

Students on the Move: The Future of International Students in the United States

EXECUTIVE SUMMARY

This paper examines the current situation and recent trends in international student enrollment in the United States, compares these trends with those in other countries, and looks at the efforts of other countries and regional groups to attract international students. Some of the key findings are:

- In 2004, there were 2.5 million international students worldwide, a 56 percent increase from 1999 (when there were 1.68 million international students) (UNESCO Institute of Statistics online). It is projected that there will be 7.2 million international students by 2025 (Boehm, Davis, Meares, and Pearce, 2002).
 - International student enrollment in the United States peaked in 2002–03, and then declined in the following two years, by 2.4 percent and 1.3 percent, falling from 586,323 students in 2002–03 to 565,039 in 2004–05 (IIE, 2005).
 - A drop in undergraduate enrollment of international students accounted for much of this overall decline. Graduate student enrollment peaked in 2003–04, and declined by 3.6 percent in the following year (IIE, 2005).
 - International graduate students continue to make up almost half of total enrollment in the science and engineering fields (NSB, 2006). The total number of applicants to graduate in programs in these fields dropped in 2003–04 and 2004–05, but recovered in 2005–06 (CGS, 2004, 2005, 2006).
 - Since 2002–03, when international student enrollment peaked, international student enrollment in U.S. doctoral/research universities (which enrolled 59 percent of international students in the United States) fell for two successive years, by 1.1 percent and 6.4 percent. In contrast, international student enrollment at comprehensive universities, baccalaureate colleges, and community colleges held steady or increased slightly (IIE, 2005).
 - In 2004, China was the largest sending country, with 343,126 students pursuing higher education studies outside of their home country. As a group, students from China make up 14 percent of the total worldwide international student population (UNESCO, 2006). China also is emerging as a top host country as international student enrollment grew 213 percent from 1999 to 2005 (MOE China, n.d.).
 - Among the top six host countries, the United States had the weakest growth in international student enrollment from 1999–2000 to 2004–05. While international student enrollment grew by nearly 17 percent in the United States, it grew by 29 percent in the United Kingdom, 46 percent in Germany, 81 percent in France, 42 percent in Australia, and 108 percent in Japan.
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- The United Kingdom, France, and Japan increased enrollment of international students from Asia by over 90 percent from 1999 to 2004. Over the same period, the number of Asian international students enrolled in the United States increased by 26 percent.
- Competitor countries have implemented various strategies to recruit international students, including using national marketing strategies, aligning immigration policies with recruiting goals, offering more programs in English, and creating regional education hubs.

INTRODUCTION

According to UNESCO, the number of students studying in higher education institutions outside their home countries is growing rapidly. In 2004, there were 2.5 million mobile students worldwide, up from 1.8 million in 2001 and from 1.68 million in 1999 (UNESCO Institute of Statistics online). IDP Education Australia estimates that by 2025, there will be 7.2 million international students, 70 percent of whom will be Asian (compared with 43 percent in 2000). This increased demand is based on projected growth in household wealth, increased demand for higher education, the lack of capacity in some countries to meet this demand, and growing interest in studying overseas (Boehm, Davis, Meares, and Pearce, 2002).

The United States, while still the leading destination for international students, is now facing greater competition from other countries. The events of September 2001 triggered the first declines in international student enrollment in U.S. institutions after more than 30 years of continuous growth (IIE, 2005). A number of factors contributed to this decline, including perceptions that it is difficult to secure visas and that the United States is unwelcoming to international students; competition from other countries; the high cost of U.S. higher education; increasing higher education capacity in countries that traditionally send a large number of students to study overseas, such as China and India; and increased anti-American sentiment around the world.

Visa processing time and visa acceptance rates have since significantly improved, and preliminary data for 2005–06 enrollments show a rebound. However, it is too early to tell if that rebound signals a recovery trend. Some commentators have suggested a paradigm shift in which the U.S. share in the international student market will decline, and the United States will lose its competitive edge in higher education. Recent statements by NAFSA: Association of International Educators (2003 and 2006) and other organizations have called attention to the declining position of the United States and the need for a national policy and strategy to address this decline.

This paper examines the current situation and recent trends in international student enrollment in the United States, compares these trends with those in other countries, and looks at the efforts of other countries and regional groups to attract international students. As the sidebar “Defining International Students” explains (see next page), countries define international students differently, so all international comparisons should be interpreted with caution. Nonetheless, this review of the available data suggests both the challenge and opportunity of enhancing the international standing of U.S. higher education.

Defining International Students

The discussion of global trends in international student enrollment assumes an agreement on the definition of an international student. However, because countries count international students differently, international comparisons are potentially inconsistent. Some countries include permanent residents or other long-time residents when reporting international student enrollment, whereas other countries—including the United States—do not. It is estimated that as many as one-third of the international students in some European countries are permanent or long-time residents (Kelo, Teichler, and Wachter, 2006). The impact of these discrepancies on data reporting is difficult to estimate. The United Nations Educational, Scientific and Cultural Organization (UNESCO) (2006) recently proposed the term *internationally mobile students* (defined as noncitizens of the host country who do not have permanent residency in the host country, and who did not complete their entry qualification to their current level of study in the host country) in an attempt to address these inconsistencies. It remains to be seen whether countries will adopt this term and change their data reporting.

Working Definitions of International Students in Top Host Countries

The following definitions are specific to the national context and guide each country's reporting of international student¹ enrollment (OECD, 2004):

United States: International students are defined as students who are neither U.S. citizens, immigrants, nor refugees, thus excluding permanent residents.

United Kingdom: International students are defined by domiciliary address, thus excluding permanent residents.

Australia: International students are defined on the basis of a combination of variables that can distinguish them from domestic students (residence permit, country of birth, permanent home residence, year of arrival in Australia). Foreign students enrolled in distance education and offshore programs are sometimes included.

Germany: International students are defined as non-German citizens, thus including permanent residents. Students with double citizenship are counted as German students. Data on foreign students do not include those enrolled in advanced research programs. Foreign students enrolled in distance education programs are included.

France: International students are defined as non-French citizens, thus including permanent residents.

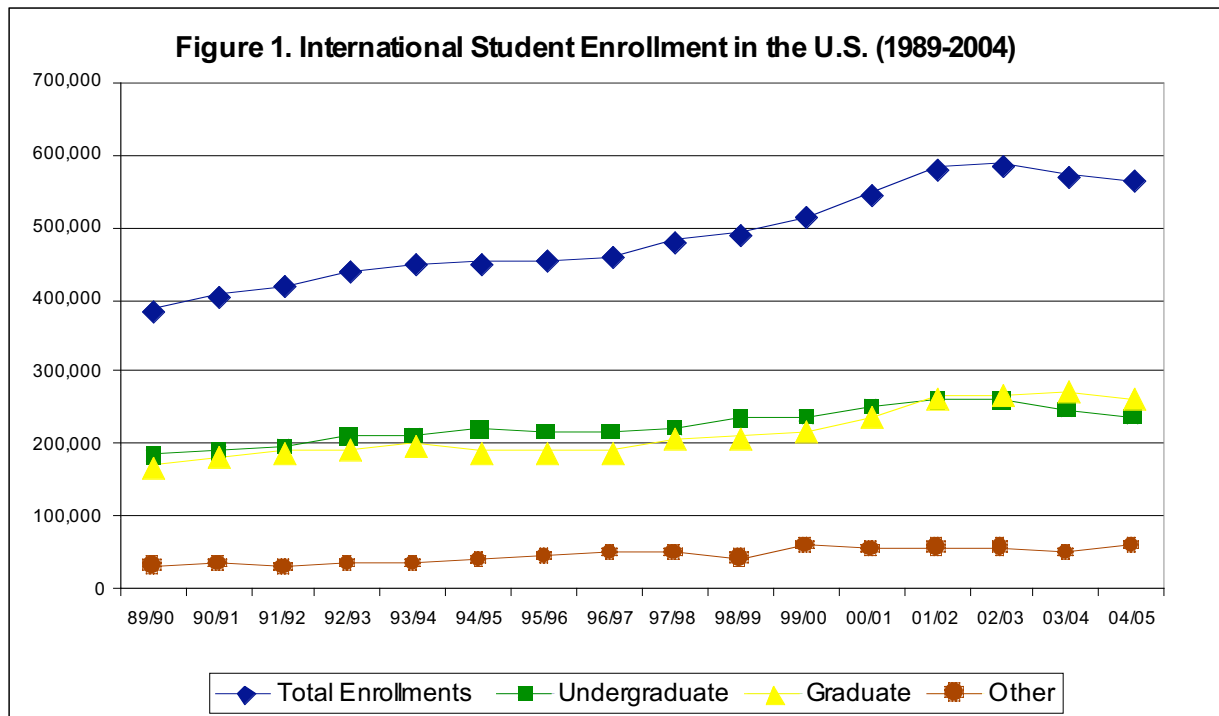
Japan: International students are defined as non-Japanese citizens, thus including permanent residents.

In addition, some countries define international students as students in degree-earning programs only. Other countries use broader parameters: For example, Australia, the United Kingdom and the United States include students in intensive English-language programs. Definitions vary not only among countries, but also change over time within the same country, which make yearly comparisons among countries more difficult.

¹ The Organisation for Economic Co-operation and Development (OECD) uses the term *foreign student* in its publications. We use the term *international student*, which is more widely used in the United States.

TRENDS IN INTERNATIONAL STUDENT ENROLLMENT IN THE UNITED STATES

The United States remains the world leader in international student enrollment, hosting 565,039 international students in 2004–05, close to a quarter of all international students worldwide (IIE, 2005; UNESCO, 2006). As **Figure 1** indicates, prior to 2003–04, total international enrollment in the United States steadily rose.



Source: Institute of International Education, *Open Doors 2005*.

The past five years are of particular interest. As **Table 1** illustrates, in the years 2000–01 and 2001–02, total international enrollment grew by 6.4 percent each year—the largest annual increases since 1980. In 2002–03, enrollment growth slowed to 0.6 percent, and the following year, 2003–04, saw the beginning of a two-year decline. In 2003–04, international student enrollment declined by 2.4 percent, the first drop after a 32-year period of annual growth. The following year, 2004–05, saw an additional drop of 1.3 percent. The periods of decline correspond to a tightening of visa restrictions and longer periods to process visas. Although efforts have been made to streamline the student visa process to encourage students to study in the United States, and preliminary data for 2005–06 point to a rebound, a full recovery is unlikely. Changes in the international student market are providing students with more choices, and students who in the past may have come to the United States are now going elsewhere.

Table 1: International Student Enrollment in the United States: 1999–2000 to 2004–05

	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	% Change from 2002–03 to 2004–05	% Change from 1999–2000 to 2004–05
Total	514,723	547,867	582,996	586,323	572,509	565,039		
Annual change (%)	4.8	6.4	6.4	0.6	-2.4	-1.3	-3.6	9.8
Undergraduate	237,211	254,429	261,079	260,103	248,200	239,212		
Annual change (%)	0.6	7.3	2.6	-0.4	-4.6	-3.6	-8.0	0.8
Graduate	218,219	238,497	264,749	267,876	274,310	264,410		
Annual change (%)	3.2	9.3	11.0	1.2	2.4	-3.6	-1.3	21.2
Other	59,293	54,941	57,168	58,344	49,999	61,417		
Annual change (%)	35.7	-7.3	4.1	2.1	-14.3	22.8	5.3	3.6

Source: Institute of International Education, *Open Doors Report 2005* (computations by authors).

International Students by Country of Origin

Evidence already exists that students from the Gulf States (United Arab Emirates, Saudi Arabia, and Oman) are choosing to study in Europe, the Middle East, or Asia rather than coming to the United States. From 2003–04 to 2004–05, student enrollment in U.S. institutions from the Gulf States declined at the highest rates (by 7.2 percent from the United Arab Emirates, 13.8 percent from Saudi Arabia, and 20.4 percent from Oman) (IIE, 2005). This is part of a larger pattern of decline among Muslim countries. In 2004–05, student enrollment from Indonesia declined by 12.6 percent, from Pakistan by 14 percent, and from Malaysia by 5.3 percent—and these three countries are among the top 20 countries that provide international students to the United States. Moreover, after a period of growth, the number of Indonesian students has been declining by double-digit percentages since 2002. While the number of students enrolled from the countries noted above is declining in the United States, their presence in other countries is growing, most notably in the Philippines (up 158 percent, mainly attributed to Indonesian students), Denmark (up by 68 percent), Italy (up by 62 percent), and Greece (up by 48 percent) (OECD, 2005).

The picture for 2005–06 is still unclear. According to a fall 2006 online survey conducted by several higher education associations of U.S. universities and colleges, 40 percent of responding institutions reported an increase in new international student enrollment, 26 percent reported a decline, and 34 percent reported level enrollments (IIE, 2005a).

In the United States, students from India and China made up 25.3 percent of all international students in 2004–05 (IIE, 2005). The number of students from India and China continue to increase, although at much lower rates than in previous years (see **Table 2**). Recent surveys conducted by the Council of Graduate Schools show graduate student applications from China experienced a steep drop of 45 percent for the 2003–04 academic year and continued to decline in 2004–05 by an additional 15 percent. Graduate student applications from India declined by 28 percent and 5 percent respectively during the same years. The picture improved in 2005–06 with applications from India and China increasing by 26 percent and 19 percent, respectively, over the previous year (CGS, 2004, 2005).

Table 2: Total Enrollment of International Students from India and China in the United States: 1999–2000 to 2004–05

	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05
India	42,337	54,664	66,836	74,603	79,736	80,466
Annual change (%)	13.0	29.1	22.3	11.6	6.9	0.9
China	54,466	59,939	63,211	64,757	61,765	62,523
Annual change (%)	6.8	10.0	5.5	2.4	-4.6	1.2

Source: Institute of International Education, *Open Doors* (1999–2005) (computations by authors).

International Student Enrollment by Field of Study

Total enrollment in most fields of study in the United States started to decline in 2002–03 and 2003–04 (IIE, 2003, 2004). The fields most popular with international students—business and management, math and computer sciences, and engineering—began experiencing declines in 2002–03 (business and management, and math and computer sciences) and in 2003–04 (engineering). The downward trend continued through 2004–05 as institutions reported that international student enrollment declined by an additional 8 percent in business and management, by 25 percent in math and computer sciences, and by 2.4 percent in engineering. Declining enrollments in these fields were slightly compensated by steady annual increases in the physical sciences and life sciences over the same period. When the focus is on first-time graduate enrollment, the decline in engineering, life sciences, and physical sciences is even larger (see **Table 3**).

Intensive English-language programs stand out as the only field of study that experienced immediate declines in international student enrollment after 2001. After three years of declining enrollments, an increase of 7.5 percent was reported in 2004–05; however, enrollments are still 30 percent below the 2000–01 levels (IIE, 2005).

International Graduate Student Enrollment

A survey conducted by the Council of Graduate Schools (CGS) of 125 graduate schools reported that 57 percent of respondents indicated declines of applications from international graduate students. Overall, international graduate applications declined by 28 percent in 2003–04 and by 5 percent in 2004–05. As Table 3 indicates, institutions compensated for the decline in applications by offering admission to a higher percentage of applicants in 2003–04 and 2004–05. Despite this adjustment, total international graduate enrollment still registered a 3.6 percent decline in 2004–05, as compared with the previous year (IIE, 2005).

Table 3: Changes in International Graduate Students' Applications, Offers of Admissions, and Enrollments in All Fields and in Engineering and Sciences: 2003–04 to 2005–06

	TOTAL FOR ALL FIELDS			Engineering			Life Sciences			Physical Sciences		
	2003–04	2004–05	2005–06	2003–04	2004–05	2005–06	2003–04	2004–05	2005–06	2003–04	2004–05	2005–06
Applications	-28%	-5%	12%	-36%	-7%	19%	-24%	-2%	9%	-22%	-2%	15%
Offers of Admissions	-18%	3%	12%	-24%	3%	26%	-19%	-2%	1%	-17%	8%	5%
First-Time Enrollment	-6%	1%	NA	-8%	3%	NA	-10%	-1%	NA	6%	1%	NA

Notes: Percentages represent rate of change over the previous year.

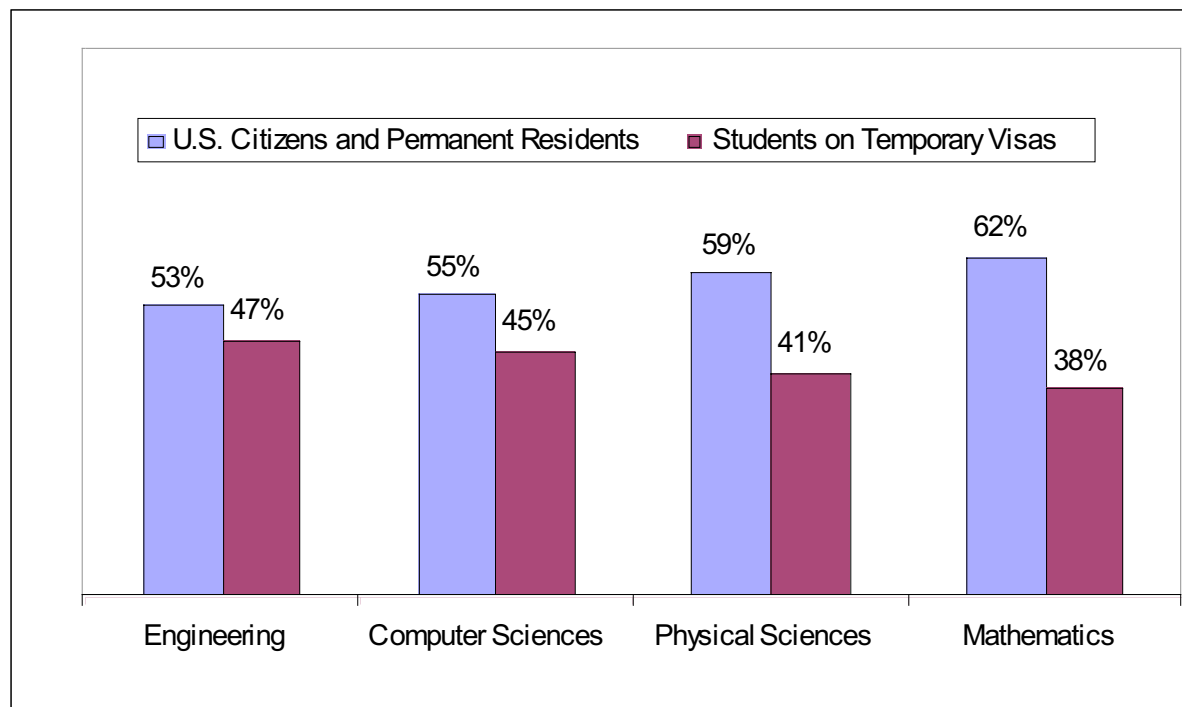
NA = Not available.

Sources: Council of Graduate Schools. *Findings from U.S. Graduate Schools on International Graduate Student Admissions Trends*; Council of Graduate Schools. *Findings From the 2005 CGS International Graduate Student Admissions Survey II: Final Applications and Admissions*; Council of Graduate Schools. *Findings From 2006 CGS International Graduate Student Admissions Survey, Phase II: Final Applications and Offers of Admission*.

The picture improved in 2005–06. Although the overall pool is still below that of 2002–03, the 2006 survey indicated a 12 percent increase in international graduate student applications from 2004–05 to 2005–06 (CGS, 2006). This increase comes after a two-year cumulative decline (between 2003–04 and 2004–05) of 32 percent in applications from international graduate students and severe declines in total international applications for graduate programs in engineering (40 percent), life sciences (26 percent), physical sciences (24 percent), and business (24 percent).

Graduate students constitute nearly half of all international students (47 percent in 2004–05) and they make significant contributions to American research and innovation (IIE, 2005). Graduate schools have relied on international students to compensate for the drop of domestic student enrollment in science and engineering for at least two decades. From 1983 to 2003, the proportion of international graduate students in all the science and engineering fields increased from 19 percent to 27 percent, with the highest international graduate enrollment (see **Figure 2**) in engineering, computer sciences, physical sciences, and mathematics (NSB, 2006). In 2003, international students earned 55.3 percent of doctoral degrees awarded in engineering, 44.3 percent in mathematics, and 43.8 percent in computer sciences (computed from NSB, Appendix Table 2-32, 2006).

Figure 2: Graduate Student Enrollment in Engineering and Science Fields: 2003



Source: National Science Board, *Science and Engineering Indicators 2006* (computations by authors).

The decline of international enrollment in these fields, without a corresponding increase in domestic enrollment, is occurring at a time when skills in these areas are in high demand. The U.S. Department of Labor is already predicting a shortage of workers in science and technology; the shortage will be more acute if enrollments in these critical areas continue to decline. The recent report *Rising Above the Gathering Storm* (COSEPUP, 2006) points out that the U.S. capacity to fill positions in engineering and science fields in academe, industry, and government has been jeopardized.

International Student Enrollment by Institutional Type

More than half (54 percent) of all international students in the United States attend one of only 146 higher education institutions (IIE, 2005). These are primarily large doctoral/research or comprehensive institutions that enroll at least 1,000 international students.

As shown in **Table 4**, all sectors showed growth in international student enrollment in 2004–05 except doctoral/research institutions. International student enrollment increased over the previous year in community colleges by 11.3 percent, in baccalaureate institutions by 5.3 percent, and in comprehensive institutions by 3.9 percent. Doctoral/research institutions, on the other hand, experienced a decrease of 6.4 percent. In the five-year trend from 1999–2000 to 2004–05, there was strong growth in all sectors, particularly in the community colleges (20 percent), baccalaureate institutions (17 percent), and comprehensive institutions (15 percent). Despite double-digit growth in all other sectors, doctoral/research institutions continue to host the largest number of international students with 59 percent of total enrollment. These data suggest that international students are increasingly looking at the diversity of institutions and educational experiences that American higher education offers.

Table 4: International Students Enrollment, by Institutional Type: 1999–2000 to 2004–05

	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	% Change from 2002–03 to 2004–05	% Change from 1999–2000 to 2004–05	As % of Total Enrollment
Doctoral/Research	312,977	331,452	353,438	358,941	354,839	331,971	-7.5	6.1	58.8
Comprehensive	84,754	91,822	97,129	95,620	93,687	97,359	1.8	14.9	17.2
Baccalaureate	22,892	22,820	24,436	25,147	25,376	26,724	6.3	16.7	4.7
Associate	70,616	76,834	82,932	82,123	75,830	84,376	2.7	19.5	14.9
Specialized	23,484	24,939	25,061	24,492	22,777	24,609	0.5	4.8	4.4
Total	514,723	547,867	582,996	586,323	572,509	565,039	-3.6	9.8	100.0

Source: Institute of International Education, *Open Doors Report 2005* (computations by authors).

TRENDS IN INTERNATIONAL STUDENT ENROLLMENT IN OTHER COUNTRIES

International student enrollment worldwide has grown steadily, and in the last five years (1999–2004) for which data are available, there was an increase of 46 percent, or 772,661 international students. In 2004, six countries hosted 67 percent of the world’s mobile students: the United States (23 percent), the United Kingdom (12 percent), Germany (11 percent), France (10 percent), Australia (7 percent), and Japan (5 percent) (UNESCO, 2006). When aggregated, Europe (defined as the 25 European Union (EU) member states and the seven non-EU states of Bulgaria, Romania, Turkey, Iceland, Liechtenstein, Norway, and Switzerland) hosted 44 percent of all international students (or 1.1 million students).

Although the United States continues to be the destination of choice for the largest group of students, the international student market is changing and a number of countries are now challenging U.S. dominance as the leading host country. As shown in **Table 5**, from 1999 to 2004, international student enrollment in the United States grew by 17 percent; however, in the same period, the U.S. share of international students, in proportion to the number of international students worldwide, declined. OECD (2006)² reported that U.S. market share of all international students enrolled declined in 2004 to 21.6 percent, from 25.3 percent in 2000. Among the top competitor countries, the United Kingdom was the only country to report a decline in market share (1 percentage point), whereas France expanded its market share by 2 percentage points and the other countries remained stable.

² Other sources have published annual market share information; however, comparisons over time are not reliable due to annual variations in the number of reporting countries. In its 2006 publication, OECD calculated worldwide market share information using its own data and world totals from UNESCO.

Table 5: International Student Enrollment in the Top Six Host Countries: 1999 to 2004

	1999	2000	2001	2002	2003	2004	% Change from 1999 to 2004
World Total	1,680,268	1,705,647	1,821,590	2,647,552	2,328,931	2,452,929	46.0
United States	490,933	514,723	547,867	582,996	586,316	572,509	16.6
Annual change (%)		4.8	6.4	6.4	0.6	-2.4	
United Kingdom	232,540	222,936	225,722	227,273	255,233	300,056	29.0
Annual change (%)		-4.1	1.2	0.7	12.3	17.6	
Germany	178,195	187,033	199,132	219,039	240,619	260,314	46.1
Annual change (%)		5.0	6.5	10.0	9.9	8.2	
France	130,952	137,085	147,402	165,437	221,567	237,587	81.4
Annual change (%)		4.7	7.5	12.2	33.9	7.2	
Australia	117,485	105,764	120,987	179,619	188,160	166,954	42.1
Annual change (%)		-10.0	14.4	48.5	4.8	-11.3	
Japan	56,552	59,691	63,637	74,892	86,505	117,903	108.5
Annual change (%)		5.6	6.6	17.7	15.5	36.3	

Notes: The World Total numbers from year to year are not strictly comparable, as the number of countries reporting data varies by year.

OECD (2006), using data collected from the OECD and from UNESCO, reported that Canada enrolled more international students than Japan in 2000 and 2004.

Countries are listed in descending order by the number of international students enrolled in the latest available year.

Sources: UNESCO Institute for Statistics, online data; Institute of International Education, *Open Doors 2005* (for the United States) (computations by authors).

While the United States continues to enroll the largest number of international students worldwide, growth rates in the next five largest host countries suggest that continued American success cannot be taken for granted. As Table 5 illustrates, the decline in the U.S. market share of international students in the past five years has been accompanied by steady increases in the United Kingdom, France, Germany, and Japan. Australia, whose growth was very steep until 2003, experienced a decline in 2004. France and Japan experienced phenomenal growth in international student enrollment from 1999 to 2004, 81 percent and 108 percent, respectively. Germany, Australia, and the United Kingdom also expanded international student enrollment significantly during the same period.

Countries outside the top six also are experiencing rapid growth. Though the Chinese government does not report data on its international students to UNESCO, which maintains the only world database on international students, the Chinese Ministry of Education reported that international student enrollment grew by 213 percent from 44,711 in 1999 to 140,000 in 2005. In the past five years, international student enrollment has increased in China by more than 20 percent annually, and it is projected to reach 300,000 by 2020 if the growth sustains at the same rate. From 1999 to 2000, Canada, New Zealand, and South Africa expanded their market share of worldwide international student enrollment by 1 percentage point

or more (OECD 2006). These data suggest that the competition for international students has become more intense.

Growth rates in competitor countries may be attributed to national policies, initiatives to recruit international students, coordination between governments and their universities, and in some cases, a strong institutional motivation to generate revenue. The United States in contrast, does not have a national policy on international students nor a national strategy for recruiting them. Institutions are largely acting individually in their recruitment efforts. The stronger growth rates in competitor countries also may exist because they are emerging markets. Because the United States is a mature market, it may be more difficult to significantly expand enrollments.

Countries of Origin

China and India are the top countries of origin for international student enrollment worldwide followed by Korea, Japan, and Germany (UNESCO, 2006). UNESCO (2006) estimates that in 2004, students from China accounted for 14 percent (or 343,126) of all international students and students from India accounted for 5 percent (or 123,559 students). In 2004, within five of the top six host countries, students from China represent either the largest or second largest group of international students. Students from India have accounted for the largest number of international student enrollment in the United States since 2001 (see Table 2, page 6). Indian students also account for the second largest number of international student enrollment in Australia, the third largest in the United Kingdom, and the fourth largest in Japan.

As shown in **Table 6**, the United States is the destination of choice for students from the entire Asian region. In 2004, the United States hosted 356,881 students from Asia, more than double the number enrolled in the United Kingdom, which hosted the second highest number of Asian students (140,797). However, enrollment by students from Asia is growing much faster in competitor countries than in the United States.

Table 6: International Enrollment of Students from Asia in the Top Host Countries: 1999 to 2004

	1999	2000	2001	2002	2003	2004	% of Change from 1999 to 2004
United States	284,050	NA	294,228	364,418	368,145	356,881	25.6
United Kingdom	73,185	70,695	74,400	80,857	104,252	140,797	92.4
Germany	62,381	64,061	67,658	75,500	85,233	94,438	51.4
France	16,987	17,543	19,828	23,053	34,809	36,500	114.9
Australia	81,870	67,849	NA	119,737	134,332	126,900	55.0
Japan	51,535	54,385	58,170	69,034	80,406	111,194	115.8

Note: NA = Not available.

Source: UNESCO Institute for Statistics online, <http://stats.uis.unesco.org>.

Competition among the top host countries, along with expanding capacity in the two largest sending countries (China and India), threatens the U.S. position as the leading host for the region. Both China and India are developing their graduate programs to encourage more of their own students to study at home and reduce the outflow of money and talent for international studies. Strategic investments in 100 Chinese universities are aimed at improving their quality and turning them into “world-class” institutions in research and innovation. India also is strengthening its higher education system. Furthermore, the market for international students is a dynamic one and countries that have traditionally been sending countries are now also host countries.

The Bologna Process and International Student Mobility

The creation of a European higher education area through the Bologna Process will certainly affect the movement of international students. One goal of the Bologna Process is to make Europe a more attractive destination for international student mobility. Since the initiative is still unfolding, its impact is unknown; however, the aggregate total of current international student enrollment in 36 of the 45 member countries, for which data are available, is 1.1 million, nearly half of all international students worldwide.

The Bologna Process

The Bologna Process, a regional inter-governmental initiative of 45 countries, aims to harmonize higher education systems and increase mobility of students, scholars, and professionals in Europe. This initiative combines the flexible features of the American higher education model with a two-tier structure of studies—bachelor’s and master’s (although the tiers differ in duration)—and a system of portable academic credits (European Credit Transfer System), and applies them for the first time to the large regional context. The process is expected to be completed in 2010.

Most international students in Europe are enrolled in social sciences, business, and law programs. There is variation in enrollment patterns by country reflecting levels of competitiveness of national programs. For example, Germany and Finland enroll proportionately more international students in the fields of engineering and science than their domestic students as compared with other countries in the region, and in most Eastern European countries, large shares of international students enroll in health profession programs offered for a competitive fee.

Reform initiatives following the Bologna Process at European universities, and their increased collaboration in teaching, research, and innovation, strengthens Europe’s position as a leading destination for international students. Another attractive feature of many continental European destinations is their tuition-free higher education systems. Reforms in the European higher education area also will likely affect the outflow of students, particularly to the United States. Europe is second to Asia in sending international students to the United States.

Efforts also are underway among Asia-Pacific countries to create a regional higher education space like that in Europe. Of the total number of students who study overseas, 40 percent of students coming from East Asia and the Pacific remain in the region (UNESCO, 2006). An initiative similar to the Bologna Process may encourage more mobile students to remain in the region.

Strategies in Other Countries to Attract International Students

Many other countries are actively recruiting international students and have developed coordinated national strategies and mechanisms to assist this process. A few are highlighted below:

National policies and coordinated efforts

Australia: International student enrollment in Australia doubled in the 1990s. Rapid growth was achieved in a relatively short period of time due to a number of contributing factors, including a national strategy for recruiting international students, an extensive network of educational recruiters, and a national admissions system for international students. Australian Education International, a governmental agency, also offers comparative pricing of the higher education options in Australia and other English-speaking countries. It is expected that distance education and offshore programs offered by Australian universities can meet almost half of the projected worldwide demand for higher education studies over the next 20 years.

United Kingdom: The Universities & Colleges Admissions Service (UCAS) (www.ucas.ac.uk), a consortium of universities, helps students find a school, simultaneously apply online to 180 universities and colleges (and list preferences for up to six universities), check their visa status online and assess their qualifications for admission. Globally, the British Council promotes the United Kingdom's higher education system through its offices in 110 countries. Despite the introduction of full tuition fees for international students in the United Kingdom, international student applications remain strong, likely due to the coordinated approach to international student recruitment and the Prime Minister's Initiative for International Education.

The Prime Minister's Initiative for International Education

This initiative, which began in 1999, set specific growth targets to increase non-European students studying in the United Kingdom by 50,000 by 2005. At its conclusion in March 2005, non-European international student enrollment increased by 116,300 students, exceeding the target goal by 55 percent. The second phase of the initiative was announced in spring 2006 with the aim of attracting an additional 100,000 international students over the next five years, establishing partnerships with universities overseas, and launching of the UK-India Education and Research Initiative (British Council USA, 2006). The thrust of this initiative is to enhance the UK's competitive position by surpassing similar recent investments made by Australia, New Zealand, and the Netherlands, and to position the United Kingdom as "a leader in international education" (British Council USA, 2006). The initiative is expected to bring long-term economic returns by attracting talent and building sustainable partnerships in research abroad.

France: EduFrance (www.edufrance.fr/en/index.htm), a joint effort between the Ministry of Foreign Affairs and the Ministry of Education, Higher Education and Research, was created in 1998 to promote French higher education worldwide through a network of 75 regional offices in 45 countries. It also provides a comprehensive web site to help prospective students search for programs and institutions, apply online, and receive information on visas, insurance, residency, and employment.

Germany: The German Academic Exchange Service (DAAD) (www.daad.de/en/index.html) supports international academic cooperation through its regional offices, provides programs and funding for international exchange, and promotes German higher education abroad.

In addition to a national strategy, some governments have adopted national policies that lessen restrictions on international students including flexible work/study options, allowing part-time employment while studying, and permitting international students to stay longer after graduation to find employment. This is particularly attractive to international students who finance their own studies, as most international students in the United States do.

Immigration policies

Some countries have strategically aligned immigration policies with other policies to attract international students. Immigration policies that are used to target a high-skill labor force may also encourage the best and the brightest students to apply for graduate and postgraduate studies with the further prospect of obtaining permanent residency and long-term employment in the host country. Canada, for example, expects that recent immigration policy changes and the easing of employment restrictions for international students will increase enrollments from abroad by as much as 20,000. Other policies include a point-based immigration system that is favorable to highly skilled professionals (as found in the United Kingdom) or the granting of permanent residency to professionals in designated high-demand fields of engineering, computer sciences, and hard sciences (as practiced in Germany).

English-speaking programs

English-speaking countries have a language advantage when it comes to attracting international students. English is the language most used in international communications and global business. Non-English speaking countries are increasingly offering programs in English to appeal to international students. This relatively new trend is especially noticeable in Nordic and Eastern European countries. The Netherlands, Sweden, and Finland, for example, offer from 200 to more than 1,000 programs in English. Other countries, such as Germany, France, Iceland, Korea, Hungary, Norway, Japan, Poland, Czech Republic, Slovak Republic, Switzerland, and Turkey, offer from 50 to about 300 programs in English. In Korea there are 10 English-only universities (OECD, 2005).

Growth of regional hubs for in-country cross-border education opportunities

A strategy that can potentially be very successful is the creation of regional education hubs. In 1999, Singapore announced that it would attract “world-class” academic institutions in order to position itself as the regional destination of choice for students, researchers, and industry. The Middle East is home to two emerging educational hubs—Knowledge Village in Dubai (United Arab Emirates) and Education City in Doha (Qatar)—both of which are establishing themselves as hosts of various foreign education providers and training centers.

CONCLUSION

The United States continues to receive the largest number of international students. However, recent trends indicate that this position is significantly challenged and may not be sustainable if current trends continue. Although potential demand is high, a redistribution of international students among host countries is underway. This change may be due to perceptions that the United States is unwelcoming, vigorous competition from other countries, and successful national strategies from competitor countries to recruit international students. As the student marketplace becomes increasingly globalized and competition intensifies, it may be difficult for some institutions to begin recruiting international students, if they have not done so already, and for others to substantially increase their numbers, particularly if there is no coordinated support at the national or regional level.

U.S. well-being is increasingly dependent on innovation and competitiveness in the global knowledge-based economy. International students and scholars have historically provided a source of new talent for innovation in the United States. Although the demand for education abroad is increasing, so is the global competition for the “best and brightest.” Declines in the number of international students, especially in the science and engineering fields so critical for innovation, will affect the ability of higher education, business, and government to engage in research and development. Additionally, international students represent an important means for strengthening U.S. cultural diplomacy around the world.

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REFERENCES

- Boehm, A., Davis, T., Meares, D., & D. Pearce. (2002). *Global student mobility 2025: Forecasts of the global demand for international higher education*. IDP Education Australia.
- British Council USA. (2006, April). *Higher Education: Initiative to recruit more overseas students*. Washington, DC: Authors. See <http://www.britishcouncil.org/usa-education-policy-uk-update-apr06.htm>.
- Committee on Science, Engineering, and Public Policy (COSEPUP). (2006). *Rising above the gathering storm: Energizing and employing America for a brighter economic future*. Washington, DC: National Academies Press. See <http://newton.nap.edu/catalog/11463.html>.
- Council of Graduate Schools (CGS). (2004). *Findings from U.S. Graduate Schools on International Graduate Student Admissions Trends*. Washington, DC: Author.
- . (2005). *Findings from the 2005 CGS International Graduate Student Admissions Survey II: Final Applications and Admissions*. Washington, DC: Author.
- . (2006). *Findings from 2006 CGS International Graduate Student Admissions Survey, Phase II: Final Applications and Offers of Admission*. Washington, DC: Author.
- Institute of International Education (IIE). *Open doors: Report on international student exchange*. New York: IIE. Annual, various years.
- . (2005a). *Fall 2005 International Student Enrollment Survey*. New York: Author. Available online at <http://opendoors.iienetwork.org/?p=Fall2005Survey>.
- Kelo, M., Teichler, U., and B. Wachter. (2006). *Eurodata: Student mobility in European higher education*. Bonn: Lemmens Verlag & Mediengesellschaft.
- Ministry of Education of the People's Republic of China (MOE China). (n.d.). *International students in China*. Beijing: Author. See www.moe.edu.cn/english/international_3.htm.
- NAFSA: Association of International Educators. (January, 2003). *In America's interest: Welcoming international students. Report of the Strategic Task Force on International Student Access*. Washington, DC: Author. See www.nafsa.org/_/Document/_/in_america_s_interest.pdf.
- . (June 19, 2006) *Restoring U.S. competitiveness for international students and scholars*. See www.nafsa.org/_/Document/_/restoring_u.s.pdf.
- National Science Board (NSB). (2006). *Science and engineering indicators 2006*. Two volumes. Arlington, VA: Author.
- Organisation for Economic Co-operation and Development (OECD). (2004). *Internationalisation and trade in higher education*. Paris: Author.
- . (2005). *Education at a glance: OECD indicators 2005*. Paris: Author.
- . (2006). *Education at a glance: OECD indicators 2006*. Paris: Author.
- UNESCO Institute for Statistics. (2006). *Global education digest 2006: Comparing education statistics across the world*. Montreal: Author.
- UNESCO Institute of Statistics online database. See <http://stats.uis.unesco.org>.
- . Table 17: Internationally Mobile Students in Tertiary Education. See <http://stats.uis.unesco.org/TableView/tableView.aspx?ReportId=217>.