# 16 Chinese Higher Education: Statistics and Trends

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China's system of higher education has experienced significant growth over the past two decades. Increased student enrollment, faculty hiring, newly established institutions of higher education, and transnational education initiatives are indications of the changing nature of higher education in China. Despite a period of sustained growth, recent figures indicate a decline on the horizon. The following analysis offers a brief summary of higher education statistics and highlights key trends.

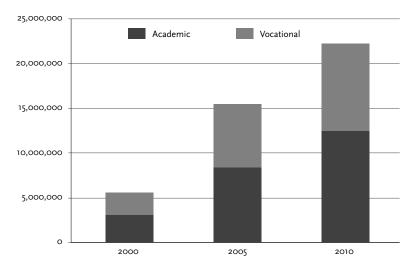
### **Students**

Undergraduate student enrollment doubled during the 1990s, from 2.1 million to 4.1 million. In the new millennium, enrollment grew at an even faster rate, bringing the total undergraduate population to a staggering 22.3 million by 2010 (see figure 1). Graduate enrollment grew at an even faster rate, from 283,000 in 2000 to over 1.5 million only 10 years later.

Furthermore, the percentage of China's relevant-aged population enrolled in college increased dramatically during these two decades. In 1991, the college participation rate or gross enrollment ratio was only 3 percent, increasing to 24 percent by 2009 (UNESCO 2011).

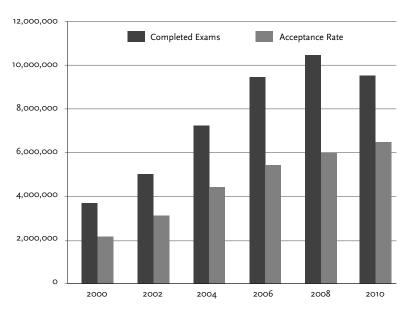
Student demographic data indicate China has achieved gender parity in undergraduate and master's degree enrollment, while the percentage of women in doctoral programs is only 35 percent. In 2010, the three most popular undergraduate majors were engineering, management, and literature, respectively. Eighty percent of students studying literature specialized in foreign languages or art.

Figure 1. Undergraduate Enrollment



Source: National Bureau of Statistics of China 2001, 2006, 2011a and 2011b.

Figure 2. National Higher Education Entrance Exam (Gaokao)



Source: People's Daily Online 2010; Chronicle of Higher Education 2010.

Though undergraduate student enrollment continues to increase, the annual growth rate has declined steadily from 2006 to 2010 from 11 percent to 4 percent, and data suggest the enrollment rate will continue to decline. From 2009 to 2011, the number of students completing the annual National Higher Education Entrance Examination, commonly referred to as the gaokao, declined leading to record high acceptance rates (see figure 2). The media offered a variety of explanations including fewer high school graduates, a depressed job market, and more undergraduate students studying abroad.

# Institutions and the Academic Profession

The increased demand for higher education led to the establishment of a number of new postsecondary institutions. In 2000, China had 1,041 colleges and universities, and that number more than doubled to 2,358 by 2010 (see figure 3).

Furthermore, the percentage of China's relevant-aged population enrolled in college increased dramatically during these two decades. In 1991, the college participation rate or gross enrollment ratio was only 3 percent, increasing to 24 percent by 2009 (UNESCO 2011). The number of institutions controlled by the central government, typically the most prestigious universities, remained constant from 2004-2009 at III, while the number of provincial or locally controlled universities increased slightly from 1,394 to 1,538. The most significant increase occurred in the private sector, often perceived as the lowest rung in Chinese institutional hierarchy, which grew from 226 in 2004 to 656 in 2009. With a slowing enrollment growth rate, many private institutions will likely struggle to attract students in coming years.

Similar to the United States, China has traditional academic bachelor's-level institutions and vocational or junior colleges. In 2000, China had 599 academic institutions and 474 vocational colleges, and by 2010 the number of academic in-situations grew to 1,112 and 1,246 vocational colleges. Of the 22.3 million undergraduate students enrolled in 2010, 12.6 million attended traditional academic institutions and 9.7 million enrolled at vocational colleges.

To keep pace with increasing demand, Chinese colleges and universities hired 869,000 new full-time faculty between 1999 and 2009. The 2009 data indicated full-time faculty in China and were near gender parity (46% women). However, only 13 percent of China's faculty hold a PhD, while 33 percent earned a master's degree, leaving over half of full-time faculty teaching with only a bachelor's degree. The shortage of faculty with advanced degrees represents a significant challenge for Chinese higher education. However, thus far, China has avoided

2,000

Figure 3. Postsecondary Institutions

2000

Academic

Source: National Bureau of Statistics of China 2001, 2006, 2011a and 2011b.

the troubling global trend of hiring a larger proportion of part-time faculty—only 20 percent out of 1.6 million total faculty are classified as part time.

2005

Vocational

2010

# **International Students and Cross-Border Education**

Just as Chinese higher education has grown over the past decade, the number of international students studying at Chinese institutions has also increased. In 2009, China hosted 117,548 international students primarily from other Asian countries, followed by Europe, Africa, and North America. The number of Chinese students seeking higher education abroad has also witnessed a notable increase in recent years, with more than 500,000 reported studying outside of China in 2009 (UNESCO 2011). The number of Chinese students studying in the United States over the last 10 years increased from 60,000 to almost 160,000, despite 5 years of stagnant growth following 9/11 (Institute of International Education 2011). Currently, large numbers of Chinese students are also studying in Japan, Australia, the United Kingdom, and

South Korea (UNESCO 2011). Over half of the Chinese students studying abroad are pursuing advanced degrees. The return rate (students returning to their home country, divided by students leaving to study abroad) of Chinese graduate students from 2001 to 2010 increased from 13.4 percent to 47.3 percent, indicating that a rising number are returning to China after graduation. However, additional data paint a more complicated picture. In 2010, 82 percent of Chinese doctoral recipients (including students from Hong Kong) studying in the United States reported an intention to stay in the United States after graduation (National Science Foundation 2011).

Cross-border higher education initiatives have expanded rapidly in recent years. Currently, 18 international branch campuses operate in China, with host institutions primarily from the United States, France, and the United Kingdom (CBERT 2011; Lawton and Katsomitros 2012). Branch campuses are required to collaborate with a local Chinese university and offer dual degrees. Seven additional institutions, all from the United States and United Kingdom are in the process of setting up branch campuses or have expressed intentions to open a campus in the next few years. In addition to branch campuses, a substantial number of joint-partnership programs exist in China. Over 600 undergraduate and graduate joint-partnership programs are approved by China's Ministry of Education. The government has expressed concerns over the quality of such partnerships and has vowed to intervene when standards are not met. Authors' note: Unless otherwise noted, all statistics are retrieved from the 1999-2010 Web sites of the National Bureau of Statistics of China (http://www.stats.gov.cn) and the Ministry of Education, Higher education statistics (http://www.moe.edu.cn)—(accessed January 17, 2012).

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