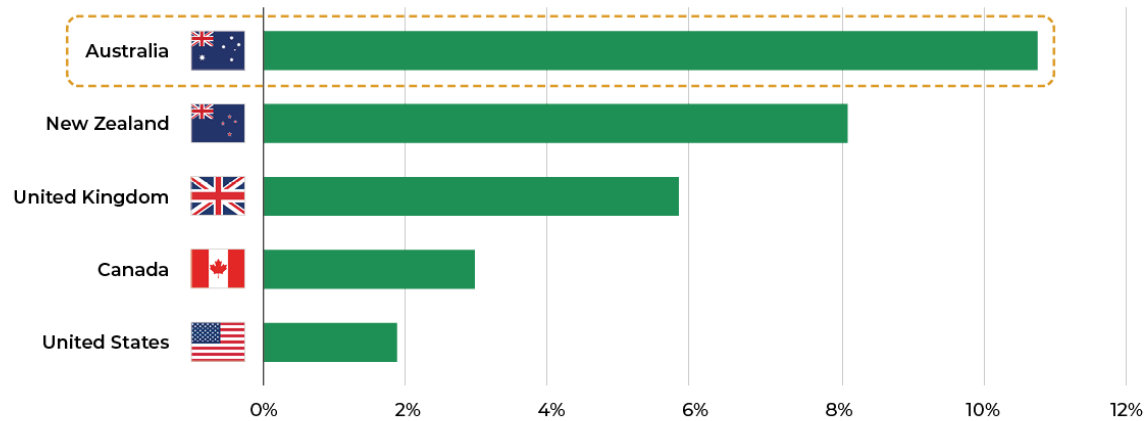
Several Australian universities are now said to have “higher proportions of international and Chinese students than any university in [the entire United States](#).” More than 50 percent of the international student body of the University of Sydney, the most popular university among Chinese students, is reportedly made up of Chinese nationals. The scale of these proportions has raised alarms about financial risks due to an overreliance on tuition fees from Chinese students. There are also concerns that this trend has negative implications for academic quality. As Australian economist Salvatore Babones [has noted](#), “Australian universities routinely compromise admissions standards to accommodate international students” and use “preparatory programs for students with lower English language test scores ... as a ... work-around for international students who do not meet admissions standards.”

Another concern is that Chinese students shape academic discourse in Australia in a negative way with controversies over topics like China’s territorial disputes playing out on campuses, sometimes resulting in academic self-censorship to avoid conflicts.

Beyond that, there are fears that China’s state-sponsored Confucius Institutes—Chinese culture and language institutes housed in universities—threaten academic freedom and undermine Australia’s security by putting sensitive research and intellectual property at risk. The Australian Security Intelligence Organization in 2018 issued a sharp warning related to these concerns. It noted that when “anyone wants to have any kind of public discussion [on human rights or Tibet or Taiwan] a lot of the instigators for counter-reaction to that, and the shouting down of anyone who wants to talk, come from people associated with ... [Confucius Institutes](#).” The state of New South Wales in 2019 already closed one of the 14 Confucius Institutes [in Australia](#). Likewise, the Australian government recently set up a University Foreign Interference [Taskforce](#) to address Chinese influence on campuses, while some universities are reassessing their [research collaborations](#) with Chinese partner institutions.

It remains to be seen how these developments will affect student mobility from China. There are currently few signs that student flows to Australia will recede—the number of inbound Chinese students grew by 4 percent between August 2018 and [August 2019](#). However, that growth rate is seven percentage points below that of the year before, and there’s the potential that rising diplomatic tensions and domestic developments in China could significantly deplete student inflows, and with it, the revenues of Australian institutions.

Chinese Students as a Percentage of All Students in Select Countries (2017)



Source: The Centre for Independent Studies

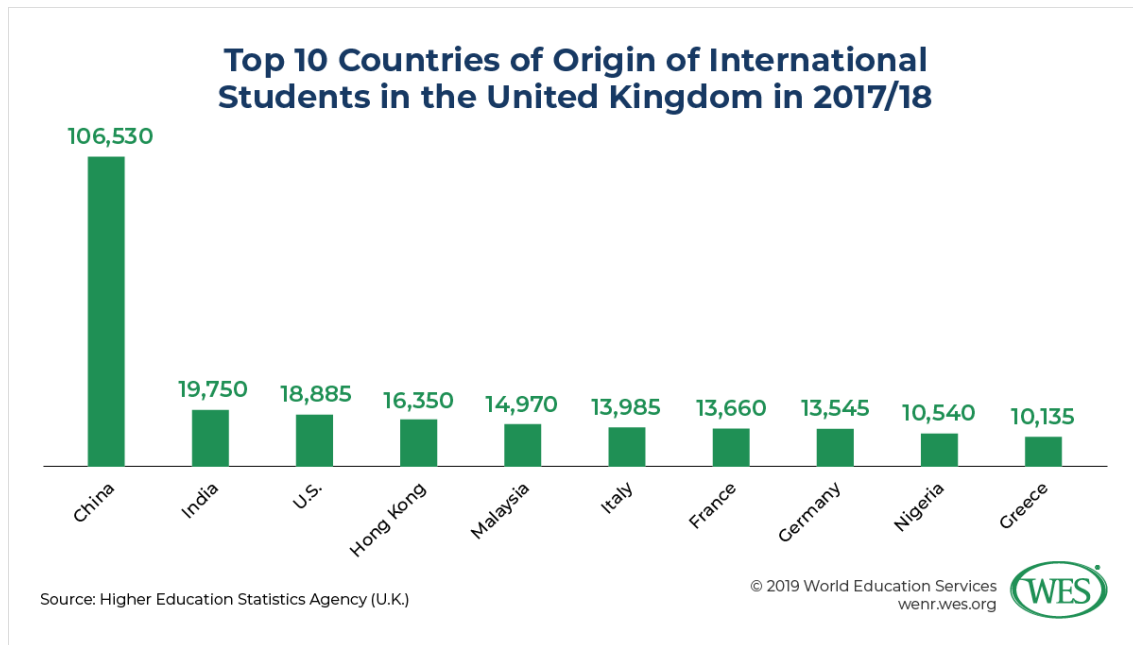
© 2019 World Education Services
wenr.wes.org



The United Kingdom

The picture in the U.K. is similar to that in other Western English-speaking countries. China is by far the largest sending country of international students; numbers are on an upward trajectory and rose from 87,895 in 2013/14 to 106,530 in 2017/18, as per [U.K. statistics](#). According to the *Guardian*, the “University of Manchester has the largest population of Chinese students in Europe. With about 5,000 Chinese students out of a total of just over 40,000, about one in eight students [\[is\] Chinese](#).” Chinese students at the institution predominantly enroll in business and engineering programs with classes in these fields being particularly crowded with Chinese students. Aside from institutions like the University of Manchester, HEIs in London are also a [top draw](#).

In addition, there are some 72,000 students enrolled in transnational programs and branch campuses of U.K. institutions [in China](#). Overall, offshore international enrollments in British transnational programs exceed the number of enrollments [in the U.K. itself](#), but there are several countries with a greater market share than China.



Canada

Canada is yet another country that witnessed a massive surge in student inflows from China over the past two decades. In 2001, China overtook South Korea as the largest sending country of international students in Canada. Since then, the number of Chinese students in the country has jumped from 22,000 to 143,000 in 2018, according to [federal government statistics](#). Fully one quarter of international students in Canada now come from China, most of them clustered in cities like Toronto, Vancouver, and Montreal. By some accounts, “Chinese students make up nearly two-thirds of the international student body at the University of Toronto, more than one-third at the University of British Columbia and almost one-fourth at [McGill University](#).” Notably, however, China is no longer the top sending country since there are now more Indian students in Canada than Chinese.

This inflow has multiple benefits for Canada. Educational services are among the country’s largest exports to China next to commodities. Overall, international student expenditures from all countries contributed \$15.5 billion to [Canada’s economy](#). International students also make for formidable immigrants and help keep afloat Canadian universities and schools, many of which are under the pressure of demographic decline due to [falling fertility rates](#). However, as in other countries, there are now growing concerns that Canadian universities have become too dependent on students from just two countries—China and India. When the 2018 arrest of Huawei executive Meng Wanzhou in Canada sparked a diplomatic spat with China, the credit rating firm Moody’s Investors Service warned of potential financial risks for universities should China curtail [student travel to Canada](#). In response to such concerns, the Canadian government recently announced a new internationalization strategy that seeks to diversify Canada’s international [student body](#).

INBOUND STUDENT MOBILITY

China is not only the largest sender of international students worldwide, it has over the past decade also emerged as a major destination country. According to [government statistics](#), there were 492,185 international students from 196 countries in China in 2018—a remarkably high number globally. However, this number is difficult to compare with other data sources, such as UNESCO, which counts only tertiary degree-seeking students and doesn't report numbers for China. The Chinese data, by contrast, also include high school students and students in various short-term vocational training programs, some of which last just a [few days or weeks](#).

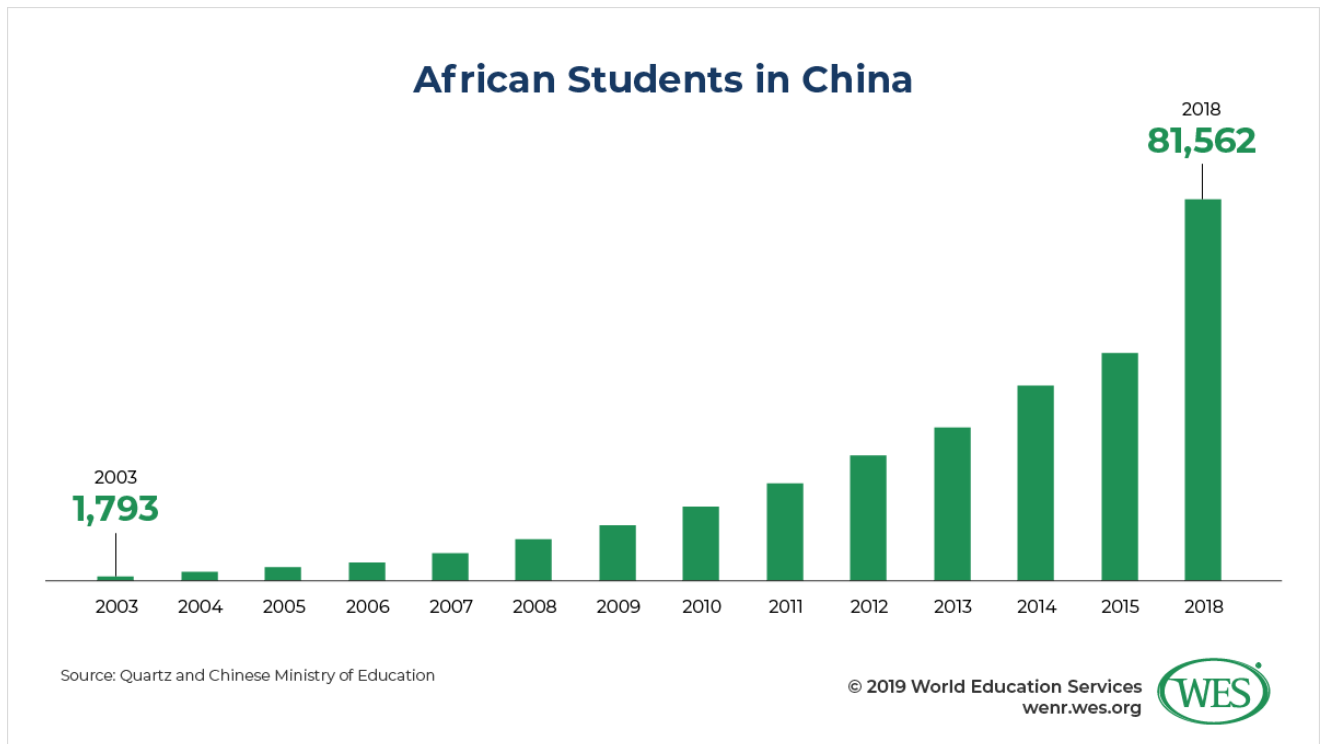
However, the government data reflect that there were 258,122 international students enrolled in degree programs, making China the world's fifth leading destination country of tertiary degree-seeking students when compared with UIS data—an astonishing development few foresaw just a decade ago. Not only are Chinese universities seeking to boost their international enrollment quotas, the government has set an official target of 500,000 international students in China by 2020—a goal that appears within reach. While growth rates slowed to [less than 1 percent](#) in 2018, there are now 227,000 more international students in China than [in 2014](#), and the government is ramping up spending to hit its recruitment target. Monies allocated to scholarships for international students increased by [20 percent](#) to USD\$560 in 2018. China funded 63,041 international students that year.

These efforts are part of China's drive to modernize its education system and become a key player in global higher education. They are also a part of China's [soft power strategy](#) in regions like Africa, where Chinese scholarships are embraced with open arms. But China's appeal as a destination goes far beyond scholarships, given that no less than 87 percent of international students in China are self-funded.

As the number of English-taught programs offered by Chinese HEIs grows, studying in China increasingly affords students from developing countries an opportunity to obtain an education of better quality than at home at relatively low cost compared with Western destinations. Other students come to China to learn Chinese or establish contacts amid growing business ties with China. The country is also a major destination for medical education—a sector often underdeveloped and marred by capacity shortages in developing countries. For instance, 21,000 out of 23,000 Indian students in China were enrolled in medical programs in 2018. Given this surge in enrollments, the Chinese government recently authorized 45 medical colleges to offer [programs in English](#).

Most international students in China—60 percent—come from Asia. The largest group of them is South Koreans, many of which are said to study in China to get an edge on the [Korean labor market](#), seeing that China is South Korea's largest trading partner. The second-largest group comes from Thailand, many of them Chinese Thais. Because of the boom in Chinese tourism in Thailand, many Thai students seek to learn Chinese to increase their [employment prospects](#). Other top sending countries are Pakistan and India, as well as the United States. A large number of U.S. students in China are enrolled in short-term [study abroad programs](#) at the [undergraduate level](#).

Of note, Africa has emerged as the second leading world region of international students in China in the wake of China becoming the continent's largest trading partner and source of foreign investment. Between 2015 and 2018 alone, the number of African students in China spiked by 64 percent with Ghana being the leading sending country [as of late](#). Other sending countries include Nigeria, Tanzania, Zambia, and Zimbabwe. About [17 percent](#) of all international students in China now come from African countries.



IN BRIEF: THE EDUCATION SYSTEM OF CHINA

Although China's modern universities were not founded before the late 19th and early 20th centuries, the history of formal education in China predates the establishment of Western-style educational institutions by centuries. The imperial education and examination system developed, as a meritocratic means to train and select civil servants, by some reckonings as early as the Han dynasty (206 BCE to 220 CE).

Some characteristics of education in Imperial China continue to influence education in the country. Contemporary China retains a meritocratic approach to education with an emphasis on examinations, the most well-known of which is the gaokao university entrance exam. Said to be one of the most demanding exams in the world, success on the gaokao is of paramount importance for students' future career and income prospects. This focus on examinations encourages a disciplined, top-down learning style that relies mostly on rote memorization and leaves less room for discussion and criticism when compared to Western education.

After the founding of the People's Republic of China, the country established a highly centralized system of education steered by China's one-party state. The higher education system was initially based on the Soviet model, a system that separated teaching from research. Universities became primarily teaching institutions, affiliated with specific government bodies. They taught related subjects, such as medicine, art, or agriculture. The result was a high degree of specialization and lack of cross-fertilization between the disciplines. Research, on the other hand, was mostly conducted by the Chinese Academy of Sciences and other research institutes.

During the Cultural Revolution schools and universities became targets of political violence and remained closed, often for years, as many students joined Mao Zedong's Red Guards to purge China of alleged "representatives of the bourgeoisie" while city youth were sent to "rural areas to be 're-educated by peasants.'"

A decade later, when the turmoil ended with Mao's death, the education system underwent major changes in line with Deng Xiaoping's free market reforms. The new government realized that education would be a central pillar of China's quest for economic modernization. During the 1980s and 1990s, China's formerly specialized HEIs were joined to form larger, more diverse universities. These institutions were granted greater autonomy, even though university autonomy in China is still very limited by Western standards. The administration of the education system, likewise, became increasingly decentralized with Beijing shifting more functions and responsibilities to local governments. Education was simultaneously commercialized to some extent with tuition fees becoming a more common funding mechanism and private education gaining greater prominence in China.

Administration of the Education System

The People's Republic of China is administratively divided into 23 provinces, four municipalities that have the same standing as provinces (Beijing, Shanghai, Tianjin, and Chongqing), five autonomous regions (including Tibet and Xinjiang), and two specially administered regions (Hong Kong and Macau). These provincial-level divisions are further subdivided into thousands of counties, cities, and townships.

The education system in mainland China (excluding Hong Kong and Macau) is administered as follows:

- At the national level, the Ministry of Education (MOE) establishes overall education policies and guides educational reforms. It sets the school system's curricula and content of examinations. It directly oversees 75 prestigious universities and steers the higher education system by setting overall directives. It also oversees the national gaokao university entrance examinations, as well as ideological education at all levels of education.
- The departments of education of the provinces approve the establishment of HEIs and monitor their performance. Apart from the universities directly overseen by the MOE and other central government bodies, such as the Ministry of Defense, as well as a few universities administered jointly by the central and provincial governments, most HEIs in China are supervised by provincial authorities and lower-level local governments.

- At the local level, counties and municipal governments manage elementary and secondary education.
-

University Autonomy

China's universities have very little autonomy; they are tightly regulated by the central government and the CCP. "All presidents ... in national universities are directly selected and appointed by the Ministry of Education and other ministries at a central level. The institutional leaders of the local public higher education institutions are determined by local authorities. Even in private universities the party organizations are present and party secretaries are appointed or dispatched by the [local government](#)." Curricula and textbooks are strictly controlled, and undergraduate students must complete mandatory courses in Marxism and Chinese socialism. Under Xi Jinping, this "ideological guidance" of universities has increased significantly. The president seeks to turn universities into "strongholds of the Party's leadership" and make "ideological and political performance" the most important criterion in the evaluation of [university instructors](#)." Since 2017, several research centers on "Xi Jinping Thought" have been established at [Chinese universities](#).

Language of Instruction and Academic Calendar

The most common [language of instruction](#) in elementary and secondary schools is Mandarin, the main official language of China. In some regions where the majority of students are ethnic minorities, instruction is offered in both Mandarin and the dominant local language. Language policies vary by region. While China officially recognizes [55 ethnic minorities](#), the Uyghur language was recently banned as a language of instruction in parts of [Xinjiang province](#). The CCP also seeks to curb the use of Tibetan as a language of [instruction in Tibet](#).

In higher education, the language of instruction is predominantly Mandarin, although English-taught programs and courses are becoming increasingly common in an attempt to internationalize China's higher education system. This is especially so at top-tier institutions that seek to attract more international students, the percentage of which is a criterion in international university rankings.

The academic calendar in both schools and universities runs from September to July. Universities usually divide the academic year into two semesters of 20 weeks each, although a few institutions use the quarter system. In semester systems, the last two weeks are usually reserved for examinations.

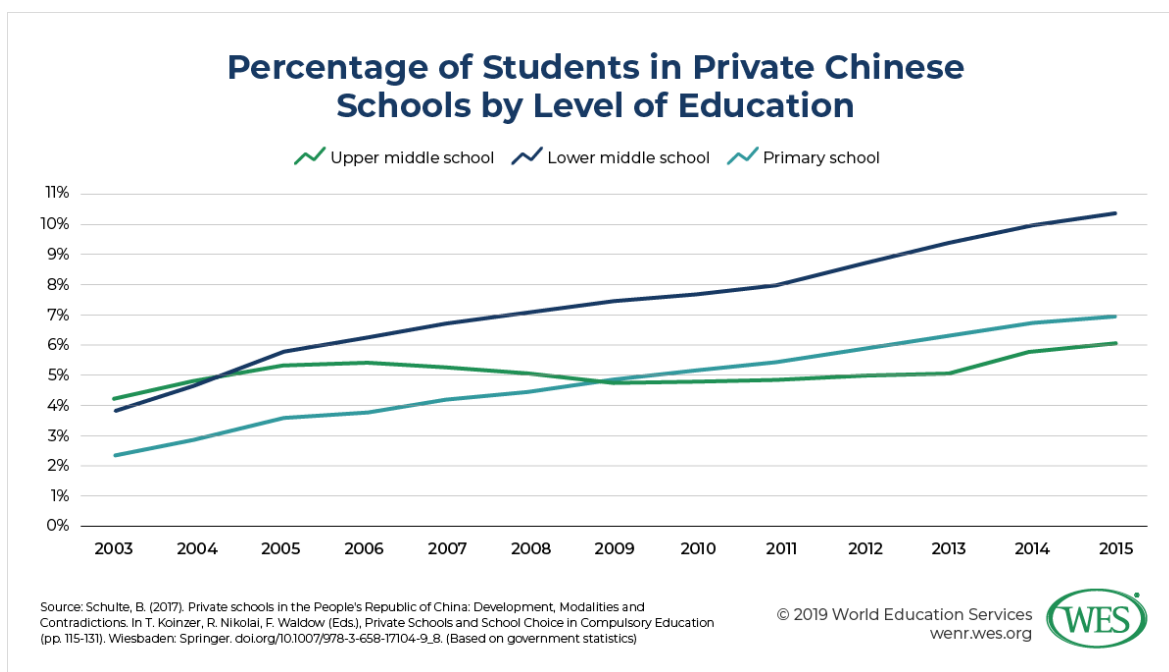
COMPULSORY EDUCATION: ELEMENTARY AND LOWER-SECONDARY EDUCATION

China's [Compulsory Education Law](#) stipulates that all children must complete nine years of compulsory education, starting at the age of six or, at the latest, seven. Children can be enrolled in kindergarten at the age of two or three, but preschool education is not compulsory. The government is now pushing to universalize preschool education, however, and pouring sizable resources into the establishment of more kindergartens—the GER in preschool education recently jumped from [70 percent](#) in 2014 to [82 percent in 2018](#).

Progress in elementary and lower-secondary education has been even more impressive. When China in 1986 adopted its compulsory education law, it set “two basic targets” (*liang ji*): universal basic education and literacy. The success of this drive can be judged by the fact that the enrollment rate for compulsory education was [close to 95 percent](#) in 2018, totaling 1.5 billion elementary and junior high school pupils nationwide. The illiteracy rate, meanwhile, has been reduced to [4.85 percent](#) among those aged 15 or older, although this national average belies considerable regional variation between eastern metropolises and rural western regions. “Wealthy cities, such as Beijing and Shanghai, reported [2014 literacy rates](#) (98.52 percent and 96.85 percent) comparable with those of developed countries. At the other extreme, Tibet’s literacy rate was a mere 60.07 percent in [the] same year, pegging it closer to under-developed countries like [Haiti and Zambia](#).”

Compulsory basic education generally comprises six years of elementary and three years of lower-secondary education and is free of charge at public schools. However, there is some variation between jurisdictions with a tiny number of them having a 5+4 rather than a 6+3 structure. Curricula and standards are set by the MOE in Beijing and then implemented nationwide by provincial and municipal governments.

Most schools are public, but the share of private schools is rising with 35 percent of elementary, junior secondary, and senior secondary schools being privately run [as of 2018](#). In 2003, a law promoting the establishment of more private schools to expand capacity went into effect. According to the [2016 amended version of the law](#), these schools need to be licensed and comply with official regulations. Except for international schools that teach foreign curricula, Chinese schools follow the national curriculum. Private schools in the compulsory education sector are officially not allowed to operate as for-profit providers but may nevertheless charge tuition fees (which should be used primarily to pay for the school’s expenses); they may also receive subsidies and tax breaks from local governments.



The current curriculum follows the ministry's [Guidelines for Compulsory Education Curriculum Reforms](#), implemented nationwide in 2005. It encompasses moral education, Chinese language and literature, mathematics, art and music, and physical education. The third grade curriculum introduces science, a foreign language (generally English), and “comprehensive practice”, a subject that may entail community service, information technology education, or basic vocational education.

Pupils may remain within the same school or transfer to a local junior high school after the completion of elementary education. Either way, there is no selective entrance examination to access lower-secondary education in public schools (private schools may have different types of admission criteria). Entrance examinations existed until the 1990s but have been eliminated, so that children are now mandatorily enrolled in local schools based [on residence](#).

The curriculum at this level expands on the basic subjects taught in elementary schools to include the additional subjects of history and geography, biology, physics, and chemistry. The foreign language taught at junior high schools is most commonly English, though schools may also offer Japanese or Russian, and students at some schools have the option of learning a [second foreign language](#). There is no junior high school graduation examination. As long as pupils pass ninth grade, which generally means a score of 60/100 in core subjects, they are awarded the Compulsory Education Certificate (*yiwujiaoyu zhengshu*).

SENIOR SECONDARY EDUCATION

There are two types of schools at the senior secondary level: general academic high schools (*gaozhong*) and vocational high schools (*zhongzhuan*). [The length of the regular program](#) is three years, whereas [three to four years](#) may be required for vocational programs.

General High Schools

General high schools—of which there were 13,600 in 2017—enroll [60 percent](#) of the total upper-secondary student population. They admitted over 8 million new students in addition to 23.7 million [already enrolled](#) in the same year.

To be admitted, students must pass an entrance examination (*zhongkao*) that is held during the final year of junior secondary school, in June or July of each year. While the MOE sets overall guidelines for the written exam, the exam is administered by local educational authorities and not standardized nationwide. It tests knowledge of the junior secondary curriculum and covers subjects, such as Chinese, mathematics, foreign language, political education, physics, and chemistry. Students must also pass a physical fitness test.

The *zhongkao* is an important benchmark in Chinese education. Educational authorities in the different jurisdictions use the test results to assign students to different schools with high grades being required for admission into top schools. Those with low scores can usually only be admitted into vocational schools. Overall progression rates from junior to senior secondary education, including both general and vocational tracks, have increased strongly in recent years, with [95 percent](#) of lower-secondary graduates progressing to upper-secondary education as of 2017.

Once admitted, students traditionally had to choose between a science stream and an arts stream at the beginning of the 11th grade, after studying a general curriculum in 10th grade. However, the curriculum has recently been revamped to allow for greater customization—a change currently being phased in, in the different provinces. The [reform](#) introduces elective subjects and eliminates the practice of streaming since students can now elect subjects from both streams.

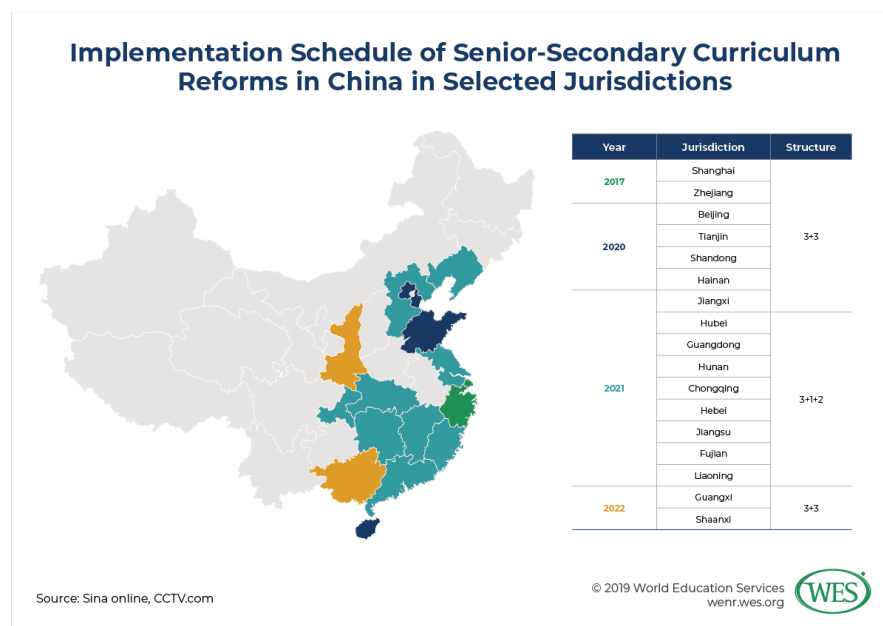
The old model was called 3+1, a formula that referred to the subjects later tested in the gaokao university entrance examinations. That is, three compulsory subjects (3)—Chinese, mathematics, and a foreign language, as well as one pre-set subject combination (1) of three subjects in the specialization stream: physics, chemistry, and biology in the case of science; and politics, history, and geography in the case of arts. In addition to these core subjects, there were other mandatory subjects, including arts, physical education, technology, and comprehensive practice. All these subjects were examined, but only the compulsory core subjects and the subjects from the specialization stream were tested in the gaokao. In this sense, the streaming concept largely predetermined which type of university programs graduates entered.

Under the current reforms, provinces will adopt one of two models referred to as “3+3” and “3+1+2.” The mandatory general subjects remain the same in both cases. But under the 3+3 model, students now can freely choose three electives from chemistry, biology, physics, geography, politics, and history. Students will typically choose their subjects based on the

admission requirements for desired university programs. In addition, students can choose a number of electives from categories like vocational subjects, arts, or physical education.

The 3+1+2 model, on the other hand, is a partial reform that was adopted out of necessity. Since the new subject combinations will result in more classes and, thus, a [need for additional teachers](#), students enrolled under this model will have fewer choices. They must choose between physics or history (1) and two electives from biology, chemistry, geography, and politics (2).

As shown in the graphic below, the new reforms have already been implemented in Shanghai and Zhejiang province. In other jurisdictions, the reforms will not be rolled out before 2022. Schools are hiring aggressively to accommodate the upcoming changes; retired teachers are also encouraged to come back to work to ensure a smooth transition.



To obtain a high school diploma, students must meet a minimum requirement of 144 credits and also pass a national graduation examination. This exam used to be called the General Examination for High School Students (*huikao* or joint exam) across most of China, but it has been phased out in recent years and will soon be completely replaced with the Academic Proficiency Test (APT, *xueye shuiping ceshi*) in all jurisdictions.

This graduation exam is based on the national curriculum set by the MOE but administered by local education departments. While the 3+x core subjects are examined at the end of grade 12, students can sit for examinations in the other subjects earlier and take the exam in parts, once they complete the necessary credit requirements in specific subjects. Graduates are issued a certificate of high school graduation.

China's Senior Secondary Curriculum					
MANDATORY SUBJECTS			ELECTIVES		
FIELD	SUBJECT	CREDIT	CATEGORY	CONTENT	CREDIT
Language and Literature	Chinese	10	Core Electives	Advanced Academic Courses (3)	Minimum 48
	Foreign Language	10			
Math	Math	10			
Liberal Arts	Politics	8			
	History	6			
	Geography	6			
Science	Physics	6	Vocational	Vocational and Technical Subjects	
	Chemistry	6			
	Biology	6	-	Physical education, fine arts, health education, etc.	
Technology	Information Technology	4			
	Technology Application	4			
Fine Arts	Music or Painting	6	Practicum	Internship, Practicum	
Physical Education	-	12			
Special Subject Education		2	Subjects mandated by the MOE (party ideology, etc.)		

Source: Ministry of Education of China

© 2019 World Education Services
wenr.wes.org



The grading [scale set forth by the MOE](#) for the APT exams is shown below, but grading practices may vary by province. Passing the APT is a prerequisite for sitting the gaokao. (See also the section on university admissions.) The overall graduation rate was 83.5 percent [in 2017](#).

Grading Scale of China's Academic Proficiency Test	
GRADE	PERCENTAGE
A	Top 15 percent of students
B	Next 30 percent
C	Next 30 percent
D	Lowest 25 percent*
E	

*Provinces can decide on the distribution of D and E grades.

Source: Ministry of Education of China

© 2019 World Education Services
wenr.wes.org



Chinese schools use different grading scales independent of the APT scale, the two most common of which are the 0-100 and 0-150 scales shown below. The three mandatory subjects—Chinese, mathematics, and English—may be factored into grade averages as weighted subjects

of greater value. Some schools use the 0-150 grading scale for these three subjects, and the 0-100 scale for the remaining subjects.

Common Secondary Grading Scales in China		
SCALE 1 (0-100)	SCALE 2 (0-150)	WES CONVERSION
85-100	127.5-150	A
75-84	112.5-127	B
60-74	90-112	C
0-59	0-89	F

© 2019 World Education Services
wenr.wes.org



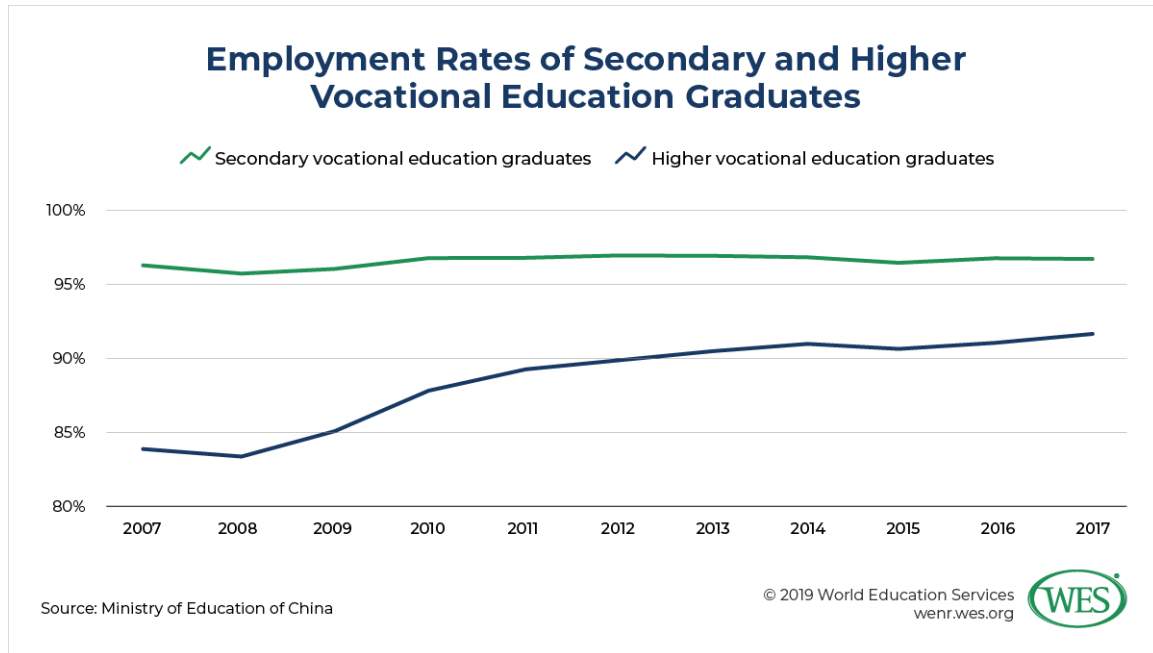
Vocational High Schools

Vocational high schools in China have different names, such as specialized secondary school or skilled worker school, but they are all designed to train mid-level technicians. In addition, these schools also provide a pathway to higher education. Graduates can sit for the gaokao university entrance exams, although students are academically much less prepared for the grueling exam since they take fewer general academic classes. Since 2014, they can also gain admission into higher vocational colleges by taking a [skills test](#) rather than sitting for the gaokao, which used to be mandatory. More than half of all entrants into higher vocational colleges entered through this pathway over the [past three years](#). Many vocational schools have also set up special pathway agreements with polytechnics that allow students to be admitted based on alternative [admissions](#) criteria.

Vocational schools were introduced in China in the 1960s, and enrollments grew tremendously in the previous century. During the early phases of China's free market reforms, formal vocational education picked up as the government sought to address the demand for skilled workers by foreign companies in the newly established special economic zones, as well as the country's booming economy at large.

During this century, by contrast, student interest in these schools has dwindled because many Chinese view vocational education as inferior to university education, even though [96 percent](#) of vocational students find employment after graduation. Between 1998 and 2008, the number of

vocational secondary education schools dropped by [35 percent](#), and another 27 percent [by 2016](#). Funding used to be a problem as well—in 2013, for instance, vocational secondary schools received only 10 percent of the total budget for secondary education while academic schools received about [90 percent](#).



However, given the growing labor shortages in China, the Chinese government is now again emphasizing vocational training. In 2010, it [set](#) the goal to boost enrollments in vocational schools to 23.5 million by 2020, although this objective seems hard to achieve at this point. In fact, in 2018, the number of vocational secondary schools decreased by 4 percent from the previous year. There were 10,200 vocational secondary schools nationwide in [that year](#).

In 2019, the government then put forward a comprehensive National Vocational [Education Reform](#) Implementation Plan. This drive is intended to boost enrollments in vocational secondary schools from the current ratio of 40 percent to 50 percent by 2022 and “reform its entire vocational education framework, including occupational standards, assessment and evaluation mechanisms, teacher training & recruitment, and [industry engagement](#).” The Ministry of Finance has earmarked additional funding for scholarships and financial assistance and other incentives to bolster vocational education.

The government is also piloting a new so-called [1+x certificate system](#) under which graduates of both secondary schools and universities can earn a vocational skills certificate in fields like information technology, transportation logistics, or elder care.

The [MOE](#) and the [Ministry of Human Resources and Social Security](#) are the government bodies responsible for the funding and oversight of most vocational secondary schools. The MOE’s [Department of Vocational and Adult Education](#) is responsible for setting standards and

curricula [nationwide](#). The department publishes a [catalogue](#) of programs that stipulates the length of programs and defines the skills profiles and learning outcomes for different occupations in fields like computer technology, construction, finance and trade, mining, textile production, or allied health.

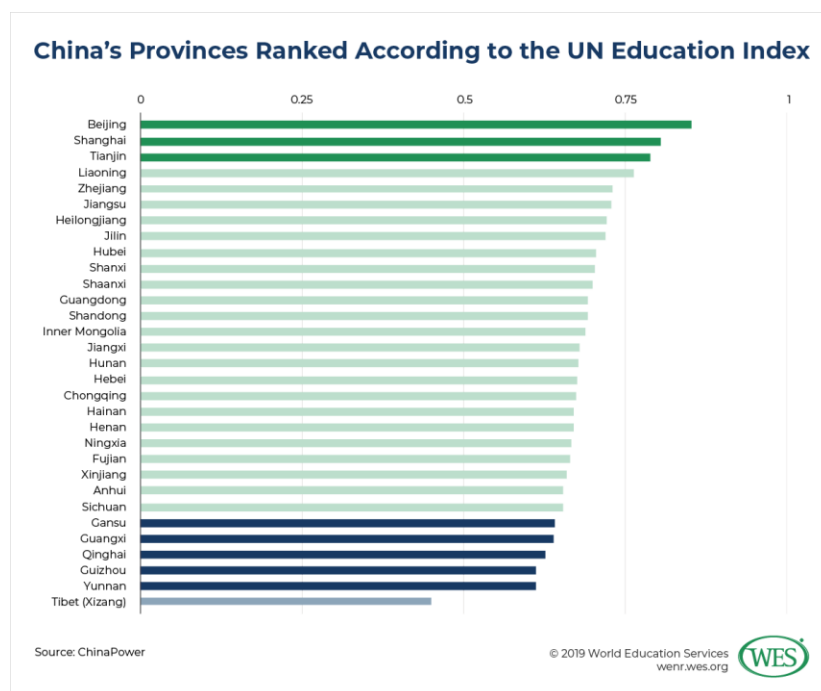
The curricula are applied and practical in nature, but also include general academic foundation subjects, which make up a third of the curriculum. They include moral education, Chinese, mathematics, foreign language, history, computer applications, physical education, art, career planning, laws and ethics of the occupation, philosophy and law, economics, politics, and society.

As for vocational specialization subjects, there are five to eight core subjects, depending on the specific vocation, and these make up two-thirds of the program. An industrial internship of at least six months is usually required, but the internship may also be completed in sections, spread across semesters. Overall, three-year vocational programs comprise 40 weeks per academic year with 28 hours of instruction each week. In most cases, 18 teaching hours equal one credit unit; 170 credits are required for graduation.

Admission to secondary vocational schools requires completion of junior secondary school and—since 2005—passing of the same entrance examinations as for general high schools (*zhongkao*). Most secondary vocational programs are three years in length, but some institutions offer two- or four-year programs in certain fields of study. Students who complete the program receive a graduation certificate that indicates completion of vocational school, but the final qualification is considered on par with the general high school graduation certificate. A vocational skills certificate may also be awarded.

China Tops the 2018 PISA Results

China ranked first out of 78 participating countries in the latest [OECD PISA study](#), overtaking Singapore, the top-rated country in the latest 2015 study. This is a remarkable achievement and underscores how far China has come in advancing education. Chinese 15-year-olds scored first in all three testing categories (reading, mathematics, and science). However, it should be noted that the study only tested students from four developed jurisdictions: Beijing, Shanghai, Jiangsu, and Zhejiang, whereas in other countries testing is done more representatively. The achievements in these four jurisdictions notwithstanding, there are huge disparities between provinces in China in terms of educational attainment. This is reflected by China ranking only 85th out of 187 countries in the latest 2018 [UN Education Index](#), a ranking that measures mean years of schooling and expected years of schooling. According to that Index, [Beijing](#) is at the level of the U.S. in terms of attainment rates, whereas Yunnan province in Western China compares more with countries like Ecuador, Peru, or the Philippines.



The Booming International School Sector

Demand for international schools in China is surging. Between 2010 and 2018, their number more than doubled to [821 schools](#), according to Chinese market research. Most are located in developed areas, such as Guangdong, Shanghai, Jiangsu, Beijing, or Zhejiang, but they are becoming increasingly common in second- and third-tier cities as well. China is now said to have the highest number of international schools [worldwide after the United Arab Emirates](#).

International schools traditionally catered exclusively to expats. Called “schools for children of foreign workers,” these specific types of schools continue to be barred from enrolling Chinese nationals—a fact that has caused rich Chinese to [obtain passports](#) of African or Caribbean countries for their children to attend these schools. Top schools in this category charge tuition fees of up to [USD\\$40,000 a year](#).

However, there are now also more and more Chinese-owned schools authorized to offer international curricula for local Chinese children; [58 percent](#) of the 359,000 students enrolled in international schools in China are currently Chinese nationals. Growing numbers of Chinese middle-class households prefer these schools because they have smaller class sizes and [bilingual curricula](#), and they provide a springboard for an international university education. Most students enrolled in these schools proceed to study abroad after graduation.

There are different forms of Chinese international schools. Some private schools exclusively teach well-established international curricula, such as British curricula or the International Baccalaureate (IB). Some of these are superior schools that offer rigorous college preparatory programs, including excellent training in English language skills. On the other end of the spectrum are low-quality providers with inadequate teaching staff who engage in questionable

practices. A school teaching the Canadian curriculum [lost its license](#) in 2016 after it was reported that “students were paying as much as \$1,100 to retake exams and inflate grades, allowing underperforming students easier access to [Ontario schools](#).”

In addition, there are so-called Sino-foreign cooperative schools that teach both international and Chinese curricula. These dual-track joint venture upper-secondary programs often require the *zhongkao* for admission and enable students to sit for the APT exams, and subsequently the gaokao. If these institutions are also recognized by the relevant overseas authorities, students simultaneously earn a foreign qualification, such as the British IGCSE (International General Certificate of Secondary Education). Lastly, private and public Chinese schools may incorporate elements of foreign curricula into the standard Chinese curriculum without being recognized by overseas authorities. Students in these types of schools earn only a Chinese high school qualification.

Overall, most international schools are privately run and offer programs that are internationally recognized, such as the IB, the U.S. Advanced Placement (AP) program, the British GCE A Level, and others. The A Level is the most widespread curriculum with a market share of [40 percent](#); it is followed by the AP (26 percent) and IB (14 percent).

The rapid growth in the number of Chinese international schools has recently provoked a [backlash from Chinese authorities](#) concerned about ideological control. Many international schools don’t teach subjects like Marxism and Chinese patriotism that are mandatory in public schools. As one observer told the *New York Times*, the “government has maintained tight ideological control over the universities, and high schools are entirely focused on test preparation, but there has been room for innovation in the grades 1-to-9 system.... As the Chinese economy slows and instability grows, the government wants to ensure maximum control [in the classroom](#).”

Since CCP officials are especially concerned about Western values being taught in basic education—at an age when children are more impressionable—it has banned for-profit schools in basic education in order to “bar foreign investment in [private schools](#).” In addition, all private schools in basic education are now required to teach the national curriculum and prepare pupils for the *zhongkao* exams. Schools for expats and Chinese international high schools are exempted from these requirements, but it’s possible that senior secondary schools will come under [closer scrutiny as well](#).



China's Obsession with Learning English

When China joined the World Trade Organization in 2001, the [MOE](#) mandated that English be taught in elementary school from third grade. Most Chinese high school students will have studied English for 10 years by the time they graduate. But in contemporary China, English is much more than just a required subject in schools. Utmost significance is attached to learning English since English proficiency improves students' chances for university admissions worldwide and enhances their prospects for career advancement, particularly against the backdrop of China's rise as a global economic power.

Nowadays, many Chinese children start learning English as early as kindergarten, while private, for-profit English Language Teaching (ELT) schools have sprung up all over the country. There are now an estimated [300 to 400 million](#) English language learners in China, making the country the world's largest ELT market by far. Demand is such that there are some 400,000 foreign English teachers in China, the majority of them reportedly [working illegally](#). And the ELT market is forecast to grow by another [22 percent](#) annually by 2022.

In higher education, the English craze manifests itself in universities requiring all students in four-year programs to complete 16 credits in English (about 10 percent of a typical bachelor's degree curriculum). Before graduation, students in non-English majors sit for the [College English Test \(CET\)](#) to evaluate their English skills. Although not officially mandated, the CET is a prerequisite for graduation at many universities.

DIFFERENT SYSTEMS: A BRIEF DESCRIPTION OF EDUCATION IN HONG KONG AND MACAU

Hong Kong and Macau have education systems that are different from that of mainland China. The former colonies' systems developed separately in the twentieth century. Sovereignty was transferred back to the People's Republic of China in 1997 and 1999, respectively, but Hong Kong and Macau remain semi-autonomous entities under the “one country, two systems” principle—a structure that allows them to have different legal systems and governmental and economic structures for 50 years. This relative independence notwithstanding, the government of Hong Kong aligned its education system with that of mainland China and introduced major reforms after the handover of Hong Kong. Macau, on the other hand, made great strides in modernizing its education system after the end of Portuguese rule.

Education in Hong Kong: The Old System

As a former British colony, Hong Kong had an education system closely aligned with that of the United Kingdom. The British-style school system in the city-state consisted of 13 years of elementary and secondary education delivered principally in English. There were different streams in upper-secondary education, with students following a science, arts, or commerce track. Two examinations governed access to post-secondary education. The Hong Kong Certificate of Education Examination (HKCEE), awarded by the Hong Kong Examinations and Assessment Authority (HKEAA), was taken after five years of secondary education and provided access to non-university post-secondary education. It was the equivalent of the British O Level exams.

Students in the university-preparatory track then took the Hong Kong Advanced Level Examination (HKALE) after an additional two years of secondary school, in Form 7 (also known as Upper Sixth). Students typically sat for both English and Chinese, as well as two or three additional subjects. Equivalent to the British A Level exams, the HKALE was the standard admission requirement and most important selection criterion for university programs. Bachelor's degree programs in Hong Kong were three, or in some cases, four or five years in length.

The New System

After Hong Kong became a special administrative region of China in 1997, its government transformed the British-style system into one more closely aligned with mainland China. In 1998, most schools were [instructed](#) to introduce Cantonese—the Chinese dialect spoken as the native language by most Hong Kong residents—as the language of instruction and phase out English and bilingual programs. Only [114 schools](#) were allowed to continue teaching in English, while over 70 percent of schools were required to switch to Chinese. However, this directive was “[fine-tuned](#)” in 2009 to allow more schools to teach more subjects in English, so as not to jeopardize Hong Kong's status as an international business hub and [financial center](#).

Another change, introduced in 2008, was the promotion of Putonghua (Mandarin Chinese) as the language of instruction for [teaching the Chinese Language](#). The stated aim was to promote bilingualism (Chinese and English) and trilingualism (Cantonese, Mandarin, and English). According to Hong Kong's Secretary for Education, [16 percent](#) of elementary schools taught Chinese exclusively in Mandarin in 2016, while another 55 percent used both Mandarin and Cantonese. At the secondary level, these percentages are lower, but there are nevertheless growing concerns about the loss of cultural identity [in Hong Kong](#).

Equally notable, the secondary education cycle was shortened from seven to six years, so that Hong Kong now has a 12-year system (6+6) rather than the previous 13-year system (6+5+2). The two benchmark credentials HKCEE and HKALE have been replaced by a single examination: the Hong Kong Diploma of Secondary Education (HKDSE), which is taken in Form Six (grade 12). The old system of specialization streams has been replaced by [a combination](#) of four core subjects (Chinese, English, mathematics, liberal studies), a choice of electives, and “other learning experiences,” such as physical education and community service.

Like its precursors, the HKDSE has served as the standard admission requirement for higher education programs since it was introduced in 2012. Students typically take a total of six or seven subjects, with the final HKDSE results being primarily based on external examinations administered by the HKEAA. Hong Kong is also home to a [sizable number](#) of [international schools](#), many of which use English as the medium of instruction and teach the International Baccalaureate curriculum.

As the elementary and secondary education cycle has changed from 13 to 12 years, the standard length of bachelor's degree programs has shifted from three to four years. The benchmark qualifications at the graduate level are the master's degree and a doctoral research degree (PhD). Shorter “sub-degree” qualifications (associate degrees, higher diplomas) also exist, as well as postgraduate certificates and diplomas. Vocational education is offered at both the upper-secondary (9+3) and post-secondary levels under the purview of the [Vocational Training Council](#). At the post-secondary level, there are various employment-gear certificate, diploma, and advanced diploma programs that require the HKDSE for admission.

Hong Kong has [22](#) degree-granting institutions, as well as several non-degree-granting institutions, many of them private. Quality assurance for tertiary institutions is under the purview of the University Grants Committee (UGC), which performs [quality audits](#) of the universities it funds. Other post-secondary institutions are [accredited and quality controlled](#) by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ).

Macau

Macau is a much smaller territory than Hong Kong with a population of only [672,000 people](#). A former Portuguese colony, and then a “[territory under Portuguese administration](#)” for much of the 20th century, Macau long had a less developed education system. For decades the Portuguese colonial government did not allocate adequate resources to education, so Macau's education system remained decentralized, fragmented, and largely privatized—[more than 80 percent](#) of

schools in the territory were privately run at the end of the last century. The first HEI in Macau, the public University of East Asia—now the University of Macau—was not established before 1981, which meant that Macau residents had to access higher education in Hong Kong or mainland China.

However, great progress has been made since the 1990s, especially after the handover of Macau to China. The territory now has a more unified and government-steered education system, provides free education in public schools, from kindergarten to grade 12 (3+6+3+3), as well as through a “free education system” of government-subsidized private, non-profit schools. While the provision of school education remains largely in private hands—67 out of 77 schools in Macau are privately owned—the government ensures consistency by requiring that government-subsidized schools in the free education system follow mandatory [curriculum guidelines](#). Judging by the OECD PISA study, the quality of education is high. Macau was ranked third out of 78 countries and territories in reading and mathematics in the latest [2018 study](#), ahead of Hong Kong, which was ranked fourth in these test subjects.

Because of the legacy of Portuguese colonialism, [more than 30](#) percent of elementary and secondary schools in Macau are Catholic schools, despite [only about 5 percent](#) of the population identifying as Catholic Christians. The reason for this is many residents view these schools as reputable institutions that provide [high-quality education](#). The most common medium of instruction by far in Macau is Chinese (mostly Cantonese), followed by English and Portuguese. Unsurprisingly, the number of children taught in Portuguese has [declined](#) since Macau came back under Chinese administration in 1999. More than 80 percent of the population speaks Cantonese.

The number of HEIs in Macau has grown tremendously in recent years—there are now [10](#) of them, four public and six private, enrolling some [33,000 students](#) in 2018. These institutions award a full range of credentials, from diplomas and bachelor’s degrees to doctorates. Admission to undergraduate programs generally requires a senior secondary school diploma, but may also entail additional criteria, such as entrance examinations in Chinese, English, or Portuguese, as well as mathematics. The government has recently piloted a unified admissions process in four HEIs based on a Joint Admission Examination (JAE). This test is also accepted for admission by some institutions in mainland China [and Portugal](#). Accreditation and quality assurance in higher education are under the purview of Macau’s Tertiary Education Services Office.

UNIVERSITY ADMISSIONS IN MAINLAND CHINA

Admission to regular HEIs in China is usually dependent on high school graduation and gaokao scores. However, while the gaokao is the most important admission criterion, there are a few variations. As noted before, applicants to vocational colleges can be admitted via a separate examination without taking the gaokao. Admission to adult higher education institutions, or adult education programs at regular universities, meanwhile, is based on the National Adult College Entrance Examination (also known as the “adult gaokao”). Applicants are expected to have academic skills on par with recent high school graduates, but a high school diploma is not required for admission.

On the other side of the spectrum, top institutions are permitted to administer their own written examinations or conduct interviews in addition to the gaokao. Students who pass these exams or interviews can be admitted based on lower gaokao scores—a process that lessens the importance of the gaokao and gives applicants another chance to be admitted to their institution of choice. However, only students from select top-performing high schools are eligible for this type of independent recruitment. What’s more, the MOE stipulates that only 5 percent of incoming students can be selected through this process, while the other [95 percent](#) must be admitted based on the gaokao. In addition, the MOE in 2019 issued ten [strict guidelines](#) that HEIs have to follow when admitting students independently.

The Gaokao

Held over a two- to three-day period in early June each year, the gaokao is an extremely high stakes exam that can have a traumatizing effect on students and parents alike. As the *Wall Street Journal* [describes](#) it, the test can have life-altering consequences for Chinese students:

“There are minimum gaokao levels required to attend [most] of China’s ... colleges, and only about two-thirds as many available admissions slots as test takers. Sliding into the lower third of marks means, at a minimum, losing a year and going through the whole horrible experience of cramming all over again. At worst, it means dropping the dream of college and taking a low-paying, dead-end manufacturing or service job, or turning to a junior college to learn basic vocational skills. But for those who do well, the gaokao is life-altering. Being among the 8.5 percent of test takers who score high enough to qualify for one of China’s ... tier-one universities, means reasonable assurance of eventual high-paying white-collar employment, thereby securing a stable financial future.”

Students usually take the test in the final year of high school after preparing for it the entire year, but it’s possible to retake the exams indefinitely after graduation from high school. There’s a large private tutoring industry that assists students in preparing for the exams in after-school cram classes or online courses. Research has shown that [58 percent](#) of Chinese high school students relied on private tutoring in 2017, with students in urban areas spending 10.6 hours a week in after-school prep courses.

Given the stakes, there’s also a fair amount of cheating—a fact that results in testing facilities deploying security cameras, metal detectors, electronic signal jammers, and [drones](#), as well as iris and fingerprint scanners to prevent hired test takers—so-called “[gunmen](#)”—from sitting for the exams in place of actual students. In 2016, the Chinese government even opted to threaten cheaters with up to [seven years of jail time](#). Since the difficulty of the exams varies by province, there’s also the phenomenon of “exam migration,” that is, students moving to regions like Inner Mongolia where the test is [easier to pass](#).

The exam is spread over nine hours and consists of both essay and multiple-choice questions, depending on the subject. Under the new 3+3/3+1+2 system, it will cover Chinese, mathematics, and a foreign language, most typically English, as well as the specialization subjects students elect in high school. In most provinces the final maximum score is 750 (150 each for the

compulsory subjects and 100 each for the 3+X electives). Ethnic minority students or athletes may be awarded extra points to facilitate their admission.

However, there are big differences in examination and scoring practices in some jurisdictions, so that the gaokao results in different provinces are difficult to compare directly. For example, Shanghai, Hainan province and Jiangxi province currently have different maximum scores (660, 940, and 480, [respectively](#)). In addition, minimum score thresholds for admission into universities vary by province. Universities take into consideration the diverging practices in the different jurisdictions when making admission decisions related to out-of-province students. This means that students from Shanghai applying in Beijing, for instance, have different score requirements than students from other provinces.

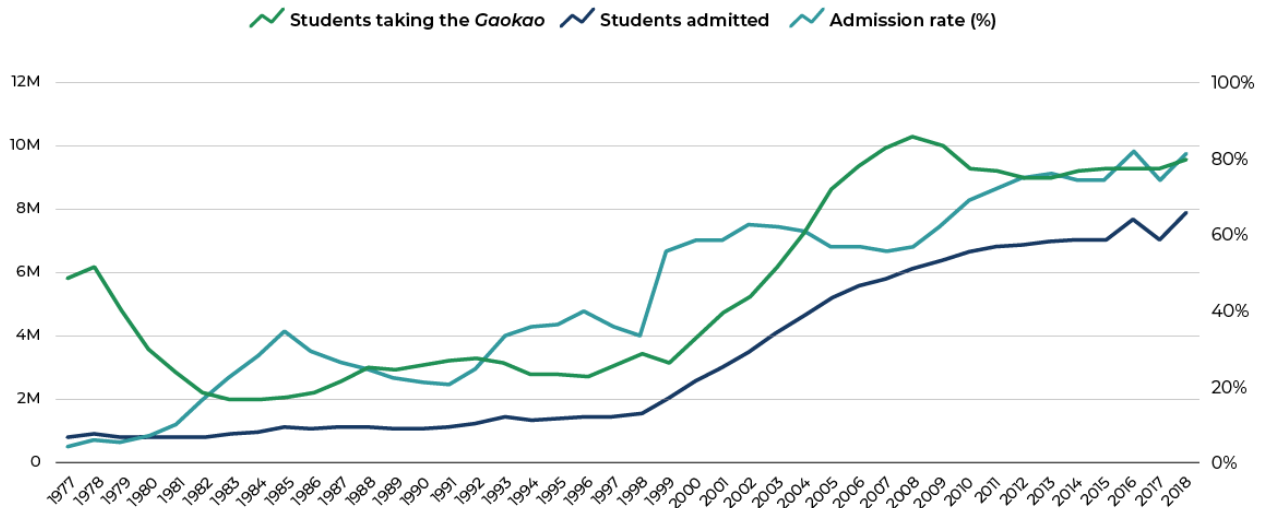
Once the gaokao results are in, admission thresholds are set based on the results; these vary by year and institution. Traditionally, universities have been grouped into three tiers with a different minimum score for each tier. “A matrix of provincial quotas, university quotas, and subject quotas is negotiated annually between universities and national and provincial authorities. Nationally, around 10% of candidates receive a Tier 1 score (allowing them to apply to Tier 1 universities), while a further 20% receive a [Tier 2 score](#),” and so on. However, several provinces are currently [replacing](#) the tier system with a more elastic approach that will allow for greater flexibility and different quotas from institution to institution.

The different jurisdictions also reserve quotas for local students—a practice that advantages students in areas that have a greater concentration of universities and top-tier institutions, such as Beijing and Shanghai. By some accounts, students from Anhui province, for instance, in 2012 had a 40 times lower chance of being admitted into Beijing universities than [local students](#).

The total number of students sitting for the gaokao exam, as well as university admission rates, has surged over the years. Consider that in the mid-1980s fewer than two million students sat for the gaokao, and that the overall admissions rate was only [23 percent in 1990](#). In 2018, by contrast, close to 10 million students took the test with [81 percent](#) of them gaining admission.

However, admission rates at top institutions like the C9 group of universities—China’s equivalent of the Ivy League—are minuscule at best. The *Atlantic* [reported in 2013](#) that “China’s prestigious Peking University and Tsinghua University, both based in Beijing, will collectively take about 84 students out of every 10,000 Beijingers who took the *gaokao* ... 14 students from every 10,000 who took the *gaokao* in nearby Tianjin, 10 out of every 10,000 test takers from Shanghai, and only about three per 10,000 candidates from Anhui ... and a mere two from every 10,000 taking the test in Guangdong.”

Students Taking the Gaokao and University Admissions Rate



Source: sohu.com, gaokao.com

© 2019 World Education Services
wenr.wes.org



Corruption in University Admissions

Given the extreme selectiveness of China's top universities, it's perhaps unsurprising that some corrupt university officials take advantage of their gatekeeper position to solicit bribes, while rich families spend considerable sums of money to buy access to top schools for their children. As in other countries transforming from Communist state economies to free market systems, corruption and crony capitalism—dubbed “*the dark side of China's rise*” by some—have become endemic problems in China in general.

The Chinese education sector is highly vulnerable to bribery, particularly in programs where students have to take non-centralized entrance examinations at individual institutions, such as in fine arts programs. But given the tremendous importance of a top-tier university education in China, bribery is also pervasive in other disciplines, as well as in the *school system*. In one egregious example, the former admissions director of Renmin University, a prestigious Beijing-based institution, admitted in court to accepting “more than \$3.6 million in illegal payments between 2005 [and] 2013, in exchange for helping 44 students obtain spots ... or to allow students already there to *change their majors*.”

The Chinese government has begun to crack down on such practices as part of President Xi Jinping's overall *anti-corruption drive*. Renmin University, for instance, was barred from admitting students through its own *autonomous admissions process*. But it remains to be seen

how effective Beijing will be in stamping out bribery. As of 2019, the success of Xi Jinping's anti-corruption campaign [remains debated](#).

HIGHER EDUCATION INSTITUTIONS

China has a heterogenous higher education system with no fewer than [2,956](#) HEIs. These include public degree-granting universities and research institutes, junior colleges, vocational colleges and universities, medical colleges, military institutions, private universities, and adult education institutions.

It's important to understand that not all institutions have degree-granting authority. Some institutions only award non-degree qualifications (*zhuanke*), while others are affiliated with “mother universities” that confer the final degree. Degree-granting authority is mainly limited to universities and research institutes, but there are also 257 independent colleges that can award degrees. These institutions are private colleges affiliated with public universities that have more autonomy than other colleges in matters like admissions requirements. They don't receive government funding and charge much higher tuition fees, while having lower admissions standards. This has made the programs offered by these institutions—usually professionally oriented programs in fields like computer science or business—an increasingly popular [option in China](#), despite the high fees.

Independent colleges are an example of the growth of private education (*minban*) in China since the 1980s, when laws governing the sector began to be relaxed. The CCP has come to view private providers as a key mechanism for addressing the mass demand for education. China's Law on the Promotion of [Privately Run Schools](#), for example, “enthusiastically” encourages private education. Between the adoption of this law in 2001 and 2016, the number of private HEIs jumped from [39](#) to 786, so that private institutions now make up some [27 percent](#) of all HEIs in China, enrolling [6.3 million students in 2016](#). While some private institutions have seen [enrollment declines](#) in recent years and the private sector is presently characterized by a flurry of mergers and acquisitions, further growth of private higher education is expected in China in the [years ahead](#).

Private institutions generally offer more applied, employment-focused programs; more than 300 of them are vocational colleges. Some of them rent buildings and other infrastructure from [public universities](#). The quality of these institutions is [highly variable](#), observers say, and they are often not on par with public HEIs. Overall, the Chinese higher education system is characterized by wide disparities between academic institutions. While top HEIs are nurtured with vast resources, other HEIs are underfunded demand-absorbing institutions of [lesser quality](#).

As a rule of thumb, the country's best and most generously funded universities are located in Beijing, Shanghai, and the great cities of eastern China, and all of them are public. Most are directly overseen by the MOE in Beijing or other central government bodies. They are generally

large multi-faculty research universities. Given their public funding, the tuition fees charged by these institutions are relatively modest compared with the fees charged by private institutions. Tsinghua University and Peking University, for example, charge around 5,000 to 6,000 yuan (USD\$711 to USD\$854) a year for [undergraduate programs](#).

Quality Improvement Initiatives

The stratification of China's higher education system is to a large extent the result of government policies that systematically consolidated a top tier of research universities. Former president Jiang Zemin formulated this objective explicitly when he proclaimed in 1998 that "China must have a number of first-rate universities of international [advanced level](#)." Beginning in the 1990s, Beijing launched several excellence initiatives—and invested tens of billions of dollars—to improve the quality, research capacity, and international competitiveness of selected top-tier HEIs in China.

One initiative, Project 211, sought to strengthen 99 universities with USD\$2.2 billion between 1996 and 2000—an effort that greatly boosted research output of [these HEIs](#). This project was later extended to [112 universities](#), while another initiative, Project 985, created an even more elite group of universities—the [C9 league of universities](#)—before government funding through this project was broadened to [39 universities](#) (both the 211 and the 985 programs were eventually combined in the Double First Class Project plan). Yet another initiative, the [Plan 111](#), attempted to bring more foreign researchers and faculty to Chinese universities.

Most recently, President Xi Jinping replaced these projects with his own World Class 2.0 initiative—an effort to create 42 world-class universities and establish world-class faculties at [95 universities](#). Altogether, these excellence initiatives have funneled tremendous resources into prioritized top-tier universities. Tsinghua University, for instance, received USD\$641 million in research funding [in 2013 alone](#). Western critics contend, however, that generous funding by itself is not enough to elevate Chinese HEIs, and that greater academic freedoms and university autonomy will be needed to establish true [world-class universities](#) in the country.

Research Institutes

Big and prestigious research institutes like the Chinese Academy of Sciences (CAS), the Chinese Academy of Agricultural Sciences, and the Chinese Academy of Social Sciences are public research universities that are among China's tier-one institutions. They are directed by different bodies of the central government, and each oversee several smaller research institutes and graduate schools. Given their narrow focus on research, students at these schools are almost exclusively graduate students, but the University of the Chinese Academy of Sciences has also offered [undergraduate programs](#) since 2014.

China's System of Cash Rewards for Journal Articles

To boost research output, Chinese academics are incentivized with cash rewards to publish in academic journals—a system that is not unique to China but which has been taken to extremes by Chinese universities. The average cash reward was [USD\\$43,783](#) for natural science articles published in Western journals in 2016, but the rewards are in some cases as high as [USD\\$165,000](#) for publications in prestigious journals. In addition, academic journal publications are often required for employment, promotions, the award of research grants, and the award of doctoral degrees.

While this system has contributed to a strong increase in Chinese-authored scientific publications, it is not always to the benefit of academic quality. As highlighted in the study “[Publish or impoverish](#),” rewards encourage Chinese academics to favor “fast research that leads to quick, cashable publications as opposed to long-term research.” Rewards have also opened the door to corrupt practices like plagiarism, ghostwriting, fake peer reviews, and falsified research. China's Wuhan University has estimated that the country's “industry of plagiarism, invented research and fake journals” grew five times in volume between [2007 and 2009 alone](#). According to the online publication Quartz, [more than 50 percent](#) of all articles retracted by scientific journals worldwide for fake peer reviews between 2012 and 2016 were submitted by Chinese authors.

Vocational Colleges

Administered at the provincial level in China are [more than 1,400](#) non-degree-granting vocational colleges. These are referred to as specialized colleges (*dazhuan*) or vocational-technical colleges (*gaodeng zhiye jishu xueyuan* or *gaozhi*), some of which are housed in universities. The programs offered by these institutions are typically three years (sometimes two) in length after high school, but there are also some five-year programs for graduates of junior secondary school that encompass the senior-secondary curriculum. The programs of study lead to the award of a diploma in a vocational specialization; they are geared toward employment and typically include an internship. The MOE sets curricula and learning outcomes for programs in 19 broad [subject categories](#), such as agriculture, finance and commerce, medicine, tourism, or transportation.

The final qualifications awarded by vocational colleges are at the so-called *zhuanke* level (specialized training) as opposed to the *benke* level (undergraduate education). In some cases, however, graduates may transfer into universities to earn a bachelor's degree within two or three years.

Adult Education Institutions

China is said to have the “largest, most-populated and most-diversified adult education system [in the world](#).” There are various forms of adult literacy programs, short-term continuing education programs, community learning centers, and schools for adults who have not completed basic

education. At the post-secondary level, adults can study in formal *zhuanke* or *benke* programs offered by Open Universities or so-called radio and television universities. Patterned after the model of the British Open University, these institutions traditionally used radio broadcasts, TV lectures, print materials, and audiocassettes to provide education in blended distance mode, but now rely increasingly on online learning. Adults typically must sit for the National Adult College Entrance Examination to be admitted into formal degree programs.

In addition, there are “spare-time universities” that provide face-to-face instruction in part-time mode, such as evening classes. Students can earn a *zhuanke* diploma in three to four years and a bachelor’s degree in five to six, but students at these institutions are allowed to take [10 years to graduate](#).

Self-Study Programs

Another way to earn *zhuanke* and *benke* qualifications is through [self-learning](#). In this case, learners study independently at home and sit for two sets of examinations each year, in April and October, at dedicated testing centers. While the exams are administered locally, the content of the Higher Education Self-Study Examinations is set by the National Education [Examinations Authority](#) of the national MOE. Students accumulate a series of completion certificates after each exam until they meet the requirements for graduation, which may also entail writing a thesis. They are issued a “certificate of graduation through self-study” that is officially considered equivalent to regular qualifications. There are no entrance examinations for self-study programs; anyone can enroll. Chinese authorities refer to the system as “easy entry, [difficult exit](#),” presumably because the exams are hard to pass.

The Open University of China

The Open University of China ([OUC](#)) is China’s largest HEI in terms of enrollments, as well as the biggest university in the world by some measures. Under the direct control of the MOE in Beijing, the OUC was established in the 1970s as a radio and TV university to expand access to education. Renamed OUC in 2012, the university oversees a vast network of regional open distance education universities throughout the country. This university system currently enrolls about [3.6 million students](#) in various programs that range from undergraduate degree programs to vocational certificate programs, teacher training programs, and a multitude of continuing education programs. Under its “One College Student per Village Program” it offers distance learning in agriculture and other fields with the aim of increasing education participation in rural areas. Degree programs are usually taught in blended learning mode, combining face-to-face tutoring at study centers with online education or other forms of distance delivery.

QUALITY ASSURANCE (QA) IN CHINESE HIGHER EDUCATION

Amid the massification of Chinese higher education, the Chinese government has since the 1990s issued a series of policy directives to strengthen the quality control of the rapidly growing number of HEIs in the country. After piloting different forms of evaluation schemes [in the 1990s](#), the MOE in 2002 mandated that HEIs which offer undergraduate programs undergo periodic external assessment in [five-year evaluation cycles](#) and proceeded to evaluate 589 institutions in a first round of quality assessments [between 2003 and 2008](#). While these institutions continue to be audited today, the MOE currently prioritizes the evaluation of newer institutions that were not assessed in previous reviews. Generally, China's QA drive since the 1990s first focused on undergraduate education and, more recently, the evaluation of graduate programs.

The main QA authority is the MOE, which sets the overall quality standards for higher education. Its Higher Education Evaluation Center (HEEC) is tasked with evaluating and auditing HEIs at the undergraduate level, as well as coaching HEIs on best QA practices, and collaborating with QA agencies in other countries. It also gathers statistical data on HEIs and maintains a [database](#) on academic institutions approved to offer *benke* and *zhuanke* programs.

On the other hand, the China Academic Degrees and Graduate Education Development Center ([CDGDC](#)), a semi-autonomous body under the purview of the MOE, is responsible for the evaluation of graduate-level institutions and programs. In addition, provincial accreditation committees are tasked with evaluating and auditing vocational HEIs and private institutions within their jurisdictions under central guidelines. The quality of teaching at HEIs attached to specific central ministries, such as the Ministry of Agriculture, is directly monitored by the respective ministries.

Beyond external quality control, HEIs are mandated to create internal self-assessment and QA systems. Most HEIs, thus, have established committees made up of senior teaching staff that monitor quality at the departmental or discipline-specific level, and make recommendations on how to improve teaching practices. The peer review of specific courses by instructors is [common as well](#), as are student surveys. Based on these self-assessments, HEIs are then required to produce and submit annual quality reports, which are key reference documents for governmental evaluations.

The QA Process and Criteria for Undergraduate Education

In order to award credentials that are officially recognized in China, HEIs, both public and private, must be approved by Chinese government authorities. To qualify for assessment, institutions must have graduated at least three student cohorts and fulfill other criteria, such as having operating budgets approved by the Ministry of Finance.

The process of institutional accreditation begins with the institutional self-assessment, submitted to an evaluation committee appointed by the HEEC. The HEEC then dispatches a team of evaluators to conduct on-site inspections, review university documents, and interview administrators, faculty, and students. The final report of the HEEC inspection team is submitted to the accreditation committee which renders the final decision. Under the current evaluation scheme, HEIs are assessed in three categories: pass, deferred pass, and not passed. The HEEC publishes these results in media outlets.

Those institutions that pass are audited again in five years to measure whether they have made the suggested improvements, but no new grade assessment is rendered based on these audits. Institutions that do not pass or receive a deferred pass, on the other hand, must rectify shortcomings before they get reassessed within two or three years. They are not allowed to establish new programs, and their enrollment quotas are restricted or reduced. Further penalties may technically be imposed if institutions again fail to pass the assessment the second time around. However, none of the 589 HEIs evaluated between 2003 and 2008 failed their [quality assessment](#).

The criteria the HEEC takes into consideration when evaluating HEIs include the mission statement, uniqueness and social contributions of the institution, student-to-teacher ratios, the level of education of teaching staff, curricular design, infrastructure, budgeting, growth strategies, the strength of internal QA mechanisms and student services, employment outcomes of graduates, and student feedback, as well as the provision of sufficient physical education and [ideological education](#).

QA in Graduate Education

While the HEEC assessment focuses on undergraduate education, there is a separate QA process for graduate education through the CDGDC, which is responsible for approving postgraduate degree-granting institutions, university departments, and research institutes that award master's and doctoral degrees. Assessment of graduate programs involves the review of selected dissertations and appears to be relatively strict. In earlier reviews by the Academic Degrees Committee of the State Council, the body that conducted the reviews before this function was transferred to the CDGDC, several doctoral and master's programs were either terminated or lost their right [to award degrees](#) in the mid-2000s.

Since the early 2000s, the CDGDC has also evaluated graduate programs in specific academic disciplines of national priority to provide a [comparative ranking](#) of institutions that offer programs in these disciplines. Rankings are based on factors like faculty and resources, research output, and academic reputation, with institutions being rated on a scale from A+ to C-. Participation in this ranking exercise is voluntary, but the rankings are well-regarded in China, so that it's in the best interests of top institutions to participate. Most recently, the scope of CDGDC rankings was extended to [professional degree programs](#) in fields like accounting, education, law, clinical medicine, or dentistry. A pilot program in 2018 ranked more than 293 institutions in these disciplines.

TRANSNATIONAL EDUCATION

Transnational education (TNE), referred to as Sino-foreign cooperative education in China, was introduced in the country in the 1990s and has since grown exponentially. Consider that there are currently more than 600,000 students enrolled in China-based TNE programs, and that the sector has graduated more than [two million students](#) as of 2019. Reflective of this trend, China in 2016 became the country hosting the largest number of international branch campuses [worldwide](#), most of them run by [U.S. and British institutions](#) like New York University or the University of Nottingham.

In total, there are currently 2,431 officially approved Sino-foreign joint programs and institutions nationwide, 1,190 of which award bachelor's and [graduate degrees](#), while 927 run shorter, non-degree [diploma programs](#). This includes stand-alone institutions operated as joint ventures with Chinese partner institutions, as well as transnational partnerships at the faculty level, or secondary international colleges attached to accredited Chinese institutions. The offerings of these providers span more than 200 different majors, with engineering and management being the most popular fields of study, according to government statistics [from 2018](#). The most common partner countries are the U.S. and the U.K, but Australian institutions had established 156 Chinese-Australian joint ventures at the bachelor's and master's level [as of 2017](#) as well. Even institutions from non-English-speaking countries like France, Germany, Russia, or Israel have inked TNE partnerships, if on a smaller scale.

While TNE programs tend to be much more expensive than domestic programs, they may offer Chinese students the opportunity to obtain an international education without leaving the country. They are also part of China's internationalization and capacity building strategy. However, the Chinese government tightly regulates this type of education and imposes several restrictions on TNE. Chinese regulations state that TNE providers cannot jeopardize "China's sovereignty on national education and must contribute to the development of Chinese higher education institutions and the broader development [needs of China](#)."

All providers, including universities in Hong Kong, Macau, and Taiwan must partner with a Chinese institution if they want to run programs accessible in mainland China. All institutions must be accredited in their home country and have faculty recruitment practices and admission requirements comparable to those in their home countries, even though Chinese applicants are typically admitted based on the gaokao. Chinese authorities favor joint curriculum development with the [Chinese partner](#) and generally prefer reputable foreign institutions that are well-represented in [international university rankings](#). Sino-foreign degree programs must be directly approved by the central MOE, while non-degree programs may be approved by provincial authorities, even though the MOE still issues the [final license](#). Foreign providers are not allowed to offer programs in elementary and lower-secondary education at all.

TNE degree programs in China typically lead to the award of both a foreign and a Chinese degree. That means, for example, that U.K. bachelor programs, which are mostly three years in length, take four years to complete if offered as Sino-foreign cooperative programs. Many programs are taught in English or another foreign language and delivered in a 2+2, 1+3, or 3+1

format, a formula which specifies how many years students spend in China before continuing their studies at the foreign partner institution. Another popular option is the 4+0 model under which students complete all four years in China. Upon graduation, students are concurrently awarded a foreign and a Chinese credential that is recognized by China's MOE.

According to a [recent survey](#) of university staff of Western TNE providers in China and their students, the Chinese government affords these providers academic freedoms and doesn't impose curricular restrictions, although there have been incidents of self-censorship and general internet restrictions. However, Beijing has periodically tightened restrictions on TNE providers over concerns about quality and the for-profit nature of many TNE ventures. In 2007, for instance, the MOE temporarily suspended the approval of [new TNE programs](#) for several years. Likewise, Beijing in 2018 terminated 229 TNE agreements, citing quality considerations, to "replace the old with the new, optimized, [and upgraded](#)." This was, however, followed by the approval of more than 30 new joint degree programs [in 2019](#). The MOE has in recent years also signed agreements with international QA organizations, the British [QAA](#) and French [HCERES](#), to collaborate on improving QA standards for TNE.

CREDIT SYSTEMS AND GRADING SCALES

While Chinese universities generally use credit units to quantify study, there's no nationally standardized credit system in China. One credit unit is usually defined as anywhere between 16 to 20 hours of classroom instruction per semester, depending on the institution, but there are a variety of divergent practices. Given these differences, a four-year bachelor's degree may require anywhere between 130 and 170 credit units to complete. Note, however, that there are outliers. Shanghai University, an institution that uses a quarter rather than a semester system, for example, defines one credit as 10 hours of instruction per quarter and usually requires the completion of 260 credits for graduation.

The two most common grading scale variations used by Chinese HEIs are shown below. Some institutions use relational grading, which means that these HEIs rank students and base their grades on the position of students in comparison with the entire class. Some institutions may use A-D letter grades instead of the common descriptors. Academic transcripts usually indicate a cumulative grade point average for the entire program. Note that there may be variations across universities. The proliferation of Sino-foreign joint programs, for instance, has resulted in the adoption of a variety of grading scales patterned after the grading systems of the foreign partner institutions.

Common Higher Education Grading Scales in China							
SCALE 1 (0–100)	SCALE 2 (0–150)	LETTER GRADE*	WES CONVERSION	GRADE RANGE (VARIATION)	DESCRIPTOR (VARIATION)	LETTER GRADE* (VARIATION)	WES CONVERSION
85–100	Excellent	A	A	90–100	Excellent	A	A
75–84	Good	B	B	75–89	Good	B	B
60–74	Fair, Satisfactory	C	C	64–74	Fair, Satisfactory	C	C
0–59	Fail	F	F	60–63	Pass	D	C
-	-	-	-	0–59	Fail	F	F

*Institutions may use "+" and "-" designations

© 2019 World Education Services
wenr.wes.org



THE HIGHER EDUCATION DEGREE STRUCTURE

As noted before, China has a bifurcated system of education that differentiates between mostly vocationally oriented short-cycle non-degree programs (*zhuanke*) and formal academic degree programs (*benke*). There are currently 1,388 post-secondary institutions in China that offer non-degree programs, compared with 1,242 degree-granting institutions. In 2018, 16.7 million students were enrolled in undergraduate *benke* programs, while 11.3 million studied in short-cycle *zhuanke* programs (not counting adult and distance education programs). As is to be expected, the number of enrollments in graduate programs was much smaller: 2.3 million students enrolled in master's programs and 389,518 in doctoral programs.

Non-degree Programs (*Zhuanke*)

Zhuanke programs are less academic and more practical in their orientation than degree programs. These employment-gearred programs typically last three or sometimes two years (see also the section on vocational colleges). They are commonly offered by vocational colleges, but universities offer them as well, in which case they are classified as “junior college level.” Curricula are usually specialized save for a few general courses, such as English, Chinese history, Communist ideology, or physical education, depending on the program. An industrial internship or a graduation project is often required.

Upon successful completion of the program, students are awarded a graduation certificate (*biye zhengshu*) rather than a bachelor's degree certificate (*xueshixuewei zhengshu*). Graduates typically enter the workforce directly, or apply for *zhuanshengben* “top-up” programs, which last two to three years and lead to a bachelor's degree.

Degree Programs (*Benke*)

For the most part, formal academic degree programs (bachelor, master, doctor) are relatively new in China. They were introduced on a larger scale in the early 1980s after the Cultural Revolution when the current degree system was formalized in the “Regulations on [Academic Degrees](#) of the People’s Republic of China.” Degrees are awarded in [13 academic disciplines](#) set forth by the MOE: agriculture, arts, economics, education, engineering, history, law, literature, management, medical science, military science, philosophy and science. Documents issued in English indicate the credential name; for example, Bachelor of Agriculture, Master of Economics, or Doctor of Engineering. The actual major is generally more specialized. In addition, there are [40](#) officially approved degree types in [professional disciplines](#) like accounting, architecture, psychology, or veterinary medicine, mostly at the master’s level.

Bachelor’s Degree

Bachelor’s programs in standard academic disciplines normally require four years of full-time study, whereas degrees in professional fields such as architecture, medicine, and a few engineering programs require five years of study. While the credit system is not standardized nationwide, full-time students may take 24 to 32 credits in a semester, with courses often carrying between 2 and 5 semester credits each for a total of approximately 130 to 170 credits for a four-year degree. A semester consists of 18 weeks of classroom-type instruction followed by a two-week period dedicated to examinations.

Bachelor curricula can be broken down into four major areas:

- General compulsory subjects such as computer basics, English, mathematics, ideology and politics, fundamentals of law, and physical education
- General elective subjects in the humanities and sciences
- Compulsory subjects in the chosen field of study
- Elective subjects in the student’s field of interest

Bachelor’s degree students must earn the required credits according to the curriculum plan, submit a thesis, and maintain a minimum GPA (usually at least 60 or C/D) to graduate. Many institutions also require that students pass the CET English test. Upon completion of the program, students are awarded both a graduation certificate (*biye zhengshu*) and a bachelor’s degree certificate (*xueshixuewei zhengshu*). In some cases, students may only be awarded the graduation certificate because they didn’t meet the full requirements for the degree. This may be the case if students don’t have a high enough GPA in core subjects or if they failed the CET.

However, China has reportedly one of the world’s highest graduation rates at the undergraduate level – only five percent of students do not complete their programs, according to [recent media reports](#). Some universities may allow student to sit for make-up exams or permit students with insufficient credits to graduate with a “downgraded” junior college *zhuanke* qualification. The MOE in November 2019 issued a [directive](#) to end these practices and called upon universities to tighten graduation requirements. It also [announced](#) that universities can no longer admit students who are enrolled in a bachelor’s degree program into a second bachelor’s degree program:

further study must represent vertical rather than horizontal progression. At the same time, universities are now permitted to offer a minor subject in bachelor's programs and to offer dual bachelor's degree programs if approved by the relevant authorities.

Master's Degree

Students with a bachelor's degree (or with a graduation certificate and relevant work experience) can apply for admission to master's programs, which may be two, two-and-a-half, or three years in length and carry approximately 27 to 39 credits of coursework, depending on the program. Master's degree programs may be either academic or professionally oriented. Most full-time academic programs are three years long. Of the [recognized professional degree programs](#) at the master's level, most are two years in length.

There are two types of master's degree programs: two-certificate (*shuangzheng*) programs and single-certificate (*danzheng*) programs. Admission to two-certificate programs is governed by entrance examinations and they require full-time study, as well as a thesis (for academic but not for professional programs). Graduates earn two certificates, hence the name: a graduation certificate and a degree certificate (*shuoshi xuwei zhengshu*). Students who completed the coursework component may be awarded the graduation certificate or certificate of completion of coursework, but no degree certificate.

One-certificate programs, on the other hand, are self-study adult education programs that can be entered without entrance exams. Graduates receive only a degree certificate. These one-certificate programs are considered "equivalency degrees" (*tongdeng xuelixuwei*), officially on par with regular degrees. Students must pass national graduation examinations set by the MOE and usually must write a thesis as well. (See also the section on self-study programs above.)

Doctoral Degree

Doctoral programs, the highest level degree programs offered in China, usually require a master's degree for admission and take three years to complete. But it is also possible to enter doctoral programs with a bachelor's degree and complete a five-year program, in which case students must complete more coursework. This pathway requires sitting for entrance examinations and is reserved for top students. To be awarded a doctorate through the regular route, students must complete approximately 30 credits of coursework, pass a final examination, and write and defend a dissertation. A doctoral degree certificate (*boshi xuwei zhengshu*) is awarded upon successful completion of all requirements.

Medical Education

Western medicine and traditional Chinese medicine (TCM) are licensed professions of equal standing in China. In 2015, close to [16 percent](#) of medical services in the country were provided by TCM practitioners, using treatment systems like acupuncture, herbal medicine, moxibustion, or *tuina*. There are also forms of integrative medicine that combine elements from both approaches.

Irrespective of the type of medicine studied, most professional entry-to-practice qualifications in medicine and dentistry are generally earned after completing a five-year bachelor's program, although there are also some seven- or [eight-year programs](#) that incorporate training in medical specialties or advanced research and lead to the concurrent award of a master's or a Doctor of Medicine degree. There are also a few U.S.-style postgraduate programs—the prestigious Peking Union Medical College, for instance, recently introduced a four-year program entered on the basis of a [bachelor's degree](#).

Admission is usually based on the National College Entrance Examination, as well as additional requirements, depending on the school. The standard five-year curriculum in Western medicine includes general science courses and basic medicine courses in the first two years, while clinical medicine is introduced in the third and fourth years, before students complete a clinical internship in the final year. In seven-year programs, students must complete another two years of clinical training and defend a [clinical research study](#).

Students must pass examinations at the end of each year, as well as a comprehensive final clinical exam at the end of the fifth year. To graduate with a Bachelor of Medicine degree and be eligible to practice, they usually must also pass the CET test, as well as sit for licensing exams. Further training in medical specialties used to differ between provinces, but the central government in 2014 standardized the length of these programs to three years in all provinces [and specialties](#). The final credential is called the Master of Medicine and is now required of all clinical practitioners.

TCM programs are structured somewhat similarly, although programs in herbal pharmacology are only four years in length. Curricula incorporate basic science and medical foundation courses, as well as TCM theory and practice courses. The last year is reserved for the internship and graduation exams. Graduates receive a Bachelor of Medicine in TCM. Further specialization training typically involves three additional years of study, concluding with the award of a Master of Medicine or Doctor of Medicine in TCM.

Teacher Education

The qualifications required for teaching in Chinese schools vary by level. Whereas elementary school teachers can teach with an upper-secondary teaching qualification, teachers in senior secondary schools require a bachelor's degree (*benke*) from a teacher training university (referred to as a “normal university” in China) or a (normal) teacher training college with degree-granting authority.

Given the socioeconomic disparities between provinces, there can be differences in educational requirements and recruitment practices across China. Teacher salaries in cities like Shanghai and in developed coastal provinces are relatively high, so that these regions attract large numbers of teachers, while recruitment is more difficult in rural areas, where [salaries are lower](#). Amid teacher shortages in these regions, the MOE in 2006 launched a program that recruited university graduates from non-teacher training programs to teach in disadvantaged regions for three years. Those who passed an examination at the end of the third year were allowed to [continue teaching](#).

More recently, the government has started to pay special allowances to teachers in rural areas in an attempt to [equalize teacher pay](#).

In general, elementary and preschool teachers are educated at dedicated senior secondary schools for teacher training (normal schools), although there are also post-secondary *zhuanke* programs for these types of teachers. The programs at normal schools last three to four years and include the general senior secondary curriculum, as well as pedagogical subjects and teaching practice. Junior secondary teachers, on the other hand, are trained in two- to three-year post-secondary *zhuanke* programs at normal colleges (junior colleges) that typically require the gaokao for admission. As noted, senior secondary teachers must complete a four-year *benke* program at a normal university.

Chinese teachers typically specialize in only one subject, two at the most. Before they can practice, they must pass a Mandarin language test and licensing exams in pedagogy and teaching practice. They must also undergo initial in-service training for 120 teaching hours before they can formally begin to [instruct pupils](#). Re-certification is usually required [every five years](#). The structure and curricula of teacher training programs are generally set by the MOE in Beijing, but some jurisdictions may have special requirements. Shanghai, for instance, requires elementary teachers to hold a [zhuanke qualification](#). Depending on the province, students must commit to teach in their home region for a set number of years in return for waived tuition fees for their teaching degree.

THE AUTHENTICATION OF ACADEMIC DOCUMENTS

China has two government agencies officially authorized to verify academic records issued in mainland China: the CDGDC and the China Higher Education Student Information and Career Center (CHESICC), both overseen by the MOE in Beijing.

The [CHESICC](#) maintains a student data repository. It stores qualification certificates, student registration and enrollment records, gaokao test results, student photos, and other information. It provides verification services for *zhuanke* and *benke* graduation certificates and academic transcripts. It also issues verification reports for high school graduation certificates, as well as gaokao, *huikao*, and APT results. It does not, however, verify documents from vocational high schools or international schools.

The [CDGDC](#) also maintains a student data repository, but focuses on formal degree qualifications and graduate education. It provides verification services for academic degrees at all levels (bachelor, master, and doctoral degrees).

World Education Services relies on officially verified academic records when evaluating Chinese credentials. For more information on our documentation requirements for specific qualifications, please visit our [website](#).

SAMPLE DOCUMENTS

Click [here](#) for a PDF file of the academic documents referred to below.

- High school diploma
- APT exam results
- National College Entrance Examination (gaokao) results
- Vocational high school diploma
- *Zhuanke* graduation certificate (vocational college)
- Bachelor of Arts
- Bachelor of Medicine
- Master of Economics
- Doctor of Engineering

[1] Kirby, William C.: “Why Do So Many Chinese Students Come to the United States?” In: Rudolph, Jennifer and Szonyi, Michael (eds.): *The China Questions: Critical Insights into a Rising Power*, pp. 219–228, p. 223.

[2] Ibid.

[3] Unpublished data from a 2019 online survey. See the latest WES [research report](#) for the published findings of the survey.

[4] Ibid.

[5] When assessing these statistics, note that “enrollment figures can [double count students](#) who complete one course of study and enroll in another within a given period”. For example, a student may complete an ELT course and continue to enroll in a bachelor’s degree program and both enrollments are counted for the same year.

The views and opinions expressed in this article are those of the author(s) and do not necessarily reflect the official policy or position of World Education Services (WES).

<https://wenr.wes.org/2019/12/education-in-china-3>