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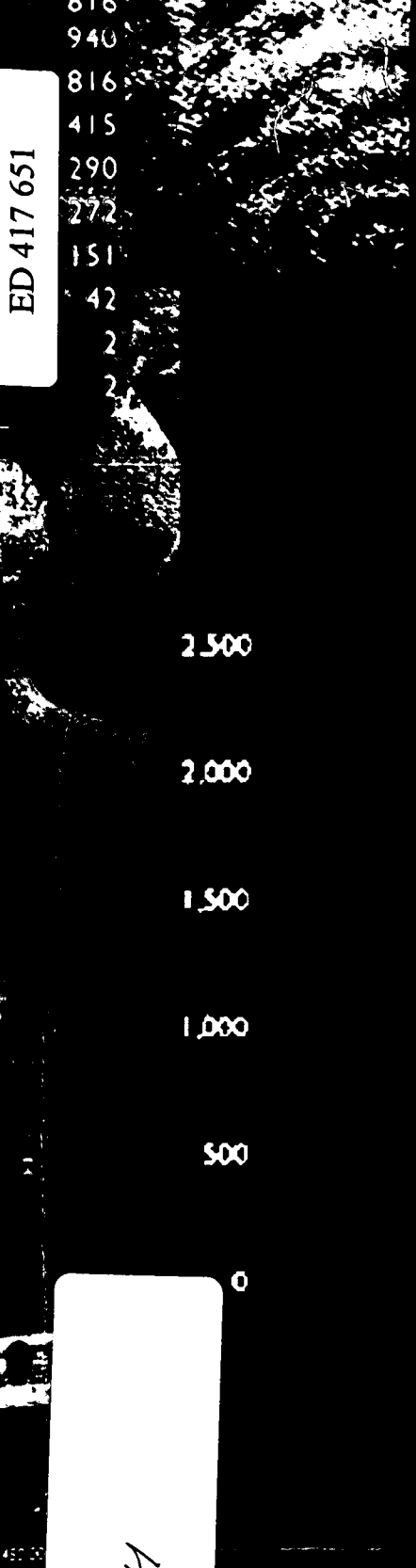
ABSTRACT

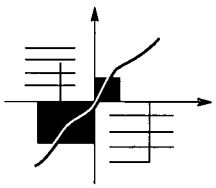
This report examines current and historical data on international student mobility, based on surveys of foreign students and scholars in the United States and U.S. students in study abroad programs and the Cooperative Institutional Research Program. The 83 data tables and 47 figures and accompanying summary text are organized as follows: (1) total number of foreign students in the Unites States; (2) enrollments by region and country of origin; (3) undergraduate and graduate distribution by country of origin; (4) field of study choices and geographic origins of students for 13 academic areas; (5) the development of field of study choices over time for students from selected Asian countries; (6) access and participation rates of foreign students by sex and nationality; (7) distribution of foreign students in the United States by county, region, and state; (8) primary funding sources and estimated expenditures of foreign students; (9) foreign student enrollments by institution; (10) academic and personal characteristics of foreign students; (11) numbers and destinations of U.S. students studying abroad; (12) foreign student enrollments in intensive English programs and student geographic origins; and (13) numbers and activities of foreign scholars on U.S. campuses. Brief essays on international education are included, along with information about the survey methodology and the accompanying diskette. (SW)



Open Doors

1996-1997

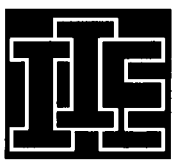
Report on International Educational Exchange



open doors 1996/97

REPORT ON INTERNATIONAL EDUCATIONAL EXCHANGE

Todd M. Davis, Editor



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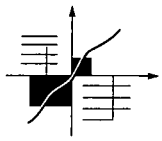


FOREWORD

Sustaining Student Exchange in a Time of Uncertainty

"It was the best of times and the most stagnant of times"... to paraphrase Charles Dickens. The number of international students studying in this country has never been higher. This year also marks the sixth year since enrollments increased by less than 5% and the third year in a row in which enrollments increased by less than 1%. This is not the first time, however, that enrollment flows have flattened. During the early 1970s and again in the early 1980s flows weakened only to be jolted upwards by students from newly rich oil producers and then from the awakening East Asian economies. There does not appear to be a new set of international developments that will produce a sharp upturn in numbers on the immediate horizon, but one can never be sure what lies ahead.

What several states and many colleges and universities now understand is that maintaining international enrollments depends increasingly on the efforts of U.S. institutions to recruit students to our higher education system. Indeed there appears to be room for this internal expansion. This year foreign students will constitute about 3.2% of all of our higher education enrollments. When compared with the major European host countries our proportion of international students is about one-third that of Germany, France or Great Britain.

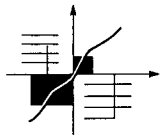
I believe that the best strategy is to clearly build the case for the benefits of sustained international enrollments while unambiguously addressing any negatives in managing foreign student flows. The key to this is to develop strong data about individual international enrollments and to follow these students as they move through the higher education system. Those of us who understand the many benefits to this country of international students

look forward to the development of national data that will support sound policy-making on the federal and local level.

This year's *Open Doors* contains the results of our Annual Census of Foreign Students, our surveys of U.S. Study Abroad and Foreign Scholars, and the return of our annual survey of students enrolled in Intensive English Programs. *Open Doors 1996/97* also contains the results of the individual foreign student survey formerly known as *Profiles*, as well as sidebars by professionals involved in many aspects of the educational exchange enterprise. As ever, I encourage you to become actively engaged with the data and the commentary in these pages. I especially welcome you to communicate directly with me about issues raised in this edition.

Todd M. Davis
Director of Research
Institute of International Education

New York City
October 10, 1997



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- The preparation of this report would not have been possible without the support and contributions we received from many individuals and organizations. The Institute of International Education gratefully acknowledges grant support from the Bureau of Educational and Cultural Affairs of the United States Information Agency for the implementation of the Annual Census of Foreign Students, the Foreign Scholars Survey, and the Survey of U.S. Study Abroad and for the production of *Open Doors*. We also appreciate the TOEFL Policy Council's generous support of the revitalized survey of foreign students enrolled in Intensive English Programs.

- The Institute also acknowledges the invaluable assistance of the members of the American Association of Collegiate Registrars and Admissions Officers (AACRAO) and of NAFSA: Association of International Educators in obtaining the data. Leaders and members of the two organizations assist the Institute in the collection and analysis of the data through AACRAO's Group II Committees for International Education and NAFSA's professional sections for advisers to foreign students and scholars (CAFSS), advisers and teachers in English as a Second Language (ATESL) and U.S. students abroad (SECUSSA).

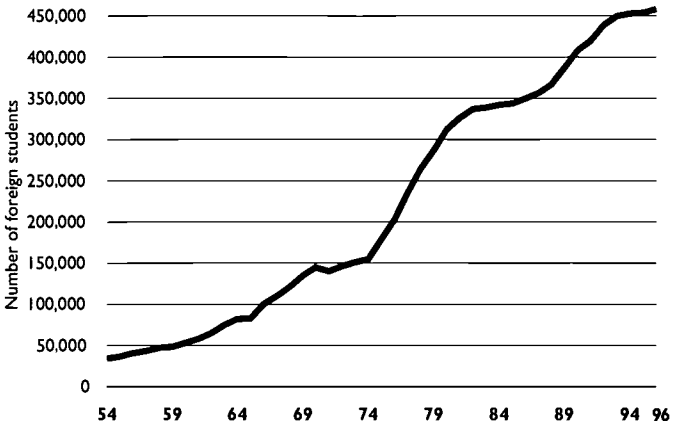
- This report has benefited from the thoughtful writing on the implications of student exchange made by our sidebar contributors. The names of these individuals are given in the bibliographic note which accompanies their essays. We are also grateful for the work of Dr. Lanna Lowe with the Noel/Levitz organization. The secondary analysis of their national data set adds considerably to our understanding of international students.

■ Many others inside and outside IIE contributed their special skills to this report. The production staff for this report was led by Lisa Rhoades. Cover design was executed by Dutton and Sherman Design. Typography and page layout was by Ian Walker Communications. Editorial assistance was provided by Carol Weeg. Copyediting of the manuscript was done by Theresa Duhon and Catherine Johntz. Theresa Duhon and Daniel Wein assisted greatly in the process of data collection and insuring the integrity of the data. Data entry was supervised by Marilyn Finkel with Automated Data Solutions. Finally we wish to acknowledge our debt to the officers of the Institute of International Education for their continuing commitment to an independent, high quality, policy-oriented report.

FAST FACTS: Open Doors 1996/97

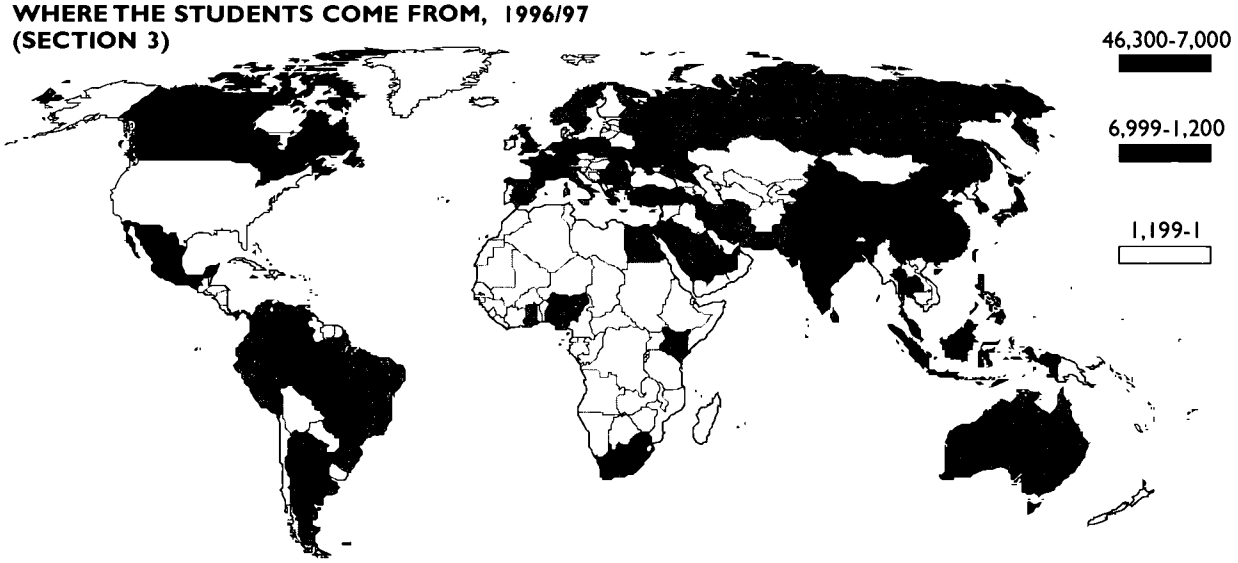
TOTAL FOREIGN STUDENT ENROLLMENT

Despite a 1,200% increase in their numbers since 1954, foreign students make up only 3.2% of the total U.S. higher education enrollment.



Year	Foreign Students	Annual % Change
1954/55	34,232	–
1964/65	82,045	–
1974/75	154,580	–
1989/90	386,851	–
1990/91	407,529	5.3
1991/92	419,585	3.0
1992/93	438,618	4.5
1993/94	449,749	2.5
1994/95	452,635	0.6
1995/96	453,787	0.3
1996/97	**457,984**	**0.9**

WHERE THE STUDENTS COME FROM, 1996/97 (SECTION 3)



Place of Origin	1995/96 Number	1996/97 Number	% Change
Japan	45,531	46,292	1.7
China	39,613	42,503	7.3
Korea, Republic of	36,231	37,130	2.5
India	31,743	30,641	-3.5
Taiwan	32,702	30,487	-6.8
Canada	23,005	22,984	-0.1
Malaysia	14,015	14,527	3.7
Thailand	12,165	13,481	10.8
Indonesia	12,820	12,461	-2.8
Hong Kong	12,018	10,942	-9.0
Germany	9,017	8,990	-0.3
Mexico	8,687	8,975	3.3

Region of Origin	1995/96 Total	1996/97 Total	% Change
Africa	20,844	22,078	5.9
Asia	259,893	260,743	0.3
Europe	67,358	68,315	1.4
Latin America	47,253	49,592	4.9
Middle East	30,563	29,841	-2.4
North America	23,644	23,611	-0.1
Oceania	4,202	3,690	-12.2
World Total	**453,787**	**457,984**	**0.9**

FAST FACTS: Open Doors 1996/97

LEADING COUNTIES, 1996/97

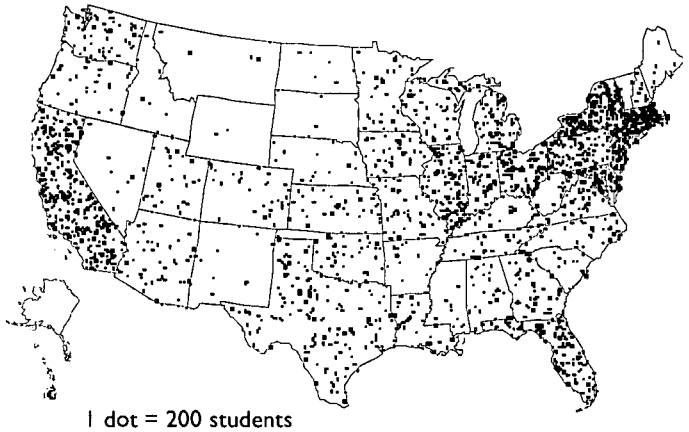
Over half of the country's foreign students are concentrated in only 50 U.S. counties.

County	State	Students
New York	New York	18,934
Los Angeles	California	17,979
Suffolk	Massachusetts	11,102
Cook	Illinois	10,302
D.C.	D.C.	9,066
Middlesex	Massachusetts	8,485
Maricopa	Arizona	6,602
Philadelphia	Pennsylvania	6,594
Dade	Florida	6,456
Harris	Texas	6,363
San Francisco	California	6,310
King	Washington	5,408
Honolulu	Hawaii	5,213
Santa Clara	California	4,894
San Diego	California	4,649
Franklin	Ohio	4,575
Washtenaw	Michigan	4,552
Orange	California	4,150
Dane	Wisconsin	4,047
Travis	Texas	3,945

STATES WITH THE MOST FOREIGN STUDENTS

California remains the leading host state.

U.S. State	1995/96	1996/97	% Change
California	55,799	57,017	2.2
New York	47,987	46,076	-4.0
Texas	27,883	28,686	2.9
Massachusetts	25,739	26,568	3.2
Florida	18,982	20,307	7.0
Illinois	19,408	19,626	1.1
Pennsylvania	17,897	18,110	1.2
Michigan	16,284	17,319	6.4
Ohio	16,161	16,763	3.7
Washington	10,257	10,959	6.8



1 dot = 200 students

WHERE THEY STUDY, 1996/97

Below are the 25 U.S. colleges and universities with the greatest number of foreign students. There are 116 institutions with 1,000 or more foreign students.

Boston U	4,657	Cornell U	2,868
New York U	4,491	U of Maryland College Park	2,825
U of Southern California	4,183	Michigan State U	2,664
U of Wisconsin-Madison	3,886	U of Houston	2,631
Columbia U	3,807	U of Minnesota-Twin Cities	2,594
Ohio State U Main Campus	3,772	Arizona State U Main	2,540
U of Texas at Austin	3,403	Florida International U	2,532
Harvard U	3,238	Indiana U at Bloomington	2,464
U of Michigan-Ann Arbor	3,194	Northeastern U	2,461
U of IL Urbana-Champaign	3,091	IA State Univ of Sci & Technology	2,446
U of Pennsylvania	2,949	Northern Virginia CC	2,433
Purdue U Main Campus	2,892	Texas A&M U	2,407
		George Washington U	2,376

FAST FACTS: Open Doors 1996/97

Primary Source of Funds	1996/97 % of Total
Personal & Family	67.2
U.S. College or University	16.9
Home Govt/University	5.5
Foreign Private Sponsor	3.5
Current Employment	2.3
U.S. Private Sponsor	2.0
U.S. Government*	0.9
International Organization	0.5
Other Sources	1.2
Total	**100.0**

* Includes only direct grants to students not counting U.S. aid to institutions which also support students.

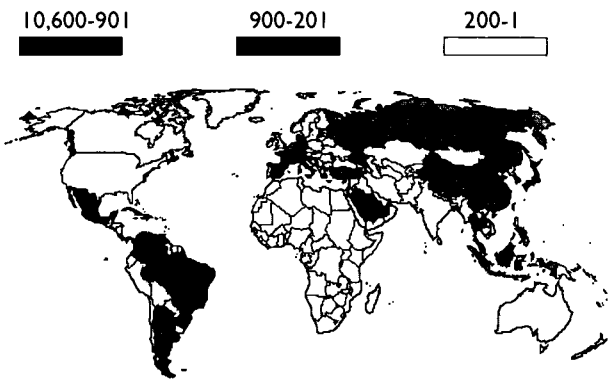
WHAT FOREIGN STUDENTS STUDY, 1996/97

Business and engineering studies remain most popular among foreign students.

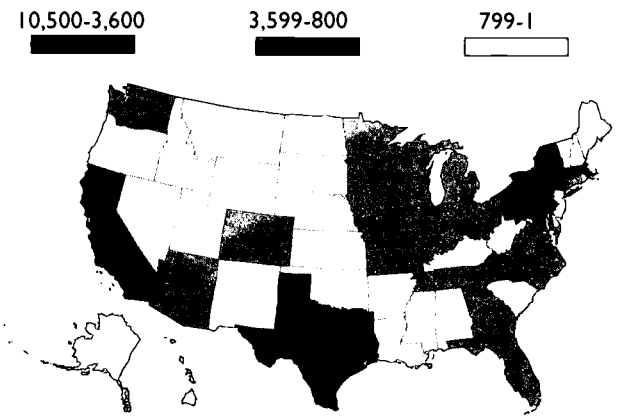
Field of Study	1995/96 Students	1995/96 %	1996/97 Students	1996/97 %	% Change
Business & Management	92,632	20.4	95,860	20.9	3.5
Engineering	72,410	16.0	71,001	15.5	-1.9
Other*	42,130	9.3	44,367	9.7	5.3
Social Sciences	38,242	8.4	38,691	8.4	1.2
Physical & Life Sciences	37,226	8.2	37,198	8.1	-0.1
Math & Computer Sciences	35,940	7.9	35,132	7.7	-2.2
Fine & Applied Arts	26,749	5.9	28,030	6.1	4.8
Intensive English Language	22,231	4.9	21,541	4.7	-3.1
Humanities	16,161	3.6	15,927	3.5	-1.4
Education	13,200	2.9	13,248	2.9	0.4
Agriculture	8,293	1.8	8,435	1.8	1.7

*Includes fields such as General Studies, Communications and Law.

ORIGINS OF INTENSIVE ENGLISH PROGRAM STUDENTS IN THE UNITED STATES (Section 11)



DISTRIBUTION OF FOREIGN SCHOLARS IN THE UNITED STATES, 1996/97



LEADING PLACES OF ORIGIN OF IEP STUDENTS (Section 11)

Place of Origin	1994/95	1996/97	% Change
Korea, Republic of	7,771	10,226	31.6
Japan	10,624	9,803	-7.7
Taiwan	2,735	3,309	21.0
Thailand	1,883	2,206	17.2
Brazil	1,255	1,658	32.1
Mexico	2,265	1,559	-31.2
Saudi Arabia	1,168	1,233	5.6
Colombia	982	991	0.9
Venezuela	1,097	925	-15.7
China	807	891	10.4
Indonesia	822	885	7.7
WORLD TOTAL	**43,522**	**43,739**	**0.5**

MAJOR FIELD OF SPECIALIZATION OF FOREIGN SCHOLARS (Section 12)

Field of Specialization	% 1996/97
Health Sciences	27.1
Life and Biological Sciences	15.4
Physical Sciences	13.8
Engineering	11.8
Social Sciences and History	4.6
Agriculture	4.1
Mathematics	2.8
Business Management	2.6
Foreign Languages and Literature	2.3
Computer and Information Sciences	2.2
All Other Fields	13.3
TOTAL ALL FIELDS	**62,354**

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FAST FACTS: Open Doors 1996/97

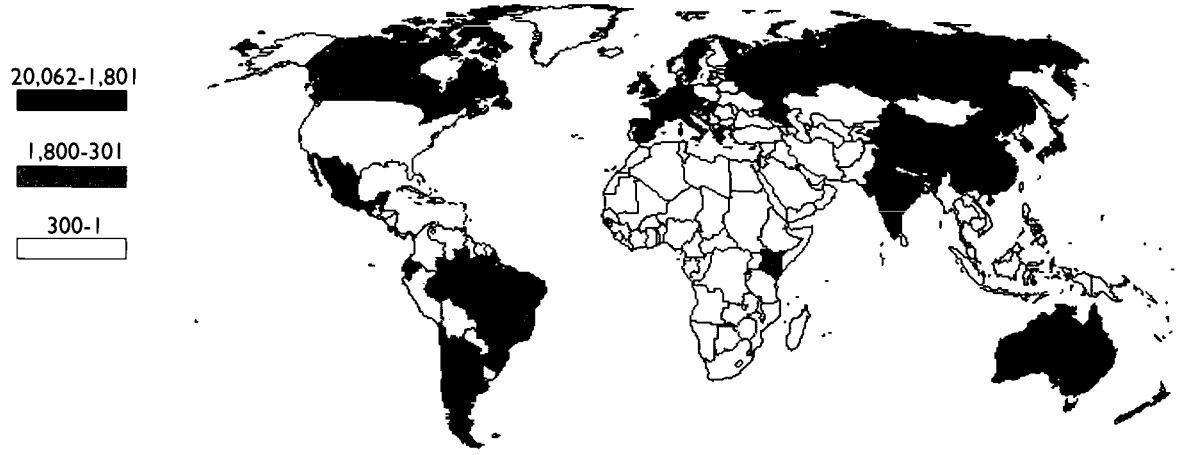
WHERE U.S. STUDENTS STUDY OVERSEAS (Section10)

Europe is the destination for almost two-thirds of U.S. students who study abroad, although this proportion has been decreasing over the past decade.

Host Region	Received Credit for Study Abroad in 1994/95	Received Credit for Study Abroad in 1995/96	% Change
Africa	1,842	2,027	10.0
Asia	5,440	5,699	4.8
Europe	55,289	57,785	4.5
Latin America	11,590	13,726	18.4
Middle East	2,823	1,859	-34.1
North America	590	653	10.7
Oceana	3,643	3,884	6.6
Multicountry	3,180	3,605	13.4
World Total	**84,403**	**89,242**	**5.7**

Host Coutries	1994/95	1995/96	% Change
United Kingdom	19,410	20,062	3.4
Spain	7,473	8,135	8.9
Italy	7,062	7,890	11.7
France	7,872	7,749	-1.6
Mexico	4,715	6,220	31.9
Germany	3,504	3,552	1.4
Australia	3,346	3,313	-1.0
Costa Rica	2,302	2,298	-0.2
Japan	2,212	2,010	-9.1
Israel	2,621	1,667	-36.4
Ireland	1,191	1,594	33.8
Austria	1,489	1,486	-0.2
Russia	1,290	1,482	14.9
China	1,257	1,396	11.1
World Total	**84,403**	**89,242**	**5.7**

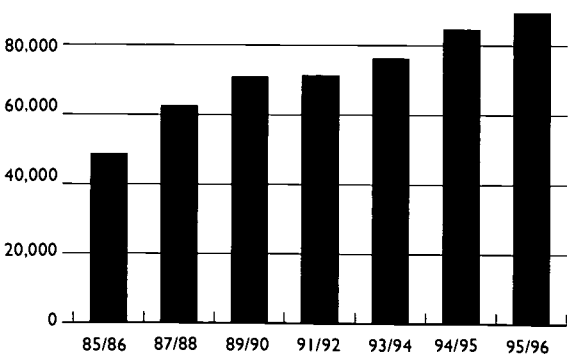
HOST NATIONS FOR U.S. STUDENTS ABROAD, 1995/96

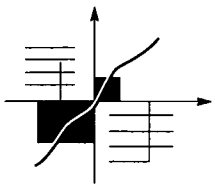


MAJOR FIELD OF STUDY OF U.S. STUDENTS ABROAD

Field of study	1994/95	1995/96	% Change
Social Science & Humanities	30,879	31,390	1.65
Business & Management	11,415	12,375	8.4
Foreign Languages	8,674	9,533	9.9
Other	5,392	6,697	24.2
Physical Sciences	5,712	6,097	6.74
Fine or Applied Arts	7,567	6,088	-19.5
Dual Major	3,480	4,237	21.8
Undeclared	2,804	3,474	23.9
Education	3,184	3,311	4.0
Health Sciences	1,786	2,047	14.6
Engineering	1,881	1,910	1.5
Math or Computer Science	1,046	1,187	13.5
Agriculture	583	895	53.5
Total	**84,403**	**89,242**	**5.7**

GROWING NUMBER OF U.S. STUDENTS STUDYING ABROAD





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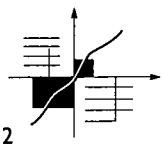

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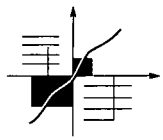

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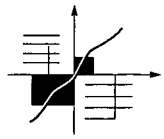


1

Foreign Student Totals

OVERVIEW

- The number of foreign students studying in the United States showed a modest upturn in 1996/97. This year's total is 457,984, an increase of 0.9% over last year's figure. Although this growth is larger than that of the previous two years, it continues a seven-year trend of decelerating foreign student enrollments.
- This increase reflects a mixed bag in enrollments from the fifteen leading places of origin for international students in the United States. In 1996/97, seven showed declines in enrollment, while the other eight showed slight to significant growth.
- One measure of the impact international students have on a host country's educational system is their percentage of the higher education population. While foreign students represent 3.2% of all U.S. higher education enrollments, foreign students are enrolled at greater proportions at higher academic levels. Foreign students represent about 2.5% of all four-year undergraduate enrollments and 10.0% of graduate enrollments.
- Despite the increases in foreign student numbers over the history of the census, these students' share of the overall U.S. higher education student population increased from only 1.4% in 1954/55 to 3.2% this year.
  In general, the tremendous growth in the number of Americans attending institutions of higher education during the same period offsets the impact of a growing international population, although percentages of foreign students in some academic fields, especially at the graduate level, are considerable.

- To find what percentage of all undergraduates and graduates in the United States are foreign students, their numbers were compared to total U.S. enrollments, which were provided by the College Board's 1997/98 Annual Survey of Colleges. This survey determined the total U.S. enrollment in all two-year institutions; all four-year institutions, including doctoral degree-granting and special purpose institutions; and all graduate and first professional degree programs.
- The proportion of foreign students at each level was then calculated by comparing the number of foreign students enrolled at each level with the College Board's total enrollment figures.*
- Total two-year enrollment: 5,774,662. Total foreign associate degree enrollment (Section 9): 53,313. Percentage of two-year enrollment: 0.9%.
- Total four-year enrollment: 6,617,858. Total foreign bachelor's enrollment (Section 9): 165,430. Percentage of four-year enrollment: 2.5%.
- Total graduate enrollment: 1,893,958. Total foreign graduate enrollment (Section 9): 190,244. Percentage of graduate enrollment: 10.0%.

* The foreign associate, bachelor's and graduate enrollment figures do not include foreign students who are enrolled in practical training, nondegree or intensive English language programs.

1.0

FOREIGN STUDENT AND TOTAL U.S. ENROLLMENT

Growth in foreign student enrollments have paced increases in U.S. total higher education enrollment.

Year	Foreign Students	Annual % Change[1]	Total Enrollment	% Foreign
1954/55	34,232	_	2,499,800	1.4
1959/60	48,486	2.6	3,402,300	1.4
1964/65	82,045	9.7	5,320,000	1.5
1969/70	134,959	11.2	7,978,400	1.7
1974/75	154,580	2.3	10,321,500	1.5
1979/80	286,343	8.5	11,707,000	2.4
1984/85	342,113	0.9	12,467,700	2.7
1985/86	343,777	0.5	12,387,700	2.8
1986/87	349,609	1.7	12,410,500	2.8
1987/88	356,187	1.9	12,808,487	2.8
1988/89	366,354	2.9	13,322,576	2.7
1989/90	386,851	5.6	13,824,592	2.8
1990/91	407,529	5.3	13,975,408	2.9
1991/92[2]	419,585	3.0	14,360,965	2.9
1992/93	438,618	4.5	14,422,975	3.0
1993/94	449,749	2.5	14,473,106	3.1
1994/95	452,635	0.6	14,554,016	3.1
1995/96	453,787	0.3	14,419,252	3.1
1996/97	**457,984**	**0.9**	**14,286,478[3]**	**3.2**

[1] Rate of change for accredited institutions. In 1981/82 the number of institutions surveyed decreased due to the elimination from the Census of all institutions that are not listed in the *Higher Educational Directory*, colleges and universities with (a) accreditations, (b) provisional or probationary accreditation or (c) pre-accredited status by a Regional Accrediting Commission.

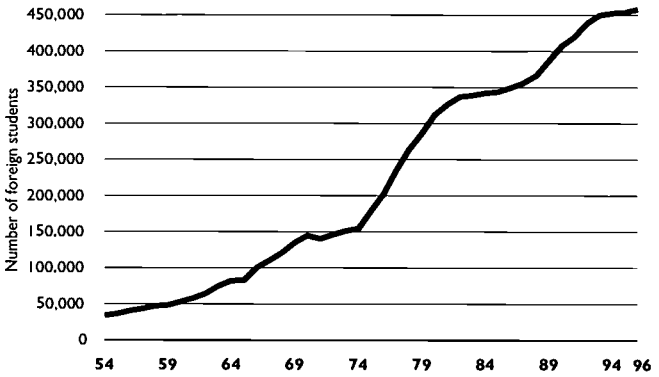
[2] Beginning in 1991/92, the foreign student totals do not include refugees, a category which had been reported since 1975/76.

[3] Reported total enrollments from 1954/55 to 1982/83 are from the National Center for Education Statistics, Washington, D.C. The report of total enrollments since 1983 is from the College Board Annual Survey of Colleges Data Base. This year's figure is for 1996/1997.

1.a

TRACKING FOREIGN STUDENT FLOW

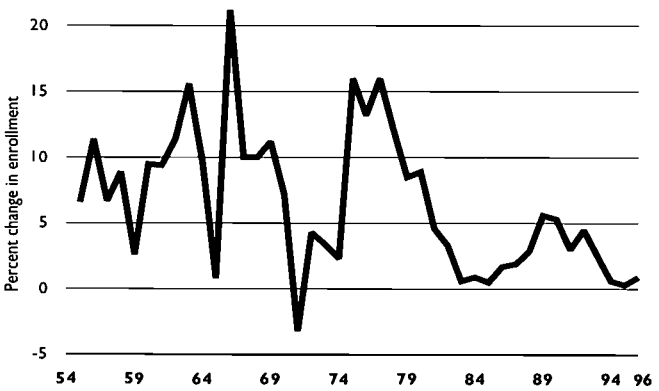
Since the 1950s periods of unsustainable growth have been followed by relatively long periods of minimal growth.



1.b

ERRATIC GROWTH

Annual rates of change have fluctuated widely, increasing as much as 21% in 1966, and declining 3% a few years later. This year's 0.9% increase, while larger than that of the previous two years, is still comparatively small.



Return to Flatland

When reading the history of student flows which are written in total numbers and rates of change it is easy to miss the significance of that story. In the present we need some perspective. During the 26 years between 1954 and 1980 only six of those years saw the rate of annual increase fall below 5% per year. In the 15 years since 1980 only two of those years saw increases of greater than 5% in a year. What makes the current pause so profound are the "glory" years between 1975 and 1980. In those five years enrollments doubled, from about 150,000 to over 300,000 enrolled foreign students. The last three years have seen the smallest consecutive annual increases in the history of the census. Prediction is a hazardous occupation but it appears as if this period of minimal change in student flows is likely to continue.

Issues for the 21st Century

The International Student Market 1997

As the world becomes increasingly interdependent and employers seek qualified employees who thrive in foreign environments and understand cross-cultural contexts, it is not surprising that education with an international focus is becoming integral to the success of individuals, organizations and nations. International education has had a prominent position in the agendas of the American, British, Canadian and Australian governments in the last 25 years, and it is clear that it will continue to be a critical issue well into the 21st century.

Governments' increased interest in international education is generating many changes to its form and content. A number of trends can be identified:

1. Education is an increasingly important service export. In Australia, international students contribute more than A$1 million to the economy annually, a figure that represents approximately 2% of the country's annual export revenue. Significantly, the Royal Melbourne Institute of Technology and Monash University are considered among Australia's top 500 business exporters. Canada and the U.K. also rely on the international student market to generate revenue. In the U.K., foreign students contribute between US$1.4 and $1.8 billion a year to the economy; in Canada, they contribute more than C$1 billion annually.
2. The European Union (EU) is currently formed by 15 nations; NAFTA, which was initially formed by the U.S., Canada and Mexico, may be joined by Chile and other Latin American nations; and APEC (Asia-Pacific Economic Cooperation) represents the U.S. as well as 16 Asian countries. Diplomacy is a key objective of regionalization efforts. The mobility of students and faculty within a core region is a means of investing in future diplomatic and trade relationships. It is also a way to foster a sense of regional community.
3. Although universities continue to plan and implement their own

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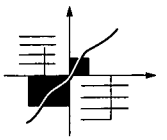


Issues for the 21st Century

...Continued

international programs, government agencies are beginning to perform a more active role in the recruitment of international students. Australia eased its visa process in order to encourage prospective foreign students to apply to its universities. It also established the Australian International Educational Foundation (AIEF), which has opened promotional offices in 40 countries throughout the world. Canada has since established nine Canadian Educational Centres (CEC). Likewise, the U.K. operates Education Counseling Service (ECS) offices and the United States Information Agency maintains overseas advising centers abroad.

4. Southeast Asia remains the most desirable region from which to attract international students: the U.S., the U.K., Canada and Australia have all targeted Pacific Rim nations in their marketing endeavors. Education advising centers, one of the means by which governments market their educational services, are most prominent in this region. Southeast Asia is the site of 23 of the AIEF offices, all of the ECS offices, and the first seven CECs. It is also the area from which a large proportion of international students in the U.S. come.
5. English will continue to be a prominent international language. Education in English-speaking nations, therefore, will remain a desirable service export, attracting students from throughout the world who wish to improve their prospects for employment and promotion. Schools in the U.S., the U.K., Canada and Australia will likely receive the majority of foreign students who aim to combine English language development with their academic programs.
6. Distance education is undergoing radical changes. Due to advances in computer technology, students can receive a degree from a foreign institution without ever leaving their home country. The effects of distance education on the international student

Continued...

Issues for the 21st Century

...Continued

market have yet to be determined. Australia has been considering the issue of distance education and quality assurance. The Canadian Bureau for International Education has raised questions about the issue of unequal access to advanced computer technology throughout the world.

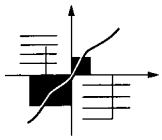
7. The private sector is performing a greater role in education. The Canadian government is encouraging institutions to establish relationships with business and industry in order to fund and support programs, a strategy that some in higher education believe could affect the autonomy and academic freedom of colleges and universities. Similarly the EU developed COMETT in 1987 to strengthen the relationship between academia and industry.

Although the future of international education is a matter of speculation, it is certain that the international education dimension will continue to play a critical role in the development of nations. In particular, it will remain an integral component of regionalization strategies, especially those launched by the EU. Educational experiences abroad affect individual perceptions about host nations, which in turn impact the success of critical activities, such as trade and diplomacy. Nations that invest in the promotion of international education and incorporate the industry into their national agenda will reap myriad economic and social benefits. Those that assume a laissez-faire approach to the recruitment and support of foreign students risk losing their share of the international student market, which is lucrative yet increasingly competitive.

This abstract was compiled by IIE from a report by Education International (EI) entitled The International Student Market '97. *For additional information on EI's International Student Research Report Series, contact EI at 5325 Cordova Bay Road, #205, Victoria, BC, Canada V8Y 2L3. Tel:(250)658-6283. E-mail: educate@eiworldwide.com or visit their website at www.eiworldwide.com.*

2

Foreign Student Totals by Region



REGIONS

- Since the early 1980s, enrollments from Asia and Western Europe have been the most important sources of growth in the international student population in the United States. This year enrollments from South Asia and Western Europe fell, while those from Eastern Europe continued to rise.
- Asian students make up over half of the U.S. international student population (56.9%). The new total of 260,743 is only a slight increase over last year's figure, and reflects either decreases in numbers or nearly flat enrollments from many Asian nations that dominated the U.S. foreign student picture for the past 16 years. This continues the pattern of softening enrollments from this region noted over the last three years.
- The number of students from Europe (68,315) increased 1.4% over last year. Enrollments from many Western European nations–traditionally the largest source of students from this region–have either declined or increased only slightly. Enrollments from Eastern Europe continue to be robust, however, increasing by 8% this year.
- Latin American enrollments increased by 4.9% this year. This represents significant increases in students from the Caribbean and South America, and slight increases from Central America and Mexico.
- From the mid-1950s to the mid-1970s, students from the Middle East constituted about one-eighth of the U.S. international student population. The number of Middle Eastern students rose very rapidly in the latter half of the 1970s, mainly due to increased flows from Iran and other OPEC countries, peaking in 1980 at about 29% of all foreign students. Since that time, however, their numbers have fallen sharply. This year's decrease of 2.4% reflects a decline in enrollments from most Middle Eastern countries.
- African enrollments increased for the fourth year in a row, after a decade-long free-fall that began in the mid-1980s. This year's regional total reflects increased student flows from all regions except Central Africa.

2.0

FOREIGN STUDENTS BY REGION, 1954/55 - 1996/97

Year	AFRICA Foreign Students	AFRICA % of Total	ASIA Foreign Students	ASIA % of Total	EUROPE Foreign Students	EUROPE % of Total	LATIN AMERICA Foreign Students	LATIN AMERICA % of Total
1954/55	1,234	3.6	10,175	29.7	5,205	15.2	8,446	24.7
1959/60	1,959	4.0	17,808	36.7	6,392	13.2	9,428	19.4
1964/65	6,855	8.4	30,640	37.4	10,108	12.3	13,657	16.6
1969/70	7,607	5.6	51,033	37.8	18,524	13.7	24,991	18.5
1974/75	18,400	11.9	58,460	37.8	13,740	8.9	26,270	17.0
1979/80	36,180	12.6	81,730	28.6	22,570	7.9	42,280	14.8
1984/85	39,520	11.6	143,680	42.0	33,350	9.7	48,560	14.2
1985/86	39,190	9.9	156,830	45.6	34,310	10.0	45,480	13.2
1986/87	31,580	9.1	170,700	48.8	36,140	10.3	43,480	12.4
1987/88	28,450	8.0	180,540	50.7	38,820	10.9	44,550	12.5
1988/89	26,430	7.2	191,430	52.2	42,770	11.7	45,030	12.3
1989/90	24,570	6.4	208,110	53.8	46,040	11.9	48,090	12.4
1990/91	23,800	5.9	229,830	56.4	49,640	12.2	47,580	11.8
1991/92	21,890	5.2	245,810	58.7	53,710	12.8	43,200	10.4
1992/93	20,520	4.7	260,670	59.4	58,010	13.2	43,250	9.9
1993/94	20,570	4.6	264,690	58.9	62,440	13.9	45,240	10.1
1994/95	20,724	4.6	261,789	57.8	64,811	14.3	47,239	10.4
1995/96	20,844	4.6	259,893	57.3	67,358	14.8	47,253	10.4
1996/97	**22,078**	**4.8**	**260,743**	**56.9**	**68,315**	**14.9**	**49,592**	**10.8**

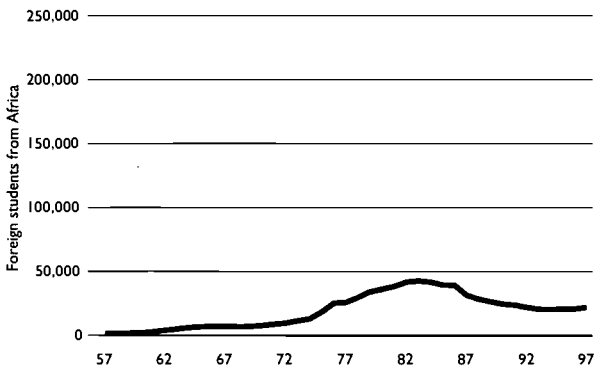
Year	MIDDLE EAST Foreign Students	MIDDLE EAST % of Total	NORTH AMERICA Foreign Students	NORTH AMERICA % of Total	OCEANIA Foreign Students	OCEANIA % of Total	WORLD TOTAL[1]
1954/55	4,079	11.9	4,714	13.8	337	1.0	34,232
1959/60	6,477	13.4	5,761	11.9	568	1.2	48,486
1964/65	9,977	12.1	9,338	11.4	1,265	1.5	82,045
1969/70	13,278	9.9	13,415	9.9	2,077	1.5	134,959
1974/75	23,910	15.5	8,630	5.6	2,650	1.7	154,580
1979/80	83,700	29.2	15,570	5.4	4,140	1.4	286,340
1984/85	56,580	16.5	15,960	4.7	4,190	1.2	342,110
1985/86	52,720	15.3	16,030	4.7	4,030	1.2	343,780
1986/87	47,000	13.4	16,300	4.7	4,230	1.2	349,610
1987/88	43,630	12.2	16,360	4.6	3,620	1.0	356,190
1988/89	40,200	11.0	16,730	4.6	3,610	1.0	366,350
1989/90	37,330	9.7	18,590	4.8	4,010	1.0	386,850
1990/91	33,420	8.1	18,950	4.6	4,230	1.0	407,530
1991/92	31,210	7.3	19,780	4.7	3,870	0.9	419,590
1992/93	30,240	6.9	21,550	4.9	4,300	1.0	438,620
1993/94	29,510	6.6	23,290	5.2	3,860	0.9	449,750
1994/95	30,246	6.7	23,394	5.2	4,327	1.0	452,635
1995/95	30,563	6.7	23,644	5.2	4,202	0.9	453,787
1996/97	**29,841**	**6.5**	**23,611**	**5.2**	**3,690**	**0.8**	**457,984**

[1] Includes students classified as stateless or of unknown origin.

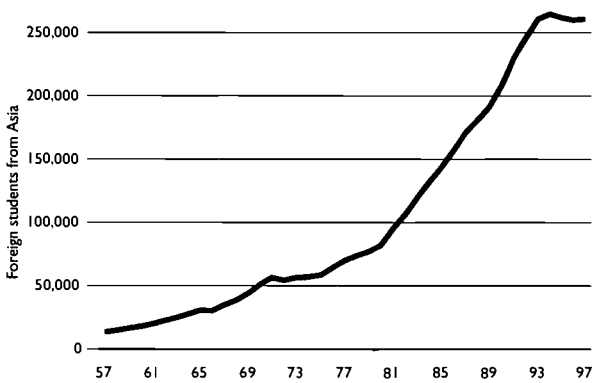
2.a

HOW THE REGIONS COMPARE IN STUDENT FLOWS TO THE UNITED STATES, 1956/57 - 1996/97

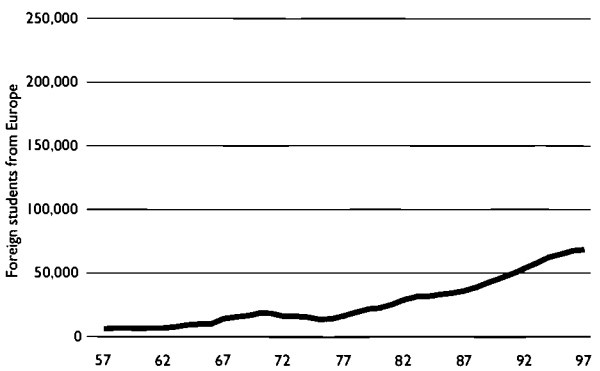
AFRICA



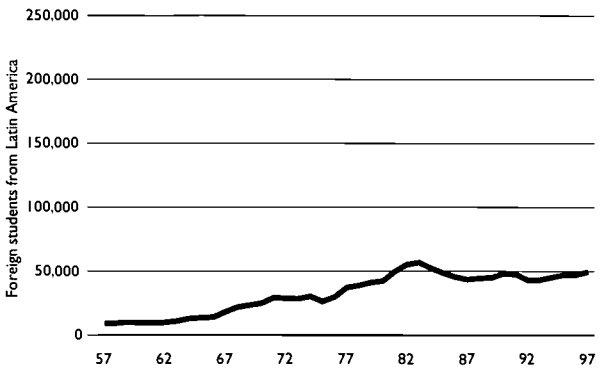
ASIA



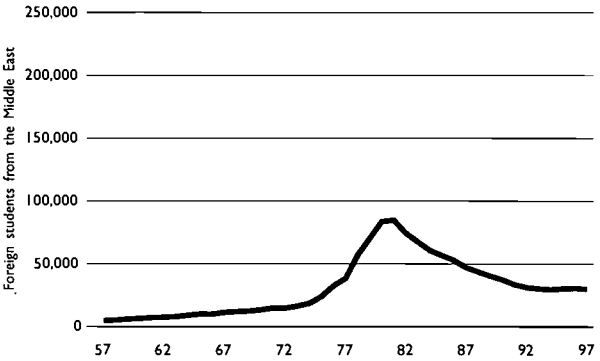
EUROPE



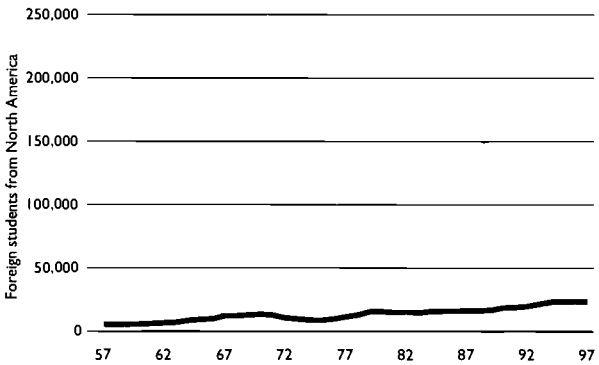
LATIN AMERICA



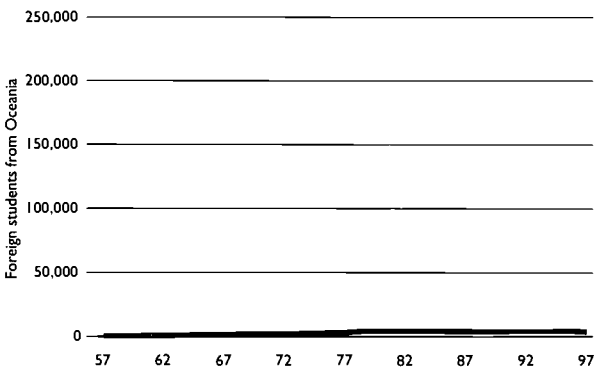
MIDDLE EAST



NORTH AMERICA



OCEANIA



AFRICA

- Africans studying in this country now number 22,078. They comprise 4.8% of the foreign student population in the United States, making them the smallest regional group after Oceania. At their peak in the early 1980s, African enrollments accounted for nearly 13% of the total, a figure comparable to the share currently held by Europeans.
- Most of the African students in the United States come from nations in East Africa (8,628 or 39.1%), while a slightly smaller number originate in West African countries (6,115 or 27.7%). North African students make up about one-sixth of all African students (3,469 or 15.7%). Fewer students come from Southern Africa (2,678 or 12.1%) and Central Africa (1,187 or 5.4%).
- Of all the African countries, Kenya sends the largest number of students (3,723), followed by Nigeria (2,184), South Africa (1,851) and Egypt (1,540).
- African enrollments in this country peaked in the early 1980s, when an influx of students (mainly Nigerians who came during the oil boom of the late 1970s and early 1980s) doubled the total in just ten years. This trend was quickly reversed during the late 1980s and early 1990s, when African enrollments plummeted to half the level of the mid-1980s.

2.1

FOREIGN STUDENT TOTALS BY REGION AND SUBREGION, 1996/97

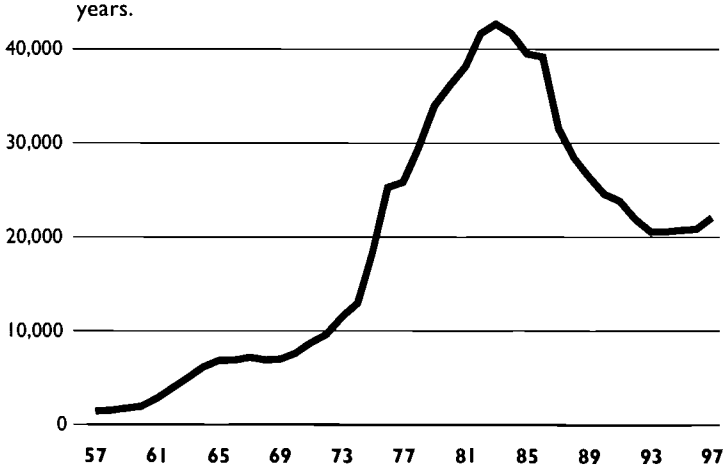
Locality	Number	Region %	World %
AFRICA	**22,078**		**4.8**
Eastern Africa	8,628	39.1	
Central Africa	1,187	5.4	
North Africa	3,469	15.7	
Southern Africa	2,678	12.1	
Western Africa	6,115	27.7	
ASIA	**260,743**		**56.9**
East Asia	167,935	64.4	
South & Central Asia	44,256	17.0	
Southeast Asia	48,550	18.6	
EUROPE	**68,315**		**14.9**
Eastern Europe	19,471	28.5	
Western Europe	48,844	71.5	
LATIN AMERICA	**49,592**		**10.8**
Caribbean	11,796	23.8	
Central America/Mexico	14,524	29.3	
South America	23,272	46.9	
MIDDLE EAST	**29,841**		**6.5**
NORTH AMERICA	**23,611**		**5.2**
OCEANIA	**3,690**		**0.8**
WORLD TOTAL	**457,984**[1]		**100.0**

[1] Includes stateless students or those of unknown origin.

2.b

TRENDS IN AFRICAN ENROLLMENTS SINCE 1957

The sharp rise and subsequent decline of students from Nigeria helped to shape the spike in African enrollments in the last 30 years.

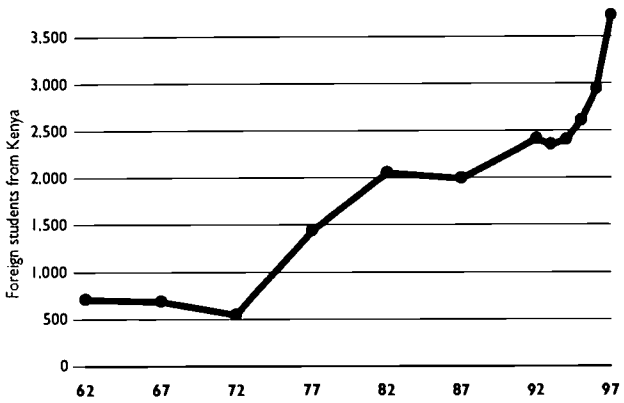


2.c

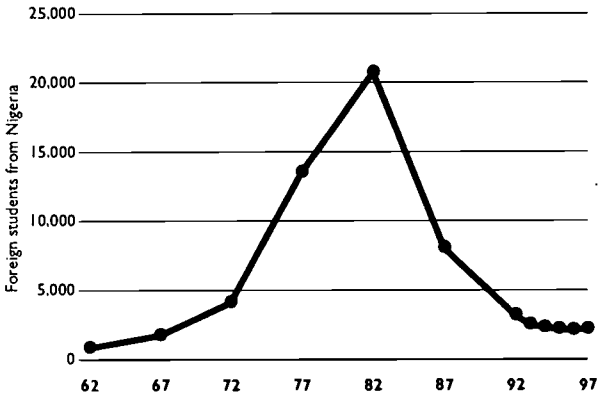
DRIVING THE TRENDS: AFRICA'S LEADING SENDERS

Leading African countries have seen dramatic increases and collapse in student flows. Recent flows from these nations, while very small, have stabilized.

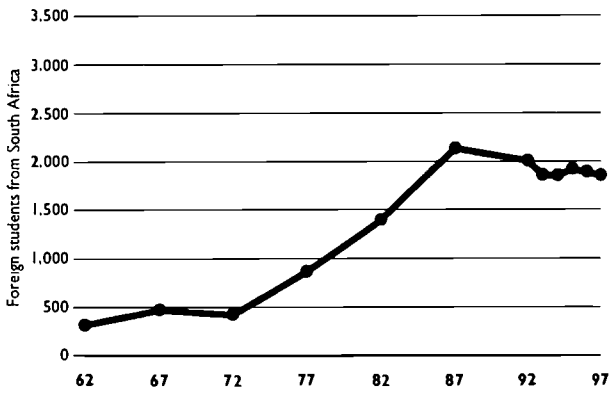
KENYA



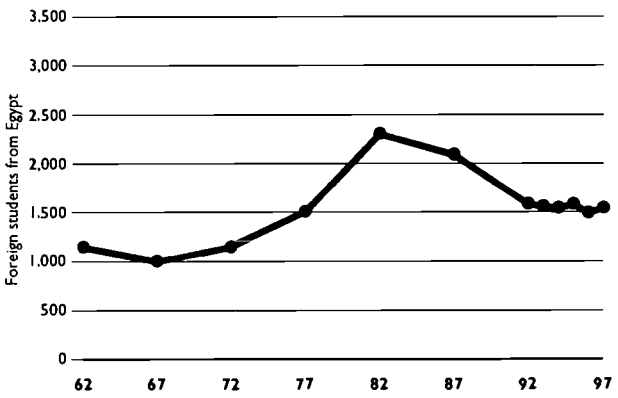
NIGERIA



SOUTH AFRICA



EGYPT

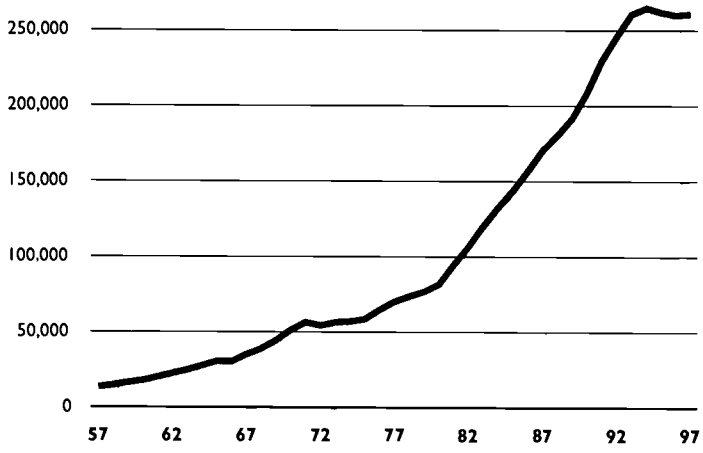


ASIA

- Following two years of declining enrollments, 1996/97 saw a slight increase in the number of Asian students coming to the United States for study (up 0.3% to 260,743 students).
- Asians still comprise over half (56.9%) of the international student population in the United States. Asians have consistently outnumbered students from other regions throughout the history of the Census, but in the 1970s and 1980s their rate of growth increased dramatically. By 1992 the U.S. international student population was approximately 60% Asian.
- Of the three subregions within Asia, both East Asia and Southeast Asia showed slight increases in enrollments this year. In East Asia, an increase in enrollments from China and the Republic of Korea helped to offset decreases in student numbers from Taiwan and Hong Kong. Increases in the number of students from Thailand and Malaysia helped to raise Southeast Asian enrollments. In South and Central Asia, student enrollments from India, Pakistan and Sri Lanka declined.
- The Asian countries with the most students in the United States are Japan (the leading country worldwide with 46,292 students), China (42,503), the Republic of Korea (37,130) and India (30,641).

2.d

TRENDS IN ASIAN ENROLLMENTS SINCE 1957
While the number of students from Asia is still very large, Asian enrollments appear to have plateaued recently.

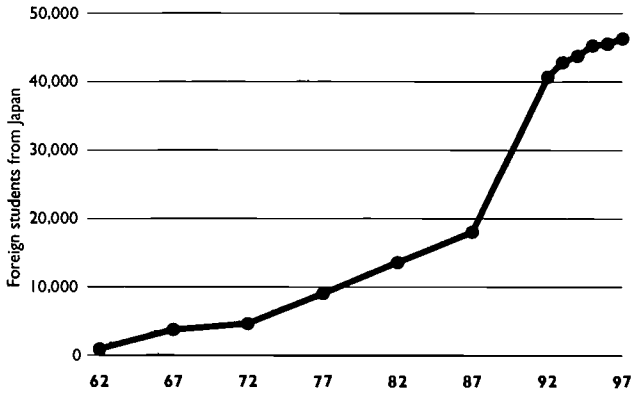


2.e

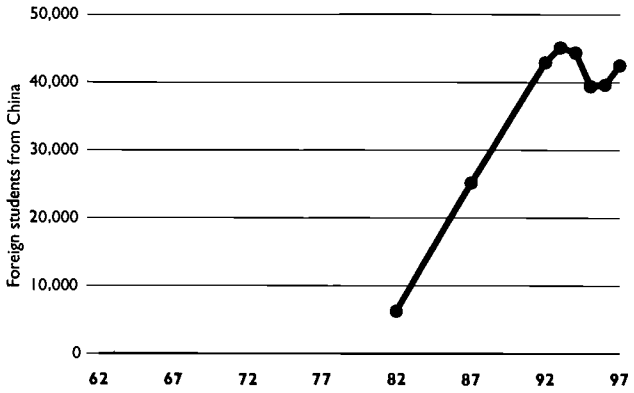
DRIVING THE TRENDS: ASIA'S LEADING SENDERS

This diverse group of Asian senders shows both dramatic drop offs in enrollment rates and, in the case of Korea, robust continued growth in enrollment.

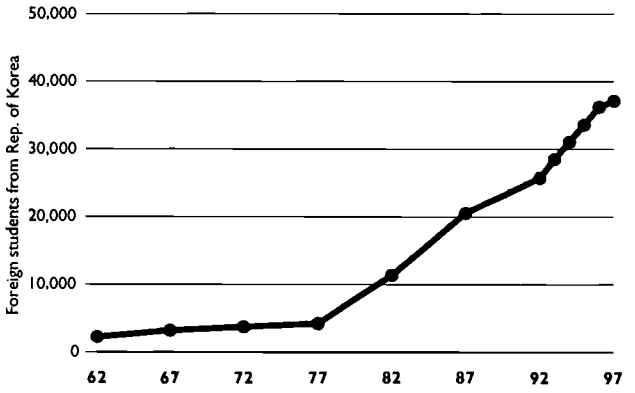
JAPAN



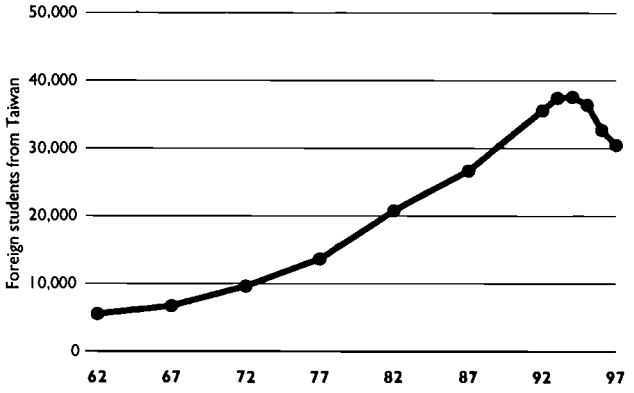
CHINA



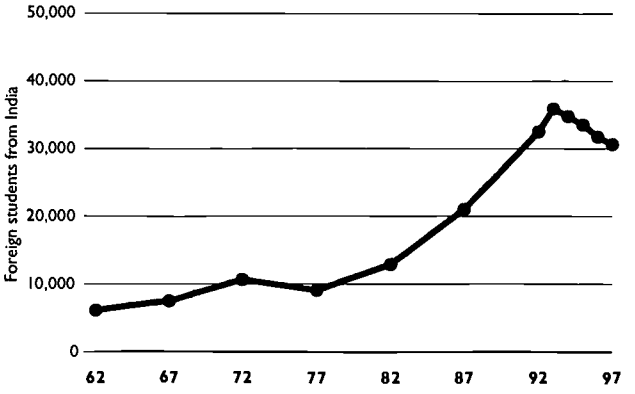
KOREA



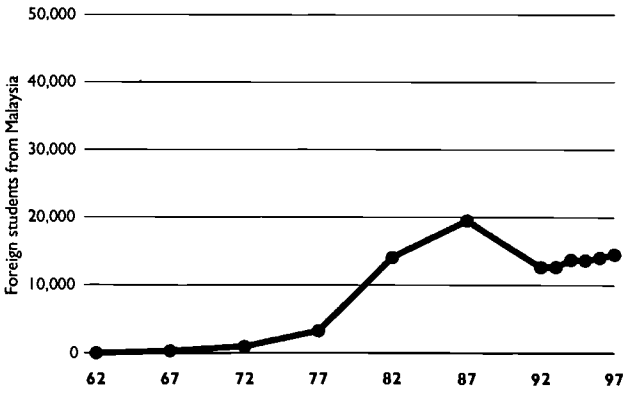
TAIWAN



INDIA



MALAYSIA



Influencing Decisions on Study Abroad

ALLISON DOORBAR

J. Walter Thompson, JWT Education

THERE are currently over 1.3 million students studying at tertiary and secondary institutions outside their home country—many of them from Asia. The annual contribution made to destination country economies is enormous—$US7 billion to the United States in 1995, $A2.8 billion to Australia in 1996. Despite the obvious economic value of overseas students, this study is the first thorough global examination of the decision-making process these students undertake to select a country, a city, an institution, and a course of study. Why do these students decide to study overseas? How is the decision reached? These are questions educational marketers and others concerned with education as a service export must have answered.

The study examines students from 10 selected Asian nations referred to as source countries. The source countries were chosen for various reasons: high level of demand for international education (Malaysia, Singapore, Hong Kong); large potential student audience (India, China, Indonesia); recent growth in the international student marketplace (Thailand, Taiwan, South Korea); and active domestic effort to retain students (Japan). The destination countries examined in detail were Australia, Great Britain, the U.S. and Canada. Data was collected by interviews conducted face-to-face with students in the country in which they had chosen to study. Students were interviewed at 55 campuses of 48 universities. Over 10,000 students were approached to achieve the desired representative samples and 958 students completed the interview. Students included in the study were first-year Asian undergraduates.

The most prominent outcome of this study is the enormous difference that exists between the choice factors and the influences of students from the various source countries.

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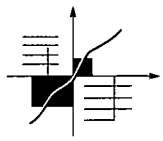


Influencing Decisions on Study Abroad

...Continued

Many institutions continue to treat "overseas student recruitment" as a single task with a singular marketing and communications strategy. In reality proper market segmentation should be undertaken, with each target group addressed according to the values, choice factors and relative priorities. Market segmentation may be undertaken on a nation-by-nation basis but should also be considered on the basis of values. Exactly what benefit is a student seeking from studying overseas? What are the similarities and differences across national and racial boundaries? What are the delivery and expectation requirements of each target group?

This study examined in detail the decision-making process by students when choosing their study destination. In almost 60% of cases the country is preselected before any institution, course or city is considered. Destination institutions must work cooperatively, otherwise individual effort will have to be greatly enhanced to market the destination as well as the merits of the institution itself.

The decision to study overseas is made at different times. Timing offers another opportunity for planned marketing communications, ensuring that the right information reaches the target audience at the right time. Institutions must endeavor to reach the prospective student early in his or her high school career and soon after the period at which he/she elects to study overseas. Very few Asian students claim that their decision to study overseas was made alone. Most were influenced by family, friends or staff at their school or college. It follows that these key reference groups should be included in marketing activities.

Abstracted with permission by IIE from a research report prepared by JWT Education (USA and Canada) and LD&A (Australia and UK). For further information or a copy of the study, contact Allison Doorbar at allison.doorbar@jwtworks.com or by mail at JWT Education, 466 Lexington Avenue, NY NY 10017-3185 or by phone at 212-210-1142.

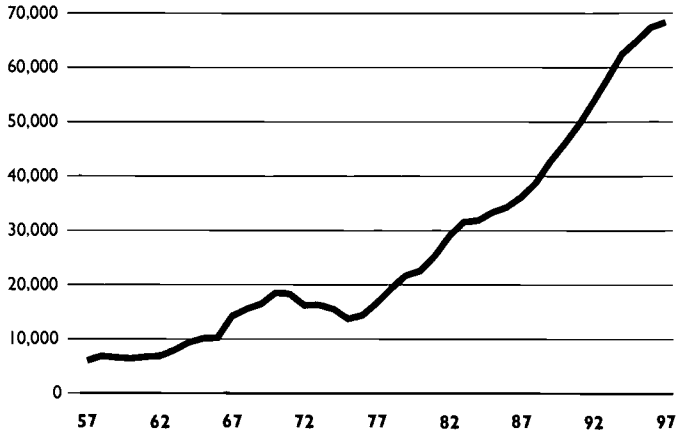
EUROPE

- This year, 68,315 European students are studying in the United States. Europeans continue to be the second largest regional group after Asians, making up 14.9% of all of the international students in the United States.
- In 1996/97, growth in European enrollments slowed further, to 1.4%. This is due to a 1% decline in the number of students coming from Western Europe. What growth there is in European enrollments is due mainly to increased numbers of students coming from Eastern Europe. Since the end of the Cold War, the enrollment rates of the Newly Independent States (NIS) of the former Soviet Union, as well as those of Eastern Europe, have increased dramatically (more than tripling since 1990). This year, 19,471 students came to the United States from Eastern Europe and the NIS.
- After growing relatively slowly in the 1950s and 1960s, the rate of enrollments from Western Europe began to accelerate in the mid-1970s. Last year the number of Western Europeans was 49,326. This year that number dropped to 48,844.
- Most European students in the United States originate from Germany (8,990 students), the United Kingdom (7,357), Russia (6,199) and France (5,692).

2.f

TRENDS IN EUROPEAN ENROLLMENTS SINCE 1957

After Asia, Europe has been one of the most important sources of growth in the U.S. international student population. Current growth is primarily from Eastern Europe.

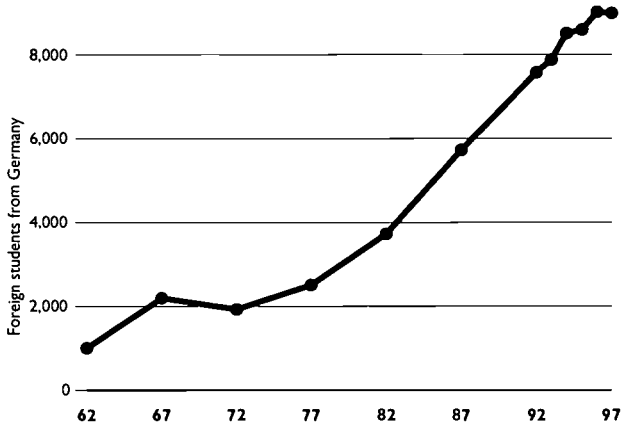


2.g

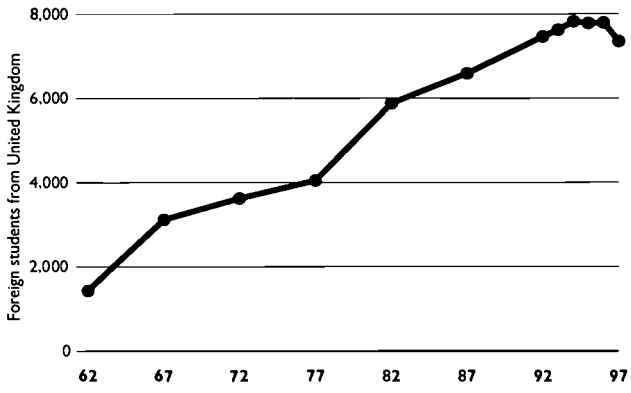
DRIVING THE TRENDS: EUROPE'S LEADING SENDERS

Enrollment growth from Eastern Europe, especially Russia, has been extraordinary. Many Western European countries actually had fewer students studying in the United States.

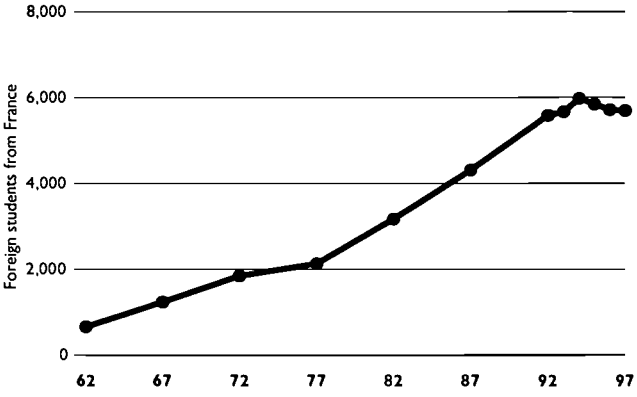
GERMANY



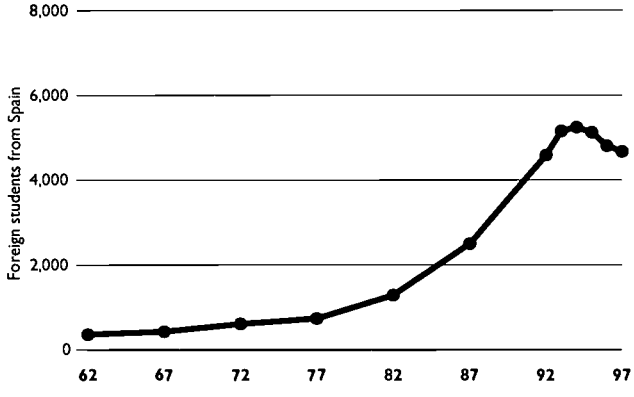
UNITED KINGDOM



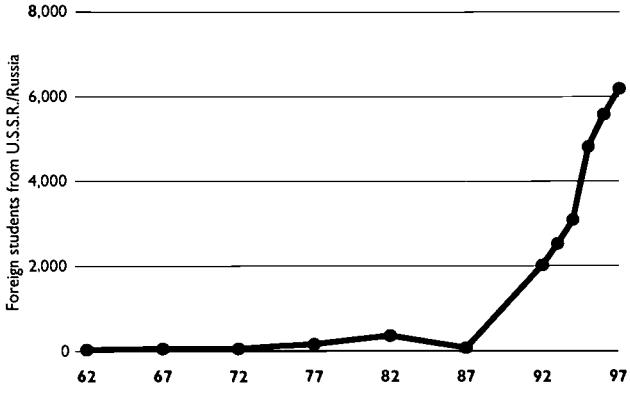
FRANCE



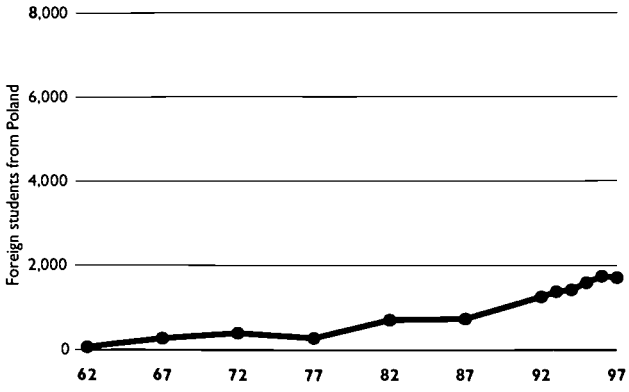
SPAIN



FORMER U.S.S.R./RUSSIA



POLAND

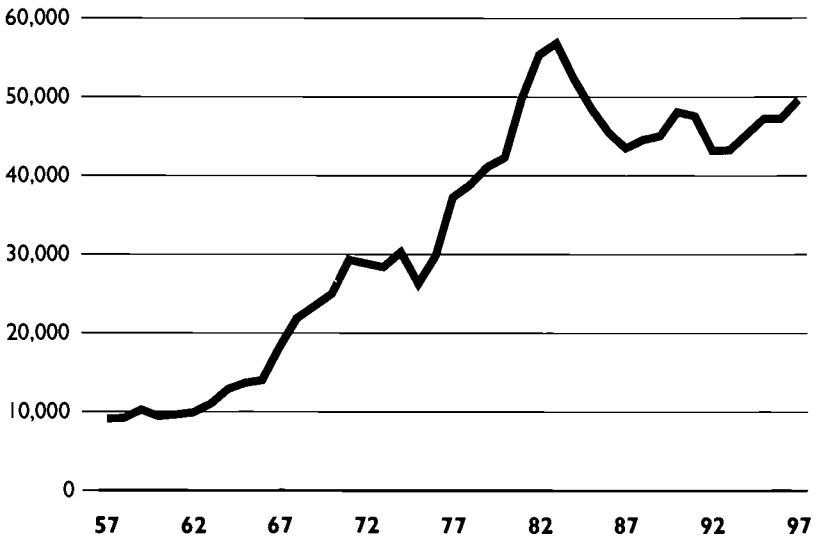


LATIN AMERICA

- Latin American enrollments rose moderately, up 4.9% (to 49,592) from last year's total. Latin Americans make up nearly 11% of the total foreign student population and are the third largest group after Asians and Europeans. In the 1960s and early 1970s Latin Americans were the second largest group, but they were quickly displaced by an influx of Middle Eastern students in the late 1970s and again by Europeans in the 1990s.
- The number of students from Mexico rose by 3.3%. Brazil (up 12.2%), Jamaica (up 14.1%) and the Bahamas (up 23.6%) all had significant increases. Declining enrollments were shown from Peru (down 1.8% to 2,205) and Panama (down 5.9% to 1,286).
- Mexico (8,975 students), Brazil (6,168), Venezuela (4,590), Colombia (3,636) and Jamaica (3,357) are the leading countries of origin for Latin American students coming to the United States.

2.h

TRENDS IN LATIN AMERICAN ENROLLMENTS SINCE 1957
Strong enrollments from Venezuela in the late 1970s spiked the overall Latin American numbers. Since then the number of students from this region have fallen and now remain relatively flat.

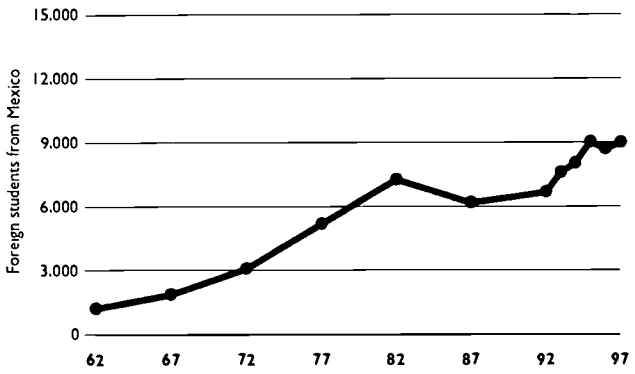


2.i

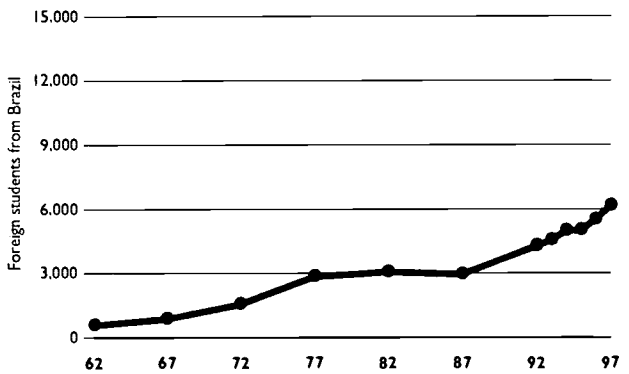
DRIVING THE TRENDS: LATIN AMERICA'S LEADING SENDERS

While the number of students from the leading South American nations has increased, the number of students from Mexico, our NAFTA partner, have not kept pace.

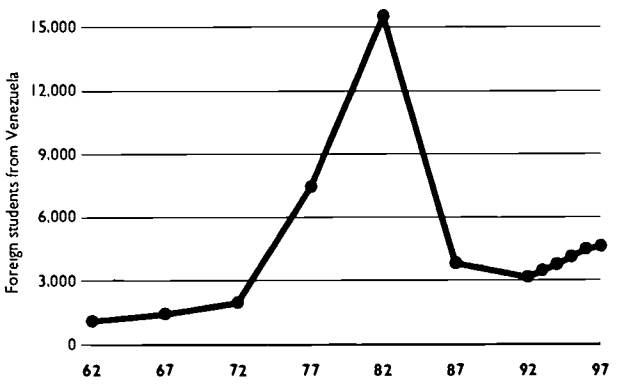
MEXICO



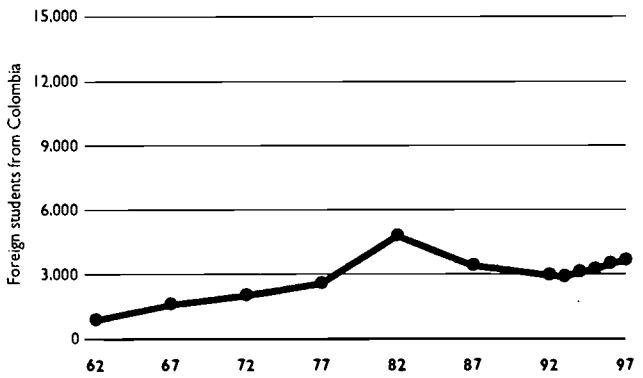
BRAZIL



VENEZUELA



COLOMBIA



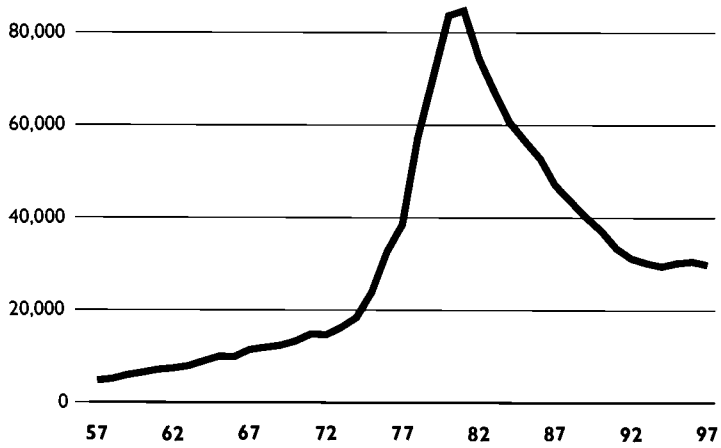
MIDDLE EAST

- This year Middle Eastern student enrollments declined slightly, down 2.4% to 29,841. This follows a two-year upswing which had reversed a decade-long downward trend. Middle Easterners, who make up 6.5% of the international students in the United States, are the fourth largest regional group after Asians, Europeans and Latin Americans.
- Students from Turkey are the fastest growing group of students coming to the United States from this region. Turkish students now number 8,124, an increase of 5.8% from last year. Student enrollments from Saudi Arabia also increased (up 1.7% to 4,264), as did those from Iraq (up 11.3% to 207).
- Between 1975 and 1980 the number of students from the Middle East (predominantly from Iran and other OPEC countries) increased by over 200%, rising from almost 24,000 in 1975 to about 84,000 five years later. Since that time, their numbers have fallen by more than half.
- Historically, enrollment trends in this region have been driven by the percentage of students from Iran. In 1980 there were 51,310 students from Iran studying in the United States (the highest total sent by any country in the history of the Census); today that number has plummeted to 2,129.

2.j

TRENDS IN MIDDLE EASTERN ENROLLMENTS SINCE 1957

Between 1975 and 1980 the number of students from Iran and other OPEC countries increased dramatically, sending overall Middle Eastern numbers up. In recent years flows from Turkey have increased notably.

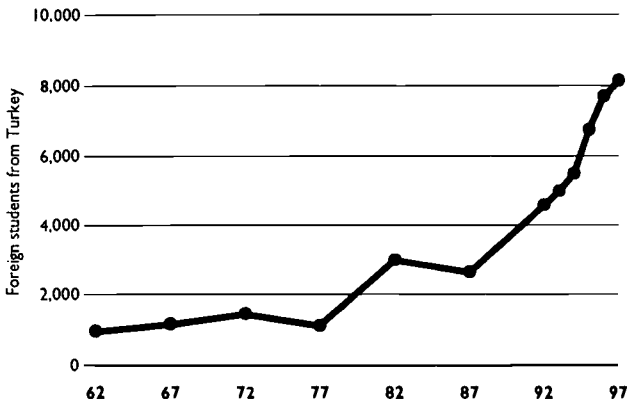


2.k

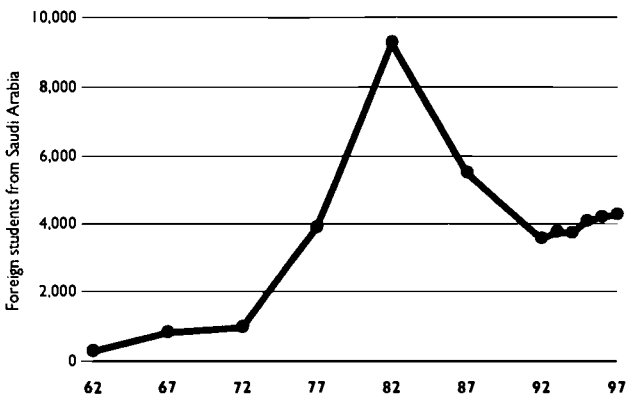
DRIVING THE TRENDS: THE MIDDLE EAST'S LEADING SENDERS

In addition to the quickly rising numbers from Turkey, more students from the United States' Gulf War allies, Saudi Arabia and Kuwait, are also here for study.

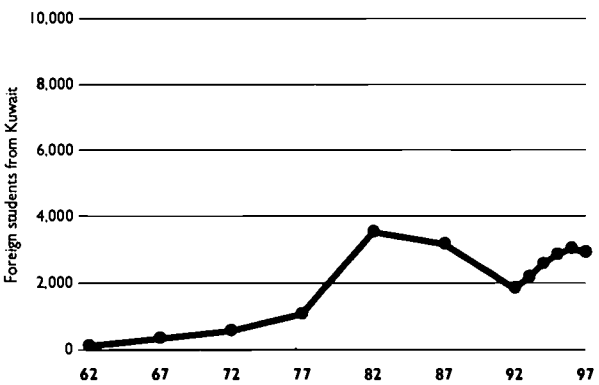
TURKEY



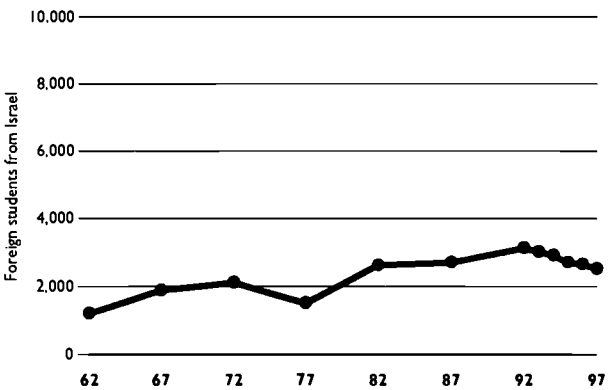
SAUDI ARABIA



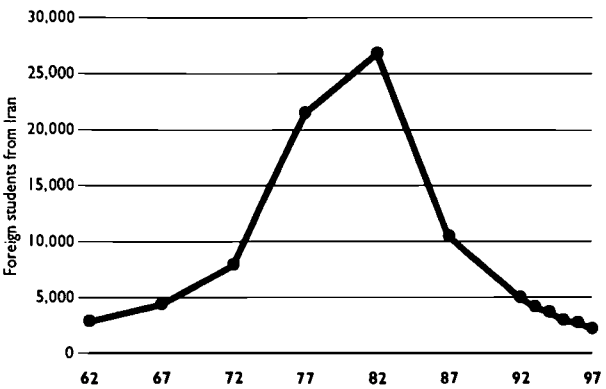
KUWAIT



ISRAEL



IRAN

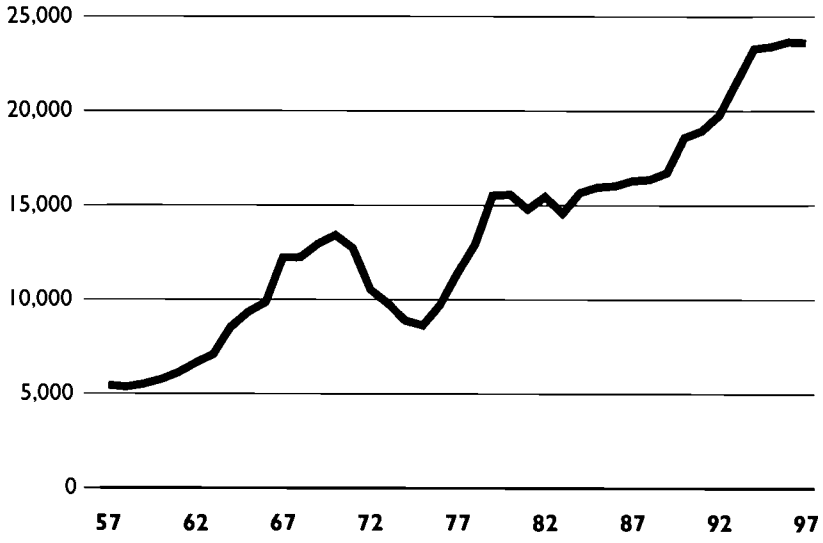


NORTH AMERICA AND OCEANIA

- North American (mainly Canadian) enrollments in the United States have dropped slightly this year. North American students from Canada and Bermuda make up 5.2% of the U.S. international student population, a larger percentage than that of either Africa or Oceania. This year, Canadian enrollments fell 0.1% to 22,984. Canada continues to rank sixth among the nations with the most students in the United States, the only non-Asian nation in the top ten.
- Oceanian students (from Australia, New Zealand, the Federated States of Micronesia and other Pacific Islands) comprise the smallest regional group. Their enrollment in U.S. institutions of higher education totals 3,690 this year, a 12.2% drop from 1995/96. Nearly all nations in the region showed declines in the number of students coming to the United States. Australia is the largest sender in the region, with 2,206 students enrolled on U.S. campuses, down 1.7%.

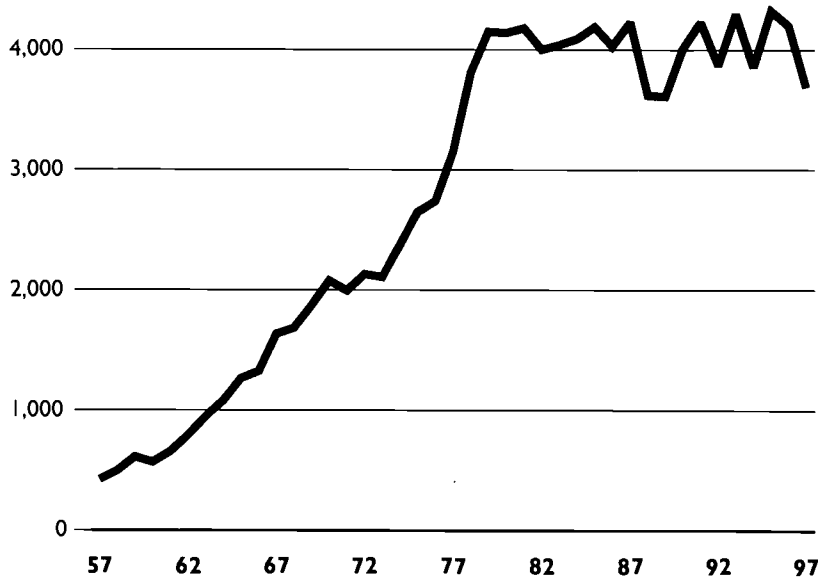
2.l

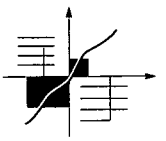
TRENDS IN NORTH AMERICAN ENROLLMENTS SINCE 1957
There have been more considerable ups and downs in the flow of students from North America, overwhelmingly Canadian, since 1955. Following a period of strong growth in the early 1990s, enrollments from this region have plateaued recently.



2.m

TRENDS IN OCEANIAN ENROLLMENTS SINCE 1957
Enrollments from this region peaked in the early 1980s and since then have fluctuated moderately. Two-thirds of enrollments from this region are from Australia.





German-American Education Exchange

HEIKE KUBITZA
IAESTE Network Intern

IN the framework of higher education in Germany, universities and institutions for higher professional training (Fachhochschulen) are called upon to promote international cooperation. The exchange between German and foreign higher education institutions in science and research, as well as in teaching, can hardly be overestimated as an element for excellence and international competitiveness. Therefore, German higher education institutions and exchange organizations must cultivate active relations with their counterparts abroad.

One of the most important organizations of international exchange between Germany and the U.S. is the German Academic Exchange Service (DAAD). In 1996, on a worldwide basis, this organization sponsored 31,932 German and 24,380 foreign students, graduates, scientists, artists and administrators, offering semester- and one-year scholarships, short-term scholarships, academic internships and integrated studies abroad.

There is, however, a large imbalance in academic exchange between the U.S. and Germany: a far greater number of German than American students are interested in bilateral academic exchanges. In 1996, 3,000 German and 1,000 American students and academics participated in various long- and short-term DAAD scholarship programs.

One major reason for American lack of interest is the language barrier. A 1997 study by the American Council of Teachers of Foreign Languages (ACTFL) found that the percentage of American high school students who are studying German as a foreign language decreased from 8.2% to 6.9% in the last ten years. These days, a greater number of Americans prefer to study Spanish as a foreign language. (Currently, two thirds of all language students in the U.S. are studying Spanish.)

The fundamental difference between German and American universities is the owner: German universities are owned and operated by a state (such as Hessen, in central Germany, which operates Frankfurt University). The professors are civil servants and the budget is supplied and supervised by the state.

Continued...

German-American Education Exchange

...Continued

In contrast, American universities, both public and private, are run as individual corporations, with much greater autonomy than their German counterparts.

Attracting potential students is also completely different. American universities must advertise in order to survive. In fact, most institutions employ a complete marketing department. In contrast, German universities don't advertise, since, as state-run institutions, they don't need to. Therefore, most American students are not aware of what German universities have to offer.

Another reason for the lower number of American students in Germany is the different concept of education. While German students do not have to pay tuition fees (just a small administrative fee), American students will usually pay the regular tuition at their home university even if they are studying in Europe. So U.S. students will opt to study in Germany only if there is a substantial payoff.

Another important factor is the different competitive system. There is no credit system at German universities, so American students can actually "lose" time in their education. This can mean that an American engineering student at MIT, for instance, must first learn German, miss a year at MIT, pay the MIT tuition and still not get credit for the year in Germany. It follows that not many students are willing to do this, with the possible exception of language students.

There is, however, an ongoing discussion about the adoption of the American credit system, and another discussion to better align the academic calendars, so that student exchange could become easier.

To raise interest in Germany, the German government, assisted by DAAD, established "Centers for European and German Studies" at Harvard, Georgetown and Berkeley universities in 1990.

Several other efforts have been made by DAAD to increase the number of exchange students, and these have been successful.

In 1995, the number of German students abroad was 30,885, and the number of foreign students in Germany was 23,190. These numbers have

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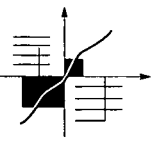

German-American Education Exchange

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increased, while the budget of DAAD has shrunk. This is because long-term scholarships from the former German Democratic Republic (GDR) were taken over by DAAD and retrenched as planned. The unused funds were partly allocated to short-term exchange programs, which grew from 905 German undergraduate and graduate participants in 1995 to 1,276 in 1996. The increase was even steeper for foreign short-timers—from 1,860 in 1995 to 2,769 in 1996.

For scientists, artists and administrators from the Federal Republic, the number of scholarships for project-related science exchanges grew from 2,522 in 1995 to 2,727 in 1996; the number of short-term lectureships of one to three months for German academics grew from 637 in 1995 to 682 in 1996. It is difficult to determine the number of Germans in the U.S. for information or technology exchange. This is because there are large numbers of "unofficial" exchanges in the sciences between research departments, private organizations and companies. This also includes network exchanges and other kinds of science transfer.

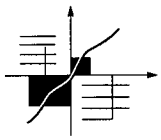
Student exchange is generally seen in Germany as very important for cultural and economic exchange and for international understanding. Companies favor applicants with foreign experience. This is one reason why studying abroad is not only important for language students, but above all for students of economics and law. The German economy is one of the highest ranking in the world, not only because of German executives' training but because of their understanding of foreign cultures. German universities value a broad education which can include a direct exchange of students, internships or other types of working experiences in foreign countries.

In an effort to enhance their global standing, the German institutions of higher education have recently launched new initiatives to introduce an international dimension to classroom and laboratory. The tightly structured, bilingual degree programs now being offered on the undergraduate and graduate levels are meant to not only recruit more foreign students but also to expose more German students to an international experience through their integral study abroad requirement. The peak number of German students abroad (not only those sponsored by DAAD) was about 40,200 in 1993, just 2.3% of all German students.

What does the German high school system do to prepare German students for study or work abroad? One of the chief characteristics of the German secondary education system is the requirement for students to study at least two foreign languages. The education period is also different. In many systems of education around the world, twelve years are required to get a secondary school diploma. In Germany, thirteen years are required. In addition, the German high school system is a science system, in contrast to the professional education system found in the United States.

In summary, much effort is being made to increase academic exchange between Germany and the U.S. In some areas, it has already been successful. In others, there is still much work to do. But with the help of education and student exchange, the nations of the world have a better chance to grow together in peace.

Heike Kubitza, a student at the University of Frankfurt, Frankfurt, Germany, spent the summer at IIE as an IAESTE Network Intern.



3

Foreign Student Enrollments by Country of Origin

COUNTRIES

- Again this year Japan is the leading country of origin for foreign students studying in the United States. Japan's modest rate of increase of less than 2% continues a four year trend of slow growth and is far smaller than that seen over the preceding decade. There was, however, a surge in the number of U.S.-bound students from China (up 7.3% to 42,503) and Thailand (up 10.8% to 13,481). Taiwan, Hong Kong, India, Pakistan, Sri Lanka, Indonesia, Singapore and the Philippines all showed declining enrollments, while numbers from the Republic of Korea increased slightly.

- Enrollment trends from many of the leading countries of Western Europe point downward this year. Germany, the United Kingdom, France, Spain and Greece all had fewer students in the United States. A contrasting trend can be seen in Eastern Europe, where the number of students from Russia has increased sharply, as have enrollments from Bulgaria, Romania, Ukraine and Hungary. The number of students from most other countries in Eastern Europe is up as well, with over 10% growth from many of these countries.

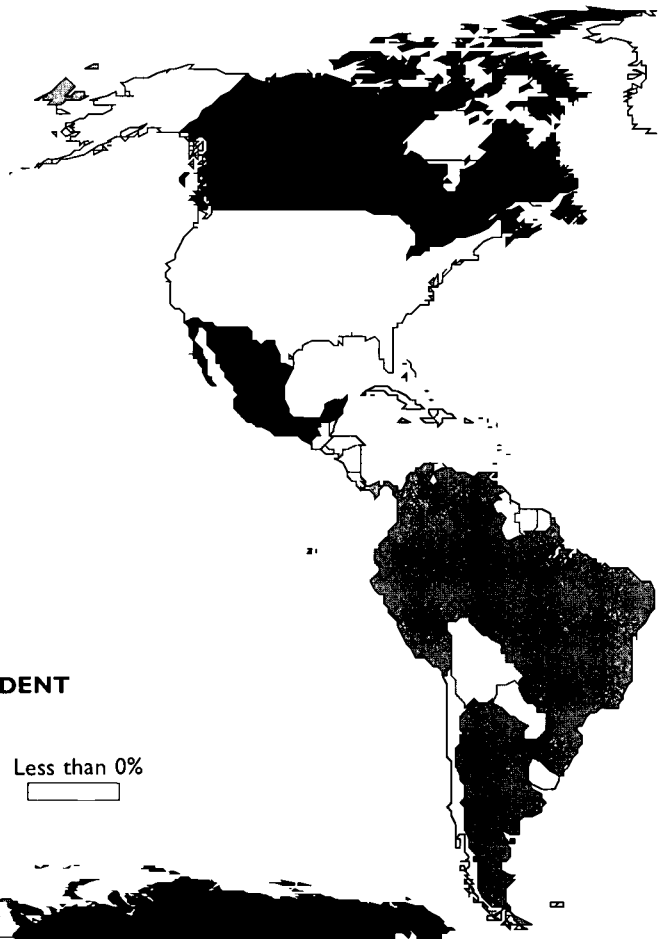
- Enrollments of students from the Middle Eastern countries that send significant numbers dropped, with the exceptions of Turkey and Saudi Arabia. Increases for these countries, however, are much smaller than those seen last year. The total number of students from the Middle East (29,841) is the lowest number seen since 1993/94.

- **Since the signing of the North American Free Trade Agreement (NAFTA), the number of Mexican students studying in the United States has grown. This year enrollments by Mexican students increased by 3.3%, nearly reversing last year's 3.5% decline. While increases in enrollments from South American countries continue, the numbers are not large. Enrollments from Canada, the other signer of NAFTA, have increased 8% since the signing of the agreement; this year, however, enrollments declined slightly. Collectively, Canada and Mexico account for nearly 44% of foreign student enrollments from the Western Hemisphere.**

3.a

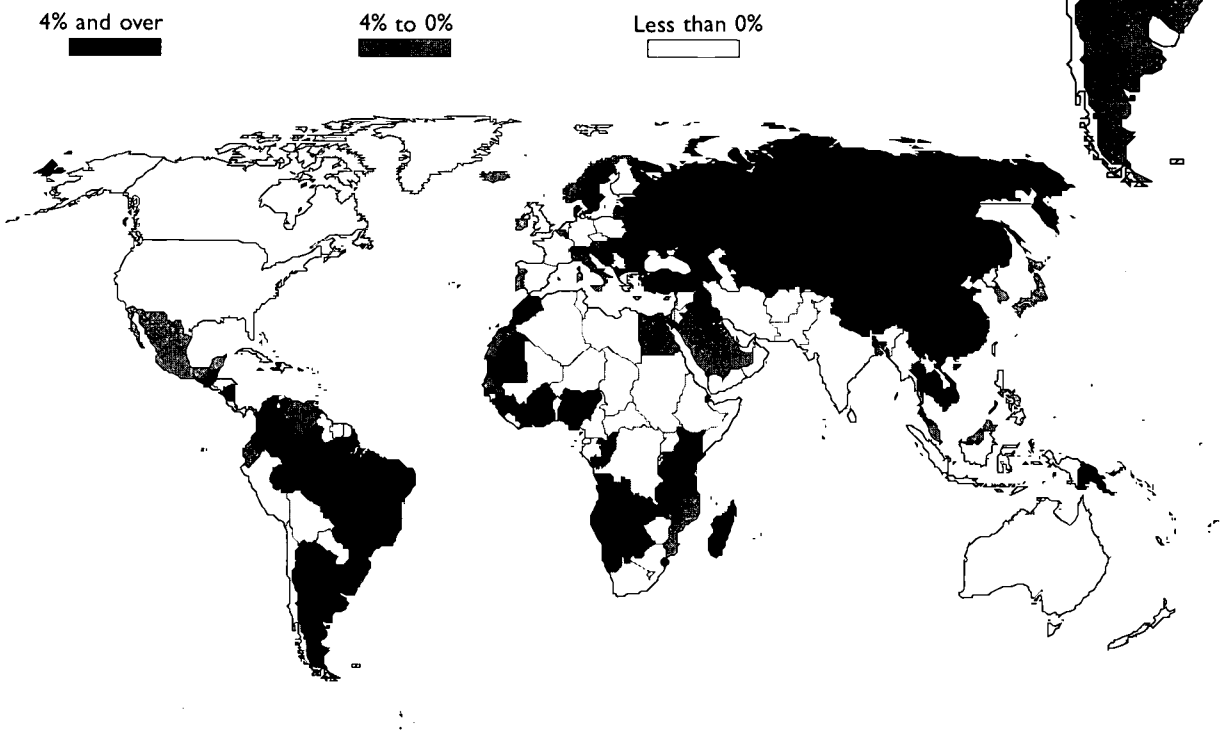
COUNTRIES OF ORIGIN, 1996/97

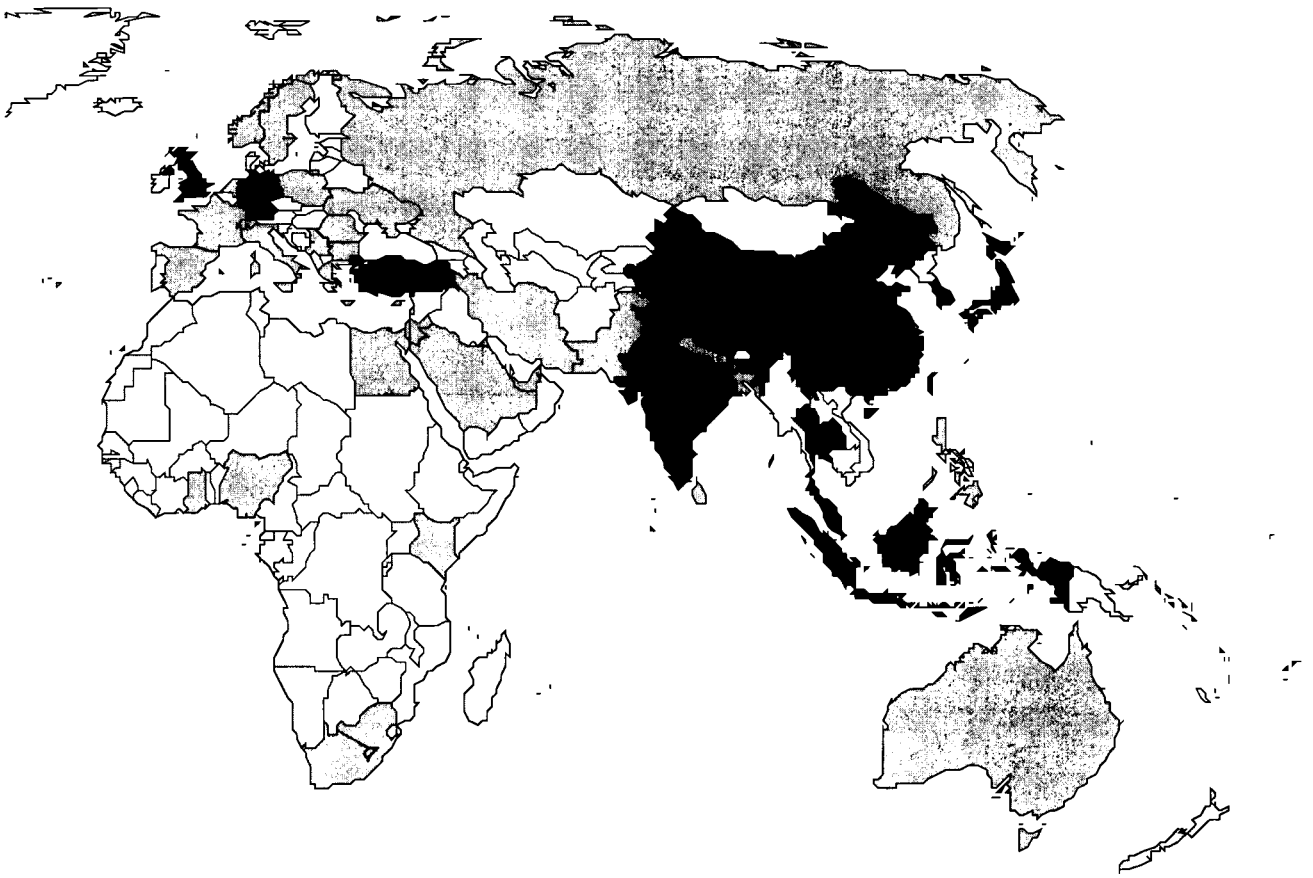
Ten of the top fifteen countries of origin are in Asia. Those which are not – Canada, Mexico, Germany, the United Kingdom and Turkey – are spread throughout the globe.



3.b

PERCENTAGE CHANGE IN FOREIGN STUDENT ENROLLMENT, 1995/96 - 1996/97




46,300-7,000
6,999-1,200
1,199-1

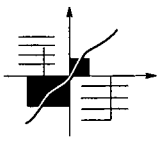
3.0

FOREIGN STUDENT TOTALS BY PLACE OF ORIGIN, 1995/96 & 1996/97

Place of Origin	1995/96	1996/97	% Change
■ AFRICA	**20,844**	**22,078**	**5.9**
Eastern Africa	**7,596**	**8,628**	**13.6**
Kenya	2,934	3,723	26.9
Ethiopia	1,328	1,160	-12.7
Tanzania	757	851	12.4
Zimbabwe	742	730	-1.6
Uganda	580	568	-2.1
Malawi	260	464	78.5
Zambia	354	402	13.6
Mauritius	182	169	-7.1
Madagascar	98	116	18.4
Mozambique	79	80	1.3
Somalia	98	79	-19.4
Comoros	11	75	581.8
Burundi	64	63	-1.6
Eritrea	26	62	138.5
Rwanda	55	51	-7.3
Djibouti	12	14	16.7
Seychelles	13	12	-7.7
Reunion Island	1	1	0.0
East Africa, Unspecified	2	8	300.0
Central Africa	**1,346**	**1,187**	**-11.8**
Cameroon	664	543	-18.2
Zaire/Congo	316	303	-4.1
Angola	144	156	8.3
Gabon	90	67	-25.6
Congo	43	47	9.3
Central African Republic	26	25	-3.8
Chad	34	20	-41.2
Equatorial Guinea	14	14	0.0
São Tome & Principe	13	10	-23.1
Central Africa, Unspecified	2	2	0.0
North Africa	**3,422**	**3,469**	**1.4**
Egypt	1,490	1,540	3.4
Morocco	986	1,053	6.8
Sudan	380	339	-10.8
Tunisia	271	262	-3.3
Algeria	229	217	-5.2
Libya	60	51	-15.0
Canary Islands	6	6	0.0
Western Sahara	0	1	.
Southern Africa	**2,657**	**2,678**	**0.8**
South Africa	1,888	1,851	-2.0
Botswana	495	540	9.1
Swaziland	117	124	6.0
Namibia	85	91	7.1
Lesotho	72	71	-1.4
Southern Africa, Unspec.	0	1	.
Western Africa	**5,818**	**6,115**	**5.1**
Nigeria	2,093	2,184	4.3
Ghana	1,188	1,327	11.7
Senegal	446	461	3.4
Côte d'Ivoire	408	428	4.9
Gambia	298	340	14.1
Liberia	349	321	-8.0
Sierra Leone	296	313	5.7
Mali	191	170	-11.0
Togo	126	133	5.6
Guinea	104	129	24.0
Benin	91	87	-4.4
Niger	72	60	-16.7
Cape Verde	67	48	-28.4
Burkina Faso	33	43	30.3
Mauritania	25	41	64.0
Guinea-Bissau	20	18	-10.0
West Africa, Unspecified	11	12	9.1
Africa, Unspecified	**5**	**1**	**-80.0**
■ ASIA	**259,893**	**260,743**	**0.3**
East Asia	**166,717**	**167,935**	**0.7**
Japan	45,531	46,292	1.7
China	39,613	42,503	7.3
Korea, Republic of	36,231	37,130	2.5
Taiwan	32,702	30,487	-6.8
Hong Kong	12,018	10,942	-9.0
Macao	401	397	-1.0
Mongolia	84	99	17.9
Korea, Dem. People's Rep.	137	85	-38.0
South & Central Asia	**45,401**	**44,256**	**-2.5**
India	31,743	30,641	-3.5
Pakistan	6,427	6,095	-5.2
Bangladesh	3,360	3,462	3.0

3.0 (cont.)

FOREIGN STUDENT TOTALS BY PLACE OF ORIGIN, 1995/96 & 1996/97



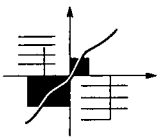
Place of Origin	1995/96	1996/97	% Change
Sri Lanka	1,951	1,816	-6.9
Nepal	1,219	1,400	14.8
Kazakhstan	345	425	23.2
Uzbekistan	134	150	11.9
Kyrgyzstan	41	81	97.6
Afghanistan	84	74	-11.9
Tajikistan	33	42	27.3
Bhutan	29	31	6.9
Turkmenistan	21	29	38.1
Maldives	14	10	-28.6
Southeast Asia	**47,774**	**48,550**	**1.6**
Malaysia	14,015	14,527	3.7
Thailand	12,165	13,481	10.8
Indonesia	12,820	12,461	-2.8
Singapore	4,098	3,727	-9.1
Philippines	3,127	2,796	-10.6
Vietnam	922	975	5.7
Myanmar	392	386	-1.5
Cambodia	93	99	6.5
Laos	121	81	-33.1
Brunei	21	17	-19.0
Asia, Unspecified	**1**	**2**	**100.0**
■ EUROPE	**67,358**	**68,315**	**1.4**
Eastern Europe	**18,032**	**19,471**	**8.0**
Russia	5,589	6,199	10.9
Bulgaria	1,588	1,805	13.7
Poland	1,743	1,707	-2.1
Romania	1,456	1,669	14.6
Former Yugoslavia	1,594	1,419	-11.0
Ukraine	1,215	1,305	7.4
Hungary	908	993	9.4
Czech Republic	735	733	-0.3
Croatia	525	601	14.5
Albania	231	371	60.6
Bosnia & Herzegovina	211	300	42.2
Slovakia	232	281	21.1
Former U.S.S.R.	477	254	-46.8
Lithuania	252	254	0.8
Georgia	195	248	27.2
Latvia	194	228	17.5
Belarus	139	171	23.0
Estonia	168	171	1.8
Slovenia	125	160	28.0
Armenia	123	157	27.6
Macedonia	99	151	52.5
Azerbaijan	102	132	29.4
Moldova	71	98	38.0
Former Czechoslovakia	58	63	8.6
Eastern Europe, Unspecified	2	1	-50.0
Western Europe	**49,326**	**48,844**	**-1.0**
Germany	9,017	8,990	-0.3
United Kingdom	7,799	7,357	-5.7
France	5,710	5,692	-0.3
Spain	4,809	4,673	-2.8
Sweden	3,889	4,096	5.3
Greece	3,365	3,010	-10.5
Italy	2,780	2,839	2.1
Norway	2,246	2,268	1.0
Netherlands	1,926	1,883	-2.2
Switzerland	1,675	1,850	10.4
Denmark	964	1,006	4.4
Austria	956	965	0.9
Ireland	956	958	0.2
Finland	938	909	-3.1
Belgium	868	876	0.9
Portugal	744	770	3.5
Iceland	522	526	0.8
Luxembourg	71	71	0.0
Malta	54	55	1.9
Monaco	14	16	14.3
Andorra	8	13	62.5
Liechtenstein	9	12	33.3
Gibraltar	2	5	150.0
San Marino	2	4	100.0
Vatican City	2	0	-100.0
■ LATIN AMERICA	**47,253**	**49,592**	**4.9**
Caribbean	**10,737**	**11,796**	**9.9**
Jamaica	2,941	3,357	14.1
Trinidad & Tobago	2,087	2,223	6.5
Bahamas	1,666	2,060	23.6
Haiti	733	855	16.6
Dominican Republic	760	757	-0.4
Barbados	508	543	6.9
Netherlands Antilles	403	368	-8.7

3.0 *(cont.)*

FOREIGN STUDENT TOTALS BY PLACE OF ORIGIN, 1995/96 & 1996/97

Place of Origin	1995/96	1996/97	% Change
Antigua	230	239	3.9
Dominica	172	195	13.4
Cayman Islands	191	188	-1.6
Grenada	217	166	-23.5
St. Kitts-Nevis	68	136	100.0
St. Lucia	139	135	-2.9
St. Vincent	111	98	-11.7
Cuba	107	91	-15.0
British Virgin Islands	76	65	-14.5
Aruba	69	60	-13.0
Anguilla	15	26	73.3
Montserrat	25	20	-20.0
Turks & Caicos Islands	13	19	46.2
Windward Islands	7	14	100.0
Martinique	7	8	14.3
Guadeloupe	16	6	-62.5
Leeward Islands	2	4	100.0
Caribbean, Unspecified	174	163	-6.3
Centrl Amer/Mexico	**14,220**	**14,524**	**2.1**
Mexico	8,687	8,975	3.3
Panama	1,367	1,286	-5.9
Honduras	900	895	-0.6
Costa Rica	840	821	-2.3
Guatemala	775	808	4.3
El Salvador	770	719	-6.6
Nicaragua	593	658	11.0
Belize	288	362	25.7
South America	**22,296**	**23,272**	**4.4**
Brazil	5,497	6,168	12.2
Venezuela	4,456	4,590	3.0
Colombia	3,462	3,636	5.0
Argentina	2,168	2,275	4.9
Peru	2,246	2,205	-1.8
Ecuador	1,503	1,516	0.9
Chile	1,016	988	-2.8
Bolivia	776	721	-7.1
Guyana	427	413	-3.3
Uruguay	327	365	11.6
Paraguay	264	260	-1.5
Suriname	135	132	-2.2
Falkland Islands	1	1	0.0
French Guiana	18	1	-94.4
South America, Unspecified	0	1	.

Place of Origin	1995/96	1996/97	% Change
■ MIDDLE EAST	**30,563**	**29,841**	**-2.4**
Turkey	7,678	8,194	6.7
Saudi Arabia	4,191	4,264	1.7
Kuwait	3,035	2,924	-3.7
Israel	2,637	2,507	-4.9
United Arab Emirates	2,233	2,133	-4.5
Iran	2,628	2,129	-19.0
Jordan	2,222	2,094	-5.8
Cyprus	1,819	1,806	-0.7
Lebanon	1,554	1,370	-11.8
Syria	628	541	-13.9
Oman	565	525	-7.1
Bahrain	392	394	0.5
Qatar	390	376	-3.6
Yemen	404	370	-8.4
Iraq	186	207	11.3
Palestinian Authority	.	2	.
Middle East, Unspecified	**1**	**5**	**400.0**
■ NORTH AMERICA	**23,644**	**23,611**	**-0.1**
Canada	23,005	22,984	-0.1
Bermuda	639	627	-1.9
■ OCEANIA	**4,202**	**3,690**	**-12.2**
Australia	2,244	2,206	-1.7
New Zealand	848	766	-9.7
Micronesia, Fed. States of	413	382	-7.5
Fiji	146	78	-46.6
Papua New Guinea	35	51	45.7
Western Samoa	119	51	-57.1
Palau	82	45	-45.1
French Polynesia	90	32	-64.4
Tonga	128	31	-75.8
Marshall Islands	8	17	112.5
Kiribati	23	13	-43.5
Solomon Islands	8	7	-12.5
Tuvalu	19	5	-73.7
Niue	4	2	-50.0
Cook Islands	19	1	-94.7
Nauru	4	1	-75.0
Vanuatu	6	1	-83.3
New Caledonia	4	0	-100.0
Oceania, unspecified	**2**	**1**	**-50.0**
Stateless	**30**	**109**	**263.3**
WORLD TOTAL	**453,787**	**457,984**	**0.9**



Japan's Goal for Foreign Students and the New Short-Term Students' Exchange Program

AKIRA NINOMIYA
Hiroshima University, Japan

THE Japanese Ministry of Education has projected that, by the year 2000, more than 100,000 foreign students will be studying in Japanese institutions of higher education. Since the 1980s, Japan has been expected to be one of the great contributing countries to the world's needs and the international community. With 100,000 foreign students, Japan would be one of the largest receiving countries for students of higher education. This number would total 5% of higher education students in Japan.

But is it achievable? For several years, Japan experienced a rapid increase in foreign student enrollments. In 1992, the country hosted 10,000 foreign students, a number that climbed to 52,000 by 1996. Still, that total was a decrease from the year before, and it is now estimated that foreign enrollments will decrease further in the years to come. This is because the number of students coming to Japan on their own to study Japanese in preparation for university entrance exams has decreased sharply. (These are the so-called reserve foreign students.) If the number of these students decreases, the number of foreign students can be expected to decrease in the following years.

The Ministry of Education is now reviewing their goal, trying to find effective policies to achieve it. Currently, about 90% of foreign students are privately supported, and 10% are supported by scholarships. In order to attract 100,000 students, we have to interest more privately-supported students.

The questions being asked are: Why do foreign students come to Japan to study? Do we meet their needs? Do they find what they are looking for in a study-abroad experience? If the answers were "yes," we would not be faced with a decrease in foreign student enrollments.

There may be several reasons for the decrease: the high cost of living, the difficulty of finding housing, lack of information about Japan available to students investigating study abroad, strict visa controls on working, few opportunities for working, strict entrance requirements to Japanese colleges and universities, and few opportunities for employment at Japanese companies after graduation.

What measures should be taken in order to meet our goal? One is to change the concept of foreign student policy. Foreign student policy is regarded as that of the Official Development Assistance (ODA). The budget for foreign student policy including scholarships has been increased every year. Other expenditures for education, however, have sometimes shown little increase in an era of national deficits. This year, even the ODA budget will be cut by 10% from the previous year. The foreign student policies which heavily depend on the concept of ODA will become critical. We must change our thinking about internationalization through foreign students. Japanese institutions of higher education have traditionally hosted students from developing countries as a kind of overseas assistance program. But the focus must change to student exchange programs.

Continued...

Japan's Goal for Foreign Students and the New Short-term Students' Exchange Program

...Continued

Students all over the world need to go abroad and experience different cultures and languages in order to live in the global age. It is time for Japanese universities to develop programs to attract students from Europe and North America who want to experience living and studying in different cultures. For their future careers, these experiences are necessary. In order to meet these needs, Japanese universities must find a way to enroll these students as regular full-time students.

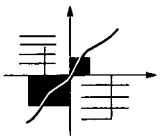
Two years ago a new program of short-term foreign students' exchange started. The Association of International Education Japan (AIEJ) provides scholarships of 80,000-100,000 yen per month to foreigners who study in Japan for a semester or an academic year. These scholarships are given to students recommended by their home universities based on the agreement between the universities.

This short-term students' exchange program is one of the most effective and significant programs in terms of the improvement of students' mobility. At some national universities in Japan, courses taught in English have been developed for short-term foreign students, in order to attract students in fields other than Japanese Studies, who may not be sufficiently fluent in Japanese to study in Japan.

Of course, there must be other efforts made to attract more foreign students. For example it is effective to ask and encourage Japanese NGOs, community associations, local governments and universities themselves to find resources to help these foreign students financially, to promote activities to help the students find work-study programs, and develop a community environment that welcomes foreign students.

The achievement of the goal of 100,000 depends heavily on the success of the short-term students' exchange programs. In many countries the opportunities for higher education have been rapidly expanding, so now is the time for Japanese universities to find ways to internationalize through flexible and short-term types of student exchange. We may develop a variety of courses in English not only for foreign students but also for Japanese students with multi-national faculty members in the future.

Akira Ninomiya is a professor of comparative education at Hiroshima University and director of its new International Center.



3.1

TOP 15 COUNTRIES, SELECTED YEARS 1962/63 - 1996/97
PERCENT OF WORLD TOTAL

1962/63

Locality	Foreign Students	% of Total
Canada	7,004	10.8
India	6,152	9.5
Taiwan	5,526	8.5
Japan	2,934	4.5
Iran	2,824	4.4
Korea, Rep of	2,233	3.5
Philippines	2,025	3.1
Hong Kong	1,695	2.6
Cuba	1,515	2.3
Greece	1,432	2.2
United Kingdom	1,432	2.2
Israel	1,208	1.9
Mexico	1,189	1.8
Egypt	1,136	1.8
Thailand	1,098	1.7
TOTAL		**60.8**

1972/73

Locality	Foreign Students	% of Total
India	10,656	7.3
Hong Kong	10,298	7.0
Canada	9,679	6.6
Taiwan	9,633	6.6
Iran	7,838	5.4
Cuba	6,859	4.7
Thailand	5,759	3.9
Japan	4,653	3.2
Nigeria	4,092	2.8
Korea, Rep of	3,730	2.6
United Kingdom	3,624	2.5
Mexico	3,054	2.1
Pakistan	2,690	1.8
Philippines	2,586	1.8
Israel	2,113	1.4
TOTAL		**59.7**

1982/83

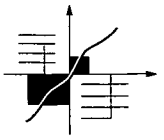
Locality	Foreign Students	% of Total
Iran	26,760	7.9
Taiwan	20,770	6.2
Nigeria	20,710	6.1
Venezuela	15,490	4.6
Malaysia	14,070	4.2
Canada	14,020	4.2
Japan	13,610	4.0
India	12,890	3.8
Korea, Rep of	11,360	3.4
Saudi Arabia	9,250	2.7
Hong Kong	8,610	2.6
Mexico	7,260	2.2
Lebanon	7,110	2.1
Jordan	6,820	2.0
Thailand	6,800	2.0
TOTAL		**57.9**

1996/97

Locality	Foreign Students	% of Total
Japan	46,292	8.4
China	42,503	7.8
Korea, Rep of	37,130	6.8
India	30,641	5.6
Taiwan	30,487	5.6
Canada	22,984	4.2
Malaysia	14,527	2.7
Thailand	12,165	2.7
Indonesia	12,461	2.3
Hong Kong	10,942	2.0
Germany	8,990	1.6
Mexico	8,124	1.6
Turkey	8,124	1.5
United Kingdom	7,357	1.3
Russia	6,199	1.1
TOTAL		**65.7**

4

Undergraduate and Graduate Distributions by Country



ACADEMIC LEVEL

- The percentage of international students studying at the graduate level increased slightly this year, to 42.8%. The largest share of foreign students are enrolled at either the undergraduate level or in practical training, non-degree and intensive English programs. (These latter programs are classified as "other" programs and represent the fastest growing segment. See Section 9.)
- Among Asians, enrollments in U.S. graduate programs climbed by 2,600 students, reversing a two-year decline. Conversely, enrollments in practical training, non-degree and intensive English programs, which had increased substantially over the same period, declined moderately, as did enrollments in undergraduate programs. Contributing to these changes were increasing graduate enrollments from Japan, China, and the Republic of Korea.
- The apparently complex pattern of enrollment by academic level from individual countries is related to the development of the home country's tertiary system of education as well as the perceived usefulness of a U.S. degree. Changes in enrollment from particular countries by academic level over time are noteworthy because international students constitute about 10% of all U.S. graduate enrollments, and up to and beyond three times that proportion in fields such as engineering and the physical sciences.
- Long-term trends suggest that as nations become wealthier and develop strong post-baccalaureate educational infrastructures, a U.S. graduate education may become less attractive for many students than home grown opportunities. Consideration of these trends should be important in the ongoing dialogue over the role of international students in U.S. graduate training programs.

4.0

REGIONS AND LEADING PLACES OF ORIGIN BY ACADEMIC LEVEL, 1996/97

Region/ Locality	% Under-graduate	% Graduate	% Other[1]	Total
AFRICA	**62.4**	**33.4**	**4.2**	**22,078**
North Africa	**47.9**	**46.6**	**5.5**	**3,469**
Egypt	38.6	57.5	3.8	1,540
Morocco	62.4	30.9	6.7	1,053
Sudan	49.4	46.0	4.5	339
Tunisia	40.2	50.2	9.6	262
Algeria	43.0	47.9	9.1	217
Sub-Saharan Africa	**65.1**	**30.9**	**4.0**	**18,608**
Kenya	75.5	22.5	2.0	3,723
Nigeria	64.3	31.3	4.4	2,184
South Africa	54.5	41.5	4.0	1,851
Ghana	58.5	38.5	3.0	1,327
Ethiopia	65.8	30.0	4.3	1,160
ASIA	**44.7**	**47.4**	**7.9**	**260,743**
East Asia	**43.4**	**47.3**	**9.3**	**167,935**
Japan	70.1	18.2	11.8	46,292
China	11.8	83.5	4.7	42,503
Korea, Republic of	44.2	42.8	13.0	37,130
Taiwan	34.5	56.7	8.7	30,487
Hong Kong	73.8	20.0	6.2	10,942
South/Cntrl Asia	**32.4**	**62.8**	**4.8**	**44,256**
India	19.9	74.9	5.2	30,641
Pakistan	59.6	36.3	4.1	6,095
Bangladesh	61.9	36.1	2.0	3,462
Sri Lanka	55.6	40.7	3.7	1,816
Nepal	70.0	26.6	3.4	1,400
Southeast Asia	**60.6**	**33.6**	**5.8**	**48,550**
Malaysia	81.8	14.7	3.5	14,527
Thailand	28.2	62.1	9.7	13,481
Indonesia	69.9	25.4	4.6	12,461
Singapore	68.1	27.8	4.1	3,727
Philippines	52.3	42.3	5.4	2,796
EUROPE	**51.6**	**40.7**	**7.8**	**68,315**
Eastern Europe	**50.3**	**44.1**	**5.6**	**19,471**
Russia	45.6	47.4	7.0	6,199
Bulgaria	54.4	42.5	3.1	1,805
Poland	58.8	32.5	8.8	1,707
Romania	26.8	71.1	2.1	1,669
Former Yugoslavia	60.0	36.9	3.0	1,419
Western Europe	**52.1**	**39.3**	**8.7**	**48,844**
Germany	41.9	48.4	9.8	8,990
United Kingdom	59.3	32.5	8.2	7,357
France	46.1	42.8	11.2	5,692
Spain	53.0	38.1	8.8	4,673
Sweden	82.2	13.8	4.0	4,096
LATIN AMERICA	**61.9**	**31.5**	**6.5**	**49,592**
Caribbean	**80.1**	**17.3**	**2.6**	**11,796**
Jamaica	76.8	21.3	1.9	3,357
Trinidad & Tobago	80.5	17.6	2.0	2,223
Bahamas	87.7	10.7	1.7	2,060
Haiti	85.2	11.6	3.2	855
Dominican Republic	67.3	23.9	8.8	757
Cntrl Am/Mexico	**63.1**	**31.9**	**5.0**	**14,524**
Mexico	56.8	37.3	5.9	8,975
Panama	75.3	20.9	3.8	1,286
Honduras	78.6	17.9	3.4	895
Costa Rica	53.2	41.9	4.9	821
Guatemala	73.8	21.7	4.5	808
South America	**52.0**	**38.5**	**9.5**	**23,272**
Brazil	51.4	39.3	9.4	6,168
Venezuela	52.4	37.1	10.5	4,590
Colombia	47.7	38.2	14.1	3,636
Argentina	38.1	53.3	8.5	2,275
Peru	59.1	34.1	6.8	2,205
MIDDLE EAST	**52.0**	**39.9**	**8.2**	**29,841**
Turkey	35.6	58.2	6.3	8,194
Saudi Arabia	54.4	31.0	14.6	4,264
Kuwait	75.6	15.4	9.0	2,924
Israel	48.1	46.1	5.8	2,507
United Arab Emirates	73.0	9.5	17.5	2,133
NORTH AMERICA	**56.1**	**38.9**	**5.0**	**23,611**
Canada	55.4	39.6	5.1	22,984
Bermuda	83.7	15.0	1.3	627
OCEANIA	**57.3**	**38.1**	**4.7**	**3,690**
Australia	53.1	41.2	5.7	2,206
New Zealand	44.8	50.7	4.5	766
WORLD	**49.7**	**42.8**	**7.4**	**457,984**

[1] Includes intensive English language, nondegree and practical training.

4.a

PROPORTION OF UNDERGRADUATE ENROLLMENT BY COUNTRY OF ORIGIN, 1996/97

Sub-Saharan Africa, Southeast Asia, and the Caribbean sent the highest proportion of undergraduates to the United States.

Greater than 69% Undergrad

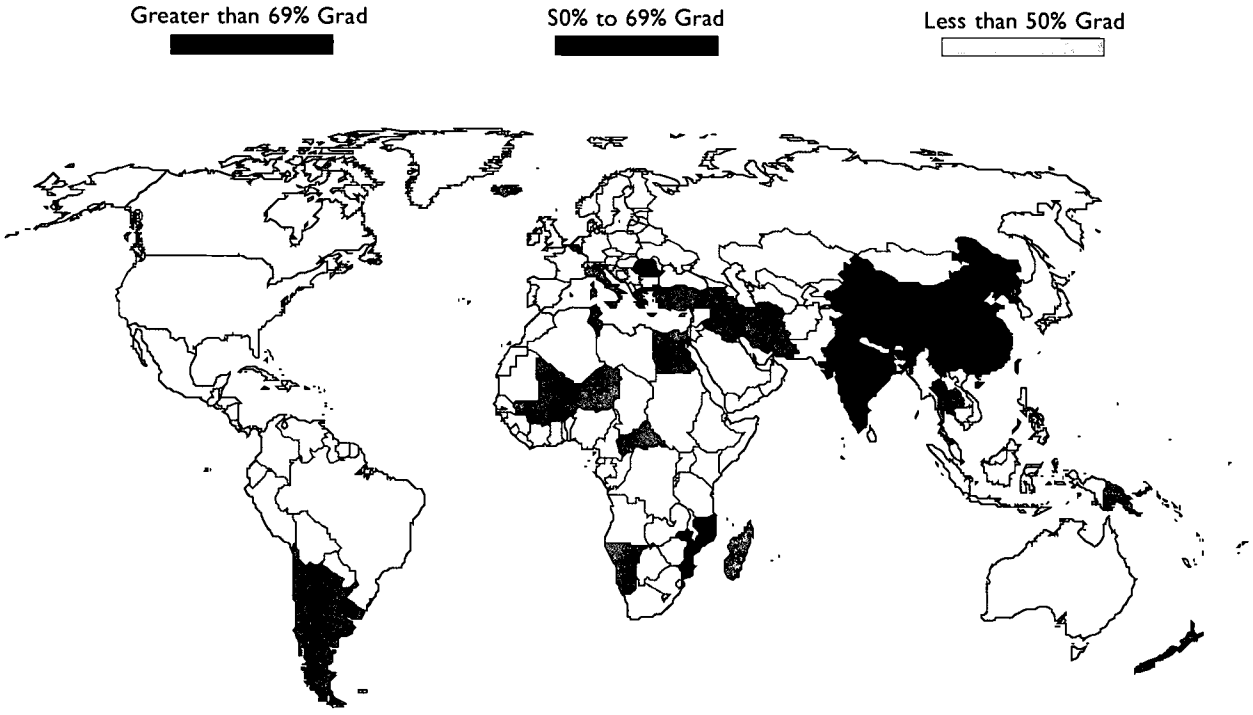
50% to 69% Undergrad

Less than 50% Undergrad

4.b

PROPORTION OF GRADUATE ENROLLMENT BY COUNTRY OF ORIGIN, 1996/97

China, India, Thailand and Turkey send the highest proportion of graduate students to the United States.



African Students

Nearly two-thirds of the African students in the United States are studying at the undergraduate level. This is particularly true of students from Sub-Saharan countries, especially Ethiopia, Nigeria and Kenya, where undergraduates outnumber graduates two to one. Close to 80% of the students from Kenya, the largest African sending country, are enrolled as undergraduates, and only among students from South Africa and Ghana are graduate and undergraduate enrollments fairly evenly matched.

North African students who come to the United States are more likely to be in graduate programs. Among the North African national groups, 51.1% of Tunisians are graduate students, as are 57.5% of Egyptians.

4.1

AFRICAN STUDENTS BY ACADEMIC LEVEL, 1996/97

Place of Origin	Undergraduate	Graduate	Other[1]	Total[2]
AFRICA	**13,784**	**7,368**	**928**	**22,078**
Eastern Africa	**5,943**	**2,404**	**280**	**8,628**
Kenya	2,812	838	73	3,723
Ethiopia	763	348	49	1,160
Tanzania	543	237	71	851
Zimbabwe	491	225	14	730
Uganda	285	273	10	568
Malawi	342	107	15	464
Zambia	286	106	10	402
Mauritius	110	47	12	169
Madagascar	53	61	3	116
Mozambique	25	54	1	80
Somalia	36	38	5	79
Comoros	71	2	1	75
Burundi	30	29	4	63
Eritrea	42	14	6	62
Rwanda	31	17	2	51
Djibouti	9	1	4	14
Seychelles	8	4	0	12
Reunion Island	0	1	0	1
East Africa, Unspecified	6	2	0	8
Central Africa	**746**	**361**	**82**	**1,187**
Cameroon	328	186	29	543
Zaire/Congo	203	86	14	303
Angola	103	24	29	156
Gabon	42	20	5	67
Congo	24	20	4	47
Central African Republic	13	13	0	25
Chad	15	4	1	20
Equatorial Guinea	10	4	0	14
São Tome & Principe	6	4	0	10
Central Africa, Unspecified	2	0	0	2
North Africa	**1,661**	**1,616**	**192**	**3,469**
Egypt	595	886	59	1,540
Morocco	657	326	71	1,053
Sudan	168	156	15	339
Tunisia	105	132	25	262
Algeria	93	104	20	217
Libya	37	12	1	51
Canary Islands	5	0	1	6
Western Sahara	1	0	0	1
Southern Africa	**1,603**	**977**	**96**	**2,678**
South Africa	1,009	768	74	1,851
Botswana	417	107	16	540
Swaziland	95	26	2	124
Namibia	42	47	1	91
Lesotho	40	28	3	71
Southern Africa, Unspec.	0	1	0	1
Western Africa	**3,830**	**2,010**	**278**	**6,115**
Nigeria	1,404	683	96	2,184
Ghana	777	510	40	1,327
Senegal	309	127	25	461
Côte d'Ivoire	262	126	41	428
Gambia	293	43	4	340
Liberia	211	98	13	321
Sierra Leone	219	82	12	313
Mali	72	90	8	170
Togo	82	43	8	133
Guinea	71	44	14	129
Benin	25	58	5	87
Niger	18	40	3	60
Cape Verde	35	13	0	48
Burkina Faso	14	28	1	43
Mauritania	19	17	5	41
Guinea-Bissau	8	7	3	18
West Africa, Unspecified	11	1	0	12
Africa, Unspecified	**1**	**0**	**0**	**1**

[1] The catagory "Other" includes those enrolled in practical training, non-degree and Intensive English programs.
[2] Due to rounding, individual columns may not add up exactly to the total listed.

Asian Students

This year's increase in graduate enrollments is largely attributable to students from Asia. The number of Asian graduate students grew to 47% of the Asian total, or 123,484 students.

The sizable number of students coming from East Asian countries largely determines trends in Asian enrollments. This year graduate level enrollments from China (35,472), the Republic of Korea (15,881) and Japan (8,406) are all up, while those from Taiwan (17,300) declined by nearly 10%.

India, the South Asian country with the most students in the United States, is the home country of most graduate students from this region. Again this year, just under three-quarters of Indian students in the United States are studying at the graduate level. Still, this is a decrease from 1993/94, when almost 80% of Indian students studied at the graduate level. And Indian graduate level totals are down nearly 4% from last year, to 22,962. Students from other countries within South and Central Asia are predominantly undergraduates.

Southeast Asians overall enroll in undergraduate programs (60.3%) more often than in graduate ones. Of the students from the leading sending countries of Southeast Asia, 79.6% of Malaysians and 69.3% of Singaporeans are enrolled as undergraduates. Conversely, 61.3% of Thais are enrolled at the graduate level.

4.2

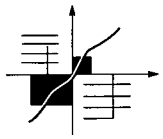
ASIAN STUDENTS BY ACADEMIC LEVEL, 1996/97

Place of Origin	Undergraduate	Graduate	Other	Total
ASIA	**116,654**	**123,484**	**20,605**	**260,743**
East Asia	**72,875**	**79,371**	**15,687**	**167,935**
Japan	32,444	8,406	5,441	46,292
China	5,020	35,472	2,011	42,503
Korea, Republic of	16,427	15,881	4,821	37,130
Taiwan	10,524	17,300	2,663	30,487
Hong Kong	8,077	2,184	682	10,942
Macao	306	45	45	397
Mongolia	52	29	18	99
Korea, Dem. People's Rep	25	54	6	85
South & Central Asia	**14,346**	**27,806**	**2,106**	**44,256**
India	6,083	22,962	1,597	30,641
Pakistan	3,633	2,214	249	6,095
Bangladesh	2,142	1,249	71	3,462
Sri Lanka	1,009	738	68	1,816
Nepal	980	372	48	1,400
Kazakhstan	246	139	40	425
Uzbekistan	75	53	22	150
Kyrgyzstan	48	28	5	81
Afghanistan	63	10	1	74
Tajikistan	23	16	4	42
Bhutan	20	11	0	31
Turkmenistan	16	11	1	29
Maldives	8	3	0	10
Southeast Asia	**29,431**	**16,307**	**2,812**	**48,550**
Malaysia	11,877	2,138	512	14,527
Thailand	3,806	8,373	1,302	13,481
Indonesia	8,716	3,170	575	12,461
Singapore	2,540	1,035	152	3,727
Philippines	1,462	1,183	150	2,796
Vietnam	658	220	97	975
Myanmar	234	142	10	386
Cambodia	61	27	11	99
Laos	65	14	3	81
Brunei	12	5	0	17
Asia, Unspecified	**2**	**0**	**0**	**2**

4.3

EUROPEAN STUDENTS BY ACADEMIC LEVEL, 1996/97

Place of Origin	Under-graduate	Graduate	Other	Total
EUROPE	**35,227**	**27,771**	**5,311**	**68,315**
Eastern Europe	**9,795**	**8,587**	**1,085**	**19,471**
Russia	2,826	2,941	432	6,199
Bulgaria	981	768	56	1,805
Poland	1,004	554	149	1,707
Romania	448	1,187	34	1,669
Former Yugoslavia	852	524	43	1,419
Ukraine	666	556	83	1,305
Hungary	502	421	70	993
Czech Republic	458	236	39	733
Croatia	375	204	22	601
Albania	222	131	18	371
Bosnia & Herzegovina	251	48	1	300
Slovakia	179	74	28	281
Former U.S.S.R.	75	170	8	254
Lithuania	122	108	24	254
Georgia	133	97	17	248
Latvia	113	108	7	228
Belarus	95	67	9	171
Estonia	93	66	11	171
Slovenia	79	68	13	160
Armenia	61	94	2	157
Macedonia	107	40	4	151
Azerbaijan	77	44	10	132
Moldova	51	43	4	98
Former Czechoslovakia	24	38	1	63
Eastern Europe, Unspecified	1	0	0	1
Western Europe	**25,432**	**19,184**	**4,226**	**48,844**
Germany	3,766	4,347	877	8,990
United Kingdom	4,362	2,393	602	7,357
France	2,621	2,436	635	5,692
Spain	2,479	1,782	413	4,673
Sweden	3,367	565	163	4,096
Greece	1,186	1,673	151	3,010
Italy	1,040	1,486	313	2,839
Norway	1,605	523	139	2,268
Netherlands	962	744	177	1,883
Switzerland	992	633	225	1,850
Denmark	515	367	124	1,006
Austria	462	394	109	965
Ireland	523	397	39	958
Finland	537	259	113	909
Belgium	346	456	74	876
Portugal	383	353	34	770
Iceland	184	315	27	526
Luxembourg	40	24	6	71
Malta	32	20	3	55
Monaco	7	7	1	16
Andorra	8	4	1	13
Liechtenstein	8	4	0	12
Gibraltar	4	1	0	5
San Marino	3	1	0	4



European Students

As a whole, European students are well represented at both the undergraduate (51.8%) and graduate (40.8%) levels in the United States. A relatively high proportion (7.8%) study at the "other" level, which includes practical training, non-degree and intensive English programs.

A majority of the students from Eastern Europe are enrolled at the undergraduate level. This is particularly true of students from the former Yugoslavia, over 60% of whom are enrolled as undergraduates. Students from Bulgaria (54.6%) and Poland (58.8%) are also predominantly undergraduates. Russian graduate students outnumber undergraduates, but only slightly. The Eastern European nation with the highest proportion of students enrolled in U.S. graduate schools is Romania with 71.6%. While both graduate and undergraduate enrollments from this region are increasing, their proportions remain stable.

Among the leading Western European countries, the proportion of graduate students is highest among the Germans (48.4%), while students from Spain and the United Kingdom are predominantly undergraduates (50.2% and 59.6% respectively). France also has a higher proportion of undergraduates (45.9%) than graduates (42.7%).

Latin American Students

Like those from Africa, nearly two-thirds (62%) of the students from Latin America who study in the United States are undergraduates.

Students from the Caribbean are overwhelmingly undergraduate, with 76.8% enrolled in associate or bachelor's degree programs. Among Jamaicans (the most numerous group) the figure is 71%, and for several other national groups within the Caribbean, the percentage is considerably higher.

Mexico, which has more students in the United States than any other Latin American country, has a relatively high proportion of students in graduate programs (38%). Among Central American countries, only Costa Rica has a higher share (42.1%). Conversely, 77.2% of the students from Panama are undergraduates, as are a large majority of the students from Honduras (78.2%) and Guatemala (75.%).

Compared to other subregions of Latin America, the proportion of South Americans coming to the United States as undergraduates is relatively small (53.2%). The proportions of Argentineans (38.7%) and Brazilians (52.8%) at this level are particularly low; Peru's share of undergraduates is the highest at 60.8%.

4.4

LATIN AMERICAN STUDENTS BY ACADEMIC LEVEL, 1996/97

Place of Origin	Under-graduate	Graduate	Other	Total
LATIN AMERICA	**30,720**	**15,639**	**3,236**	**49,592**
Caribbean	**9,453**	**2,039**	**305**	**11,796**
Jamaica	2,580	714	64	3,357
Trinidad & Tobago	1,789	390	43	2,223
Bahamas	1,806	220	34	2,060
Haiti	728	99	28	855
Dominican Republic	509	181	67	757
Barbados	405	125	13	543
Netherlands Antilles	278	82	9	368
Antigua	198	30	11	239
Dominica	176	18	2	195
Cayman Islands	177	11	0	188
Grenada	133	28	4	166
St. Kitts-Nevis	105	29	3	136
St. Lucia	100	28	6	135
St. Vincent	86	10	2	98
Cuba	64	12	15	91
British Virgin Islands	48	16	1	65
Aruba	53	6	1	60
Anguilla	24	2	0	26
Montserrat	12	7	1	20
Turks & Caicos Islands	13	6	0	19
Windward Islands	12	2	0	14
Martinique	8	0	0	8
Guadeloupe	6	0	0	6
Leeward Islands	3	1	0	4
Caribbean, Unspecified	140	22	1	163
Cntrl America/Mexico	**9,164**	**4,632**	**731**	**14,524**
Mexico	5,096	3,351	528	8,975
Panama	969	269	49	1,286
Honduras	704	161	31	895
Costa Rica	437	344	41	821
Guatemala	597	175	36	808
El Salvador	584	113	22	719
Nicaragua	502	140	16	658
Belize	275	79	8	362
South America	**12,103**	**8,968**	**2,200**	**23,272**
Brazil	3,168	2,422	578	6,168
Venezuela	2,405	1,705	480	4,590
Colombia	1,734	1,391	511	3,636
Argentina	867	1,214	194	2,275
Peru	1,304	751	150	2,205
Ecuador	1,075	342	99	1,516
Chile	333	569	86	988
Bolivia	500	178	43	721
Guyana	306	101	6	413
Uruguay	155	189	20	365
Paraguay	162	70	28	260
Suriname	91	36	5	132
Falkland Islands	1	0	0	1
French Guiana	1	0	0	1
South America, Unspecified	1	0	0	1

Middle Eastern Students

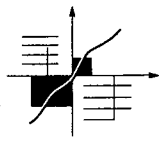
Middle Easterners who come to the United States for study are more often enrolled at the undergraduate (52%) than the graduate (39.9%) level. Exceptions are students from Iran, Jordan and Iraq, more of whom are enrolled at the graduate than the undergraduate level.

Turkey, which has more students in the United States than does any other Middle Eastern country, also has the highest proportion of graduate students here (58.3%).

Students from Kuwait are most often enrolled as undergraduates: close to 75% are in associate or bachelor's degree programs. The majority of Saudi Arabian students are also undergraduates (53.9%), and a comparatively high percentage (14.5%) are in the "Other" category, which for Saudi Arabian students is most often intensive English language training. Israeli students are fairly evenly divided between undergraduate and graduate programs.

4.5

MIDDLE EASTERN STUDENTS BY ACADEMIC LEVEL, 1996/97



Place of Origin	Undergraduate	Graduate	Other	Total
MIDDLE EAST	**15,451**	**11,949**	**2,449**	**29,841**
Turkey	2,917	4,769	516	8,194
Saudi Arabia	2,319	1,321	624	4,264
Kuwait	2,211	451	262	2,924
Israel	1,206	1,155	146	2,507
United Arab Emirates	1,556	203	373	2,133
Iran	832	1,171	126	2,129
Jordan	980	1,027	87	2,094
Cyprus	1,203	539	64	1,806
Lebanon	671	622	77	1,370
Syria	266	244	31	541
Oman	413	78	34	525
Bahrain	297	75	22	394
Qatar	245	79	52	376
Yemen	253	103	13	370
Iraq	83	100	24	207
Palestinian Authority	1	1	0	2
Middle East, Unspecified	4	1	0	5

North American Students

Over one-half of the North American students (predominantly Canadian) who come to the United States are enrolled as undergraduate students, with one-third coming as graduate students.

4.6

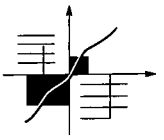
NORTH AMERICAN STUDENTS BY ACADEMIC LEVEL, 1996/97

Place of Origin	Under-graduate	Graduate	Other	Total
NORTH AMERICA	**13,250**	**9,191**	**1,171**	**23,611**
Canada	12,725	9,097	1,163	22,984
Bermuda	525	94	8	627

4.7

OCEANIAN STUDENTS BY ACADEMIC LEVEL, 1996/97

Place of Origin	Under-graduate	Graduate	Other	Total
OCEANIA	**2,113**	**1,405**	**174**	**3,690**
Australia	1,171	909	127	2,206
New Zealand	343	389	34	766
Micronesia, Fed. States of	357	23	2	382
Fiji	55	22	1	78
Papua New Guinea	23	26	3	51
Western Samoa	41	9	1	51
Palau	42	3	0	45
French Polynesia	24	5	3	32
Tonga	22	8	1	31
Marshall Islands	17	0	0	17
Kiribati	8	5	0	13
Solomon Islands	2	4	1	7
Tuvalu	3	1	1	5
Niue	1	1	0	2
Cook Islands	1	0	0	1
Nauru	1	0	0	1
Vanuatu	1	0	0	1
Oceania, Unspecified	1	0	0	1
Stateless	**58**	**41**	**10**	**109**
WORLD TOTAL	**227,305**	**196,795**	**33,880**	**457,984**



Oceanian Students

Oceanian students (students from Australia, New Zealand and the Pacific Islands) are more often undergraduates (52.4%) than graduates (37.8%).

Australians, the most numerous group of Oceanians, are mostly undergraduates (52.9%), while students from New Zealand are more likely to be graduates (51%).

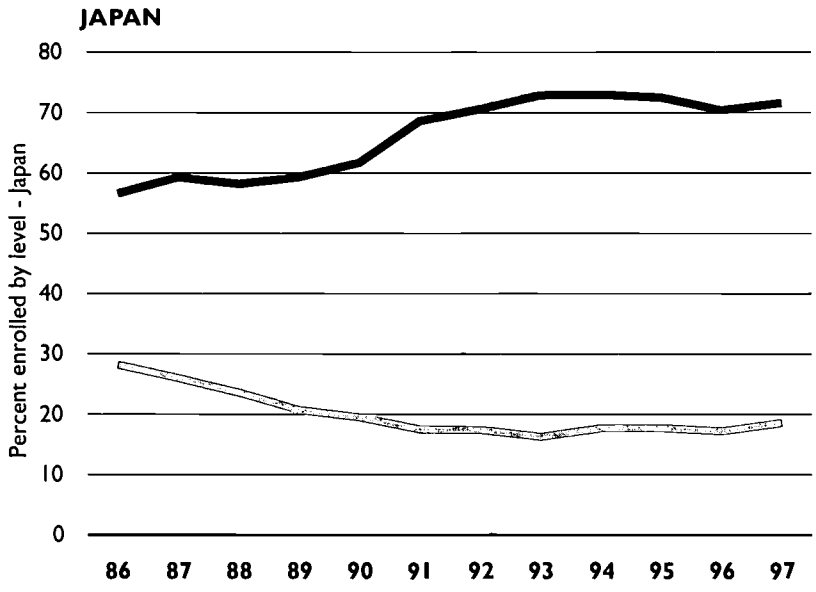
Enrollment Shifts Over Time

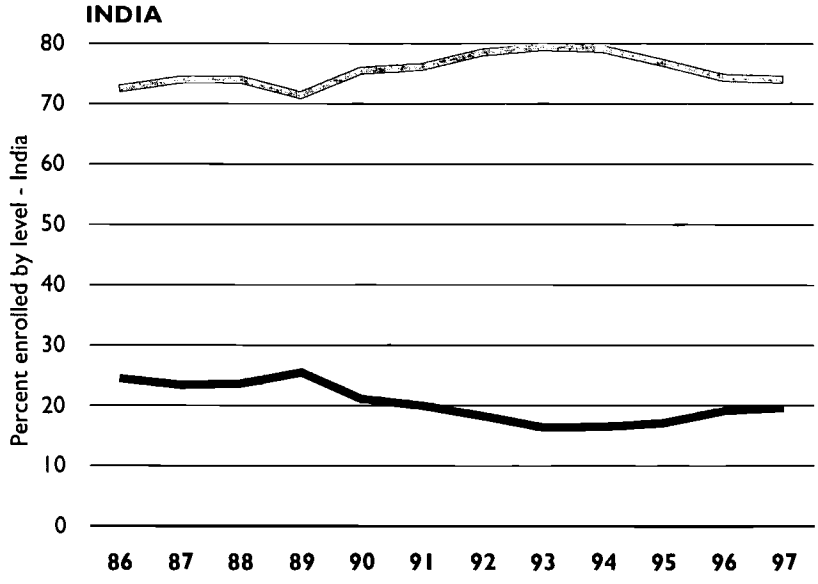
After a ten-year decline in the relative proportion of graduate students from many of the leading home places for foreign students bound for the United States, this year saw a slight increase. The enrollment proportions shown here (Figure 4.c) are for the six leading places of origin for foreign students in the United States. Three major Asian senders (Korea, Thailand, Taiwan) have changed their enrollment mix in significant ways. Most of these places currently have a smaller proportion of graduate students studying in the United States than they did ten years ago and others have maintained their graduate enrollments.

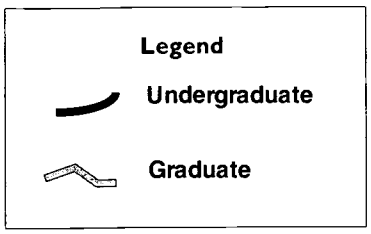
4.c

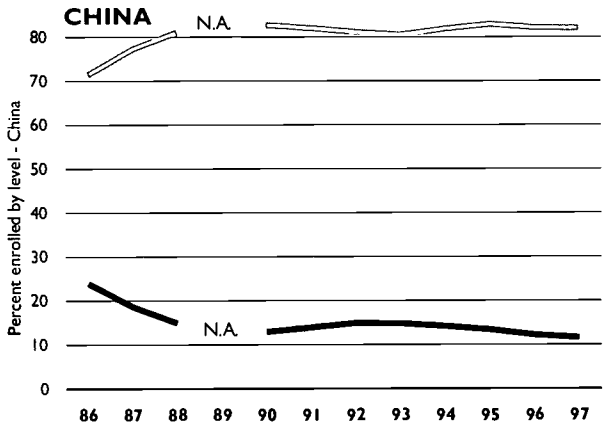
ACADEMIC LEVEL, PROPORTIONS OVER TIME, 1985/86 - 1996/97

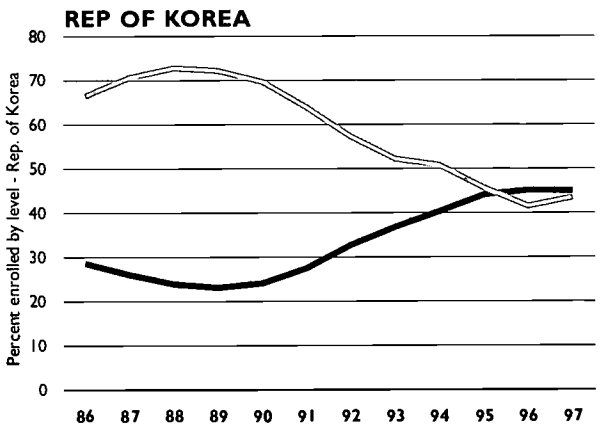
How the enrollment mix by academic level has changed over time for the leading places of origin of foreign students in the United States.

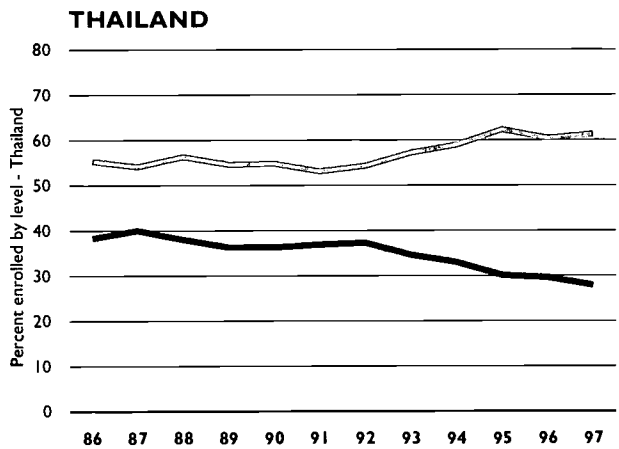


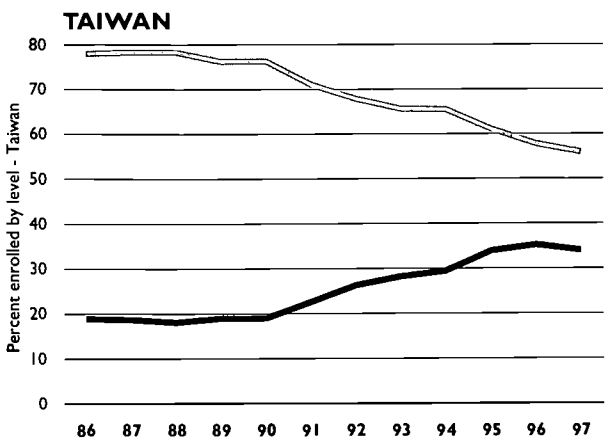



Legend
Undergraduate
Graduate


CHINA
N.A.
N.A.
Percent enrolled by level - China
80
70
60
50
40
30
20
10
0
86 87 88 89 90 91 92 93 94 95 96 97


REP OF KOREA
Percent enrolled by level - Rep. of Korea
80
70
60
50
40
30
20
10
0
86 87 88 89 90 91 92 93 94 95 96 97


THAILAND
Percent enrolled by level - Thailand
80
70
60
50
40
30
20
10
0
86 87 88 89 90 91 92 93 94 95 96 97


TAIWAN
Percent enrolled by level - Taiwan
80
70
60
50
40
30
20
10
0
86 87 88 89 90 91 92 93 94 95 96 97

Continuing Higher Education Programs Reach Out to Meet Worldwide Demand

K. Cyrus Homayounpour
University Continuing Education Association

Today's global economy is creating new demands for continuing education programs that prepare American businesses, foreign governments and individuals to function across borders. Data gathered by the University Continuing Education Association (UCEA) show that U.S. colleges and universities are responding to increased demand for international educational opportunities with a broad range of programs.

Travel/study abroad programs, foreign language and ESL (English as a Second Language) instruction and ESL teacher training constitute the major growth areas in international continuing education for both public and private colleges and universities. Offerings in these program areas include both credit and non-credit courses.

For public institutions, travel/study abroad programs involve the most institutions, followed by foreign language instruction and ESL training. By contrast, foreign language instruction tends to be the primary focus of private institutions, followed by ESL training and travel/study abroad programs. UCEA member institutions report that international enrollments in continuing education-sponsored, post-baccalaureate professional certificate programs continue to climb even as the enrollment of international students in U.S. graduate programs decreased for the second year in a row in 1995-96. Such certificate programs are seen as an attractive alternative to degree programs by many international professionals seeking U.S. university credentials. Certificate programs require a shorter time commitment, tend to be less costly and teach cutting-edge professional practice in popular fields such as management, public health and multimedia studies.

The benefits of U.S. college and university international programs are many, for both participants from the U.S. and around the world. Such programs expose current and future leaders to the values, beliefs and subtleties of other cultures. From this awareness and interaction more informed and effective relationships are emerging. Following is a sampling of some successful programs:

■ Though Congress has cut its funding severely, the U.S. Agency for International Development (USAID) remains a contractor of university training. A pilot project funded by USAID in 1996 and developed by the U.S. Peace Corps, Pennsylvania State University and the University of Minnesota enabled 80 Russian students to learn how the West conducts business. The Peace Corps identified a critical need for educational programming in business, government and public policy areas. Penn State and the University of Minnesota were selected because of the wide variety of courses they offer via distance education and their ability to send and receive lessons through e-mail.

Russian academic institutions from Volgograd and Saratov cooperated, and libraries in Gorky and Saratov established American-Russian centers equipped with computers, U.S. research resources and periodicals for the students. Print materials, videotapes and computers were used with the Peace Corps providing tutoring, on-site computer support and proctoring of exams.

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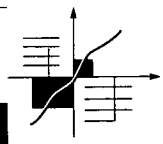


Continuing Higher Education Programs Reach Out to Meet Worldwide Demand

...Continued

■ University of Maryland University College offers a Master's of International Management designed for corporate managers. The program is available in an executive weekend format or globally on-line. Nine undergraduate specializations and three other master's degrees are also offered globally on-line: computer systems management, technology management and general management. UMUC also delivers a joint degree program in Business Management and Economic Relations with two universities in Asian Russia: Irkutsk and Far Eastern State. The program has received funding from the U.S. Information Agency. UMUC faculty teach classes in Siberia, allowing students to complete baccalaureate degrees locally. Russian students come to the United States and spend five weeks in internships with American businesses. UMUC also cooperates with the Department of Defense to offer its degree programs and courses to U.S. military personnel in 26 countries overseas, including those in areas of conflict—most recently the Persian Gulf and Bosnia.

■ U.S. Information Agency funding also brought students and faculty of Vyatka State Technical University to Blacksburg, Virginia in 1996. Virginia Tech custom-designed an intensive one-year program to help Russia better utilize its vast forest resources, entitled "Wood's Impact on the Rejuvenation of Russian Economy and Life." The two universities are also developing a student exchange program.

■ In 1997, a group from China visited the University of California at Berkeley's campus and was allowed to videotape courses on the U.S. legal system, information management, city and regional planning and finance. Edited tapes (with subtitles and dubbed in Chinese) will air on Chinese public television to be viewed by students all over the country.

■ In 1996, the College of Extended Studies at San Diego State University signed an eight-year contractual agreement with the Chinese government to provide English language testing and curricula to all hotel workers in China who use English in their jobs. The General Test of English Language Proficiency (GTELP) that will be offered is currently being used by governments and businesses in Mexico, Japan, Korea, Argentina, and Taiwan. It is estimated that 60,000 Chinese workers will take the GTELP in 1998, but that number will increase eventually to some 200,000 workers annually. SDSU has also agreed to develop accompanying curricula to aid those who do not pass the test on the first try. The test itself has been amended to reflect the hotel industry in China, and is being pilot-tested throughout the country in 1997, with implementation scheduled for 1998.

■ In Washington, D.C., American University recently was a partner with the Korea Economic Research Institution in hosting a group of high-level Korean economists for one week, and providing training in regulatory economics. The program included site visits to the World Bank, Import-Export Bank and the International Monetary Fund.

■ USAID funding recently brought 17 indigenous rural educators from Bolivia to the campus of University of Oklahoma for a specialized teacher training program. OU's College of Education and Center for the Study of Small/Rural Schools worked together to develop the curriculum.

Continued...

Continuing Higher Education Programs Reach Out to Meet Worldwide Demand

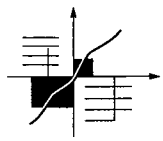
...Continued

■ A group of Croatian government officials recently toured Missouri for 29 days to learn from the University of Missouri-Columbia and Lincoln University ways to rebuild their war-torn country. The universities arranged for the Croatians to meet with business leaders, extension specialists and faculty as well as state, county and local government officials to study democracy and economic development. The Croatians learned how Missouri had recovered from tornadoes and flooding and discussed ways that Croatia might boost tourism and rebuild itself as a major transportation hub for shipping on the Adriatic Sea. The program was part of USAID's Partners for International Education & Training that provides training to central and eastern Europeans who can help their countries through political, economic and social transitions.

■ Korea Mobile Telecom is sending up to 800 of its employees to the University of Denver's University College for immersion training in English language and culture, with two months spent visiting relevant industries and studying telecommunication skills, conflict resolution and global business strategies. KMT has also contracted with the University of Colorado at Boulder to develop a program for more than 300 of its senior executives which emphasizes high-level leadership strategies and "visioning."

■ The University of Kansas Division of Continuing Education works with its School of Engineering's Department of Aerospace to offer 3-5 day courses at locations around the world. The University of Kansas finds in-country partners to host the seminars and markets them through a catalog that is published semi-annually and circulated to aerospace engineers worldwide. Courses recently were held in England, Canada and Australia.

K. Cyrus Homayounpour is Director of International Relations of the University Continuing Education Association. The association represents some 425 higher-education institutions and exists to support, promote and enhance continuous learning in the service of society. It is based in Washington, D.C.



5

Field of Study and Sex by Nationality

PROFILES

This section presents information on foreign students' fields of study and sex by nationality. Since 1979, IIE has collected individual student data in alternate years. Previously, this data was published in a separate report, *Profiles*, but since the 1995/96 edition, it has been included in *Open Doors*. This data was collected during the 1995/96 academic year, a year earlier than the data in other sections of this report.

Unlike the *Open Doors* census, which is based on aggregate totals by category (nationality, field of study, etc.), the *Profiles* data is collected on an individual basis from reporting colleges and universities. Since it requires an enormous effort to collect and report individual student data, the response rate to this biennial survey is considerably lower than that of *Open Doors*, which this year is 95%. Approximately 61% of the institutions with foreign students in 1995/96 provided detailed individual data on 232,617 foreign students, or about 50.7% of the total foreign student population. Thus the following analysis is based on a sample of the entire foreign student population. There is strong evidence, however, that this sample is representative of the whole population. The interested reader may refer to Section 13 for an analysis of this issue.

Data which allows for a detailed description of academic field by nationality is especially interesting to policy makers and analysts who are concerned with the training needs and capabilities of established and emerging economies. In the postmodern economy, the relationship between a nation's educational infrastructure and its ability to be competitive in the global marketplace is strong. To complete the picture of a nation's stock of skilled individuals, both domestic and international sources must be included. The analysis in this section highlights the relationship between student flows and economic development. Other approaches to understanding this data are also useful. A complete set of nationality by field of study data is available on the disk enclosed in this report.

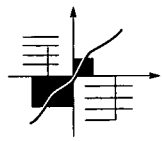
This chapter is divided into three parts. The first examines the field of study choices by international students in the United States by world region, subregion and leading countries for 13 separate academic areas. Overall enrollment proportions are presented first, followed by an analysis by academic level (graduate and undergraduate).

5.0

FIELD OF STUDY OF ALL FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

PERCENTAGES

World Region/ Country	Agriculture	Business	Education	Engineering	Fine & App Arts	Health Professions	Humanities
AFRICA	**4.1**	**20.3**	**3.7**	**14.2**	**2.4**	**7.7**	**5.5**
Eastern Africa	**4.5**	**22.9**	**3.1**	**10.1**	**2.3**	**7.8**	**5.6**
Kenya	3.8	24.4	3.8	7.7	2.7	8.3	6.3
Ethiopia	5.5	16.9	1.2	13.1	1.4	9.3	1.8
Central Africa	**5.2**	**19.9**	**2.8**	**14.6**	**1.5**	**11.2**	**4.6**
Cameroon	6.6	12.8	3.0	15.4	0.3	15.4	3.9
North Africa	**2.6**	**18.4**	**1.7**	**31.0**	**2.6**	**4.2**	**3.2**
Egypt	2.0	11.9	1.5	40.1	3.7	6.5	2.0
Morocco	3.0	30.1	1.0	21.2	1.4	1.4	5.2
Southern Africa	**4.7**	**16.9**	**8.5**	**8.2**	**4.1**	**6.0**	**5.9**
South Africa	1.8	17.9	7.9	8.3	4.3	4.6	6.9
West Africa	**3.9**	**19.6**	**3.9**	**11.8**	**2.0**	**9.5**	**6.8**
Nigeria	1.9	18.0	4.0	11.4	2.5	13.4	7.7
Ghana	2.7	15.5	4.3	13.5	3.1	9.5	9.4
ASIA	**2.0**	**21.7**	**2.2**	**18.3**	**6.3**	**3.3**	**3.1**
East Asia	**1.9**	**18.5**	**2.8**	**13.2**	**8.1**	**3.1**	**3.9**
Japan	0.9	17.9	2.8	3.4	9.2	1.6	6.1
China	3.7	11.8	2.0	22.4	2.2	4.8	1.4
Korea, Rep. of	1.6	16.1	2.6	11.7	13.1	2.6	6.2
Taiwan	2.2	24.5	5.1	17.6	9.3	3.6	2.2
Hong Kong	0.7	36.5	0.7	14.7	6.8	3.9	1.2
South/Cntrl Asia	**2.4**	**17.8**	**1.0**	**33.0**	**1.7**	**4.2**	**1.4**
India	2.2	14.9	1.0	35.6	1.9	4.5	1.5
Pakistan	2.2	25.8	0.5	31.4	1.5	3.8	1.0
Bangladesh	2.0	22.5	0.5	30.8	1.5	3.6	0.6
Sri Lanka	3.5	20.2	1.5	23.0	0.7	2.1	1.4
Southeast Asia	**1.8**	**37.4**	**1.4**	**21.5**	**4.3**	**2.7**	**1.7**
Malaysia	0.8	36.2	1.2	30.5	3.2	1.5	1.1
Indonesia	2.1	44.6	1.3	20.5	4.4	0.8	1.0
Thailand	2.4	40.3	1.3	16.7	5.3	2.7	1.2
Singapore	1.0	31.4	1.8	19.1	5.8	2.0	2.3
Philippines	4.1	18.1	3.0	7.8	3.8	14.9	6.7
EUROPE	**1.6**	**22.1**	**2.0**	**9.3**	**5.9**	**2.8**	**6.5**
Eastern Europe	**2.1**	**21.8**	**1.8**	**7.4**	**5.0**	**2.4**	**5.3**
Russia	1.0	25.6	1.7	6.1	3.1	1.7	5.1
Poland	2.6	19.5	1.7	4.5	8.1	4.5	7.1
Bulgaria	1.9	26.3	1.6	4.4	8.6	1.6	2.7



The second part presents the development of field of study choices over time for students from selected Asian countries in business, the physical sciences, engineering and math and computer sciences. The third part presents the access and participation rates of foreign students in U.S. higher education by sex and nationality.

5.0 (cont.)

FIELD OF STUDY OF ALL FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

PERCENTAGES

Math & Comp Sci	Phys & Life Sci	Social Sci	Other	IEP	Undeclared	Profiles Survey 1995/96	Open Doors Survey 1995/96
7.7	**8.2**	**10.4**	**8.0**	**1.3**	**6.5**	**10,394**	**20,844**
8.1	**9.1**	**10.3**	**8.8**	**0.4**	**7.1**	**3,888**	**7,596**
8.9	8.6	9.2	9.6	0.2	6.4	1,535	2,934
8.2	13.1	10.8	8.2	0.9	9.6	657	1,328
7.2	**7.7**	**8.0**	**7.4**	**2.5**	**7.5**	**678**	**1,346**
8.5	9.2	7.5	7.5	1.6	8.2	305	664
8.4	**6.6**	**6.5**	**6.5**	**3.1**	**5.1**	**1,779**	**3,422**
8.0	6.7	5.7	5.2	1.5	5.2	734	1,490
8.2	4.6	4.4	9.2	6.0	4.4	501	986
6.4	**8.3**	**15.1**	**9.8**	**0.2**	**6.0**	**1,242**	**2,657**
6.8	9.0	15.1	10.9	0.1	6.3	923	1,888
7.4	**8.2**	**11.4**	**7.3**	**1.8**	**6.4**	**2,801**	**5,818**
8.1	9.6	10.8	6.9	0.2	5.6	1,006	2,093
5.6	9.4	11.0	7.0	0.5	8.6	556	1,188
9.2	**8.7**	**7.7**	**8.3**	**4.3**	**5.0**	**124,791**	**259,893**
8.0	**10.2**	**8.9**	**9.9**	**5.8**	**5.5**	**79,713**	**166,717**
3.3	3.6	15.4	17.1	9.9	8.8	22,825	45,531
13.6	24.7	5.6	4.0	0.8	3.0	19,769	39,613
6.3	7.6	7.7	9.9	9.3	5.3	16,569	36,231
9.2	6.2	5.4	7.6	3.3	3.6	14,357	32,702
9.3	4.4	6.7	7.3	1.6	6.2	5,675	12,018
15.9	**8.7**	**5.4**	**4.6**	**0.5**	**3.6**	**22,980**	**45,401**
17.0	9.4	4.6	4.2	0.1	3.0	15,534	31,743
13.1	4.7	4.9	5.6	1.1	4.4	3,563	6,427
15.4	7.6	6.4	4.2	0.8	4.0	1,755	3,360
13.4	15.5	9.2	3.9	0.5	5.1	1,071	1,951
6.4	**3.5**	**5.4**	**6.4**	**3.1**	**4.4**	**22,098**	**47,774**
7.2	3.1	4.8	5.3	1.1	4.0	6,730	14,015
5.6	2.3	4.6	5.9	2.6	4.3	6,255	12,820
5.8	3.3	5.0	5.7	6.7	3.6	5,261	12,165
6.4	3.7	8.9	11.0	0.0	6.5	1,839	4,098
7.6	8.7	8.4	9.2	1.0	6.6	1,376	3,127
6.1	**9.2**	**11.8**	**11.3**	**1.4**	**10.2**	**33,196**	**67,358**
9.3	**14.0**	**11.4**	**9.0**	**1.9**	**8.6**	**9,329**	**18,032**
8.3	16.0	10.7	9.4	2.5	8.7	2,864	5,589
9.7	11.2	9.5	8.2	2.0	11.4	831	1,743
9.7	11.5	15.1	8.0	0.6	8.0	849	1,58P

5.0(cont.)

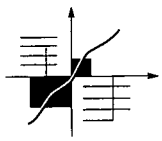
FIELD OF STUDY OF ALL FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

PERCENTAGES

World Region/ Country	Agriculture	Business	Education	Engineering	Fine & App Arts	Health Professions	Humanities
Western Europe	**1.4**	**22.2**	**2.0**	**10.0**	**6.2**	**2.9**	**6.9**
Germany	1.5	19.6	1.2	8.4	7.1	2.4	8.9
United Kingdom	0.9	16.3	3.4	5.9	6.9	3.9	7.0
France	1.5	29.6	1.9	9.1	4.2	1.9	8.1
Spain	1.3	25.0	1.3	13.9	5.6	2.3	10.0
Sweden	1.0	31.4	1.6	7.8	7.1	2.8	2.8
Greece	1.5	20.5	3.2	18.5	4.7	3.1	3.6
Italy	2.2	16.4	0.6	10.3	6.2	2.9	12.4
Norway	1.2	26.0	1.6	22.4	4.9	3.3	2.1
Netherlands	2.0	26.5	1.9	8.6	4.4	2.7	3.7
Switzerland	1.4	18.9	1.1	8.7	11.2	4.3	5.8
Ireland	1.3	22.9	3.9	5.8	3.7	4.0	10.2
LATIN AMERICA	**4.4**	**23.5**	**2.7**	**13.4**	**4.8**	**4.2**	**3.7**
Caribbean	**2.0**	**27.1**	**4.4**	**10.3**	**3.7**	**9.0**	**2.4**
Jamaica	1.7	28.9	3.7	9.2	3.5	10.0	2.1
Trinidad & Tobago	1.6	22.4	3.3	10.6	2.8	11.4	2.6
Bahamas	1.2	22.3	6.1	11.2	2.1	10.1	2.0
Dominican Republic	4.7	24.8	1.6	15.0	6.5	2.1	4.4
Cntrl America/Mexico	**5.9**	**23.4**	**2.5**	**15.5**	**4.5**	**2.4**	**3.3**
Mexico	4.4	21.5	2.1	15.6	4.7	2.2	3.7
Panama	4.0	31.0	2.6	19.3	4.8	3.0	1.6
Honduras	12.7	23.7	3.8	16.7	5.0	4.2	3.0
Costa Rica	9.9	22.4	3.5	12.7	5.3	2.8	5.1
South America	**4.3**	**21.8**	**2.2**	**13.3**	**5.6**	**3.3**	**4.5**
Brazil	4.7	19.0	2.3	11.6	7.3	3.0	4.7
Venezuela	2.7	25.0	2.0	16.2	5.9	3.3	2.4
Colombia	3.1	21.8	2.7	12.7	3.6	4.2	5.5
Peru	3.4	23.3	1.8	15.4	4.3	3.9	5.0
Argentina	7.8	16.0	1.8	10.7	6.9	1.8	7.1
Ecuador	4.6	29.6	2.2	10.7	4.8	1.9	3.6
MIDDLE EAST	**1.9**	**19.4**	**1.9**	**28.0**	**2.9**	**4.4**	**1.8**
Turkey	3.8	26.7	1.3	24.5	2.9	1.1	1.5
Saudi Arabia	1.4	14.4	3.2	29.2	0.8	3.9	1.7
Kuwait	0.8	17.6	1.4	40.8	2.0	2.3	1.1
Israel	0.7	19.8	2.3	13.8	9.4	4.0	4.2
Iran	1.3	7.1	1.0	30.8	1.7	13.9	1.1
Jordan	1.6	12.8	3.4	33.8	3.5	7.1	2.1
Lebanon	2.5	13.5	1.0	31.7	3.1	7.7	2.9
NORTH AMERICA	**1.6**	**11.0**	**13.2**	**5.3**	**5.9**	**17.1**	**4.5**
Canada	1.6	10.6	13.1	5.3	6.0	17.3	4.5
OCEANIA	**1.9**	**16.4**	**6.2**	**5.4**	**7.6**	**4.7**	**8.9**
Australia	1.7	16.9	5.5	5.3	9.4	4.5	9.0
New Zealand	1.7	11.4	4.2	6.4	8.3	7.2	10.8
Fed States of Micronesia	1.9	21.1	18.0	0.6	0.0	1.9	1.9
Percent of Total	**2.2**	**21.1**	**3.0**	**16.1**	**5.6**	**4.4**	**3.8**
World Total	**4,977**	**46,747**	**6,540**	**35,582**	**12,477**	**9,658**	**8,400**

5.0(cont.)

FIELD OF STUDY OF ALL FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96



PERCENTAGES

Math & Comp Sci	Phys & Life Sci	Social Sci	Other	IEP	Undeclared	Profiles Survey 1995/96	Open Doors Survey 1995/96
4.8	**7.4**	**11.9**	**12.2**	**1.2**	**10.8**	**23,867**	**49,326**
5.7	11.0	11.5	10.2	0.7	11.8	4,332	9,017
3.5	8.5	16.1	12.4	0.1	15.0	3,731	7,799
2.6	6.3	8.0	12.9	3.3	10.6	2,531	5,710
6.4	5.1	8.1	11.7	2.1	7.1	2,308	4,809
4.5	4.0	12.0	15.6	0.3	9.0	1,912	3,889
9.6	10.2	10.8	8.6	1.0	4.7	1,718	3,365
5.2	6.4	13.8	12.2	3.3	8.0	1,337	2,780
4.6	3.6	8.5	13.9	0.6	7.5	1,208	2,246
2.7	7.8	12.5	12.3	0.0	14.9	976	1,926
3.4	7.1	10.4	14.7	4.1	8.9	761	1,675
4.2	6.6	14.3	13.3	0.0	9.8	519	956
5.0	**6.8**	**9.4**	**9.9**	**4.2**	**8.0**	**23,650**	**47,253**
5.7	**7.4**	**10.1**	**10.6**	**1.0**	**6.1**	**5,080**	**10,737**
6.1	6.1	11.4	10.7	0.1	6.5	1,285	2,941
5.5	9.8	10.2	12.0	1.1	6.8	898	2,087
5.8	9.6	11.7	11.4	0.0	6.5	898	1,666
4.4	7.0	8.3	14.0	2.1	5.4	387	760
4.6	**5.9**	**8.4**	**9.3**	**3.9**	**10.4**	**7,985**	**14,220**
4.9	5.5	9.1	8.6	4.6	13.1	5,096	8,687
4.5	6.1	5.9	11.0	2.6	3.6	693	1,367
4.0	4.8	5.2	8.4	2.0	6.4	498	900
2.5	10.4	8.3	9.4	1.6	6.2	434	840
4.8	**7.2**	**9.8**	**10.1**	**6.1**	**7.0**	**10,583**	**22,296**
5.9	7.4	10.3	11.6	4.4	7.6	2,569	5,497
5.0	4.6	7.4	11.5	7.6	6.5	2,102	4,456
3.3	8.0	7.8	8.9	11.9	6.5	1,701	3,462
4.9	7.5	11.8	9.9	4.2	4.5	1,142	2,246
4.8	10.7	14.2	8.6	3.9	5.7	984	2,168
3.4	5.8	9.4	10.1	5.8	8.2	673	1,503
7.4	**6.7**	**7.9**	**8.0**	**4.6**	**5.1**	**15,024**	**30,563**
7.0	6.7	10.7	6.0	3.5	4.2	3,675	7,678
9.5	4.4	9.3	7.1	9.9	5.3	2,097	4,191
5.1	3.1	5.0	10.8	5.5	4.4	1,464	3,035
6.8	6.0	12.7	10.0	1.9	8.3	1,129	2,637
8.8	17.1	4.8	4.9	1.2	6.3	1,293	2,628
9.2	8.2	6.3	5.6	2.1	4.3	1,079	2,222
10.2	10.0	6.4	6.1	0.7	4.2	832	1,554
1.9	**6.6**	**14.2**	**10.6**	**0.1**	**8.2**	**12,501**	**23,644**
1.9	6.6	14.3	10.6	0.1	8.2	12,141	23,005
4.7	**6.5**	**17.3**	**10.3**	**0.1**	**10.1**	**1,717**	**4,202**
4.2	5.7	16.1	10.1	0.1	11.5	1,057	2,244
5.0	8.0	20.5	10.8	0.0	5.8	361	848
5.0	6.8	23.6	10.6	0.0	8.7	161	413
7.6	**8.3**	**9.0**	**9.0**	**3.5**	**6.4**	**100.0**	**100.0**
16,902	**18,351**	**20,024**	**20,017**	**7,733**	**14,157**	**221,565**	**453,787**

5.1

FIELD OF STUDY OF GRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

GRADUATE

FIELD OF STUDY (PERCENTAGES)

World Region/ Country	Agriculture	Business	Education	Engineering	Fine & App Arts	Health Professions	Humanities
AFRICA	**9.1**	**10.9**	**7.9**	**16.7**	**2.1**	**5.9**	**10.8**
Eastern Africa	**13.0**	**11.8**	**7.8**	**8.3**	**1.9**	**5.6**	**12.5**
Kenya	10.5	12.4	10.5	5.8	2.4	5.8	15.3
Ethiopia	17.8	6.7	3.9	11.1	0.6	8.3	3.9
Central Africa	**13.7**	**9.1**	**8.6**	**9.1**	**1.1**	**8.0**	**14.9**
Cameroon	18.0	10.1	10.1	10.1	1.1	6.7	11.2
North Africa	**4.5**	**11.0**	**3.0**	**39.8**	**2.3**	**4.4**	**4.5**
Egypt	3.2	5.5	1.8	50.6	3.5	6.0	2.1
Morocco	6.6	31.6	2.6	17.8	0.7	0.7	11.2
Southern Africa	**5.5**	**10.0**	**14.8**	**8.0**	**3.2**	**6.1**	**11.0**
South Africa	3.0	10.2	11.7	8.7	4.2	5.7	12.2
West Africa	**10.1**	**10.6**	**8.6**	**11.6**	**1.8**	**7.0**	**13.8**
Nigeria	5.1	13.1	8.4	10.7	2.1	10.1	16.1
Ghana	6.4	7.2	8.9	14.0	3.0	5.5	18.7
ASIA	**3.7**	**15.8**	**3.6**	**25.7**	**4.4**	**3.8**	**3.5**
East Asia	**3.7**	**13.1**	**4.6**	**21.6**	**5.5**	**4.0**	**4.2**
Japan	2.3	17.2	8.4	7.4	8.8	3.2	10.7
China	4.3	8.9	2.1	24.9	1.7	4.4	1.5
Korea, Rep. of	3.3	12.1	5.0	18.7	11.0	2.9	9.2
Taiwan	3.4	19.4	7.8	24.2	6.9	4.2	2.5
Hong Kong	1.7	22.3	2.3	16.5	5.2	5.2	4.4
South/Cntrl Asia	**3.4**	**12.5**	**1.3**	**40.0**	**1.9**	**3.7**	**1.7**
India	2.8	11.7	1.1	41.3	1.9	3.6	1.7
Pakistan	5.4	19.4	1.2	39.7	1.9	4.0	1.4
Bangladesh	5.0	13.8	1.3	41.4	1.8	3.9	1.1
Sri Lanka	6.9	10.2	2.6	22.7	1.2	2.6	1.4
Southeast Asia	**4.3**	**36.8**	**3.5**	**18.6**	**3.3**	**3.3**	**3.6**
Malaysia	2.0	24.2	5.5	20.1	4.5	2.5	3.9
Indonesia	6.3	35.7	4.5	22.0	1.9	1.8	2.7
Thailand	3.8	47.7	1.9	19.5	3.4	3.7	1.4
Singapore	2.1	23.6	4.5	15.6	6.0	3.2	4.9
Philippines	7.9	17.7	5.2	8.7	3.1	5.1	13.0
EUROPE	**2.6**	**15.2**	**2.6**	**13.4**	**5.8**	**3.1**	**10.1**
Eastern Europe	**2.8**	**10.6**	**2.9**	**11.4**	**5.1**	**1.7**	**6.4**
Russia	1.6	13.3	2.9	9.8	2.7	1.3	5.8
Poland	6.5	9.5	2.9	7.3	7.3	2.5	12.7
Bulgaria	4.4	12.6	3.8	7.2	10.7	0.9	4.1

5.1 *(cont.)*

FIELD OF STUDY OF GRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

GRADUATE

FIELD OF STUDY (PERCENTAGES)							
Math & Comp Sci	Phys & Life Sci	Social Sci	Other	IEP	Undeclared	Profiles Survey 1995/96	Open Doors Survey 1995/96
5.8	**9.0**	**15.0**	**5.0**	**0.0**	**1.7**	**3,652**	**7,482**
4.0	**10.1**	**17.3**	**5.9**	**0.0**	**1.7**	**1,097**	**2,316**
3.7	11.3	14.2	5.8	0.0	2.4	380	805
5.6	16.7	19.4	4.4	0.0	1.7	180	354
4.0	**10.3**	**12.6**	**6.9**	**0.0**	**1.7**	**175**	**369**
6.7	13.5	6.7	3.4	0.0	2.2	89	199
9.5	**7.5**	**7.9**	**3.9**	**0.1**	**1.6**	**870**	**1,643**
9.2	6.7	6.2	3.7	0.0	1.4	433	853
7.9	6.6	6.6	5.9	0.0	2.0	152	327
6.4	**9.5**	**18.6**	**5.7**	**0.0**	**1.3**	**528**	**1,118**
7.7	11.4	17.2	6.7	0.0	1.2	402	854
4.5	**8.7**	**17.1**	**4.3**	**0.0**	**1.9**	**982**	**2,036**
3.9	7.8	15.2	5.4	0.0	2.1	335	706
3.0	9.8	16.6	5.5	0.0	1.3	235	493
11.2	**14.5**	**8.1**	**4.3**	**0.1**	**1.2**	**56,351**	**120,047**
10.3	**17.8**	**9.1**	**4.8**	**0.2**	**1.3**	**35,801**	**76,780**
3.4	5.0	24.7	7.5	0.2	1.2	3,331	7,819
13.1	28.3	5.9	3.2	0.1	1.4	16,188	32,512
7.0	11.8	11.2	6.7	0.2	1.0	7,086	15,045
10.1	8.6	6.7	5.0	0.3	0.9	7,999	18,904
12.5	10.4	10.9	6.1	0.1	2.4	1,022	2,348
15.7	**10.3**	**5.2**	**3.1**	**0.0**	**1.1**	**13,842**	**28,283**
17.1	10.4	4.2	3.1	0.0	1.0	11,294	23,593
9.7	6.7	6.1	3.5	0.0	1.2	1,214	2,181
8.3	10.4	9.3	2.4	0.0	1.3	616	1,162
12.6	22.5	11.6	3.6	0.0	2.1	422	815
6.7	**5.4**	**9.0**	**4.1**	**0.1**	**1.1**	**6,708**	**14,984**
11.0	6.6	11.6	5.4	0.0	2.6	920	1,956
6.5	3.9	10.6	3.6	0.1	0.6	1,405	2,947
5.2	3.8	5.6	3.4	0.1	0.8	3,197	7,347
10.1	5.8	15.4	7.5	0.0	1.3	467	1,057
6.9	14.8	11.2	4.5	0.0	2.0	554	1,337
8.7	**16.1**	**13.6**	**6.5**	**0.1**	**2.3**	**12,520**	**26,892**
13.2	**25.3**	**13.2**	**5.2**	**0.1**	**2.0**	**3,829**	**8,058**
12.0	30.8	12.9	4.8	0.1	1.9	1,221	2,726
12.0	21.1	11.6	2.9	0.0	3.6	275	576
14.8	20.8	14.5	5.3	0.0	0.9	318	666

5.1 (cont.)

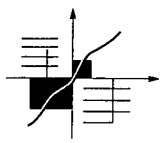
FIELD OF STUDY OF GRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

GRADUATE

World Region/ Country	FIELD OF STUDY (PERCENTAGES) Agriculture	Business	Education	Engineering	Fine & App Arts	Health Professions	Humanities
Western Europe	**2.5**	**17.2**	**2.5**	**14.3**	**6.1**	**3.7**	**11.7**
Germany	1.9	17.9	1.2	12.3	5.3	2.6	12.1
United Kingdom	1.6	11.6	4.6	7.4	10.0	4.5	12.6
France	3.3	28.7	2.9	15.4	3.0	2.4	12.0
Spain	2.7	17.0	1.7	13.7	7.8	3.7	23.7
Sweden	2.4	22.3	2.7	25.1	8.2	2.7	4.8
Greece	2.2	17.3	3.8	24.1	4.2	4.1	4.2
Italy	3.4	12.0	1.0	12.6	5.8	4.5	18.1
Norway	2.0	20.6	3.2	29.2	3.2	7.9	3.2
Netherlands	4.5	17.9	2.7	18.8	5.4	4.2	7.2
Switzerland	3.6	17.9	0.4	11.7	9.4	7.6	8.1
Ireland	2.6	11.0	4.2	9.9	7.9	3.7	15.7
LATIN AMERICA	**9.1**	**16.8**	**4.7**	**15.6**	**4.2**	**3.7**	**7.4**
Caribbean	**5.7**	**21.4**	**10.9**	**11.0**	**2.3**	**6.9**	**5.8**
Jamaica	5.2	24.9	12.4	6.2	2.1	7.3	5.7
Trinidad & Tobago	6.4	18.5	8.1	13.9	1.2	7.5	4.0
Bahamas	2.0	20.4	18.4	11.2	0.0	14.3	5.1
Dominican Republic	7.9	13.2	0.0	21.1	3.5	1.8	7.0
Cntrl America/Mexico	**10.9**	**15.7**	**4.7**	**16.8**	**3.2**	**2.6**	**7.1**
Mexico	9.8	14.8	3.9	19.3	3.3	2.1	7.4
Panama	3.4	22.4	7.8	13.8	2.6	5.2	7.8
Honduras	22.9	16.7	11.5	6.3	3.1	7.3	4.2
Costa Rica	15.5	17.2	4.0	10.9	3.4	2.3	8.0
South America	**8.8**	**16.5**	**3.4**	**15.8**	**5.2**	**3.6**	**7.9**
Brazil	9.9	13.0	3.9	15.8	8.5	4.1	6.8
Venezuela	5.4	23.5	2.8	20.1	4.5	4.1	3.3
Colombia	6.0	19.8	4.3	15.0	3.4	4.6	10.2
Peru	8.8	12.7	3.9	16.8	4.1	3.6	12.1
Argentina	12.2	12.7	1.7	12.4	5.0	1.7	9.8
Ecuador	7.4	21.3	3.2	11.7	4.3	1.6	8.5
MIDDLE EAST	**4.1**	**13.4**	**4.1**	**30.6**	**2.7**	**5.2**	**3.3**
Turkey	6.4	19.0	2.2	31.3	2.5	1.6	2.0
Saudi Arabia	3.6	9.2	8.1	30.1	0.7	6.1	2.7
Kuwait	1.2	11.3	11.9	20.8	3.0	4.2	4.2
Israel	1.1	16.9	3.7	13.4	8.7	4.1	7.8
Iran	2.4	5.0	1.7	42.5	0.8	12.4	1.8
Jordan	3.0	7.7	6.5	32.8	3.0	6.5	4.0
Lebanon	4.6	8.4	1.3	30.0	1.8	6.6	4.6
NORTH AMERICA	**2.3**	**6.7**	**12.1**	**4.6**	**6.9**	**26.3**	**7.4**
Canada	2.3	6.7	11.9	4.6	6.9	26.4	7.4
OCEANIA	**3.4**	**8.8**	**5.1**	**6.4**	**11.6**	**5.3**	**19.0**
Australia	3.0	9.1	6.4	5.4	12.8	5.2	19.3
New Zealand	2.8	7.3	1.7	7.3	11.2	6.7	17.9
Fed. States of Micronesia							0.0
Percent of Total	**4.1**	**14.9**	**4.2**	**22.0**	**4.5**	**5.0**	**5.3**
World Total	**3,738**	**13,523**	**3,825**	**19,913**	**4,105**	**4,542**	**4,828**

5.1 *(cont.)*

FIELD OF STUDY OF GRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96



GRADUATE

FIELD OF STUDY (PERCENTAGES)							
Math & Comp Sci	Phys & Life Sci	Social Sci	Other	IEP	Undeclared	Profiles Survey 1995/96	Open Doors Survey 1995/96
6.7	**12.0**	**13.8**	**7.0**	**0.0**	**2.4**	**8,691**	**18,834**
7.7	16.2	13.0	7.1	0.1	2.8	2,084	4,304
4.7	14.8	18.0	8.8	0.0	1.2	1,099	2,511
3.1	10.8	9.2	6.8	0.0	2.3	941	2,336
6.2	7.3	10.6	4.5	0.0	1.1	754	1,712
5.2	6.5	13.1	5.2	0.0	1.7	291	554
12.6	11.6	9.5	4.3	0.0	2.1	904	1,782
6.5	9.8	15.6	7.1	0.0	3.4	673	1,335
5.5	5.5	11.5	5.9	0.0	2.4	253	510
2.1	13.7	17.0	6.3	0.0	0.3	335	717
6.3	9.0	13.9	9.9	0.0	2.2	223	572
6.8	9.9	17.8	7.3	0.0	3.1	191	376
5.6	**11.3**	**14.0**	**5.7**	**0.1**	**1.7**	**7,089**	**14,554**
3.2	**7.8**	**15.3**	**7.0**	**0.0**	**2.7**	**838**	**1,929**
3.6	4.1	13.5	10.4	0.0	4.7	193	489
3.5	13.3	16.8	5.2	0.0	1.7	173	438
1.0	4.1	17.3	2.0	0.0	4.1	98	216
1.8	13.2	13.2	15.8	0.0	1.8	114	197
6.2	**12.2**	**13.9**	**5.4**	**0.1**	**1.2**	**2,274**	**4,331**
7.1	11.6	14.7	4.9	0.1	1.2	1,630	3,070
3.4	12.1	6.9	12.1	0.0	2.6	116	229
4.2	9.4	8.3	5.2	0.0	1.0	96	161
2.3	17.2	13.2	4.0	0.0	1.7	174	348
5.9	**11.5**	**13.8**	**5.7**	**0.2**	**1.8**	**3,976**	**8,294**
7.0	10.6	13.7	5.3	0.2	1.3	1,009	2,221
7.4	8.4	10.2	7.5	0.1	2.7	706	1,521
5.1	14.6	10.7	4.2	0.2	1.9	646	1,220
3.1	10.6	18.3	5.2	0.0	0.8	387	768
4.8	14.5	17.0	6.4	0.4	1.4	518	1,090
5.3	12.8	16.0	5.9	0.0	2.1	188	351
9.3	**10.2**	**11.3**	**4.5**	**0.0**	**1.3**	**5,727**	**11,478**
8.5	9.9	12.5	3.6	0.0	0.3	2,084	4,282
9.9	6.4	14.9	6.6	0.1	1.7	754	1,355
10.7	8.3	11.3	12.5	0.0	0.6	168	368
7.6	9.1	19.0	6.9	0.0	1.7	462	1,065
9.9	15.8	4.1	1.7	0.0	2.0	659	1,257
12.8	11.1	8.1	3.4	0.0	1.0	494	1,012
13.2	13.2	8.9	4.6	0.0	2.8	393	699
1.5	**7.5**	**15.5**	**7.6**	**0.0**	**1.6**	**4,587**	**8,940**
1.5	7.6	15.5	7.6	0.0	1.6	4,554	8,851
6.3	**8.8**	**18.8**	**5.8**	**0.0**	**0.6**	**622**	**1,373**
6.2	8.1	18.8	4.9	0.0	0.7	405	900
6.1	11.2	20.7	7.3	0.0	0.0	179	385
50.0	0.0	50.0	0.0	0.0	0.0	2	4
9.5	**13.6**	**10.3**	**4.9**	**0.1**	**1.4**	**100.0**	**100.0**
8,647	**12,316**	**9,314**	**4,474**	**85**	**1,301**	**90,611**	**190,776**

5.2

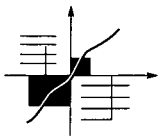
FIELD OF STUDY OF UNDERGRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

UNDERGRADUATE

World Region/ Country	FIELD OF STUDY (PERCENTAGES) Agriculture	Business	Education	Engineering	Fine & App Arts	Health Professions	Humanities
AFRICA	**1.5**	**26.9**	**1.3**	**13.3**	**2.8**	**8.5**	**2.3**
Eastern Africa	**1.3**	**27.6**	**1.3**	**11.3**	**2.5**	**8.6**	**2.7**
Kenya	1.7	27.9	1.7	8.5	2.9	9.4	3.0
Ethiopia	0.9	22.4	0.0	14.1	1.9	9.4	1.2
Central Africa	**2.4**	**25.9**	**0.7**	**16.7**	**1.9**	**12.5**	**0.9**
Cameroon	2.3	15.5	0.0	16.1	0.0	20.7	1.1
North Africa	**0.8**	**29.3**	**0.4**	**24.4**	**3.4**	**3.3**	**1.8**
Egypt	0.4	23.5	0.9	24.8	4.3	6.4	1.7
Morocco	1.7	32.9	0.3	25.8	2.0	1.7	2.4
Southern Africa	**4.4**	**24.3**	**3.2**	**9.2**	**5.0**	**5.5**	**2.3**
South Africa	1.1	25.8	4.2	8.6	4.4	3.5	3.1
West Africa	**0.7**	**25.9**	**1.2**	**12.3**	**2.3**	**10.9**	**2.4**
Nigeria	0.3	19.8	1.6	12.1	3.1	15.3	2.9
Ghana	0.0	23.5	0.7	12.6	3.2	12.3	1.1
ASIA	**0.6**	**28.9**	**1.0**	**13.6**	**8.5**	**2.7**	**2.4**
East Asia	**0.6**	**25.2**	**1.4**	**7.0**	**11.5**	**2.8**	**3.4**
Japan	0.7	19.6	1.9	3.1	10.6	1.5	5.5
China	0.8	27.6	0.7	10.4	5.2	8.1	1.0
Korea, Rep. of	0.3	21.7	0.9	8.0	17.1	2.8	2.9
Taiwan	0.6	33.3	1.7	9.6	13.1	3.4	1.4
Hong Kong	0.5	40.8	0.2	14.5	7.1	3.7	0.4
South/Cntrl Asia	**0.8**	**27.3**	**0.3**	**23.6**	**1.6**	**2.9**	**0.9**
India	0.6	25.0	0.5	21.5	2.1	4.0	1.1
Pakistan	0.7	30.6	0.0	28.2	1.5	1.1	0.8
Bangladesh	0.4	27.3	0.1	25.9	1.2	3.6	0.3
Sri Lanka	1.4	28.6	0.5	23.6	0.2	1.0	1.6
Southeast Asia	**0.7**	**39.1**	**0.5**	**24.8**	**4.7**	**2.4**	**0.7**
Malaysia	0.6	37.7	0.5	33.8	3.0	1.4	0.6
Indonesia	0.9	48.8	0.3	21.6	5.1	0.5	0.4
Thailand	0.3	32.7	0.1	15.0	10.2	1.1	0.5
Singapore	0.6	34.5	0.7	20.7	5.4	1.7	1.2
Philippines	1.4	19.1	1.1	7.2	4.3	21.4	2.6
EUROPE	**0.8**	**28.2**	**1.7**	**7.2**	**6.0**	**2.5**	**3.8**
Eastern Europe	**0.7**	**31.7**	**1.0**	**4.7**	**4.9**	**2.8**	**4.3**
Russia	0.4	38.0	0.9	3.3	3.1	2.2	4.2
Poland	0.6	27.4	0.9	3.4	7.3	5.6	3.9
Bulgaria	0.2	34.1	0.4	2.3	8.0	2.1	1.7

5.2(cont.)

FIELD OF STUDY OF UNDERGRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96



UNDERGRADUATE

FIELD OF STUDY (PERCENTAGES)						Profiles Survey 1995/96	Open Doors Survey 1995/96
Math & Comp Sci	Phys & Life Sci	Social Sci	Other	IEP	Undeclared		
9.2	**8.1**	**7.1**	**9.7**	**0.5**	**8.8**	**5,875**	**12,441**
10.3	**8.8**	**7.1**	**10.1**	**0.1**	**8.5**	**2,542**	**5,052**
11.2	7.5	7.6	11.0	0.0	7.6	1,072	2,051
10.1	11.3	6.6	10.4	0.7	11.1	425	931
8.5	**7.5**	**6.4**	**7.8**	**0.2**	**8.7**	**425**	**906**
8.0	8.0	9.2	9.8	0.0	9.2	174	441
7.4	**5.8**	**3.8**	**10.1**	**1.2**	**8.2**	**730**	**1,538**
6.8	6.8	3.8	8.1	0.9	11.5	234	547
8.1	3.7	3.1	11.2	1.4	5.8	295	593
6.6	**7.9**	**10.8**	**11.7**	**0.2**	**8.9**	**618**	**1,448**
5.9	7.3	12.8	13.9	0.2	9.3	454	963
9.7	**8.2**	**7.3**	**8.8**	**1.1**	**9.3**	**1,554**	**3,492**
11.4	10.5	7.6	7.1	0.3	7.9	580	1,307
7.2	9.4	6.1	7.2	1.1	15.5	277	639
7.7	**4.1**	**8.0**	**12.9**	**1.4**	**8.3**	**55,608**	**118,693**
6.4	**4.1**	**10.1**	**16.2**	**1.7**	**9.6**	**34,634**	**74,236**
3.7	3.8	15.9	21.3	1.7	10.7	15,705	32,034
14.8	6.0	4.1	9.1	2.7	9.5	2,318	4,851
7.1	5.5	6.3	14.8	2.6	10.0	7,187	16,333
8.2	3.1	4.2	12.2	1.3	7.7	4,978	11,522
8.6	3.1	6.0	7.9	0.1	6.9	4,242	9,055
15.5	**6.3**	**5.6**	**7.1**	**0.7**	**7.5**	**7,420**	**14,329**
14.9	7.3	5.8	7.9	0.4	8.9	3,049	6,049
15.2	3.7	4.1	7.1	1.0	6.1	2,089	3,897
19.4	5.9	4.6	5.1	0.9	5.3	1,056	2,085
13.6	10.3	7.5	4.2	0.2	7.3	573	1,056
6.5	**2.7**	**4.1**	**7.5**	**0.8**	**5.4**	**13,554**	**30,127**
6.8	2.6	3.8	5.3	0.2	3.8	5,446	11,630
5.5	1.8	2.9	6.8	0.4	5.0	4,410	9,325
8.0	3.3	4.6	10.8	4.9	8.4	1,437	3,599
4.6	3.0	6.9	12.9	0.0	7.8	1,248	2,937
7.6	5.0	7.5	13.4	0.3	9.2	655	1,614
4.9	**5.3**	**11.6**	**14.3**	**0.6**	**13.1**	**16,614**	**34,784**
7.1	**6.4**	**11.1**	**12.4**	**1.2**	**11.6**	**4,604**	**8,847**
6.5	4.8	9.8	14.3	1.1	11.3	1,341	2,399
10.1	6.7	9.5	11.2	1.5	11.9	464	1,012
6.5	6.1	16.4	10.5	0.4	11.2	475	870

5.2(cont.)

FIELD OF STUDY OF UNDERGRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

UNDERGRADUATE

World Region/ Country	FIELD OF STUDY (PERCENTAGES) Agriculture	Business	Education	Engineering	Fine & App Arts	Health Professions	Humanities
Western Europe	**0.8**	**26.9**	**2.0**	**8.2**	**6.4**	**2.3**	**3.7**
Germany	1.0	24.1	1.4	5.1	8.8	1.8	6.0
United Kingdom	0.8	20.0	3.1	5.6	5.5	3.6	4.4
France	0.4	32.6	1.5	5.5	5.7	1.6	5.5
Spain	0.8	29.8	1.3	16.2	4.9	1.6	2.2
Sweden	0.9	33.4	1.4	4.2	6.8	2.8	2.5
Greece	0.7	24.7	2.9	12.3	5.4	1.6	3.2
Italy	1.3	23.0	0.2	9.8	8.9	1.3	4.6
Norway	0.9	27.5	1.3	22.4	5.5	1.4	1.7
Netherlands	0.8	33.5	1.7	4.2	4.2	2.1	1.7
Switzerland	0.7	21.4	1.2	7.5	12.2	3.2	4.2
Ireland	0.4	35.4	4.7	3.5	1.6	3.5	3.1
LATIN AMERICA	**2.8**	**28.4**	**2.1**	**13.4**	**5.4**	**3.9**	**2.0**
Caribbean	**1.5**	**29.9**	**3.5**	**10.0**	**3.7**	**7.7**	**1.7**
Jamaica	1.4	33.0	2.4	8.8	3.5	8.0	1.9
Trinidad & Tobago	0.6	26.0	2.2	9.2	2.9	10.3	1.8
Bahamas	1.2	22.6	4.9	11.3	2.3	7.9	1.8
Dominican Republic	3.9	30.6	2.6	12.9	7.8	1.7	2.6
Cntrl America/Mexico	**4.5**	**27.8**	**1.6**	**15.9**	**5.5**	**2.3**	**1.8**
Mexico	2.1	26.1	1.3	14.4	6.1	2.3	2.0
Panama	4.3	34.6	1.6	22.3	5.7	2.4	0.4
Honduras	11.1	26.5	2.2	20.0	5.1	3.5	2.4
Costa Rica	7.1	29.3	3.1	15.6	6.2	3.1	3.1
South America	**2.0**	**27.8**	**1.5**	**13.4**	**6.5**	**2.9**	**2.4**
Brazil	1.5	25.9	1.4	9.9	7.0	2.0	2.9
Venezuela	1.4	28.6	2.1	17.8	7.1	3.4	1.5
Colombia	1.3	28.9	1.3	14.1	5.2	4.3	3.1
Peru	0.7	30.1	0.9	13.9	4.5	3.6	1.2
Argentina	4.1	21.1	2.3	10.0	10.3	1.8	4.4
Ecuador	4.4	34.5	2.1	10.9	5.7	2.1	1.8
MIDDLE EAST	**0.7**	**25.8**	**0.4**	**30.0**	**3.3**	**3.5**	**0.7**
Turkey	0.5	39.5	0.2	17.1	3.4	0.1	0.9
Saudi Arabia	0.1	21.8	0.3	36.4	0.8	3.1	1.0
Kuwait	0.9	20.4	0.0	47.3	1.5	2.3	0.4
Israel	0.6	20.0	0.8	14.2	10.6	3.6	0.9
Iran	0.2	10.0	0.2	20.2	3.3	12.5	0.2
Jordan	0.4	18.3	0.4	38.9	4.5	5.7	0.4
Lebanon	0.8	19.2	0.8	35.1	3.4	6.8	1.3
NORTH AMERICA	**1.3**	**13.9**	**11.5**	**6.1**	**5.4**	**11.8**	**2.9**
Canada	1.3	13.3	11.3	6.1	5.5	11.8	2.9
OCEANIA	**1.2**	**21.1**	**7.0**	**5.0**	**5.0**	**4.5**	**2.7**
Australia	0.9	22.3	4.8	5.4	6.7	4.1	2.0
New Zealand	0.7	16.0	6.7	6.7	6.0	9.3	2.0
Fed. States of Micronesia	1.9	21.5	18.4	0.6	0.0	1.9	1.9
Percent of Total	**1.0**	**27.3**	**2.0**	**13.1**	**6.8**	**3.8**	**2.5**
World Total	**1,090**	**29,244**	**2,100**	**14,063**	**7,307**	**4,078**	**2,686**

5.2(cont.)

FIELD OF STUDY OF UNDERGRADUATE FOREIGN STUDENTS BY WORLD REGION AND SELECTED PLACE OF ORIGIN, 1995/96

UNDERGRADUATE

FIELD OF STUDY (PERCENTAGES)							
Math & Comp Sci	Phys & Life Sci	Social Sci	Other	IEP	Undeclared	Profiles Survey 1995/96	Open Doors Survey 1995/96
4.0	**4.9**	**11.7**	**15.1**	**0.3**	**13.7**	**12,010**	**25,937**
4.2	6.6	10.8	13.6	0.1	16.5	1,541	3,662
3.1	5.9	16.1	14.1	0.1	17.9	2,127	4,660
2.7	4.3	8.1	17.9	0.5	13.6	1,173	2,672
7.4	4.5	7.8	13.0	1.1	9.5	1,226	2,637
4.2	3.7	12.1	18.1	0.1	9.7	1,451	3,177
6.1	8.5	13.2	12.9	0.4	8.1	691	1,369
3.9	3.0	14.8	17.2	0.7	11.3	460	1,123
4.5	3.3	8.2	15.8	0.0	7.4	866	1,628
4.0	4.6	11.9	13.7	0.0	17.9	481	1,008
2.0	6.2	11.2	17.0	0.5	12.5	401	855
2.3	2.7	12.5	13.6	0.0	16.7	257	527
4.8	**5.2**	**8.1**	**11.9**	**1.3**	**10.9**	**13,366**	**29,384**
6.1	**7.2**	**9.2**	**11.2**	**0.7**	**7.4**	**3,478**	**8,543**
5.9	5.4	10.6	10.8	0.1	8.1	830	2,402
5.5	9.2	8.8	13.6	0.0	9.8	543	1,593
7.0	10.1	11.5	12.7	0.0	6.7	733	1,418
5.6	4.3	6.9	13.8	0.9	6.5	232	520
3.9	**3.6**	**6.6**	**11.1**	**1.3**	**14.2**	**4,915**	**9,078**
4.4	2.9	6.9	11.1	1.4	19.2	2,947	5,079
3.8	5.1	5.9	9.9	0.2	3.8	506	1,056
3.2	4.1	4.6	8.9	1.1	7.3	370	711
3.1	4.9	5.3	11.1	0.4	7.6	225	442
4.8	**5.2**	**8.7**	**13.0**	**1.6**	**10.1**	**4,972**	**11,763**
5.8	6.0	8.7	16.1	1.2	11.6	1,226	2,754
4.8	2.8	7.6	12.4	1.3	9.3	1,017	2,394
2.7	4.6	8.2	12.9	1.9	11.3	672	1,693
6.7	6.7	9.9	13.7	2.4	5.8	584	1,346
4.7	7.6	13.8	10.9	0.0	9.1	341	866
3.1	3.4	7.8	12.2	3.6	8.5	386	1,066
7.0	**4.9**	**6.5**	**9.1**	**1.0**	**7.2**	**7,467**	**16,470**
5.1	2.1	9.9	9.0	2.2	10.0	1,214	2,805
12.0	4.2	7.9	6.4	0.4	5.6	992	2,186
5.0	2.7	3.9	11.1	0.1	4.5	1,130	2,380
6.6	4.5	9.5	12.5	3.0	13.2	529	1,426
8.1	19.3	5.6	8.7	0.2	11.6	519	1,180
5.3	5.9	5.7	7.5	1.4	5.7	493	1,093
8.1	7.5	3.9	8.1	0.3	4.9	385	769
2.3	**6.4**	**14.4**	**12.2**	**0.0**	**11.9**	**7,028**	**13,513**
2.2	6.5	14.5	12.4	0.0	11.9	6,753	12,987
3.7	**5.6**	**17.0**	**12.6**	**0.0**	**14.7**	**943**	**2,502**
2.8	4.5	14.7	13.8	0.0	17.9	537	1,169
2.7	5.3	21.3	12.7	0.0	10.7	150	419
4.4	7.0	23.4	10.8	0.0	8.2	158	304
6.5	**4.8**	**8.9**	**12.5**	**1.1**	**9.6**	**100.0**	**100.0**
7,014	**5,170**	**9,548**	**13,370**	**1,132**	**10,324**	**107,126**	**227,787**

Understanding Field of Study Data

In attempting to understand the mass of information presented here on field of study enrollments by nationality, three general observations are useful.

1. Economic growth and national competitiveness in a global marketplace require a pool of well-trained citizens in fields such as engineering, the sciences and business. For many nations, especially those with recently industrialized or emerging economies, the domestic opportunities for high quality postsecondary education in technical fields are limited. Many of these nations supplement their own national educational systems with U.S. higher education. As a result, nations and regions that are in the process of developing technologically-based economies have above average U.S. enrollments in several of the fields of study directly tied to economic development. These fields include business, engineering, the physical and life sciences and math and computer sciences. Asian nations such as China, India, Malaysia and Indonesia exemplify this pattern.

2. Nations and regions with well established higher education systems, and which produce advanced technologies and are generally successful as global competitors, have less need for U.S. higher education in fields directly related to economic and technical activity. Students from these nations are likely to enroll in U.S. higher education in fields that tap the social and cultural spheres. These fields include the humanities, the arts and the social sciences. Students from these areas are also more likely to be enrolled in nondegree, certificate and practical training programs which are classified in this report as "other" or are registered as "undeclared" students. Nations such as Japan, the United Kingdom, Sweden and Italy show this pattern.

3. It is perhaps not surprising that national economies which are poor, and nations which invest relatively little in building their own educational and social infrastructures, also have higher proportions of students enrolling in fields that are not directly related to technologically-based economic development. Students from these poorer and underdeveloped regions who are enrolled in U.S. institutions tend to do so in fields such as education, the humanities and the social sciences. Students from these areas are also enrolled in higher proportions than the world average in agricultural fields. Individuals trained in agriculture, forest and fisheries management can make a significant contribution to economies that are substantially centered on natural resources. Many of the nations of Sub-Saharan Africa reflect this pattern.

ASIA

While almost 57% of foreign students come from Asia, their enrollment levels and fields of study vary dramatically by country. To clarify an exceedingly complex Asian scene, it is necessary to examine more homogeneous economic groupings. A special report of the National Science Foundation, which assessed technological activity and economic competitiveness among nine Asian nations, highlighted three economic groups. First, Japan stands apart as a world-class technological and economic superpower. Second is a group of four economies known as the "Four Tigers," which have made enormous strides recently in global competitiveness: Hong Kong, Singapore, South Korea and Taiwan. Third are the Emerging Asian Economies (EAEs), nations which lag behind the "Tigers" in some significant ways but which have made major commitments to technology-based growth. The EAEs include China, India, Indonesia and Malaysia.

Examining the flow of students from specific localities to U.S. higher education institutions over time can provide insights into the pace and breadth of an economy's development. The National Science Foundation's report* on Asia's new high-tech competitors presented enrollment figures of students from the three economic groups in fields directly related to technological development.

The figures suggest the following:

1. Both developing groups ("Tigers" and EAEs) still require more externally trained manpower in each of the four development-related fields than does Japan, which since the late 1960s has had fewer of its students enrolled in these development-related fields than have either the "Tigers" or the EAEs.

2. The "Tigers" have a smaller proportion of students enrolled in engineering, physical sciences, and math and computer sciences in 1995/96 than they did in the 1960s and 1970s.

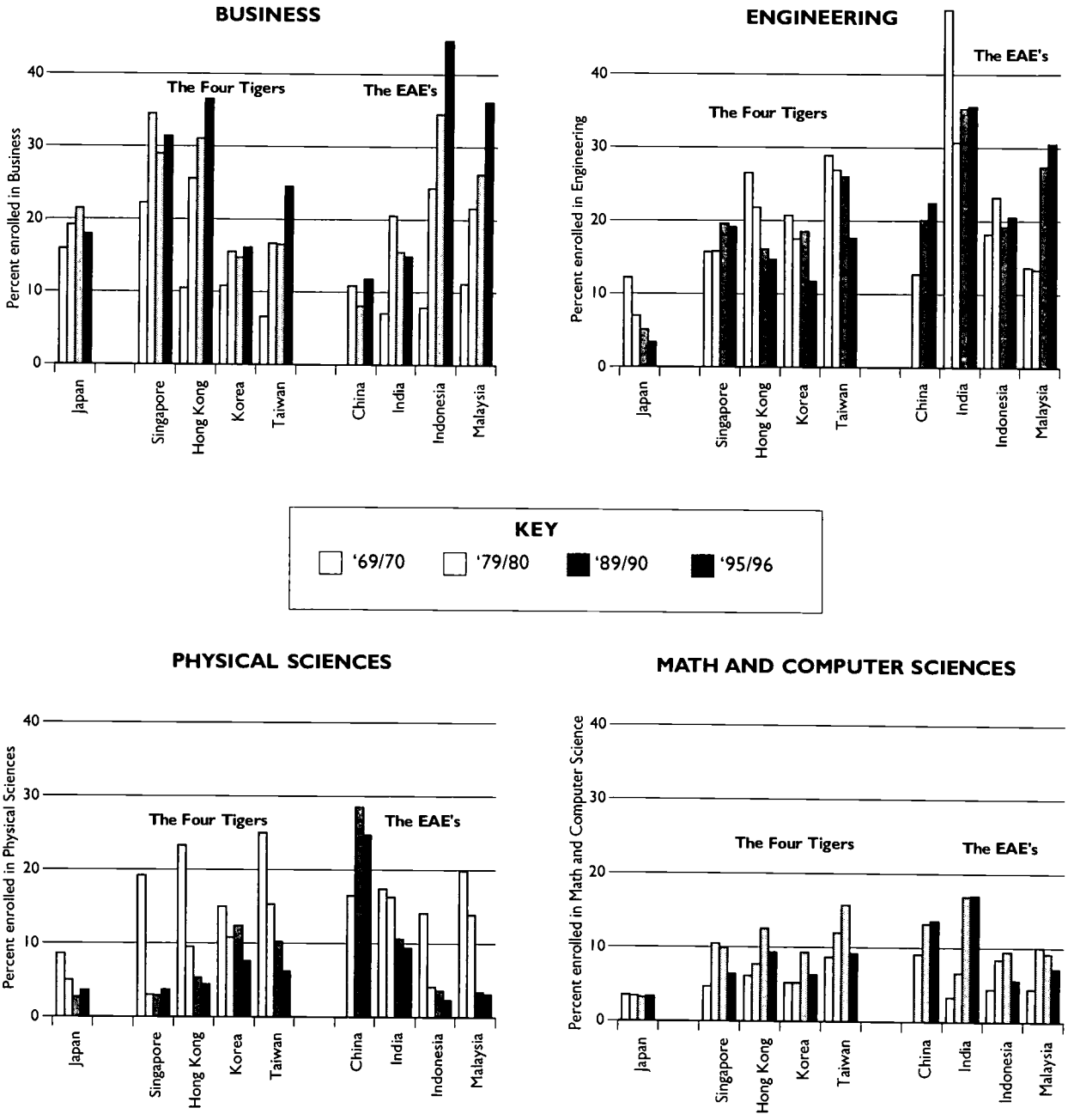
3. All of the EAEs have large proportions of students enrolled in engineering disciplines and math and computer sciences, proportions which have continued to increase since the late 1960s. This year's data suggests that enrollments in math and computer sciences may have plateaued for these nations. Among the EAEs, only China appears to have maintained a large—but declining—proportion of students enrolled in the physical and life sciences. These enrollments may parallel China's internal investments in biotechnology and patent activity in areas closely linked to basic science. They may also reflect graduate student opportunities for U.S. funding not present in some other fields of study.

4. Technology-based economic development requires that an economy both develop and produce high quality products and competitively bring them to the international marketplace. The efficient production and distribution of high-tech products therefore requires a significant pool of well-trained individuals in business and management. It is notable that only in the field of business do Japanese students enroll in proportions comparable to those of its other Asian neighbors. Indeed, since the late 1960s the proportion of students enrolled in business from many of these countries has increased. China is a notable exception. The Chinese emphasis on technological development has only recently been paralleled by efforts to transform its centrally planned economy. The small and stagnant enrollments in business may reflect the absence of opportunity for students enrolled in this area. It is possible that the imbalance between technical development and a market-driven economy may prove to be a significant obstacle to China's development in the future.

* National Science Foundation, *Asia's New High-Tech Competitions*, NSF 95.309 (Arlington, VA, 1995).

5.a

HOW THE "TIGERS" AND EAEs COMPARE: ENROLLMENTS IN DEVELOPMENT-RELATED FIELDS, SELECTED YEARS



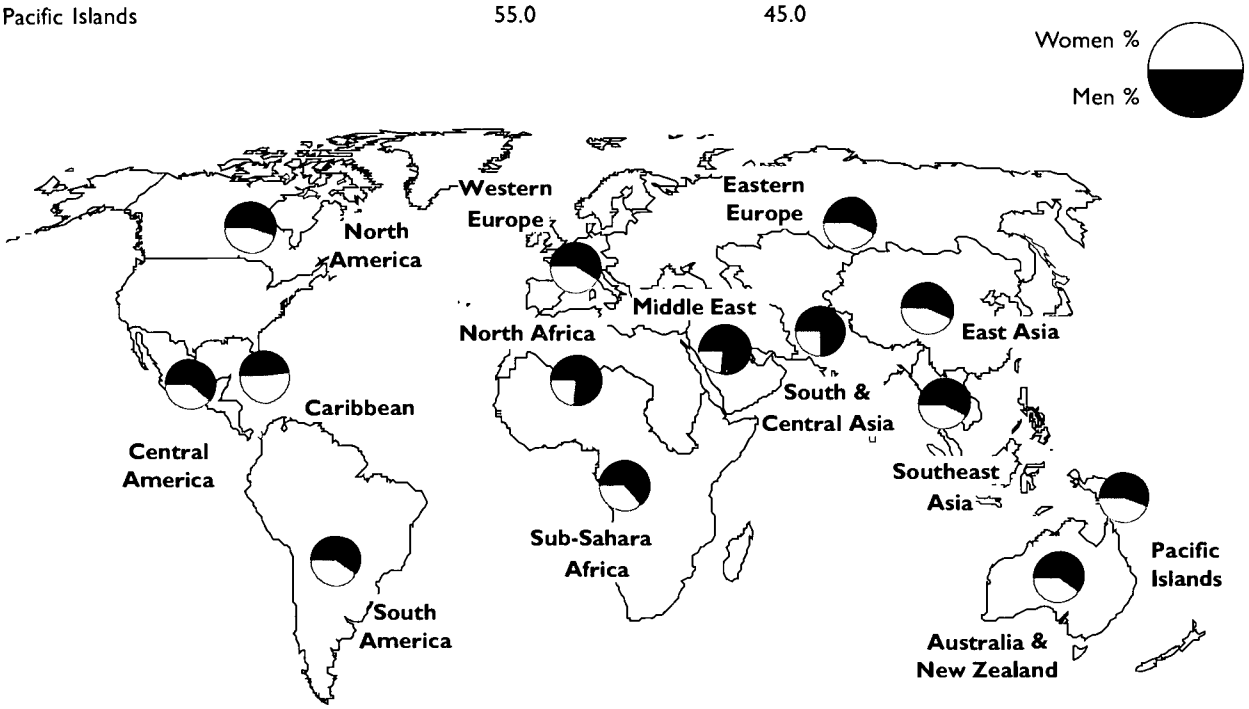
*China sent no students to the United States in 1969-70.

5.b

SEX DISTRIBUTION BY NATIONALITY, 1995/96

Men outnumber women among all foreign student groups except those from the Caribbean.

Region	Male	Female
Sub-Saharan Africa	63.3	36.7
North Africa	77.1	22.9
Middle East	78.5	21.5
East Asia	56.4	43.6
South & Central Asia	75.2	24.8
Southeast Asia	58.8	41.2
Eastern Europe	57.5	42.5
Western Europe	58.8	41.2
Caribbean	47.4	52.6
Central America	61.3	38.7
South America	59.3	40.7
North America	54.8	45.2
Australia & New Zealand	59.8	40.2
Pacific Islands	55.0	45.0



International Student Participation by Sex

The percentage of male foreign students who study in the U.S. is significantly higher than that of their female counterparts. Only Japan, Jamaica and Trinidad and Tobago send a larger proportion of females than males. However, student enrollments from a number of countries throughout the world are fairly equally divided between men and women.

Students from Ethiopia who study in the U.S. are comprised of 41% women. Among Asian countries, percentages of female students from Taiwan (49%) and Thailand (49%) nearly equal those of male students. Europe is well represented by female students who come to the U.S. Enrollments from Bulgaria, France and Poland are all over 45% women, and Italy and Romania each send 43% female students.

Among Latin American countries, 46% of the students coming to the U.S. from Honduras are women, as are 41% of those from Brazil. Foreign student enrollments from Canada are 45% female. Among students from Oceanian countries, 49% of those from the Federated States of Micronesia and 42% of those from New Zealand are women.

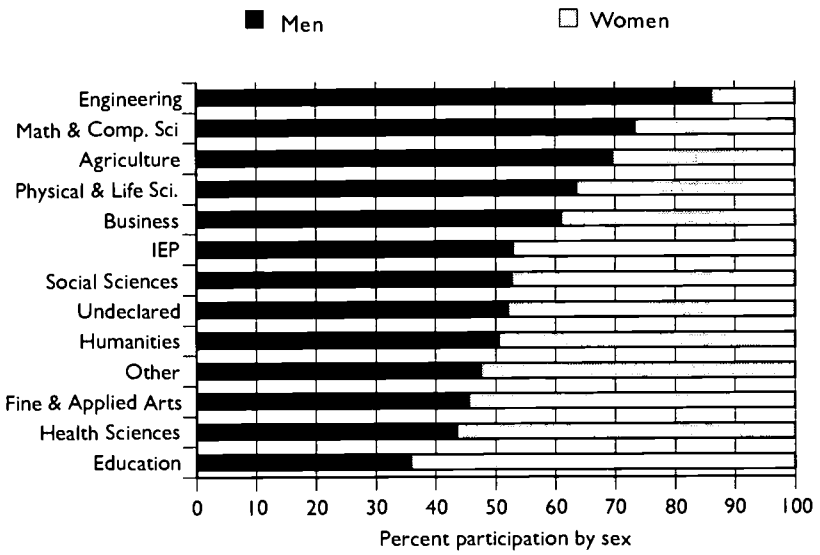
5.3

PERCENTAGE OF INTERNATIONAL ENROLLMENTS BY NATIONALITY AND SEX, 1995/96

Locality	% Men	% Women
Africa		
Algeria	82.1	17.9
Egypt	80.7	19.3
Ethiopia	58.8	41.2
Ghana	71.8	28.2
Kenya	60.0	40.0
Nigeria	64.2	35.8
South Africa	65.3	34.7
Asia		
China	60.8	39.2
India	72.4	27.6
Indonesia	62.3	37.7
Japan	47.8	52.2
Malaysia	62.1	37.9
Pakistan	88.5	11.5
Republic of Korea	68.3	31.7
Sri Lanka	66.0	34.0
Taiwan	50.9	49.1
Thailand	51.4	48.6
Europe		
Bulgaria	51.1	48.9
France	52.1	47.9
Germany	59.6	40.4
Italy	57.0	43.0
Poland	50.6	49.4
Romania	56.6	43.4
Russia	59.2	40.8
United Kingdom	58.5	41.5
Latin America		
Argentina	62.3	37.7
Brazil	58.7	41.3
Honduras	54.1	45.9
Jamaica	45.0	55.0
Mexico	63.7	36.3
Peru	60.0	40.0
Trinidad & Tobago	48.4	51.6
Middle East		
Iran	62.9	37.1
Israel	65.3	34.7
Saudi Arabia	88.7	11.3
Turkey	72.7	27.3
North America		
Canada	55.1	44.9
Oceania		
Australia	60.3	39.7
Fed. States of Micronesia	50.9	49.1
New Zealand	58.2	41.8

5.c

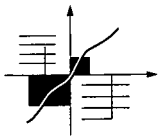
SEX DISTRIBUTION BY FIELDS OF STUDY, 1995/96



5.4

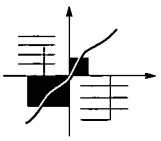
SEX DISTRIBUTION BY FIELDS OF STUDY, 1995/96

Field of Study	Male	Female
Engineering	86.1	13.9
Math & Comp. Sci	73.3	26.7
Agriculture	69.6	30.4
Physical & Life Sci.	63.5	36.5
Business	60.9	39.1
IEP	52.9	47.1
Social Sciences	52.7	47.3
Undeclared	52.0	48.0
Humanities	50.5	49.5
Other	47.5	52.5
Fine & Applied Arts	45.4	54.6
Health Sciences	43.5	56.5
Education	35.8	64.2



As Figure 5.c indicates, enormous variation in the enrollment proportions of men and women are apparent among different regions of the world. The countries listed are representative of the ratios of participation in their regions. The disk in the back of this book contains a file with a complete listing of participation by sex for all countries and places of origin. In the economically developed regions of Europe, North America, Australia and many Asian localities, enrollment ratios have approached parity. By contrast, a much smaller proportion of women from the nations of South Asia, the Middle East and most of Africa has accessed international education in the United States. For example, from Pakistan and Saudi Arabia only 11% of enrollments are women, from Egypt 19%, and from Algeria 18%. In Latin America, there is wide variation in enrollments by sex; in general, however, about 40% of enrollments are women.

The participation rates of men and women by field of study show variability that may be tied to national economic development. Women are the majority in the arts, the humanities and in "helping" fields such as education and the health sciences. They are less likely to be present in fields more closely tied to national economic development and competitiveness, such as engineering, agriculture and business.



6

U.S. DISTRIBUTION

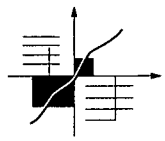
Foreign Student Totals in U.S. Counties, Regions and States

- While international students are found in great numbers throughout the United States, they appear to cluster around major metropolitan areas. When foreign student enrollments are displayed by county, it becomes apparent that a small handful of major cities attracts the bulk of international students.
- After the Northeast, Midwestern states host more students than any other region, and the South hosts more students than the Pacific West Coast. Because the increase in the total international student population was minimal (0.9%) again this year, the regional changes were accordingly minimal.
- The states enrolling the most international students are California (57,017), New York (46,076), Texas (28,686), Massachusetts (26,568), Florida (20,307) and Illinois (19,626). New York and California have consistently hosted the largest numbers of foreign students. California has had the highest enrollments since the late 1950s. Massachusetts, third in international enrollments in the mid-1950s, lost ground in the 1960s when more foreign students headed for Michigan and Illinois.

6.0

FOREIGN STUDENTS IN U.S. REGIONS AND STATES, SELECTED YEARS

State/Region	1959/60	1969/70	1979/80	1989/90	1995/96	1996/97	% Change from 1995/96
Alaska	0	73	185	364	524	519	-1.0
California	6,457	22,170	47,621	54,178	55,799	57,017	2.2
Hawaii	151	1,927	2,653	4,190	5,801	5,490	-5.4
Oregon	638	2,312	4,853	6,403	6,704	6,824	1.8
Washington	1,031	3,238	6,717	6,858	10,257	10,959	6.8
Pacific Totals	**8,277**	**29,720**	**62,029**	**71,993**	**79,085**	**80,809**	**2.2**
Colorado	672	1,460	4,184	4,681	6,349	6,216	-2.1
Idaho	160	500	989	1,150	1,457	1,405	-3.6
Montana	162	324	401	770	1,056	1,027	-2.7
Nevada	12	109	521	783	1,712	2,081	21.6
Utah	741	1,915	3,493	4,862	6,477	6,056	-6.5
Wyoming	63	282	435	527	489	451	-7.8
Mountain Totals	**1,810**	**45,90**	**10,023**	**12,773**	**17,540**	**17,236**	**-1.7**
Illinois	2,890	7,795	12,218	16,816	19,408	19,626	1.1
Indiana	1,819	3,230	5,499	7,575	8,981	9,269	-3.2
Iowa	776	1,285	4,010	6,735	7,144	7,378	3.3
Kansas	800	2,005	4,479	6,009	7,093	6,594	-7.0
Michigan	3,259	6,774	10,559	13,555	16,284	17,319	6.4
Minnesota	1,473	2,577	4,142	5,446	6,777	6,937	2.4
Missouri	996	2,896	4,712	6,620	8,612	8,825	2.5
Nebraska	358	601	1,517	1,918	3,138	3,019	-3.8
North Dakota	211	616	512	1,341	1,519	1,503	-1.1
Ohio	1,550	4,121	8,672	13,856	16,161	16,763	3.7
South Dakota	113	262	486	758	941	919	-2.3
Wisconsin	1,199	3,450	4,088	6,438	7,342	7,443	1.4
Midwest Totals	**15,444**	**35,612**	**60,894**	**87,067**	**103,400**	**105,598**	**2.1**
Alabama	311	551	3,220	4,513	4,873	4,868	-0.1
Arkansas	107	235	1,328	1,710	2,707	2,686	-0.8
Delaware	38	311	447	1,003	1,597	1,490	-6.7
District of Columbia	2,020	3,949	8,499	9,487	9,489	8,583	-9.5
Florida	730	6,939	11,919	20,364	18,982	20,307	7.0
Georgia	416	1,258	4,472	5,980	8,859	8,536	-3.6
Kentucky	293	734	2,208	2,543	3,6667	3,707	1.1
Louisiana	815	1,720	5,546	5,535	5,466	5,842	6.9
Maryland	542	1,670	4,266	6,952	8,554	9,234	7.9
Mississippi	130	387	1,704	1,941	2,074	2,071	-0.1
North Carolina	628	1,594	3,709	5,764	6,263	5,830	-6.9
South Carolina	185	368	1,484	2,381	2,838	2,954	4.1
Tennessee	450	1,295	4,499	4,247	4,997	4,940	-1.1
Virginia	275	662	3,374	6,970	9,164	9,508	3.8
West Virginia	118	226	1,453	1,417	1,819	1,943	6.8
South Totals	**7,058**	**21,899**	**58,128**	**80,807**	**91,349**	**92,499**	**1.3**



- Perhaps the most dramatic shift came in the late 1960s, when Florida became the fourth most populous state in terms of foreign students; in 1965 it was not even among the top ten. While this initial jump was fueled by arriving refugees from Cuba (with immigrants first added to the Census in 1967 and removed in 1991), subsequent growth in Florida's international student population was sustained by enrollments from around the world and especially from the Caribbean and South America. Texas, eighth in 1969/70, leaped to third place a short five years later and drew even more students than New York by the late 1970s, falling again to third place in the following years.

6.0 (cont.)

FOREIGN STUDENTS IN U.S. REGIONS AND STATES, SELECTED YEARS

State/Region	1959/60	1969/70	1979/80	1989/90	1995/96	1996/97	% Change from 1995/96
Arizona	310	1,134	3,798	6,763	8,916	9,229	3.5
New Mexico	515	481	1,240	1,399	1,724	1,612	-6.5
Oklahoma	717	1,554	8,464	5,989	8,695	8,700	0.1
Texas	1,574	4,902	24,416	24,170	27,883	28,686	2.9
Southwest Totals	**3,116**	**8,071**	**37,918**	**38,321**	**47,218**	**48,227**	**2.1**
Connecticut	573	1,314	2,847	4,636	6,099	6,444	5.7
Maine	84	262	307	902	1,240	1,219	-1.7
Massachusetts	3,136	6,352	12,607	20,840	25,739	26,568	3.2
New Hampshire	102	356	501	1,262	1,928	1,869	-3.1
New Jersey	583	1,738	4,767	9,608	9,306	8,499	-8.7
New York	6,069	17,701	23,509	38,350	47,987	46,076	-4.0
Pennsylvania	1,734	5,248	8,919	15,803	17,897	18,110	1.2
Rhode Island	191	635	949	1,858	2,990	3,128	4.6
Vermont	136	222	702	1,206	815	647	-20.6
Northeast Totals	**12,608**	**33,828**	**55,108**	**94,465**	**114,001**	**112,560**	**-1.3**
Guam	—	113	589	473	341	346	1.5
Puerto Rico	156	1,049	628	633	624	577	-7.5
Virgin Islands	—	104	130	319	229	132	-42.4
Other Totals	**156**	**1,266**	**1,347**	**1,425**	**1,194**	**1,055**	**-11.6**
U.S. TOTAL	**48,486**	**134,959**	**286,343**	**386,851**	**453,787**	**457,984**	**0.9**

Metropolis

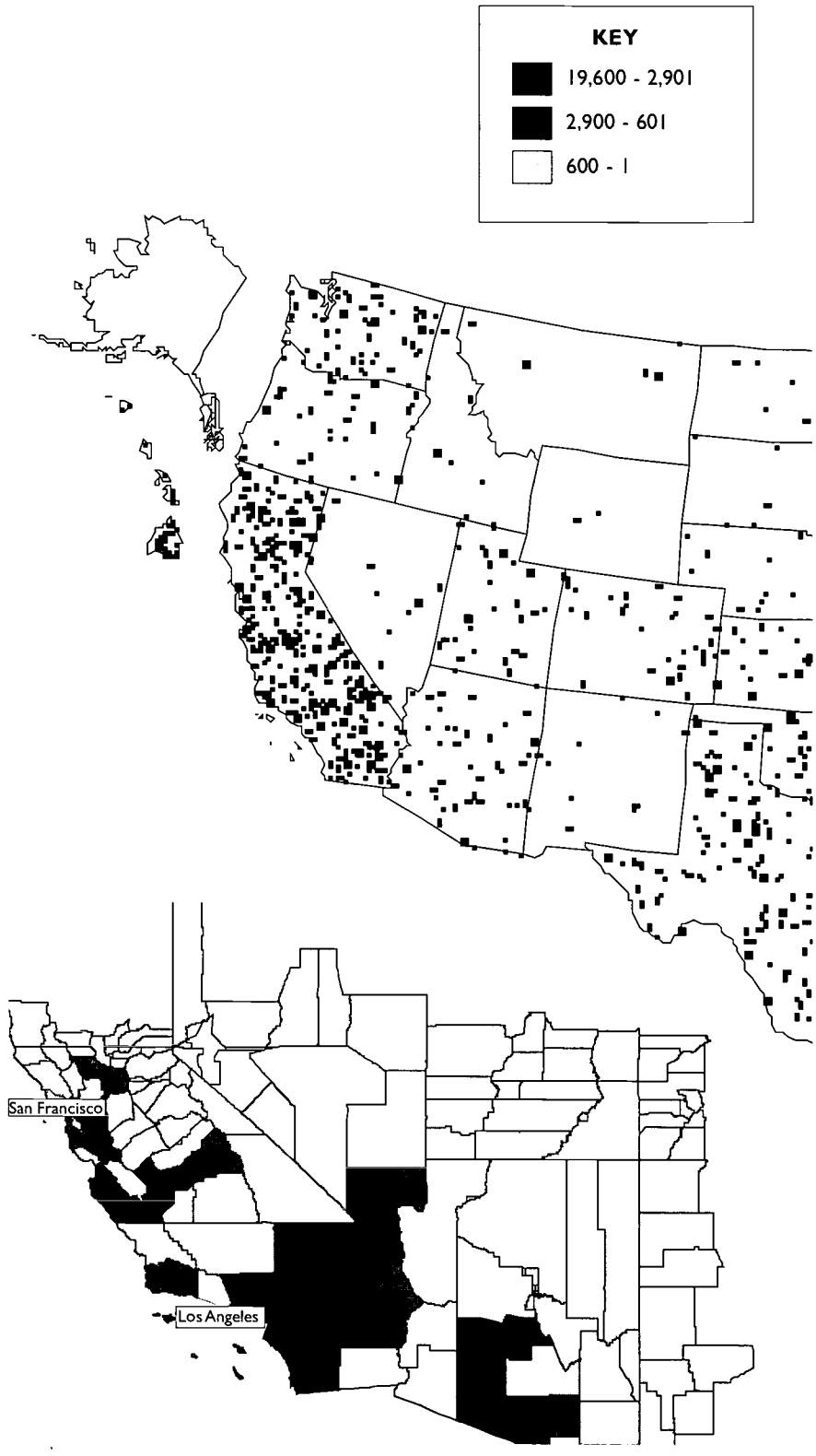
Over 22% of all international students are enrolled in universities and colleges located in just ten U.S. counties.

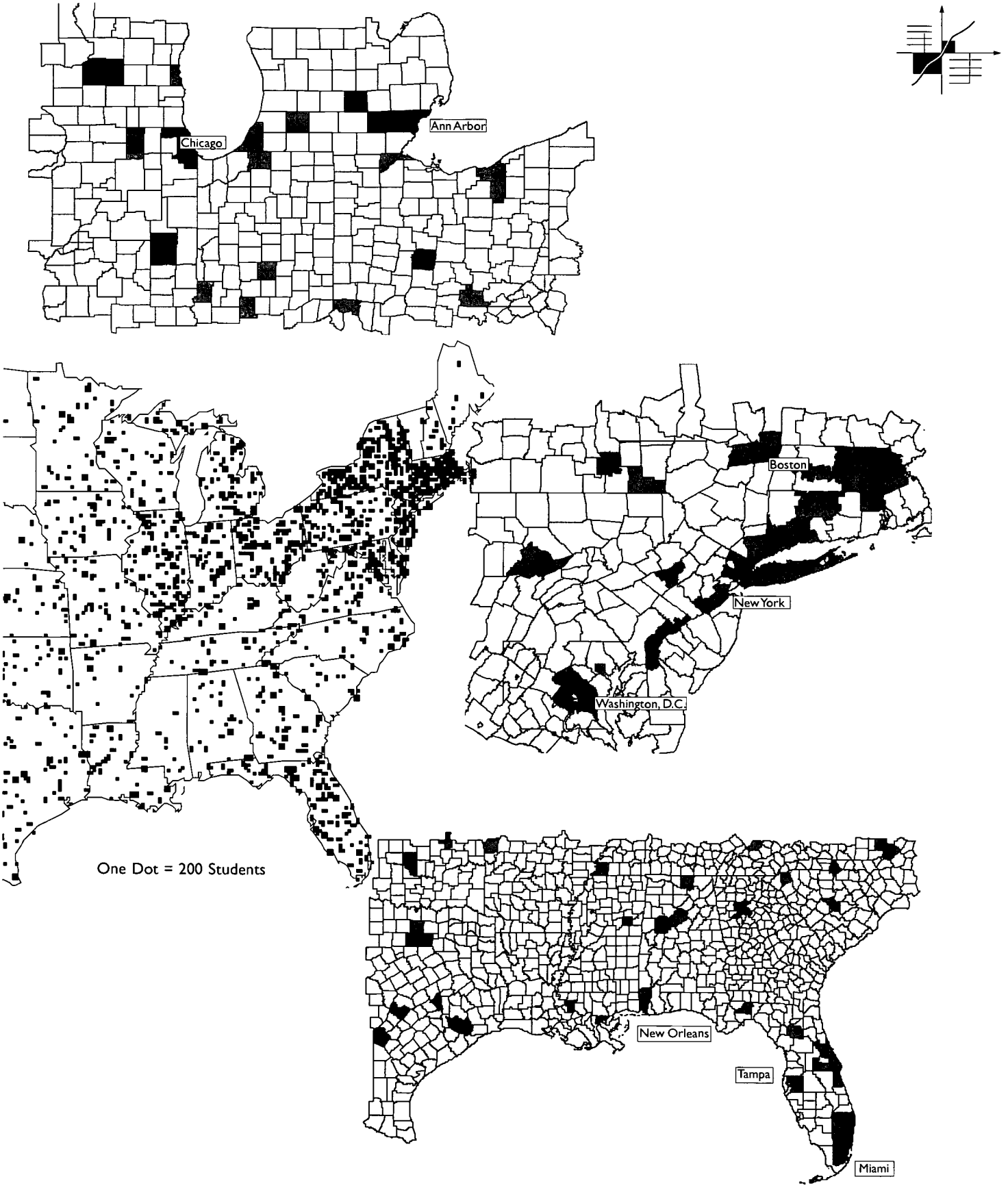
Over half of all international students are enrolled in just 50 of the over 3,100 counties in the United States. These global centers of finance, information, technology, media, services and education and their industries are crucial to the emerging global economy. The presence of international students in these cities reflects the importance of these metropoles for this country and suggests at least one of the means by which these cities will further extend their global reach. Foreign students are part of the boundary blurring that occurs in these metropolitan regions between cultures, ideologies and fields of inquiry.

This year, New York County was ranked as the leading county in terms of numbers of international students (18,934), surpassing Los Angeles County (17,979).

6.a

DISTRIBUTION OF INTERNATIONAL STUDENTS, 1996/97




Chicago
Ann Arbor
Boston
New York
Washington, D.C.
One Dot = 200 Students
New Orleans
Tampa
Miami

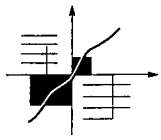
6.1

LEADING COUNTIES, 1996/97

Rank	County	State	# of International Students
1	New York	New York	18,934
	Los Angeles	California	17,979
	Suffolk	Massachusetts	11,102
	Cook	Illinois	10,302
	District of Columbia	District of Columbia	9,066
	Middlesex	Massachusetts	8,485
	Maricopa	Arizona	6,602
	Philadelphia	Pennsylvania	6,594
	Dade	Florida	6,456
10	Harris	Texas	6,363
	Total of top ten		**101,883**
	San Francisco	California	6,310
	King	Washington	5,408
	Honolulu	Hawaii	5,213
	Santa Clara	California	4,894
	San Diego	California	4,649
	Franklin	Ohio	4,575
	Washtenaw	Michigan	4,552
	Orange	California	4,150
	Dane	Wisconsin	4,047
20	Travis	Texas	3,945
	Allegheny	Pennsylvania	3,813
	Fairfax	Virginia	3,500
	Prince George's	Maryland	3,457
	Champaign	Illinois	3,415
	Kings	New York	3,287
	Dallas	Texas	3,144
	Oklahoma	Oklahoma	3,142
	Hennepin	Minnesota	3,125
	Tompkins	New York	3,063
30	Alameda	California	3,008
	Erie	New York	2,995
	Fulton	Georgia	2,958
	Wayne	Michigan	2,956
	Ingham	Michigan	2,903
	Tippecanoe	Indiana	2,900
	Middlesex	New Jersey	2,651
	Centre	Pennsylvania	2,537
	Providence	Rhode Island	2,522
	Monroe	Indiana	2,475
40	Lane	Oregon	2,458
	Story	Iowa	2,446
	Brazos	Texas	2,407
	Cuyahoga	Ohio	2,405
	Hampshire	Massachusetts	2,352
	Alachua	Florida	2,326
	Utah	Utah	2,304
	Monroe	New York	2,289
	Queens	New York	2,245
	Orleans	Louisiana	2,241
50	New Haven	Connecticut	2,225
	Total of top fifty		**233,175**
	Norfolk	Massachusetts	2,214
	Salt Lake	Utah	2,205
	Multnomah	Oregon	2,150
	St. Louis	Missouri	2,132
	Denver	Colorado	2,112
	Denton	Texas	2,090
	Pima	Arizona	2,087
	Jackson	Illinois	2,043
	Kalamazoo	Michigan	2,032
60	Boone	Missouri	2,016
	Payne	Oklahoma	1,976
	East Baton Rouge	Louisiana	1,970
	Nassau	New York	1,935
	Tarrant	Texas	1,877
	Onondaga	New York	1,869
	Lucas	Ohio	1,759
	El Paso	Texas	1,756
	Douglas	Kansas	1,735
	Baltimore City	Maryland	1,727
70	Cleveland	Oklahoma	1,718

7

The Primary Sources of Funding and Estimated Expenditures of Foreign Students



THE ECONOMICS OF EXCHANGE

- Over two-thirds (67%) of all foreign students receive most of their funding for U.S. study from personal and family sources, and over three-quarters (76%) receive most of their funding from sources outside the United States.
- The most significant source of funding from within the United States for foreign students, especially foreign graduate students, is the institution the student attends. Colleges and universities in the United States provide the bulk of funding for 16.9% of the students, more than twice as much as all other U.S. sources combined. The U.S. government provides support directly for less than 1% of foreign students, but indirectly for many more through grants to U.S. campuses. The college or university provides primary funding for nearly 35% of foreign graduate students, though much of that funding comes originally from the U.S. government, foundations or other sources.
- Since 1979/80 the most important changes in funding sources for foreign students have been the increased support by U.S. universities and the drop in support by foreign governments. U.S. institutions now support 16.9% of foreign students compared with 9.2% 17 years ago. While the percentage of support by foreign governments increased to 5.5% this year, it is still a significant decrease from 1979/80, when foreign governments (especially the oil-rich countries) were a primary funding source for 13% of foreign students.
- When interpreting primary-source-of-funds data, it should be kept in mind that U.S. colleges and universities are likely to be best informed about the contributions of their own funds and thus the percentage receiving primary support from these institutions may be overstated. The proportion of students receiving major support directly from the U.S. government understates its overall contributions, since government funds are often channelled through a number of programs or awarded directly to a U.S. campus.

7.0

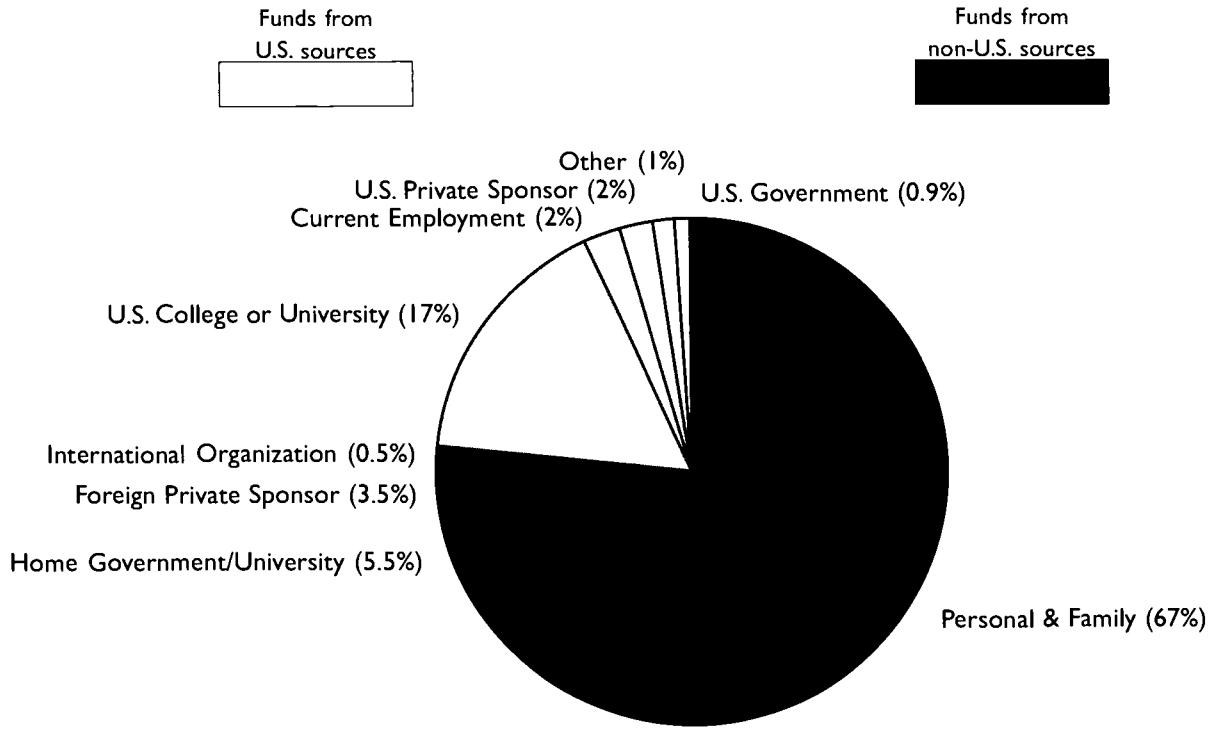
FOREIGN STUDENTS BY PRIMARY SOURCE OF FUNDS, 1995/96 and 1996/97

Primary Source of Funds	1995/96 Foreign Students	1995/96 % of Total	1996/97 Foreign Students	1996/97 % of Total	% Change
Personal & Family	307,622	67.8	307,948	67.2	0.1
U.S. College or University [1]	75,056	16.5	77,445	16.9	3.2
Home Govt/University	23,778	5.2	25,235	5.5	6.1
Foreign Private Sponsor	13,296	2.9	15,984	3.5	20.2
Current Employment	10,573	2.3	10,442	2.3	-1.2
U.S. Private Sponsor	9,620	2.1	8,931	2.0	-7.2
U.S. Government [1]	4,538	1.0	4,122	0.9	-9.2
International Organization	2,859	0.6	2,473	0.5	-13.5
Other Sources	6,444	1.4	5,404	1.2	-16.1
Total	**453,787**	**100.0**	**457,984**	**100.0**	

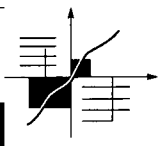
7.a

FOREIGN STUDENTS BY PRIMARY SOURCE OF FUNDS, 1996/97

A full three-quarters of the international students in the United States receive their primary source of support from non-U.S. sources.



[1] U.S. government grants refer only to those awarded directly to the student; other U.S. government funds may be received indirectly through grants to U.S. universities.



The Role of ESL Instruction in the U.S. Economy

ROBERT PESEK
Intensive English Institute

THAT world economic growth is dependent on the English language is well established. The language of business, finance, science and technology is English. ESL instruction in the U.S. is serving this increasing worldwide demand. Globally, English language training is estimated to be a $20 billion service industry. Who's tracking this industry in the U.S.?

Other countries have recognized not only the short-term but the long-term economic impact international students create. Students who have been educated in a foreign country are likely to look to that host nation for ideas and expertise in the future. For the past several decades, Germany has consciously pursued a policy of attracting foreign students as part of its overall economic strategy of increasing exports. It recognizes that students who study abroad return to their home countries to become political and business leaders, and are likely, when provided the opportunity, to maintain and further professional contacts in the country in which they studied. Thus, international education becomes a catalyst for global economic integration, a trend that is predicted to grow.

Here in the U.S., English-language training is a crucial component of university and college degree programs. However, it also serves the needs of international business professionals, government employees, travel/hospitality employees and scientists.

While the U.S. has far outpaced other countries in the field of English-language training, there is a disturbing trend emerging. With strong support from their governments, Canada, Britain and Australia have experienced rapid growth in international students, while the growth in the number of international students coming to the U.S. has slowed over the past three years. Nonetheless, these students who come to the U.S. to study ESL make up the fastest growing component of the international student population.

The U.S. is still the favorite destination of foreign students in terms of actual numbers. But we are worried about maintaining this position. In last year's edition of *Open Doors*, Rhona Genzel, past president of the American Association of Intensive English Programs (AAIEP) and Joanne Geddes, past president of the consortium of University and College Intensive English Programs (UCIEP), wrote that the number of Japanese students inquiring about study in the U.S. decreased 5%, while there was a 5% increase in inquiries to Canada. The primary reason cited for this phenomenon was the "visa situation;" the closing of the Fukuoka and Sapporo visa offices had a great effect. While Japanese travel overseas went up 11% during the same period, travel to Canada increased by 33%, to Australia by 26% and to New Zealand by 45%.

Foreign citizens reportedly choose to study in the U.S. for the following reasons: the prestige and reputation associated with U.S. higher education and degrees; the greater access afforded by the size, diversity and flexibility of the U.S. system; and the value of proficiency in the English language and knowledge of U.S. culture and business practices. In addition, U.S. colleges and universities

Continued...

The Role of ESL Instruction in the U.S. Economy

...Continued

often have the best scientific and technical research facilities.

U.S. Foreign and Commercial Services in Korea, Brazil and Argentina are leading the way in sponsoring Study USA educational fairs in their countries.

We need better statistics than we have now. We need to know what our world market is so that we can better coordinate resources. We need to know how many students study ESL at any school in the U.S. each year throughout the year, how long they stay and how much money they spend.

We need knowledge of the countries from which students are currently having trouble getting visas and any that are becoming less restrictive. We need information on trends related to student demographics: which countries have or anticipate having population bulges in the undergraduate age group that won't be accommodated in domestic education systems.

We need to know about trends in a country's economics that make it possible for students to afford to come to the U.S. We need to know about trends in law or regulations affecting the usefulness of a U.S. degree. For example, is a U.S. bachelor's degree recognized for international students seeking graduate school admission in their country?

Gathering this information will require cooperation among various groups. The Department of Commerce (DOC) is concerned with the revenues provided by ESL students. International student education in the U.S. generates $7.5 billion annually. The DOC classifies international student education as the third largest exporting industry in the country (behind international air travel, shipping and tourism). The Department of State and INS are interested in assuring that international students studying in the U.S. can pay their bills and that they return to their home country eventually. All of us involved with ESL training in the U.S. want to know from where our future students will be coming so that we can be prepared to serve them. No group can solve the problems on its own.

These groups are beginning to come together. The Bureau of the Census is working with the DOC in establishing a new industry classification for language programs, instead of lumping them with educational and training programs in general. *Open Doors* and the Bureau of Labor Statistics will be collaborating with AAIEP in defining the universe constituted by ESL students, and surveying ESL-related economic activity.

At a recent DOC seminar on the export of educational services, an audience member asked, "Who is the person in charge of tracing the ESL component of the U.S. export economy?" I hope that soon we'll be able to respond with more than head-scratching and quizzical looks.

Robert A. Pesek is the Director of Operations, Intensive English Institute, and 1994-95 president of AAIEP.

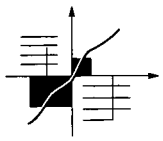
7.1

PRIMARY FUNDING SOURCE WITHIN ACADEMIC LEVEL, 1996/97

At the undergraduate level, eight in ten international students receive their primary support from personal and family funds, but at the graduate level the figure is below 50%.

Primary Source of Funds	Under-graduate	Graduate	Other
Personal & Family	81.3	47.7	60.5
U.S. College or University [1]	6.6	34.9	4.9
Home Govt/University	4.8	6.7	4.5
U.S. Government [1]	0.8	1.1	0.9
Private U.S. Sponsor	2.2	1.8	1.3
Foreign Private Sponsor	3.0	4.1	3.8
Current Employment	0.4	1.0	21.7
International Organization	0.3	0.9	0.7
Other Sources	0.8	1.7	1.8
Total	**100.0**	**100.0**	**100.0**

[1] U.S. government grants refer only to those awarded directly to the student; other U.S. government funds may be received indirectly through grants to U.S. universities.



Primary Source of Funds by Academic Level

- More than eight of every ten international undergraduates (81.3%) draw the bulk of their funding for study from personal and family resources. Less than 7% are funded by any other single source: 6.6% are supported mainly by the U.S. college or university they attend, and 4.8% are financed by their home government or university. The U.S. government provides support directly for 0.8% of foreign undergraduates studying in this country.
- Almost half of the foreign graduate students draw the major part of their funding for study in this country from personal and family sources (47.7%). This proportion is much lower than the proportion of undergraduates who rely primarily on personal and family funds (81.3%).

The Education Industry: An Investor's Perspective

MATTHEW WULFSTAT
Rosewood Capital

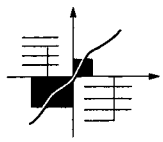
EDUCATION: the new "hot" industry on Wall Street? It does not yet have the frenzied hype of "the Internet," but just wait. The structure of the education industry has many of the same characteristics that investors look for in any attractive segment. It is a large and stable industry that is functioning well below its potential. Due to a variety of economic, political and social factors, our educational system is beginning to undergo some fundamental changes.

The United States spends over $600 billion annually, or 10% of its GDP, on education. This is more than we spend on defense and more than any other nation in the world spends on educating its population. Foreign students studying in the U.S. alone comprise a substantial market. The Institute of International Education estimates the gross economic impact of foreign students in the U.S. to be $7 billion per year.

A strong educational system is critical in today's evolving knowledge-based economy. Within the context of a highly competitive global economy, the rapid pace of technological development has made knowledge a competitive advantage at least as important as traditional, scarce natural resources. Technology makes lifelong learning a necessity. As a result, maintaining an effective educational system is imperative.

Despite the need and the amount of capital spent, the performance of our educational system is well below its potential. Forty-two percent of our nation's fourth graders cannot read at a basic level. In math, American eighth graders rank below the international average. Seventy-one percent of Americans give our schools a grade of C or worse. One could easily go on.

Continued...



The Education Industry: An Investor's Perspective

...Continued

The current educational crisis has enabled entrepreneurs who are passionate about education to develop new ideas, products and services within the public and private sectors. Charter schools have been launched in many states, freed from the confines of "the system" to nurture new ideas. Small private schools like the Challenger Schools in California are having extraordinary success educating children at very reasonable costs to families. Numerous large publicly-traded companies have been built in a wide variety of educational segments, including The Learning Company (software), Apollo Group (University of Phoenix distance learning) and Sylvan Learning Centers (extracurricular tutoring and testing services) to name just a few.

In the international exchange segment, ELS Language Centers provides a classic example of a company that saw a problem (foreign students and executives visiting the U.S. who needed intensive English language training) and provided a service to address this problem. Earlier this summer, ELS was bought by Berlitz International for $95 million.

The government's monopoly on education will likely continue to erode as smart, creative education entrepreneurs work to improve the way we learn. Change will certainly take time. However, ten years down the road, the structure of the education industry will likely be very different than it is today.

Matt Wulfstat heads up research into the education industry for Rosewood Capital, a venture capital firm in San Franciso, California.

- Undergraduate and graduate international students also differ in the shares receiving primary support from the schools they attend. While only 6.6% of undergraduates receive the bulk of their funding from U.S. colleges and universities, 34.9% of foreign graduate students receive their primary support from this source, largely in the form of teaching or research assistantships. The U.S. government provides the primary support directly for 1.1% of foreign graduate students studying in this country, and indirectly to many more through research grants to U.S. campuses.

7.2

FOREIGN STUDENTS BY PRIMARY SOURCE OF FUNDS, SELECTED YEARS, 1979/80 - 1996/97
How the primary sources of support have changed since 1979.

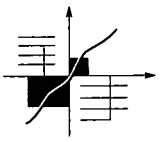
Primary Source of Funds	1979/80 % of Total	1984/85 % of Total	1989/90 % of Total	1994/95 % of Total	1995/96 % of Total	1996/97 % of Total
Personal & Family	65.4	66.2	63.7	68.4	67.8	67.2
U.S. College or University	9.2	11.6	18.2	16.5	16.5	16.9
Home Govt/University	13.0	12.0	6.7	5.3	5.2	5.5
Foreign Private Sponsor	3.0	3.0	2.2	2.5	2.9	3.5
U.S. Private Sponsor	1.9	1.9	3.1	2.2	2.1	2.3
Current Employment	2.7	2.1	2.1	2.2	2.3	2.0
U.S. Government	2.0	2.1	2.2	1.2	1.0	0.9
International Organization	NA	NA	0.6	0.5	0.6	0.5
Other Sources	2.8	1.1	1.2	1.3	1.4	1.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

7.3

FUNDING BY CARNEGIE CLASSIFICATION, 1996/97

Undergraduate Source	Research I&II	Doctoral I&II	Master's I&II	Liberal Arts I&II	Community College
Personal & Family	78.5	70.8	80.7	73.5	89.1
U.S. College or University	7.2	7.7	8.2	17.7	0.9
Home Govt/University	7.9	9.9	4.8	3.7	1.9
U.S. Government	0.6	0.5	0.7	0.6	1.0
Private U.S. Sponsor	1.3	1.5	1.8	2.0	3.1
Foreign Private Sponsor	2.1	8.7	2.5	1.7	3.0
Current Employment	0.1	0.4	0.5	0.1	0.6
International Organization	0.3	0.1	0.4	0.3	0.2
Other Sources	2.1	0.4	0.4	0.4	0.3

Graduate Source	Research I&II	Doctoral I&II	Master's I&II	Liberal Arts I&II
Personal & Family	38.1	49.0	75.6	77.5
U.S. College or University	43.4	34.6	12.2	13.6
Home Govt/University	7.9	5.9	3.1	4.1
U.S. Government	1.4	0.8	0.8	0.3
Private U.S. Sponsor	0.9	2.0	2.0	2.5
Foreign Private Sponsor	4.0	5.5	3.8	0.8
Current Employment	0.7	1.0	1.7	1.0
International Organization	1.0	0.7	0.4	0.0
Other Sources	2.6	0.5	0.3	0.2



Primary Source of Funds by Carnegie Classification

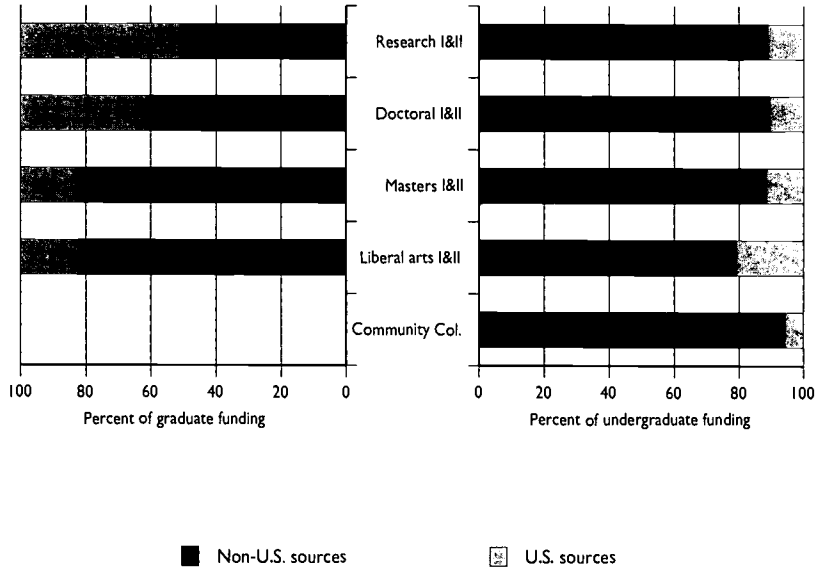
- The pattern of support for foreign undergraduates appears generally similar across different types of institutions by Carnegie Classification. (See Section 8 for a description of the Carnegie Classification scheme.) The bulk of student support comes from personal and family sources in all types of institution.
- Despite this basic similarity there are several obvious differences between institutional types. Community college students receive the largest share of support across institutional types from personal sources (89.1%) as well as from U.S. private sponsors (3.1%). Liberal arts institutions provide the largest proportion of undergraduate student support from institutional sources (17.7%).
- At the graduate level, doctoral students and those attending research institutions receive a greater proportion of support from home governments, 5.9% and 7.9% respectively, than students in any other type of institution.

- At the graduate level there are important differences between the institutional types in the sources of financial support for foreign students. This year, foreign students at research institutions received more primary support from their university (43.4%) than from personal or family sources (38.1%). Just over half of foreign graduate students attending research institutions receive their primary source of support from non-U.S. institutions. Students at master's institutions, in general, provide their own support from personal sources (75.6%) while 12.2% receive primary support from their institution.
- Generally, across Carnegie types at least 75% of foreign undergraduates (and typically more) receive their primary source of support from non-U.S. sources. At the graduate level, the level of non-U.S. support is considerably lower. While undergraduate funding patterns are relatively similar, considerable variation in the sources of primary support exists at the graduate level by institutional type.

7.b

FUNDING BY CARNEGIE CLASSIFICATION, 1996/97

Across Carnegie types, the percentage of graduate students receiving their primary support from non-U.S. sources is considerably lower than undergraduates.



7.4

ESTIMATED TUITION AND LIVING EXPENSES FOR UNDERGRADUATE FOREIGN STUDENTS, 1997/98

State	Est. Foreign Undergrad.	Weighted Living Expenses	Total Living Costs	Weighted Tuition Expenses	Total Tuition Costs
Alabama	3,218	$4,959	$15,958,062	$4,877	$15,694,186
Alaska	347	$5,454	$1,892,538	$6,058	$2,102,126
Arizona	5,496	$3,684	$20,247,264	$6,912	$37,988,352
Arkansas	2,026	$5,559	$11,262,534	$5,616	$11,378,016
California	38,115	$4,594	$175,100,310	$8,454	$322,224,210
Colorado	3,865	$4,995	$19,305,675	$9,600	$37,104,000
Connecticut	3,163	$7,201	$22,776,763	$13,110	$41,466,930
Delaware	867	$5,806	$5,033,802	$9,612	$8,333,604
Dist. of Columbia	4,234	$7,900	$33,448,600	$15,330	$64,907,220
Florida	15,232	$5,379	$81,932,928	$7,668	$116,798,976
Georgia	4,774	$5,503	$26,271,322	$7,992	$38,153,808
Hawaii	3,188	$5,909	$18,837,892	$7,215	$23,001,420
Idaho	1,063	$6,403	$6,806,389	$5,374	$5,712,562
Illinois	8,180	$5,860	$47,934,800	$9,590	$78,446,200
Indiana	4,673	$5,862	$27,393,126	$10,299	$48,127,227
Iowa	4,359	$4,918	$21,437,562	$8,032	$35,011,488
Kansas	4,125	$5,997	$24,737,625	$7,051	$29,085,375
Kentucky	2,374	$5,810	$13,792,940	$6,600	$15,668,400
Louisiana	2,734	$4,963	$13,568,842	$7,079	$19,353,986
Maine	957	$6,663	$6,376,491	$9,728	$9,309,696
Maryland	5,467	$4,187	$22,890,329	$8,051	$44,014,817
Massachusetts	15,103	$8,049	$121,564,047	$16,461	$248,610,483
Michigan	8,158	$5,551	$45,285,058	$9,026	$73,634,108
Minnesota	4,272	$5,781	$24,696,432	$8,913	$38,076,336
Mississippi	1,026	$5,365	$5,504,490	$5,460	$5,601,960
Missouri	4,930	$7,538	$37,162,340	$10,833	$53,406,690

Thinking About Economic Impact

Unlike casual tourists, foreign students make educational service purchases (tuition and fees), as well as incurring cost-of-living expenses (room and board) over a year's time. These purchases are seen by many state governments as important service sector "exports" with significant long- and short-term implications for state and regional economies. It is well to keep in mind that these estimates are built upon assumptions and data samples with distinct limitations.

First, it is very difficult for either campus officials or individual students to untangle the complex mix of financial sources that are used to underwrite a college education. Typically a broad mix of sources, including personal, grant-based and—for public institutions—state subsidies, are tapped. Most financial data is not shared widely across a campus and, for privacy reasons, is not shared when individuals might be identified.

7.4(cont.)

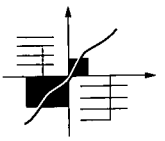
ESTIMATED TUITION AND LIVING EXPENSES FOR UNDERGRADUATE FOREIGN STUDENTS, 1997/98

State	Est. Foreign Undergrad.	Weighted Living Expenses	Total Living Costs	Weighted Tuition Expenses	Total Tuition Costs
Montana	783	$6,850	$5,363,550	$7,403	$5,796,549
Nebraska	1,721	$5,893	$10,141,853	$6,808	$11,716,568
Nevada	1,675	$7,378	$12,358,150	$4,619	$7,736,825
New Hampshire	1,124	$7,507	$8,437,868	$15,259	$17,151,116
New Jersey	4,993	$4,850	$24,216,050	$8,283	$41,357,019
New Mexico	680	$4,950	$3,366,000	$6,478	$4,405,040
New York	25,028	$4,953	$123,963,684	$11,312	$283,116,736
North Carolina	3,045	$5,513	$16,787,085	$9,083	$27,657,735
North Dakota	1,106	$4,894	$5,412,764	$5,599	$6,192,494
Ohio	7,505	$5,960	$44,729,800	$9,606	$72,093,030
Oklahoma	5,552	$5,621	$31,207,792	$6,004	$33,334,208
Oregon	4,545	$5,011	$22,774,995	$10,666	$48,476,970
Pennsylvania	9,426	$6,952	$65,529,552	$13,690	$129,041,940
Rhode Island	1,996	$7,959	$15,886,164	$16,503	$32,939,988
South Carolina	1,361	$5,187	$7,059,507	$6,594	$8,974,434
South Dakota	448	$5,520	$2,472,960	$6,791	$3,042,368
Tennessee	2,859	$6,015	$17,196,885	$8,893	$25,425,087
Texas	15,501	$4,861	$75,350,361	$6,437	$99,779,937
Utah	4,226	$7,117	$30,076,442	$4,742	$20,039,692
Vermont	457	$6,639	$3,034,023	$10,926	$4,993,182
Virginia	5,098	$6,097	$31,082,506	$9,691	$49,404,718
Washington	8,599	$3,808	$32,744,992	$7,285	$62,643,715
West Virginia	1,334	$4,500	$6,003,000	$5,636	$7,518,424
Wisconsin	4,171	$6,167	$25,722,557	$10,622	$44,304,362
Wyoming	265	$5,874	$1,556,610	$5,154	$1,365,810
Total	**265,444**		**$1,473,693,311**		**$2,471,720,123**

7.5

ESTIMATED TUITION AND LIVING EXPENSES FOR GRADUATE FOREIGN STUDENTS, 1997/98

State	Est. Foreign Graduates	Weighted Living Expenses	Total Living Costs	Weighted Tuition Expenses	Total Tuition Costs
Alabama	1,650	$4,923	$8,122,950	$4,457	$7,354,050
Alaska	172	$6,596	$1,134,512	$8,135	$1,399,220
Arizona	3,733	$4,840	$18,067,720	$6,952	$25,951,816
Arkansas	660	$6,051	$3,993,660	$6,951	$4,587,660
California	18,902	$7,361	$139,137,622	$12,511	$236,482,922
Colorado	2,351	$5,708	$13,419,508	$10,608	$24,939,408
Connecticut	3,281	$7,933	$26,028,173	$14,234	$46,701,754
Delaware	623	$1,795	$1,118,285	$11,332	$7,059,836
Dist. of Columbia	4,349	$3,568	$15,517,232	$14,059	$61,142,591
Florida	5,075	$6,896	$34,997,200	$9,074	$46,050,550
Georgia	3,762	$7,773	$29,242,026	$9,926	$37,341,612
Hawaii	2,302	$6,942	$15,980,484	$8,088	$18,618,576
Idaho	342	$7,252	$2,480,184	$7,869	$2,691,198
Illinois	11,449	$7,078	$81,036,022	$12,425	$142,253,825
Indiana	4,596	$6,129	$28,168,884	$10,391	$47,757,036
Iowa	3,019	$6,920	$20,891,480	$9,122	$27,539,318
Kansas	2,469	$6,373	$15,734,937	$7,336	$18,112,584
Kentucky	1,333	$4,671	$6,226,443	$7,103	$9,468,299
Louisiana	3,108	$6,520	$20,264,160	$9,527	$29,609,916
Maine	262	$6,294	$1,649,028	$9,506	$2,490,572
Maryland	3,767	$3,685	$13,881,395	$10,388	$39,131,596
Massachusetts	11,465	$5,404	$61,956,860	$15,328	$175,735,520
Michigan	9,161	$6,022	$55,167,542	$11,676	$106,963,836
Minnesota	2,665	$6,508	$17,343,820	$10,042	$26,761,930
Mississippi	1,045	$4,471	$4,672,195	$5,025	$5,251,125
Missouri	3,895	$6,793	$26,458,735	$11,743	$45,738,985



Second, the *Open Doors* survey was designed to provide nationally aggregated estimates. There is considerable variation in support by nationality, field of study, academic level and institutional type. David North, in his book *Soothing the Establishment*, accurately describes the intricacies of funding foreign graduate students in the science and engineering disciplines. Using National Research Council data, he describes how "...a large majority of all Ph.D. candidates in engineering are funded by U.S. sources, but the majority is largest among those graduate students holding temporary visas" (p.83). It is for this reason that for the past four years *Open Doors* has presented financial support data by academic level and institutional type (see Table 7.3). Over 22% of foreign students enrolled at research institutions are majoring in engineering.

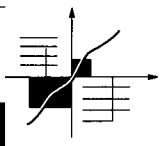
Without question, for particular subgroups the nationally aggregated estimates will almost assuredly be inaccurate. For these more discrete analyses, the collection of individual data directly from students may be a sounder approach. The sidebar essay by David Funk which follows shows how individual data collection may yield much higher expenditure estimates.

Third, and finally, financial data simply is difficult data to obtain from either campus officials or probably from individual foreign students. As *Open Doors* has repeatedly reported over the years, the response rate to financial items has been consistently below 45%. We take this as a reflection of the limitations of data sharing among campus officials as well as possible problems in data definition. While we advocate caution in the interpretation of these data, we believe that they are suggestive of the kinds of financial contributions that foreign students in general make to state economies.

7.5(cont.)

ESTIMATED TUITION AND LIVING EXPENSES FOR GRADUATE FOREIGN STUDENTS, 1997/98

State	Est. Foreign Graduates	Weighted Living Expenses	Total Living Costs	Weighted Tuition Expenses	Total Tuition Costs
Montana	244	$5,974	$1,457,656	$5,332	$1,301,008
Nebraska	1,298	$5,588	$7,253,224	$6,158	$7,993,084
Nevada	406	$8,949	$3,633,294	$5,400	$2,192,400
New Hampshire	745	$6,061	$4,515,445	$16,783	$12,503,335
New Jersey	3,506	$2,457	$8,614,242	$5,449	$19,104,194
New Mexico	932	$7,200	$6,710,400	$6,772	$6,311,504
New York	21,048	$6,315	$132,918,120	$10,874	$228,875,952
North Carolina	2,785	$6,729	$18,740,265	$10,081	$28,075,585
North Dakota	397	$4,095	$1,625,715	$6,484	$2,574,148
Ohio	9,258	$5,572	$51,585,576	$10,143	$93,903,894
Oklahoma	3,148	$6,389	$20,112,572	$6,356	$20,008,688
Oregon	2,279	$5,651	$12,878,629	$9,016	$20,547,464
Pennsylvania	8,684	$7,617	$66,146,028	$15,215	$132,127,060
Rhode Island	1,132	$6,494	$7,351,208	$10,512	$11,899,584
South Carolina	1,593	$7,166	$11,415,438	$6,481	$10,324,233
South Dakota	471	$4,781	$2,251,851	$5,573	$2,624,883
Tennessee	2,081	$6,573	$13,678,413	$9,205	$19,155,605
Texas	13,185	$5,224	$68,878,440	$6,366	$83,935,710
Utah	1,830	$9,125	$16,698,750	$6,422	$11,752,260
Vermont	190	$2,403	$456,570	$10,698	$2,032,620
Virginia	4,410	$5,535	$24,409,350	$7,487	$33,017,670
Washington	2,360	$7,037	$16,607,320	$11,563	$27,288,680
West Virginia	609	$6,534	$3,979,206	$7,271	$4,428,039
Wisconsin	3,272	$6,487	$21,225,464	$12,949	$42,369,128
Wyoming	186	$6,986	$1,299,396	$7,324	$1,362,264
Total	**191,485**		**$1,187,133,629**		**$2,022,844,727**



International Student Spending at the University of Wisconsin-Madison

DAVID L. FUNK

University of Wisconsin-Madison

RECENT studies by the Center for International Higher Education Studies (CIHES) at the University of Wisconsin have sought to determine the true economic impact stemming from international student movement in the U.S. A CIHES research study initiated in 1996 by the UW-Madison School of Business indicates that the unique dynamics of the international education experience have led to dramatic underestimations of the immediate as well as extended impact of international students studying in the U.S.

We discovered, for example, that previous static analysis of educational costs and services using domestic student methodologies disregarded entirely the immense impact to local, state and national economies from the following unique expenditure habits of international students:

- Pre- and post-enrollment travel and tourism
- Extended visits from family and friends
- Planned purchasing for interpersonal export upon arrival
- Planned purchasing just prior to departing the U.S. following a course of study
- Initial household adjustment expenditure period upon arrival
- Return travel during breaks and holidays
- Higher-than-average overall family wealth of international students versus U.S. students, resulting in a small percentage (30%) of international students substantially out-spending both their international and U.S. peers. International students are required to demonstrate a defined level of financial well-being in order to matriculate in U.S. universities.

The two-year study of international student spending habits, which relied on extensive survey research followed up by in-depth interviews and case studies, found that when international students self-report their spending habits they tend to greatly underestimate expenditures for utilities, auto service, dining and drinking, guest lodging and transportation, while overestimating on furniture and books/supplies.

Survey results from over 300 international students at the University of Wisconsin found their annual living expenditures (not including tuition costs) averaged $24,640 in 1996, which translated into a $97.7 million a year direct impact on the local Madison, Wisconsin economy. The impact on the state, meanwhile, when the economic multiplier effect is considered, expands to $219.8 million. The length of international student stay in Madison averaged 46 months, or almost four years.

A minimum spender profile was developed in order to compare the average of the lowest 5% reported expenditures for each individual category of spending to the overall results. It was sensed that outlaying groups of very financially secure students as well as financially pressed international students created a tale of three distinct worlds—the poverty-stricken international student, an average (middle-class) international student profile, and a significantly more extravagant international student that exceeded both their U.S. and international peers in spending behavior.

The "minimum spender" spent $9,392 annually, while the composite international student averaged $24,640. Clearly, there are a minority of international students (5%) at UW-Madison who are living at a level of expenditure 2.5 times lower than their average international student peer. The "big spenders" among the international student sample, the top 5%, averaged an astounding $85,136 a year. This startling figure of student spending is largely bolstered by guest spending, automobile purchases, extensive travel and other large purchases. The nature of the spending notwithstanding, however,

Continued...

International Student Spending at the University of Wisconsin-Madison

...Continued

the "big spender" profile evidences a powerful economic capability among a select group of international students.

The results of the University of Wisconsin-Madison international student economic impact study reveal dramatically higher spending levels by international students over U.S. students, and cast considerable doubt on the ability to apply the same economic impact data collection tools used on domestic students to their international counterparts. Whereas a previous study on domestic students found an average $1,022 in spending per month, international students in the same university population had an average monthly expenditure of $2,053, all factors remaining equal. Ironically, despite a mean overall monthly expenditure almost two times that of a domestic UW-Madison student, 12 out of the 22 itemized categories actually resulted in equal or lower per month spending levels, possibly representing a willingness by a segment of the international student population to accept/afford a lower standard of living than U.S. students.

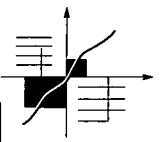
The following five monthly spending categories—telephone bill, vehicle purchases, furniture and appliances, transportation and books/supplies—and the collective categories of visitor spending and pre- and post-travel, however, accounted for the dramatic increase. The explanation is understandable. Virtually every international student purchases at least one, and often two, round-trip flight tickets annually at an average cost of $1,355 per year. Many students purchased automobiles upon arriving in the U.S., with the majority intending to ship the car home with their one duty-free auto allowance following their stay. International student car purchasing resulted in average annual expenses of $1,367 for automobile purchasing.

When international students set about establishing their living quarters, meanwhile, without exception they had no furniture or appliances and, even when they chose a furnished apartment to rent, had high initial expenditures on furnishings. Although the bulk of purchases were in the first three months, the annual average came out to $503 for furniture only with an additional $372 a year spent on miscellaneous household items. Finally, the high spending on books and supplies is largely attributable to students purchasing computers upon arriving in the U.S. International students averaged $1,104 on computers annually, and spent $1,347 on books every year. Most astounding, however, was spending related to visitor and travel/tourism. International students averaged a little over two international visitors with a collective stay of 25 days during their course of study in the U.S. These visitors spent $4,787 during their almost one-month stay. Additionally, estimated per student spending on travel was an aggregate of $718 per student, most often undertaken during winter breaks or at the conclusion of their academic programs.

The above economic impact findings from the continuing 1996-98 CIHES project at the University of Wisconsin-Madison cautions that previous attempts to determine the economic impact of international students may have seriously underestimated spending behavior by not adjusting research methodologies to address the dynamics of the international student experience. The CIHES project, which concludes in May 1998, is a comprehensive look at international student and programming impacts—on local, state and national economies, on knowledge and human capital migration flows and on academic and social communities.

David L. Funk is a faculty member of the University of Wisconsin-Madison School of Business.

Continued...



Comparisons of International Student Spending 1996 CIHES UW-Madison Profile

HOW DO INTERNATIONAL STUDENTS SPEND THEIR MONEY?[2]

Categories	Profile of a Minimum Spender[1]	Profile of an Average Spender	Profile of a Big Spender[3]
TOTAL ANNUAL SPENDING	$9,392	$24,640	$85,136
RENT	$3,000	$4,787	$8,112
CLOTHING	-	$1,019	$6,480
INTERNATIONAL AIR TRAVEL	$800	$1,355	$4,782
CAR	-	$1,367	$7,645
UTILITIES	$600	$350	$672
PERSONAL OR BUSINESS SERVICES	-	$218	$936
PHONE	$420	$1,682	$8,520
VISITORS	-	$2,879	$23,132
OTHER	$240	$372	$1,440
U.S. TRAVELING	-	$718	$2,926
ENTERTAINMENT	$120	$439	$2,160
CHILDREN'S EDUCATION	-	$58	$262
GROCERIES	$2,400	$2,726	$4,320
COMPUTERS	-	$1,104	$2,213
BOOKS	$720	$1,347	$1,082
ELECTRONICS	-	$356	$1,968
FURNITURE	-	$503	$2,214
INSURANCE	$540	$956	$1,644
GOVERNMENT	-	$210	$936
TRANSPORTATION	$192	$583	$1,652
SPOUSE'S EDUCATION	-	$652	-
DINING	$360	$955	$2,040

[1] A Base Minimum Profile was developed using the average of the lowest 5% reported expenditures for each individual category of spending from the 1996 Center for International Higher Education Studies UW-Madison Profile of 248 total respondents. The averaged Base Minimum was then compared to a CIHES-generated reasonable estimate of the lowest possible expenditure levels in each spending category based on Madison, WI costs of living. The difference between the averaged and estimated Base Minimums was statistically negligible. It is possible that an international student could survive on less than the Minimum Spender, yet CIHES' findings indicate that $9,392 is a accurate minimum level of spending notwithstanding students' more frugal intents. The Base Minimum Spender is 0.75 standard deviations below the mean expenditure level.

[2] How Do International Students Spend Their Money? depicts the mean expenditure for each category of spending from the 1996 Center for International Higher Education Studies UW-Madison Profile of 248 total respondents.

[3] A Big Spender profile was developed using the average of the highest 5% reported expenditures for each individual category of spending from the 1996 Center for Higher Education Studies UW-Madison Profile of 248 total respondents. The Big Spender profile is important in illustrating the impact on overall international student mean expenditure figures exerted by the upper 5-20% of international students, who tend to be funded exclusively by family support and exhibit spending behavior 2.95 standard deviations above the mean level of expenditure.

ESTIMATING ECONOMIC IMPACT: 1996/97

Presented here are estimated tuition and cost-of-living expenses for international students. Unlike in past years, these estimates are based on cost data provided to the College Board by individual institutions, and collected as part of the College Board's Annual Survey of Colleges for the year 1996-97. The data is based on information supplied by the colleges themselves in response to this voluntary survey. The College Board's Annual Survey of Colleges is sent to public and private institutions that are accredited and confer at least one bachelors or associate degree. Of these 3,263 institutions, 2,674 provided full data, which was then inspected by data editors. Discrepancies were noted and the institutions re-questioned. This year, estimated expense data was intensively queried by the College Board. Every cost figure in this data set was verified with an institutional representative. Cost data for foreign students included undergraduate tuition and fees, as well as maintenance expenses. Maintenance expenses included books and supplies, transportation and other expenses. For graduate students the Master's tuition figure and maintenance expenses were utilized.

7.6

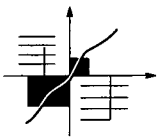
TOTAL ESTIMATED EXPENSES FOR ALL FOREIGN STUDENTS, 1996/97

Costs	Undergraduate	Graduate	Total
Living Expenses	$1,473,693,311	$1,187,133,629	$2,660,826,940
Tuition Expenses	$2,471,720,123	$2,022,844,727	$4,494,564,850
Total Expenses	$3,945,413,434	$3,209,978,356	$7,155,391,790

7.7

COMBINED UNDERGRADUATE AND GRADUATE ESTIMATED EXPENSES BY STATE FOR FOREIGN STUDENTS, 1996/97

State	Estimated 1996/97 Expenses
Alabama	$47,129,248
Alaska	$6,528,396
Arizona	$102,255,152
Arkansas	$31,221,870
California	$872,945,064
Colorado	$94,768,591
Connecticut	$136,973,620
Delaware	$21,545,527
District of Columbia	$175,015,643
Florida	$279,779,654
Georgia	$131,008,768
Hawaii	$76,438,372
Idaho	$17,690,333
Illinois	$349,670,847
Indiana	$151,446,273
Iowa	$104,879,848
Kansas	$87,670,521
Kentucky	$45,156,082
Louisiana	$82,796,904
Maine	$19,825,787
Maryland	$119,918,137
Massachusetts	$607,866,910
Michigan	$281,050,544
Minnesota	$106,878,518
Mississippi	$21,029,770
Missouri	$162,766,750
Montana	$13,918,763
Nebraska	$37,104,729
Nevada	$25,920,669
New Hampshire	$42,607,764
New Jersey	$93,291,505
New Mexico	$20,792,944
New York	$768,874,492
North Carolina	$91,260,670
North Dakota	$15,805,121
Ohio	$262,312,300
Oklahoma	$104,663,260
Oregon	$104,678,058



The analysis included the following steps:

First, the College Board data was restricted to graduate and undergraduate programs that contained at least a tuition estimate for either undergraduate or, if applicable, for graduate students. These data were than matched with IIE *Open Doors* data for number of foreign undergraduate and graduate students. In all, some 1,996 institutions were able to provide IIE with data suitable for analysis. For the purposes of this analysis, students classified as "other" (Intensive English, Non Degree, Practical Training) were combined with students classified as undergraduates. Of graduate schools, 761 provided data for expenses and 746 provided tuition data. For undergraduate schools, 1,760 provided expense data and 1,766 provided tuition data.

Second, enrollment-weighted average (mean) tuition and maintenance expense estimates were calculated for each state based on individual institutional data for foreign student enrollment and cost. These enrollment-weighted averages were calculated separately for undergraduate and graduate students at each institution. Estimates vary by state, based both on cost of living in each state and on the relative number of foreign students enrolled at either the more costly private four-year institutions or less costly public two- and four-year institutions.

Third, because foreign student enrollment data by academic level was available for only 402,741 of the known total number of foreign students in the U.S. (456,929), the missing 54,188 students were proportionally distributed by state and academic level.

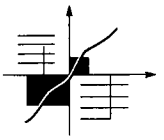
Fourth, and finally, total tuition and expense estimates by state were calculated by multiplying the weighted tuition and expense estimates for each academic level by the estimated number of foreign graduate and undergraduate students enrolled in a particular state.

The total combined foreign expenditures on tuition and cost-of-living just exceeds $7.1 billion, comparable to the Department of Commerce estimates of $7 billion and prior *Open Doors* estimates (1994/95) of $6.9 billion.

7.7 (cont.)

COMBINED UNDERGRADUATE AND GRADUATE ESTIMATED EXPENSES BY STATE FOR FOREIGN STUDENTS, 1996/97

State	Estimated 1996/97 Expenses
Pennsylvania	$392,844,580
Rhode Island	$68,076,944
South Carolina	$37,773,612
South Dakota	$10,392,062
Tennessee	$75,455,990
Texas	$327,944,448
Utah	$78,567,144
Vermont	$10,516,395
Virginia	$137,914,244
Washington	$139,284,707
West Virginia	$21,928,669
Wisconsin	$133,621,511
Wyoming	$5,584,080
Total	$7,155,391,790



8

Foreign Student Enrollments on U.S. Campuses

INSTITUTIONS

The purpose of this section is to stimulate and inform the policy dialog on college campuses concerning international students. While foreign students remain a relatively small percentage of overall enrollments in U.S. higher education, at many institutions and within many academic programs foreign students are an important segment. U.S. education is a vast and complex enterprise. Our diversified system of public, private, religious and specialized institutions offers a varied set of educational and cultural opportunities. The very diversity of our institutions, from research universities to local community colleges, offers many points of access to U.S. higher education for international students.

Policy discussions are confused by the very diversity of U.S. higher education. Institutions differ considerably in size, location, governance and (especially) mission. Institutions with differing missions and sizes offer very different contexts and ought to be compared with like institutions. Academic policy makers and researchers find the Carnegie Classification system a useful tool in managing this variety, because it provides summary classifications of institutions by mission and, to a lesser extent, by size. Academic administrators who wish to consider institutional policies or organizational features benefit from comparisons with other similar institutions.

This section will present an analysis of foreign student enrollments on U.S. campuses by institutional type and size.

THE Carnegie Classification of Higher Education groups U.S. colleges and universities according to their educational missions.

What is the Carnegie Classification System?

THE Carnegie Classification of Higher Education groups U.S. colleges and universities according to their educational missions. This classification was developed by Clark Kerr in 1970, primarily to improve the precision of the Carnegie Commissions research. Over the years the system has gained credibility and has served as a helpful guide for scholars and researchers.

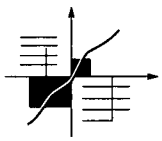
The Carnegie Classification is not intended to establish a hierarchy among higher learning institutions. Rather, the aim is to cluster institutions with similar programs and purposes. We have in this country a rich array of institutions serving a variety of needs, and there are institutions of distinction in every category of the Carnegie Classification. The Carnegie Classification utilizes survey data from the U.S. Department of Education Integrated Post-secondary Education Data System (IPEDS), the National Science Foundation, the College Board and the 1994 *Higher Education Directory,* published by Higher Education Publications, Inc. (HEP).

Definitions of Types of Institutions:

Research Universities I: These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate and give high priority to research. They award 50 or more doctoral degrees each year. In addition they receive at least $40 million annually in federal support.

Research Universities II: These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate and give high priority to research. They award 50 or more doctoral degrees each year. In addition they receive between $15.5 million and $40 million annually in federal support.

Doctoral Universities I: These institutions offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. They award at least 40 doctoral degrees annually in five or more disciplines.



What is the Carnegie Classification System?

Doctoral Universities II: These institutions offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. They award annually at least 10 doctoral degrees in three or more disciplines, or 20 or more doctoral degrees in one or more disciplines.

Master's Universities and Colleges I: These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 40 or more master's degrees annually in three or more disciplines.

Master's Universities and Colleges II: These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines.

Baccalaureate Colleges I: These institutions are primarily undergraduate colleges with major emphasis on baccalaureate degree programs. They award 40% or more of their baccalaureate degrees in liberal arts fields and are restrictive in admissions.

Baccalaureate Colleges II: These institutions are primarily undergraduate colleges with major emphasis on baccalaureate degree programs. They award less than 40% of their baccalaureate degrees in liberal arts fields or are less restrictive in admissions.

Associate of Arts Colleges: These institutions offer associate of arts certificate or degree programs and, with few exceptions, offer no baccalaureate degrees.

Professional and Specialized Institutions: These institutions offer degrees ranging from the bachelor's to the doctorate. At least 50% of the degrees awarded by these institutions are in a single discipline. Specialized institutions include: theological seminaries; medical schools and other health-related schools; schools of engineering, business, art or law; teachers' colleges and tribal colleges.

Source: The Carnegie Foundation for the Advancement of Teaching

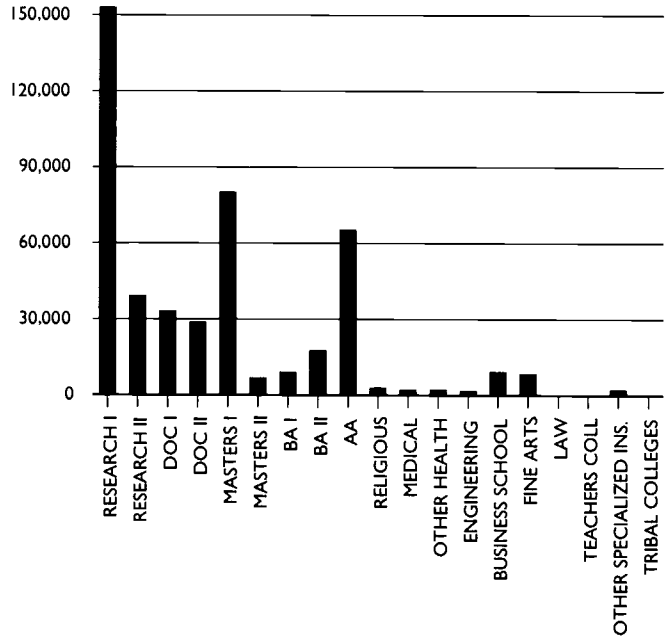
The system is not intended to establish a hierarchy among higher learning institutions, but rather to cluster institutions with similar programs and purposes.

Foreign Student Totals by Carnegie Classification

- When examined by Carnegie Classification, Research I institutions together host the largest number (152,677) of international students. These institutions host just over a third of all international students. The 87 reporting universities host an average of 1,755 international students each.
- Master's I institutions host an average of 194 international students for a total of 79,865, while the Associate of Arts Colleges host an average of 68 foreign students for a total of 64,920.

8.a

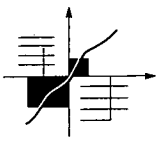
FOREIGN STUDENT TOTALS BY INSTITUTIONAL TYPE, 1996/97



8.0

FOREIGN STUDENT TOTALS BY INSTITUTIONAL TYPE, 1996/97

Category	Average # of Foreign Students	Foreign Student Totals	Institutions Reporting
TOTAL CENSUS	**175**	**457,984**	**2,613**
Research I	1,755	152,677	87
Research II	1,051	38,896	37
Doctoral I	684	32,835	48
Doctoral II	484	28,577	59
Masters I	194	79,865	412
Masters II	75	6,575	88
Baccalaureate I	54	8,871	164
Baccalaureate II	42	17,350	415
Associate Degree	68	64,920	948
Religious	23	2,741	121
Medical	62	1,861	30
Other Health	70	2,020	29
Engineering	72	1,576	22
Business School	180	9,020	50
Fine Arts	182	8,193	45
Law	4	21	5
Teachers Coll	19	76	4
Other Specialized Ins	43	1,895	44
Tribal Colleges	3	15	5



- This information is from a computer analysis of 2,613 colleges and universities that responded to the IIE Annual Census and were classified by the Carnegie Foundation for the Advancement of Teaching. The Tables, 8.0 to 8.5, and Figure 8.a, present institutional rankings by Carnegie Classification. Listed are the 32 host institutions within each classification which host the largest number of foreign students, in rank order according to their enrollment level of foreign students.

8.1

FOREIGN STUDENT ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 32 RESEARCH INSTITUTIONS, 1996/97

Research Institutions	City	State	Foreign Students	Total Enrollments	Foreign Student % of Enrollments
Boston U	Boston	MA	4,657	29,664	15.7
New York U	New York	NY	4,491	36,056	12.5
U of Southern California	Los Angeles	CA	4,183	27,558	15.2
U of Wisconsin-Madison	Madison	WI	3,886	39,826	9.8
Columbia U	New York	NY	3,807	20,198	18.8
Ohio State U Main Campus	Columbus	OH	3,772	48,676	7.7
U of Texas at Austin	Austin	TX	3,403	47,905	7.1
Harvard U	Cambridge	MA	3,238	18,250	17.7
U of Michigan-Ann Arbor	Ann Arbor	MI	3,194	36,450	8.8
U of Illinois Urbana-Champaign	Champaign	IL	3,091	36,465	8.5
U of Pennsylvania	Philadelphia	PA	2,949	22,148	13.3
Purdue U Main Campus	West Lafayette	IN	2,892	35,156	8.2
Cornell U	Ithaca	NY	2,868	19,290	14.9
U of Maryland College Park	College Park	MD	2,825	33,236	8.5
Michigan State U	East Lansing	MI	2,664	41,545	6.4
U of Houston	Houston	TX	2,631	30,774	8.5
U of Minnesota-Twin Cities	Minneapolis	MN	2,594	37,018	7.0
Arizona State U Main	Tempe	AZ	2,540	42,463	6.0
Indiana U at Bloomington	Bloomington	IN	2,464	34,700	7.1
Northeastern U	Boston	MA	2,461	26,999	9.1
Iowa State U of Science & Tech.	Ames	IA	2,446	24,899	9.8
Texas A&M U	College Station	TX	2,407	43,095	5.6
George Washington U	Washington	DC	2,376	18,986	12.5
Penn State U U Park Campus	U Park	PA	2,362	39,571	6.0
Rutgers U	New Brunswick	NJ	2,265	33,862	6.7
U of California, Los Angeles	Los Angeles	CA	2,228	34,372	6.5
Stanford U	Stanford	CA	2,205	13,811	16.0
Massachusetts Inst. of Tech	Cambridge	MA	2,144	9,947	21.6
Wayne State U	Detroit	MI	2,124	31,185	6.8
U of California, Berkeley	Berkeley	CA	2,112	29,630	7.1
U of Oregon-Main Campus	Eugene	OR	2,105	17,269	12.2
U of Arizona	Tucson	AZ	2,087	34,777	6.0

■ The United States has a major resource in the number and types of post-secondary institutions. These institutions serve a variety of educational needs of students seeking an international education. International students are a presence at institutions in each Carnegie category.

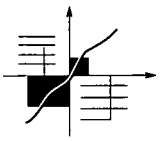
8.2

FOREIGN STUDENT ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 32 DOCTORAL INSTITUTIONS, 1996/97

Doctoral Institutions	City	State	Foreign Students	Total Enrollments	Foreign Student % of Enrollments
Florida International U	Miami	FL	2,532	29,938	8.5
Western Michigan U	Kalamazoo	MI	1,892	25,699	7.4
American U	Washington	DC	1,648	11,285	14.6
U of Toledo	Toledo	OH	1,609	21,692	7.4
New School for Social Research	New York	NY	1,568	6,939	22.6
U of North Texas	Denton	TX	1,557	24,957	6.2
Wichita State U	Wichita	KS	1,435	14,568	9.9
U of Texas at Arlington	Arlington	TX	1,223	22,121	5.5
Drexel U	Philadelphia	PA	1,200	9,158	13.1
George Mason U	Fairfax	VA	1,067	23,310	4.6
Florida Atlantic U	Boca Raton	FL	1,045	18,362	5.7
Georgia State U	Atlanta	GA	1,019	24,316	4.2
U of Nevada, Reno	Reno	NV	943	12,279	7.7
Illinois Institute of Technology	Chicago	IL	925	6,287	14.7
Texas Southern U	Houston	TX	914	8,112	11.3
U of Central Florida	Orlando	FL	831	26,325	3.2
U of Denver	Denver	CO	820	8,847	9.3
U of Akron Main Campus	Akron	OH	810	25,098	3.2
Old Dominion U	Norfolk	VA	806	17,000	4.7
St. John's U	Jamaica	NY	769	18,787	4.1
Portland State U	Portland	OR	769	14,768	5.2
U of Missouri-Kansas City	Kansas City	MO	766	10,298	7.4
Graduate School & U Center CUNY	New York	NY	765	3,900	19.6
U of Alabama	Tuscaloosa	AL	750	19,046	3.9
U of Texas at Dallas	Richardson	TX	750	9,008	8.3
Cleveland State U	Cleveland	OH	741	15,617	4.7
U of San Francisco	San Francisco	CA	738	7,888	9.4
Florida Institute of Technology	Melbourne	FL	715	4,232	16.9
Boston College	Chestnut Hill	MA	695	14,830	4.7
U of New Orleans	New Orleans	LA	692	15,483	4.5
Northern Illinois U	Dekalb	IL	675	21,609	3.1
SUNY at Binghamton	Binghamton	NY	671	11,976	5.6

8.3

FOREIGN STUDENT ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 32 MASTER'S INSTITUTIONS, 1996/97



Master's Institutions	City	State	Foreign Students	Total Enrollments	Foreign Student % of Enrollments
Baruch College CUNY	New York	NY	2,344	15,233	15.4
Hawaii Pacific U	Honolulu	HI	2,219	8,036	27.6
City College CUNY	New York	NY	1,601	14,160	11.3
U of Texas at El Paso	El Paso	TX	1,522	15,386	9.9
San Francisco State U	San Francisco	CA	1,497	26,000	5.8
U of Central Oklahoma	Edmond	OK	1,415	15,334	9.2
California State U, Long Beach	Long Beach	CA	1,259	27,490	4.6
Oklahoma City U	Oklahoma City	OK	1,252	4,023	31.1
Eastern Michigan U	Ypsilanti	MI	1,095	22,541	4.9
San Jose State U	San Jose	CA	1,093	26,500	4.1
California State U, Fullerton	Fullerton	CA	1,073	22,534	4.8
Brooklyn College CUNY	Brooklyn	NY	1,008	16,282	6.2
U of Nevada, Las Vegas	Las Vegas	NV	892	19,682	4.5
California State U, Northridge	Northridge	CA	883	27,189	3.2
Golden Gate U	San Francisco	CA	836	6,500	12.9
Rochester Institute of Technology	Rochester	NY	788	12,933	6.1
U of Bridgeport	Bridgeport	CT	785	2,519	31.2
U of South Alabama	Mobile	AL	785	11,832	6.6
Embry-Riddle Aeronautical U	Daytona Beach	FL	769	4,135	18.6
CA State Polytechnic U, Pomona	Pomona	CA	750	16,940	4.4
National U	San Diego	CA	749	15,000	5.0
Suffolk U	Boston	MA	668	4,780	14.0
California State U, Los Angeles	Los Angeles	CA	647	18,385	3.5
U of Hartford	West Hartford	CT	630	6,500	9.7
California State U, Fresno	Fresno	CA	629	17,213	3.7
California State U, Sacramento	Sacramento	CA	602	23,420	2.6
Lake Superior State U	Sault St Marie	MI	582	3,437	16.9
Santa Clara U	Santa Clara	CA	581	7,863	7.4
U of New Haven	West Haven	CT	575	5288	10.9
Fairleigh Dickinson U, Teaneck	Teaneck	NJ	573	9,535	6.0
U of North Carolina, Charlotte	Charlotte	NC	570	15,895	3.6
CA State Univ, San Bernardino	San Bernardino	CA	569	12,500	4.6
Mankato State U	Mankato	MN	555	12,600	4.4

Marketing Graduate Programs Internationally

JOHN A. MCKILLIP
Southern Illinois University at Carbondale

INTERNATIONAL students make up an important percentage of the graduate students at U.S. universities. According to this year's *Open Doors*, international students make up 10% of students enrolled in graduate schools in the U.S. and 33% of doctoral students. The overall percentage of international students has remained relatively stable over the last six years, although the number of master's students has dropped somewhat more than 2% over the last three years and the number of doctoral students has dropped 5%.

Southern Illinois University at Carbondale continues to play an important role in international education. According to *Open Doors*, we enrolled 2,043 international students in 1996-97, ranking us 39th among U.S. universities. In fall 1996, 630 international students were enrolled in graduate or professional programs at SIUC, about 16% of the graduate student body. The size of SIUC's international student body has been dropping recently due to several factors, including increased competition at home and abroad.

We have combined a quantitative analysis of data from the Graduate School database with that of *Open Doors* to address two questions: Which of our programs should we market internationally? What countries should we market our programs in?

We discovered that, for graduate students at all U.S. graduate schools, the most popular fields are engineering, business and programs in the sciences. Although these fields are also popular with international students at SIUC, we have significantly higher percentages of our international students in the social sciences and education.

Nearly half of international graduate students studying in the U.S. are from four countries in Asia: China, India, Taiwan and Korea. This is true for current SIUC students also, although historically—based on where alumni live—other Asian countries such as Malaysia are more prominent. It's also notable that SIUC enrolls twice the percentage of students from Africa as do other U.S. graduate schools, and our alumni reflect this strength. In addition, SIUC enrolls a much lower percentage of Latin and Central American students and North American (Canadian) students than do other U.S. graduate schools. Since we have enrolled more students from these areas in the past (based on alumni), they may present attractive potential markets.

To identify programs that have the potential to attract paying international students, I used four sources of information. First is the number of international graduate students enrolled, with the rationale that additional international students will be attracted to programs that are already attended by international students. Second is the percentage of international graduate students paying tuition, since we want to attract paying students. Third is program interest in additional international students, since those are preferred. And fourth is program enrollment, since larger programs have a greater capacity to handle increases in international enrollment.

Continued...

Marketing Graduate Programs Internationally

...Continued

Similarly, to identify countries that have potential as markets of our graduate programs, I identified three sources of information. First is the number of international graduate students studying in each of ten academic fields from the 63 countries with the largest enrollment in the U.S. The rationale for this is that openness to study in the U.S. varies by country and academic area. Second is the number of graduate students studying at SIUC from each of those 63 countries, since students are more likely to come to SIUC from countries that already have students attending SIUC. And third is the number of alumni (graduate and undergraduate) in each of those 63 countries with good mailing addresses, since students are more likely to come to SIUC from countries with SIUC alumni.

Our results showed that the five master's programs with the best potential to attract international graduate students are the MBA, teaching English to speakers of other languages (TESOL), workforce education and development, computer science and electrical engineering. The first two already have a significant international student presence, and both have an excellent potential for attracting more international students.

As for doctoral programs, they generally attract fewer international students than do master's level programs and thus have a lower marketing potential. The five doctoral programs with the highest marketing potential are philosophy, economics, speech communication, engineering science and chemistry. Philosophy and speech communication are particularly interesting, since neither currently attracts many international students.

Academic areas vary widely in attractiveness to students of different countries, although students from a few Asian countries provide the bulk of graduate students in almost all academic fields. In the areas of business and engineering, the greatest potential markets were China, Taiwan and India. In education, the top three markets were China, Taiwan and Korea.

Several of the graduate programs identified as having potential for attracting additional international students had not had a history of relatively large international enrollments. This analysis is particularly interesting. Analysis of countries to recruit in by academic area proved less enlightening since the same few countries rose to the top of each list. Increasing the importance of local indicators may provide a more varied listing of countries. We are expanding the country analysis to include information on recent faculty research and training contracts.

This study of the market and recruitment potential for our graduate programs is meant to energize international planning. Starting the analysis with academic programs and then moving to countries with potential for recruitment helps put international planning in the context of the university's culture and strengths. We think this approach has the potential for a more solid basis for international initiatives.

Abstracted from Marketing Graduate Programs Internationally: A Quantitative Analysis, *by John A. McKillip, Associate Dean of the Graduate School, Southern Illinois University at Carbondale.*

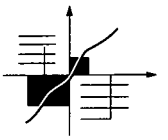
8.4

FOREIGN STUDENT ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 32 BACCALAUREATE INSTITUTIONS, 1996/97

Baccalaureate Institutions	City	State	Foreign Students	Total Enrollments	Foreign Student % of Enrollments
Brigham Young U-Hawaii Campus	Laie Oahu	HI	827	2,241	36.9
Columbia College	Chicago	IL	405	7,857	5.2
U of Dallas	Irving	TX	400	2,737	14.6
Medgar Evers College CUNY	Brooklyn	NY	360	4,724	7.6
U of Houston-Downtown	Houston	TX	332	7,947	4.2
Teikyo Loretto Heights U	Denver	CO	317	404	78.5
Lewis-Clark State College	Lewiston	ID	314	2,978	10.5
U of Findlay	Findlay	OH	259	3,737	6.9
Mount Holyoke College	South Hadley	MA	256	1,905	13.4
Mount Ida College	Newton Centre	MA	253	1,962	12.9
Salem-Teikyo U	Salem	WV	250	867	28.8
U of Southern Colorado	Pueblo	CO	244	4,104	5.9
Tri-State U	Angola	IN	202	1,141	17.7
Lawrence Technological U	Southfield	MI	202	4,153	4.9
Mercy College	Dobbs Ferry	NY	197	7,010	2.8
Smith College	Northampton	MA	192	2,670	7.2
Lewis & Clark College	Portland	OR	191	3,074	6.2
U of Hawaii at Hilo	Hilo	HI	190	2,723	7.0
U of Maine at Presque Isle	Presque Isle	ME	187	1,347	13.9
Eckerd College	St Petersburg	FL	183	1,400	13.1
Ramapo College of New Jersey	Mahwah	NJ	182	4,543	4.0
Mount Vernon College	Washington	DC	180	582	30.9
Metropolitan State College of Denver	Denver	CO	177	16,600	1.1
Ohio Wesleyan U	Delaware	OH	176	1,835	9.6
Marymount Manhattan College	New York	NY	175	2,014	8.7
Pennsylvania State U C'wealth Campus	U Park	PA	175	3,510	5.0
Oakwood College	Huntsville	AL	173	1,666	10.4
Dordt College	Sioux Center	IA	169	1,269	13.3
Macalester College	Saint Paul	MN	164	1,799	9.1
Oberlin College	Oberlin	OH	160	2,800	5.7
U of Maine at Fort Kent	Fort Kent	ME	155	767	20.2
Wesleyan U	Middletown	CT	149	2,905	5.1

8.5

FOREIGN STUDENT ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 32 ASSOCIATE INSTITUTIONS, 1996/97

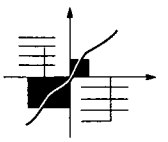


Associate Institutions	City	State	Foreign Students	Total Enrollments	Foreign Student % of Enrollments
Northern Virginia CC	Annandale	VA	2,433	38,084	6.4
Santa Monica College	Santa Monica	CA	2,294	25,067	9.2
Montgomery C Rockville Campus	Rockville	MD	1,459	12,473	11.7
Miami-Dade CC	Miami	FL	1,358	49,780	2.7
La Guardia CC CUNY	Long Is City	NY	1,199	11,438	10.5
Broward CC	Fort Lauderdale	FL	1,148	30,359	3.8
Borough of Manhattan CC CUNY	New York	NY	1,105	16,772	6.6
City College of San Francisco	San Francisco	CA	1,100	57,011	1.4
Edmonds CC	Lynnwood	WA	926	10,430	8.9
Pasadena City College	Pasadena	CA	855	25,325	3.4
Los Angeles City College	Los Angeles	CA	806	14,000	6.0
Houston CC System	Houston	TX	779	39,541	2.0
Orange Coast College	Costa Mesa	CA	770	25,170	3.1
Seattle Central CC	Seattle	WA	691	10,001	6.9
Moraine Valley CC	Palos Hills	IL	636	12,813	5.0
Bellevue CC	Bellevue	WA	630	17,439	3.6
Irvine Valley College	Irvine	CA	628	10,376	6.1
Grossmont College	El Cajon	CA	573	14,850	3.9
Santa Barbara City College	Santa Barbara	CA	516	12,084	4.3
Valencia CC	Orlando	FL	503	23,748	2.1
East Los Angeles College	Monterey Park	CA	502	14,437	3.5
Rancho Santiago College	Santa Ana	CA	480	20,701	2.3
DeKalb College	Clarkston	GA	477	15,901	3.0
Austin CC	Austin	TX	469	25,618	1.8
Nassau CC	Garden City	NY	467	20,300	2.3
Montgomery C Takoma Park C	Takoma Park	MD	466	4,115	11.3
Mesa CC	Mesa	AZ	451	23,108	2.0
Shoreline CC	Seattle	WA	441	8,254	5.3
Glendale CC	Glendale	CA	428	13,285	3.2
Foothill College	Los Altos Hills	CA	411	14,000	2.9
Sacramento City College	Sacramento	CA	411	16,039	2.6
Mt. San Antonio College	Walnut	CA	411	21,495	1.9

8.6

FOREIGN STUDENT ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 30 PROFESSIONAL AND SPECIALIZED INSTITUTIONS, 1996/97

Prof./Specialized Institutions	City	State	Foreign Students	Total Enrollments	Foreign Student % of Enrollments
U of Phoenix	Phoenix	AZ	2,112	35,000	6.0
Academy of Art College	San Francisco	CA	1,428	4,443	32.1
Berklee College of Music	Boston	MA	1,079	2,868	37.6
Pratt Institute	Brooklyn	NY	936	3,442	27.2
Johnson & Wales U	Providence	RI	812	10,000	8.1
New Hampshire College	Manchester	NH	794	5,628	14.1
Strayer College	Washington	DC	700	8,172	8.6
School of Visual Arts	New York	NY	545	2,771	19.7
Bentley College	Waltham	MA	488	6,401	7.6
Art Center College of Design	Pasadena	CA	466	1,499	31.1
American Graduate School Intl Mgnt	Glendale	AZ	464	1,458	31.8
Babson College	Babson Park	MA	463	3,062	15.1
Life Chiropractic College	Marietta	GA	454	3,854	11.8
Savannah College of Art & Design	Savannah	GA	386	3,093	12.5
Monterey Institute Intl Studies	Monterey	CA	333	823	40.5
Manhattan School of Music	New York	NY	310	777	39.9
Rhode Island School of Design	Providence	RI	308	2,003	15.4
Lincoln U	San Francisco	CA	303	314	96.5
Lynn U	Boca Raton	FL	289	1,664	17.4
Fuller Theological Seminary	Pasadena	CA	289	1,676	17.2
Juilliard School	New York	NY	270	851	31.7
Wentworth Institute of Technology	Boston	MA	257	2,767	9.3
Franklin U	Columbus	OH	255	4,073	6.3
New England Conservatory of Music	Boston	MA	246	730	33.7
American College for the Applied Arts	Atlanta	GA	237	967	24.5
Bryant College	Smithfield	RI	235	3,323	7.1
U of Texas Health Sci Ctr Houston	Houston	TX	232	3,097	7.5
Southeastern U	Washington	DC	227	528	43.0
National College of Chiropractic	Lombard	IL	223	894	24.9
Johns Hopkins U Peabody Conserv Mus	Baltimore	MD	221	726	30.4



Orange Coast College-Strategies for Dynamic Growth

SAEEDA WALI MOHAMMED
Orange Coast College

THE International Student Program at Orange Coast College had its genesis in a small operation limited by staffing and financial constraints. In 1984, there were a total of 38 students with 25 countries represented. The program grew to 108 students in spring 1990, and a current (fall, 1997) student population of 700 F-1 students and 116 other visa students from 60 countries. The top three Asian countries represented are Japan, Korea and Taiwan. The top three European countries represented are Sweden, the Netherlands and Germany.

The mission of the International Center of Orange Coast College is to enhance student success by providing services to students to assist them in reaching their educational goals, and lifelong enrichment opportunities. These services include admission, in-country and out-of-country registration, immigration regulation information, passport services, homestay/housing coordination, orientation information and other services such as insurance enrollment, maintenance of legal status and cross-cultural guidance when appropriate.

Seeking to develop an outstanding International Student Program, the College initiated serious efforts to transform itself into an internationally oriented and globally diverse entity. Thus, college administration at the highest administrative level made a strong commitment to internationalization.

The philosophical foundation of the program stemmed from a college-wide realization that beyond financial gain, this program provided a unique opportunity to address the cultural realities of a world in which communication and cross-cultural exchange are the pre-eminent features.

With the review and adoption of a five-year strategic plan, Orange Coast College committed itself to internationalism. This plan posited the development and enhancement of a unique campus environment.

Continued...

Orange Coast College-Strategies for Dynamic Growth

...Continued

The goals of the five-year plan were to expand international student enrollment to 850 by the year 2000, with the idea that the presence of international students would help to facilitate increased knowledge and awareness of the entire student body, faculty and staff toward other peoples and their cultures. Additionally, the plan focused on providing domestic students and faculty the opportunity to study and work with students from other parts of the world. The college determined to maintain the English admissions requirement at a score of 500 on the TOEFL. This has resulted in a high retention rate and successful completion of degrees. Further, it posited a pragmatic base for funding and services with a necessary commitment to increase staffing as the program grew. The plan also supported a flexible approach to allow for changes as the program developed and grew.

The five-year plan made a commitment to diversity and to providing international students with a campus in which both domestic and international students were integrated through activities involving mutual respect and understanding supported by the Associated Student Government and the International Club. Thus, each spring semester a week-long event highlighting internationalism is presented to the campus community. The plan also supported establishing agreements with recognized English language schools which emphasize completion of final levels of programs.

Orange Coast College deliberately opted for high-impact, low-cost methods of recruiting international students. Prominent among these were the establishment of an International Center Programs web site and the computerization of Form I-20. The college invested in appropriate technology that allowed us to respond to students within 24 hours of an inquiry. Students presenting us with completed applications who are eligible for admission are also issued an I-20 within 24 hours as well. We also recruit domestically in regions where large intensive English as a Second Language schools operate. Additional funding was requested for courses through joint proposals with individual divisions such as ESL where international student impact was consistently shown. A recent international student survey informed us that 85% of international students at Orange Coast College rank the program as excellent/very good, and a full 47% discovered us through word of mouth referrals from friends and relatives.

Saeeda Wali Mohammed is the Director of the International Center at Orange Coast College in Costa Mesa, California.

8.7

INSTITUTIONS WITH 1,000 OR MORE FOREIGN STUDENTS, 1996/97, RANKED BY FOREIGN STUDENT TOTALS

This table combines institutions from all Carnegie classifications.

Rank	Institution	City	State	Total Foreign Students	Total Enrollment	Foreign Student % of Enrollment
1	Boston U	Boston	MA	4,657	29,664	15.7
	New York U	New York	NY	4,491	36,056	12.5
	U of Southern California	Los Angeles	CA	4,183	27,558	15.2
	U of Wisconsin-Madison	Madison	WI	3,886	39,826	9.8
	Columbia U	New York	NY	3,807	20,198	18.8
	Ohio State U Main Campus	Columbus	OH	3,772	48,676	7.7
	U of Texas at Austin	Austin	TX	3,403	47,905	7.1
	Harvard U	Cambridge	MA	3,238	18,250	17.7
	U of Michigan-Ann Arbor	Ann Arbor	MI	3,194	36,450	8.8
10	U of IL Urbana-Champaign	Champaign	IL	3,091	36,465	8.5
	U of Pennsylvania	Philadelphia	PA	2,949	22,148	13.3
	Purdue U Main Campus	West Lafayette	IN	2,892	35,156	8.2
	Cornell U	Ithaca	NY	2,868	19,290	14.9
	U of Maryland College Park	College Park	MD	2,825	33,236	8.5
	Michigan State U	East Lansing	MI	2,664	41,545	6.4
	U of Houston	Houston	TX	2,631	30,774	8.5
	U of Minnesota-Twin Cities	Minneapolis	MN	2,594	37,018	7.0
	Arizona State U Main	Tempe	AZ	2,540	42,463	6.0
	Florida International U	Miami	FL	2,532	29,938	8.5
20	Indiana U at Bloomington	Bloomington	IN	2,464	34,700	7.1
	Northeastern U	Boston	MA	2,461	26,999	9.1
	IA State Univ of Sci & Technology	Ames	IA	2,446	24,899	9.8
	Northern Virginia CC	Annandale	VA	2,433	38,084	6.4
	Texas A&M U	College Station	TX	2,407	43,095	5.6
	George Washington U	Washington	DC	2,376	18,986	12.5
	PA State U Univ Park Campus	U Park	PA	2,362	39,571	6.0
	Baruch College CUNY	New York	NY	2,344	15,233	15.4
	Santa Monica College	Santa Monica	CA	2,294	25,067	9.2
	Rutgers U	New Brunswick	NJ	2,265	33,862	6.7
30	U of CA, Los Angeles	Los Angeles	CA	2,228	34,372	6.5
	Hawaii Pacific U	Honolulu	HI	2,219	8,036	27.6
	Stanford U	Stanford	CA	2,205	13,811	16.0
	Massachusetts Inst of Tech	Cambridge	MA	2,144	9,947	21.6
	Wayne State U	Detroit	MI	2,124	31,185	6.8
	U of California, Berkeley	Berkeley	CA	2,112	29,630	7.1
	U of Phoenix	Phoenix	AZ	2,112	35,000	6.0
	U of Oregon-Main Campus	Eugene	OR	2,105	17,269	12.2
	U of Arizona	Tucson	AZ	2,087	34,777	6.0
	Southern IL U Carbondale	Carbondale	IL	2,043	21,863	9.3

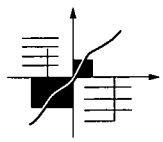
8.7(cont.)

INSTITUTIONS WITH 1,000 OR MORE FOREIGN STUDENTS, 1996/97, RANKED BY FOREIGN STUDENT TOTALS

Rank	Institution	City	State	Total Foreign Students	Total Enrollment	Foreign Student % of Enrollment
40	U of Illinois at Chicago	Chicago	IL	2,024	24,583	8.2
	Brigham Young U	Provo	UT	2,004	31,419	6.4
	U of Florida	Gainesville	FL	2,003	39,137	5.1
	Oklahoma State U Main Campus	Stillwater	OK	1,976	19,201	10.3
	S U NY at Buffalo	Buffalo	NY	1,948	23,577	8.3
	Western Michigan U	Kalamazoo	MI	1,892	25,699	7.4
	U of Washington	Seattle	WA	1,878	34,368	5.5
	U of Missouri-Columbia	Columbia	MO	1,874	22,483	8.3
	U of Miami	Coral Gables	FL	1,808	13,677	13.2
	U of Massachusetts at Amherst	Amherst	MA	1,800	23,052	7.8
50	LA State U & A&M College	Baton Rouge	LA	1,770	26,851	6.6
	U of Chicago	Chicago	IL	1,711	12,293	13.9
	U of Kansas	Lawrence	KS	1,707	25,000	6.8
	U of Oklahoma Norman Campus	Norman	OK	1,702	20,026	8.5
	U of Hawaii at Manoa	Honolulu	HI	1,701	18,500	9.2
	Syracuse U	Syracuse	NY	1,699	15,105	11.2
	Northwestern U	Evanston	IL	1,682	13,618	12.4
	U of Iowa	Iowa City	IA	1,669	27,921	6.0
	U of Utah	Salt Lake City	UT	1,655	26,359	6.3
	American U	Washington	DC	1,648	11,285	14.6
60	U of Pittsburgh Main Campus	Pittsburgh	PA	1,623	25,479	6.4
	U of Toledo	Toledo	OH	1,609	21,692	7.4
	City College CUNY	New York	NY	1,601	14,160	11.3
	New School for Social Research	New York	NY	1,568	6,939	22.6
	U of North Texas	Denton	TX	1,557	24,957	6.2
	Temple U	Philadelphia	PA	1,528	28,319	5.4
	U of Texas at El Paso	El Paso	TX	1,522	15,386	9.9
	Washington State U	Pullman	WA	1,511	20,169	7.5
	San Francisco State U	San Francisco	CA	1,497	26,000	5.8
	SUNY at Stony Brook	Stony Brook	NY	1,496	17,316	8.6
70	U of Kentucky	Lexington	KY	1,489	24,061	6.2
	Montgomery C - Rockville	Rockville	MD	1,459	12,473	11.7
	Wichita State U	Wichita	KS	1,435	14,568	9.9
	U of Cincinnati	Cincinnati	OH	1,429	34,951	4.1
	Academy of Art College	San Francisco	CA	1,428	4,443	32.1
	U of Central Oklahoma	Edmond	OK	1,415	15,334	9.2
	U of Connecticut	Storrs	CT	1,392	22,471	6.2
	U of Georgia	Athens	GA	1,389	29,404	4.7
	Yale U	New Haven	CT	1,383	12,185	11.4
	VA Polytechnic Inst & State U	Blacksburg	VA	1,380	26,659	5.2

8.7 *(cont.)*

INSTITUTIONS WITH 1,000 OR MORE FOREIGN STUDENTS, 1996/97, RANKED BY FOREIGN STUDENT TOTALS



Rank	Institution	City	State	Total Foreign Students	Total Enrollment	Foreign Student % of Enrollment
80	Georgetown U	Washington	DC	1,368	13,411	10.2
	Miami- Dade CC	Miami	FL	1,358	49,780	2.7
	Carnegie Mellon U	Pittsburgh	PA	1,333	7,758	17.2
	U of Rochester	Rochester	NY	1,307	9,052	14.4
	U of Nebraska-Lincoln	Lincoln	NE	1,289	23,887	5.4
	U of Colorado at Boulder	Boulder	CO	1,285	24,622	5.2
	Georgia Institute of Technology	Atlanta	GA	1,276	12,985	9.8
	CA State U, Long Beach	Long Beach	CA	1,259	27,490	4.6
	Oklahoma City U	Oklahoma City	OK	1,252	4,023	31.1
	U of Texas at Arlington	Arlington	TX	1,223	22,121	5.5
90	U of California, Irvine	Irvine	CA	1,216	17,183	7.1
	Drexel U	Philadelphia	PA	1,200	9,158	13.1
	La Guardia CC CUNY	Long Is City	NY	1,199	11,438	10.5
	Oregon State U	Corvallis	OR	1,184	14,161	8.4
	Washington U	Saint Louis	MO	1,164	11,636	10.0
	U of Delaware	Newark	DE	1,164	21,380	5.4
	Broward CC	Fort Lauderdale	FL	1,148	30,359	3.8
	U of California, San Diego	La Jolla	CA	1,146	18,119	6.3
	Ohio U Main Campus	Athens	OH	1,137	19,441	5.8
	U of South Florida	Tampa	FL	1,118	35,444	3.2
100	Case Western Reserve U	Cleveland	OH	1,114	9,970	11.2
	Boro of Manhattan CC CUNY	New York	NY	1,105	16,772	6.6
	City Coll of San Francisco	San Francisco	CA	1,100	57,011	1.4
	Eastern Michigan U	Ypsilanti	MI	1,095	22,541	4.9
	San Jose State U	San Jose	CA	1,093	26,500	4.1
	Kansas State U	Manhattan	KS	1,088	20,324	5.4
	North Carolina State U	Raleigh	NC	1,082	27,169	4.0
	Berklee College of Music	Boston	MA	1,079	2,868	37.6
	Brown U	Providence	RI	1,076	7,626	14.1
	California State U, Fullerton	Fullerton	CA	1,073	22,534	4.8
110	George Mason U	Fairfax	VA	1,067	23,310	4.6
	Florida Atlantic U	Boca Raton	FL	1,045	18,362	5.7
	Howard U	Washington	DC	1,028	10,652	9.7
	U of South Carolina-Columbia	Columbia	SC	1,025	25,489	4.0
	Saint Louis U Main Campus	Saint Louis	MO	1,022	10,572	9.7
	Georgia State U	Atlanta	GA	1,019	24,316	4.2
116	Brooklyn College CUNY	Brooklyn	NY	1,008	16,282	6.2

TOTAL INSTITUTIONS = 116

Demystifying Increased International Student Enrollment at Community Colleges

AUDREE M. CHASE

American Association of Community Colleges (AACC)

THE open doors of America's community colleges are attracting a great deal of attention with the recent increase of international student enrollment. Why might this be?

At first glance, it may be perplexing for a student from another country to understand how he or she might benefit from attending a U.S. community college. After all, the community college is a uniquely American institution, and its mission and purpose are often misunderstood by Americans as well as other citizens of the world. Although countries such as Canada, the United Kingdom and Australia have institutions similar to an American community college, nothing quite like it exists anywhere else in the world.

The first recorded public two-year college, Joliet Junior College in Illinois, opened its doors in 1901. Significant factors, including the Great Depression, World War II, government programs and the Truman Commission Report led to the substantial growth of community colleges. The colleges were accessible to people, provided training for available jobs, prepared students for upper division study and offered personal development programs for all citizens.

In many ways, then, community colleges have been responding to the needs of their local communities based upon world events since the Great Depression. And as communities across the United States are becoming more aware of the importance of learning how to compete in the global marketplace, community colleges are among the important institutions charged to respond to this challenge. In addition, communities are becoming more ethnically diverse, and the community college has recognized the need to respond to and nurture this diversity. In some ways, this diversity drives the internationalization of many community college campuses across the United States.

The diversity reflected in the 10.3 million students enrolled at community colleges is significant. Of the 5.3 million students enrolled in credit programs, 28% are minority students. Of these minority students, 39% are African American, 38% Hispanic, 19% Asian/Pacific Islander and 4.5% Native American. Furthermore, based on a national survey conducted by the American Association of Community Colleges (AACC) in 1995, there were 167,572 international students and immigrants enrolled at U.S. community college campuses during the 1995/96 academic year.

Perhaps these numbers indicate that other nationalities are beginning to understand what we are and what our colleges offer. Community college programs offer more personalized attention through smaller classrooms, flexibility to change courses as needs and career goals evolve, a chance to serve the local communities and quality education at a more affordable price.

A snapshot of the increased international activity at U.S. community colleges was captured by AACC's 1995 survey. It indicated that out of the 624 colleges responding (1,100 colleges were surveyed),

Continued...

Demystifying Increased International Student Enrollment at Community Colleges

...Continued

more than 80 percent offered some type of international program, ranging from offering study abroad exchange opportunities to international distance learning. Sixty-three percent of the respondents said they offered English as a Second Language (ESL) programs. Intensive ESL programs were regularly noted as being offered as well. International student clubs and special services were noted, and international scholarship programs were offered at community college campuses nationwide. All these reasons may be why more international students are choosing to enroll at a community college. There are other unique aspects of community colleges that may attract foreign students as well.

Community colleges provide three basic types of services to their students and the community at large. The first is the college transfer program. A student attends a community college for two years, earns an associate degree and transfers into the last two years of a four-year college or university. This might be an attractive option for an international student who may not have sufficient financial resources to attend a four-year college or university for all four years. It also provides the student with an opportunity to experience smaller classrooms upon first entering the U.S. higher education system. Many international students take advantage of the significant amount of career counseling that is often available, so that they can transfer to the four-year college program as seamlessly as possible.

Technical and occupational programs are the second component of a community college education. These programs range from six months to two years, and vary greatly depending on the needs of the businesses and industries within a given community. The courses are designed to provide the student an easier entry in the business world. The U.S. Department of Education has reported that 93% of students who have graduated from a community

Continued...

Demystifying Increased International Student Enrollment at Community Colleges

...Continued

college in five years or less with an associate's degree obtain a job in less than one month. In many colleges, a 2+2 program exists, whereby community colleges work with secondary schools to carry students in technical programs into their associate's degree work. In some cases, a 2+2+2 approach is adopted by the college, which is designed to carry students two years further into their baccalaureate studies.

More international students may be attracted to the technical course offerings of a community college as their countries require more skilled technicians to give them a competitive edge in the global marketplace.

Due to the entrepreneurial nature of community colleges, many are branching out from working with just the local businesses and industries to providing customized international contract training for institutions, businesses and governments in other countries. These programs often lead to an increased number of student and faculty exchanges between U.S. community colleges and institutions of higher education in other countries.

The third component of a community college is its non-credit course offerings. Each of these courses respond to demands from the local community, or from a perceived need from the college itself to offer curricula outside of credit courses. The fact that 22 percent of community college students over the age of 25 already possess a bachelor's degree indicates that colleges provide continuing education at all levels. International students may partake of non-credit courses in addition to their regular course of study purely to further their interest in a certain area.

International students are not the only ones who benefit from a community college experience; the college campus reaps benefits as well. A community building project, which was a collaboration between AACC and the W.K. Kellogg Foundation, issued findings that stated that "community colleges have an urgent obligation to keep students informed about people and cultures other than their own." (*A Climate Created: Community Building in the Beacon College Project*, p. 10) The influx of students from other countries is a cost-effective way for community colleges to internationalize their campuses. The students add that much more diversity to the community, and they often are invited to participate in campus and community activities such as guest lecturing or performing songs and dances of their native countries. The international students also bring a substantial financial contribution to the local economies.

Community colleges have known their value to their communities for many years, but it now appears that the global community has recognized their significance as well.

Audree M. Chase is the coordinator of international services at the American Association of Community Colleges (AACC) in Washington, D.C. Her responsibilities include raising the profile of international education at U.S. community colleges by working with international education organizations and federal agencies in Washington, D.C., and helping facilitate institutional relationships between community colleges and higher education institutions and other organizations worldwide.

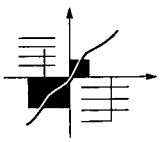
INTERNATIONAL STUDENTS' PERCEPTIONS OF INSTITUTIONAL STRENGTHS AND PRIORITIES FOR CAMPUS INTERVENTIONS

International Students: Perceptions of Institutional Strengths

- Nearly all faculty are knowledgeable in their fields.
- My academic advisor knows requirements in my major.
- Campus is safe and secure for all students.
- I am able to experience intellectual growth here.
- Major requirements are clear and reasonable.
- Faculty are available after class and during office hours.
- This institution has a good reputation in the community.

International Students: Priorities for Campus Interventions

- Computer labs are adequate and accessible.
- Library resources and services are adequate.
- There are adequate services to help me decide on a career.
- My academic advisor helps me set goals to work towards.



Results of the 1997 National Student Satisfaction Study

In *Open Doors* 1995/96 the results of the first comprehensive study of international student satisfaction with U.S. higher education was published. This year we present the second such report. The 1997 International Student Satisfaction Report is part of a comprehensive national student satisfaction study conducted annually since 1993 by USA Group Noel-Levitz. The data represent 524 colleges and universities from four-year public, four-year private, two-year community, junior and technical institutions and career and private schools that utilized the student satisfaction inventory with all or part of their student body.

The total student populations by institutional type include 76,161 from the four-year publics; 106,837 from the four-year privates; 90,758 from the two-year community, junior and technical colleges; and 18,377 from career and private schools.

The international student body represented in this study included 3,529 students who identified themselves as international students in the 1997 national study. The analysis of

the data was conducted by Dr. Lana Low, who is vice president for retention and assessment services at USA Group Noel-Levitz. Campus officials interested in more information about the complete National Student Satisfaction Report or the Student Satisfaction Inventory may contact USA Group Noel-Levitz at 1-800-876-1117.

The Instrument

The Student Satisfaction Inventory, by which the data for this study were collected, consists of over 70 items that cover the full range of college experiences. Each item is expressed as a statement of expectation. Each statement includes a rating scale of 1 to 7. Students are asked to rate the level of importance they assign to the expectation as well as their level of satisfaction that the expectation is being met. The inventory findings are then presented with three scores for each item: an importance score, a satisfaction score, and a performance gap score that is calculated by subtracting the satisfaction score from the importance score. A large performance gap score on an item indicates that the institution is not meeting the expectation. Specifically, this analysis examines the following questions:

8.8

PERFORMANCE GAPS AT U.S. INSTITUTIONS

FOUR-YEAR PRIVATE INSTITUTIONS

	All Students Performance Gaps		International Students Performance Gaps	
SCALES	**1997**	**1996**	**1997**	**1996**
Instructional Effectiveness	**1.08**	1.07	1.23	1.26
Academic Advising	**1.02**	0.99	1.17	1.15
Student Centeredness	0.98	1.01	1.14	1.15
Campus Climate	1.07	1.10	1.19	1.23
Concern for the Individual	1.04	1.05	1.18	1.22
Safety and Security	1.56	1.61	1.27	1.42
Registration Effectiveness	1.20	1.23	1.24	1.26
Recruitment / Financial Aid	1.27	1.30	1.35	1.41
Campus Support Services	1.03	1.02	1.19	1.23
Service Excellence	1.08	1.10	1.15	1.19
Campus Life	1.01	1.05	1.19	1.23

FOUR-YEAR PUBLIC INSTITUTIONS

	All Students Performance Gaps		International Students Performance Gaps	
SCALES	**1997**	**1996**	**1997**	**1996**
Academic Advising	**1.38**	1.33	**1.44**	1.43
Instructional Effectiveness	**1.34**	1.29	1.41	1.45
Safety and Security	**2.06**	1.94	**1.77**	1.69
Registration Effectiveness	**1.50**	1.48	**1.54**	1.49
Concern for the Individual	**1.46**	1.37	**1.50**	1.46
Campus Support Services	**1.21**	1.12	1.38	1.38
Campus Climate	**1.32**	1.28	**1.36**	1.26
Student Centeredness	**1.28**	1.22	**1.38**	1.36
Recruitment / Financial Aid	**1.54**	1.50	1.47	1.55
Service Excellence	**1.42**	1.36	1.30	1.36
Campus Life	**0.97**	0.91	1.28	1.41

Scores in bold indicate performance gaps that increased from 1996 to 1997.
SSI Scales in Order of Importance with Performance Gap Scores.

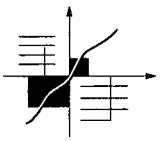
8.8(cont.)

PERFORMANCE GAPS AT U.S. INSTITUTIONS

TWO-YEAR COMMUNITY, JUNIOR AND TECHNICAL COLLEGE

	All Students Performance Gaps		International Students Performance Gaps	
SCALES	**1997**	**1996**	**1997**	**1996**
Instructional Effectiveness	0.92	0.92	0.81	0.96
Registration Effectiveness	**0.90**	0.89	0.83	0.89
Academic Advising / Counseling	**1.07**	1.04	0.93	1.14
Concern for the Individual	**1.04**	1.01	0.93	1.05
Academic Services	**0.98**	0.92	1.00	1.08
Admissions & Financial Aid	**1.07**	1.04	0.94	1.11
Safety and Security	1.23	1.28	1.03	1.15
Campus Climate	0.85	0.86	0.76	0.90
Student Centeredness	**0.78**	0.75	0.69	0.83
Service Excellence	**0.89**	0.88	0.81	0.90
Campus Support Services	**0.68**	0.64	0.64	0.74

Scores in bold indicate performance gaps that increased from 1996 to 1997.
SSI Scales in Order of Importance with Performance Gap Scores.



1. What are the strengths of our institutions and what are the priorities for intervention as identified by international students?

2. How do the expectations of international students compare with those of U.S. students?

Strengths and Priorities

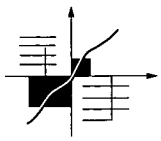
Institutional strengths identified by international students were consistent across institutional types 50% of the time; however, the rankings by level of importance were not as consistent. The items of agreement among the four-year private and public and the two-year institutions focused primarily on the academic area. What areas do international students identify as priorities for intervention? Priorities for campus intervention across institutional types are consistent on four items dealing with computer labs, career services, library resources, and academic advising. Students at four-year private and four-year public institutions agree on three additional priorities for action; ease in registering for classes, tuition as a worthwhile investment, and the extent to which faculty are fair and unbiased.

How do the expectations of international students compare with those of U.S. students?

The performance gap takes into consideration both the importance score and the satisfaction score by generating a discrepancy score. When the student's level of satisfaction is subtracted from the strength of the student's expectation, the result is a performance gap or unmet expectation. The scales provide a global summary of student responses by grouping the 70+ items statistically and conceptually into twelve key areas. Table 8.8 summarizes the performance gap findings for international students and U.S. students at four-year private and public, and two-year institutions. The scale scores for both 1997 and 1996 are provided with increases in performance gaps noted in bold type.

Findings

In general, performance gaps for international students at four-year institutions tend to be larger than those of U.S. students; the opposite is true at two-year institutions where the performance gap scores for international students are smaller. Additionally, increases in performance gaps (1996 to 1997) are noted more frequently for U.S. students than for international students on the scales. Increases in instructional effectiveness, academic advising and campus support services are indicated at four-year private institutions while there are increases for eleven scales at four-year public institutions. For international students at four-year private institutions, only one scale, academic advising, shows a performance-gap increase. At four-year public institutions there are six scale increases, with no increases at two-year institutions.



9

Academic and Personal Characteristics of Foreign Students

ACADEMIC/PERSONAL

- Perhaps the most basic facts that any teacher needs about the classroom are: who your students are, what their backgrounds are, what they are studying and at what level. This section answers these questions. The first of the three major parts of this section addresses the fields of study chosen by foreign students. For many years foreign students have been an important part of U.S. academic life in many disciplines, especially in science and engineering. These enrollments by field of study are then broken down by college and university type (that is, by Carnegie Classification). Data on foreign student enrollments by discipline is analyzed to show the relationship between institutional type and the academic fields chosen by foreign students.
- The second part of this section focuses on foreign student enrollments by academic level. In Section 4 academic level is examined by nationality. In this section, data is examined for trends over time and according to the personal characteristics of foreign students.
- Finally, the third part of this section describes the foreign student population by sex, marital status, enrollment status and visa status. Data for the 1996/97 academic year is presented along with an analysis of trends over time.

Field of Study

- Business and management continues to be the most popular field of study among foreign students this year. Numbering 95,860, foreign students concentrating in business fields make up over 20% of the entire foreign student population. Engineering, the second most popular field, enrolls 71,001, or 15.5%.
- Enrollments in the physical and life sciences total 37,198 (8.1%), with math and computer sciences enrolling a similar amount (35,132 or 7.7%). "Other" fields (liberal arts, law, communications, etc.) increased this year by 5.3% and now enroll 44,367 students, 9.7% of all international students.
- This year enrollment in nontraditional fields has risen slightly. Education enrollments have risen (up 0.4%), as have those of students in the arts (up 4.8%), social sciences (up 1.2%) and students who have not declared a major (up 2%). Business enrollments have increased by 3.5%. The engineering disciplines and the sciences have historically been the major areas of choice among international students, especially those from the developing nations of Asia. This year enrollments in engineering have again fallen, albeit by less than 2%. Enrollments in math and computer science and in the physical and life sciences also decreased, by 2.2% and 0.1% respectively.

9.0

FOREIGN STUDENTS BY FIELD OF STUDY, 1995/96 - 1996/97

	1995/96			1996/97		
Field of Study	Foreign Students	% of Total	% Change	Foreign Students	% of Total	% Change
Agriculture, Total	**8,293**	**1.8**	**-7.3**	**8,435**	**1.8**	**1.7**
Agricultural Sciences	4,286	0.9	-24.8	4,727	1.0	10.3
Agribusiness & Agricultural Production	2,192	0.5	19.3	1,835	0.4	-16.3
Conservation & Renewable Natural Resources	1,815	0.4	1.6	1,873	0.4	3.2
Business & Management, Total	**92,632**	**20.4**	**1.3**	**95,860**	**20.9**	**3.5**
Business & Management, General	85,920	18.9	0.6	89,256	19.5	3.9
Marketing & Distribution	6,041	1.3	12.0	5,266	1.1	-12.8
Consumer, Personal & Misc Services	671	0.1	-2.2	1,337	0.3	99.3
Education	**13,200**	**2.9**	**-12.8**	**13,248**	**2.9**	**0.4**
Engineering, Total	**72,410**	**16.0**	**-0.5**	**71,001**	**15.5**	**-1.9**
Engineering, General	63,929	14.1	-3.0	63,357	13.8	-0.9
Engineering-Related Technologies	6,383	1.4	18.8	5,870	1.3	-8.0
Transportation & Material Moving	615	0.1	-38.5	831	0.2	35.1
Mechanics & Repairers	394	0.1	4.3	607	0.1	54.1
Construction Trades	757	0.2	58.9	233	0.1	-69.2
Precision Production	332	0.1	24.1	103	0.0	-69.0

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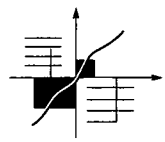
FOREIGN STUDENTS BY FIELD OF STUDY, 1995/96 - 1996/97

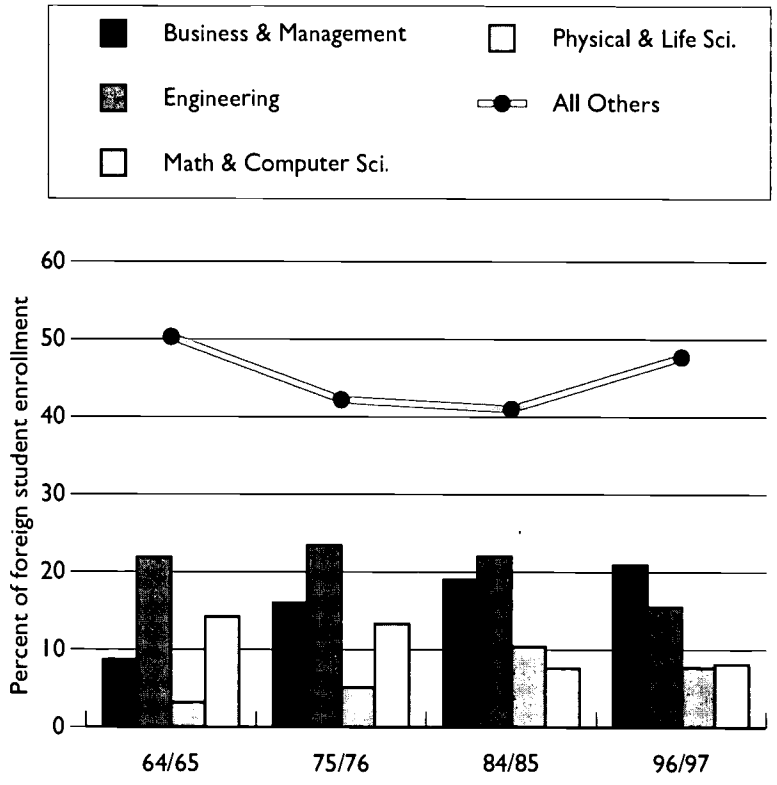


Field of Study	1995/96 Foreign Students	1995/96 % of Total	1995/96 % Change	1996/97 Foreign Students	1996/97 % of Total	1996/97 % Change
Fine & Applied Arts, Total	**26,749**	**5.9**	**12.6**	**28,030**	**6.1**	**4.8**
Visual and Performing Arts	20,845	4.6	15.3	21,994	4.8	5.5
Architecture & Environmental Design	5,904	1.3	2.9	6,036	1.3	2.2
Health Professions	20,674	4.6	-0.3	20,099	4.4	-2.8
Humanities, Total	**16,161**	**3.6**	**-3.8**	**15,927**	**3.5**	**-1.4**
Letters	6,065	1.3	2.3	5,377	1.2	-11.3
Foreign Languages	4,678	1.0	0.0	4,933	1.1	5.5
Theology	3,625	0.8	-19.7	3,736	0.8	3.1
Philosophy & Religion	1,793	0.4	-2.5	1,881	0.4	4.9
Mathematics & Computer Sciences, Total	**35,940**	**7.9**	**2.8**	**35,132**	**7.7**	**-2.2**
Computer & Information Sciences	27,681	6.1	3.1	27,158	5.9	-1.9
Mathematics	8,259	1.8	1.6	7,974	1.7	-3.5
Physical & Life Sciences, Total	**37,226**	**8.2**	**2.3**	**37,198**	**8.1**	**-0.1**
Physical Sciences	18,520	4.1	2.0	17,719	3.9	-4.3
Life Sciences	17,647	3.9	1.3	18,084	3.9	2.5
Science Technologies	1,059	0.2	23.0	1,395	0.3	31.7
Social Sciences, Total	**38,242**	**8.4**	**5.7**	**38,691**	**8.4**	**1.2**
Social Sciences, General	23,033	5.1	0.6	23,701	5.2	2.9
Psychology	6,270	1.4	4.3	6,432	1.4	2.6
Public Affairs	3,750	0.8	17.3	3,975	0.9	6.0
Area & Ethnic Studies	2,479	0.5	24.9	1,835	0.4	-26.0
Protective Services	511	0.1	-6.7	534	0.1	4.5
Parks & Recreation	2,199	0.5	24.1	2,214	0.5	0.7
Other, Total	**42,130**	**9.3**	**-8.5**	**44,367**	**9.7**	**5.3**
Liberal/ General Studies	22,261	4.9	-14.1	23,723	5.2	6.6
Communications	9,522	2.1	2.2	8,742	1.9	-8.2
Law	3,464	0.8	0.3	4,033	0.9	16.4
Multi/Interdisciplinary Studies	2,640	0.6	-15.1	3,017	0.7	14.3
Home Economics	1,991	0.4	-20.1	2,464	0.5	23.8
Library & Archival Sciences	676	0.1	5.3	520	0.1	-23.1
Vocational Home Economics	431	0.1	-40.8	560	0.1	29.9
Communication Technologies	943	0.2	28.1	1,135	0.2	20.4
Military Technologies	202	0.0	2.0	174	0.0	-13.9
Intensive English Language	**22,231**	**4.9**	**13.5**	**21,541**	**4.7**	**-3.1**
Undeclared	**27,897**	**6.1**	**-12.5**	**28,456**	**6.2**	**2.0**
TOTAL	**453,787**	**100.0**	**0.3**	**457,984**	**100.0**	**0.9**

- Engineering, the favored field among foreign students throughout much of the history of the Census, has experienced greatly decelerated growth in recent years and is now second to business in popularity. In the late 1980s and early 1990s the average rate of growth in engineering enrollments was less than 1%, while during that same period business and management enrollments grew at a rate of 10% a year.
- While math and computer sciences continues to draw a sizable 7.7% of the international student body, growth in these fields has fallen off in recent years. In the early 1980s the average yearly rate of growth was 16%. In the latter part of that decade, however, math and computer sciences were averaging only a 1% yearly increase. During the same period, demand for physical and life science fields went up significantly. In the latter part of the 1980s, the average yearly rate of growth of physical and life sciences was 7%.

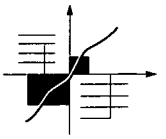
9.a

FOREIGN STUDENTS IN SELECTED YEARS, 1964/65 -1996/97
Over the last three decades the number of international students in business fields has increased thirteen fold.



9.1

FOREIGN STUDENTS BY MAJOR FIELDS, SELECTED YEARS



1964/65

Field of Study	Foreign Students	% of Total
Agriculture	3,211	3.9
Business & Management	7,116	8.7
Education	3,999	4.9
Engineering	18,084	21.9
Fine & Applied Arts	3,946	4.8
Health Sciences	4,918	6.0
Humanities	12,137	14.7
Math & Computer Sciences	2,670	3.2
Physical & Life Sciences	11,731	14.2
Social Sciences	12,607	15.3
Other	607	0.7
Intensive English Language	—	—
Undeclared	—	—
TOTAL	**82,045**	**98.3**

1975/76

Field of Study	Foreign Students	% of Total
Agriculture	5,270	2.9
Business & Management	28,670	16.0
Education	9,790	5.5
Engineering	42,000	23.4
Fine & Applied Arts	8,320	4.6
Health Sciences	7,180	4.0
Humanities	15,030	8.4
Math & Computer Sciences	9,060	5.1
Physical & Life Sciences	23,910	13.3
Social Sciences	20,730	11.6
Other	9,380	5.2
Intensive English Language	—	—
Undeclared	—	—
TOTAL	**179,340**	**100.0**

1984/85

Field of Study	Foreign Students	% of Total
Agriculture	7,540	2.2
Business & Management	64,930	19.0
Education	12,140	3.6
Engineering	75,370	22.0
Fine & Applied Arts	15,900	4.7
Health Sciences	13,410	3.9
Humanities	13,030	3.8
Math & Computer Sciences	35,630	10.4
Physical & Life Sciences	25,960	7.6
Social Sciences	25,000	7.3
Other	22,250	6.5
Intensive English Language	11,010	3.2
Undeclared	19,940	5.8
TOTAL	**342,110**	**100.0**

1996/97

Field of Study	Foreign Students	% of Total
Agriculture	8,435	1.8
Business & Management	95,860	20.9
Education	13,248	2.9
Engineering	71,001	15.5
Fine & Applied Arts	28,030	6.1
Health Professions	20,099	4.4
Humanities	15,927	3.5
Math & Computer Sciences	35,132	7.7
Physical & Life Sciences	37,198	8.1
Social Sciences	38,691	8.4
Other	44,367	9.7
Intensive English Language	21,541	4.7
Undeclared	28,456	6.2
TOTAL	**457,984**	**100.0**

9.2

FIELDS OF STUDY BY INSTITUTION TYPE, 1996/97

Engineering now trails behind business in popularity at all but the research institutions.
(See Section 8 for institutional definitions by Carnegie Classifications.)

TYPE OF INSTITUTION

Research Institutions	% Enrollment
Engineering	22.3
Business & Management	14.2
Physical & Life Sciences	11.1
Social Sciences	9.8
Other	7.9
Math & Computer Sciences	7.2
Undeclared	5.1
Fine & Applied Arts	4.4
Intensive English	4.4
Health Professions	4.2
Agriculture	3.2
Humanities	3.2
Education	2.8

Liberal Arts Institutions	% Enrollment
Business & Management	22.4
Undeclared	18.2
Social Sciences	11.2
Other	11.2
Physical & Life Sciences	6.6
Math & Computer Sciences	5.8
Humanities	4.9
Intensive English	4.9
Education	4.2
Fine & Applied Arts	4.0
Engineering	3.8
Health Professions	2.2
Agriculture	0.5

Doctoral Institutions	% Enrollment
Business & Management	24.5
Engineering	16.1
Social Sciences	10.1
Math & Computer Sciences	9.4
Physical & Life Sciences	9.0
Other	7.5
Undeclared	5.5
Intensive English	4.1
Fine & Applied Arts	3.5
Health Professions	3.3
Humanities	3.3
Education	2.9
Agriculture	0.7

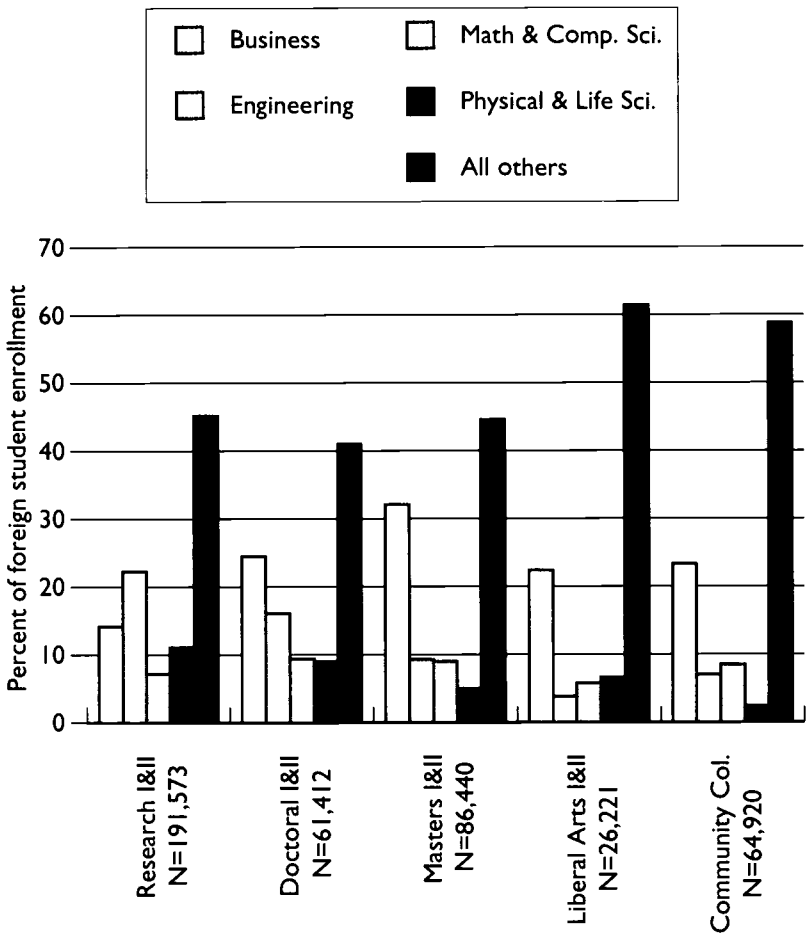
Community & Technical Colleges	% Enrollment
Other	25.0
Business & Management	23.3
Math & Computer Sciences	8.5
Undeclared	8.5
Engineering	7.0
Intensive English	7.0
Health Professions	5.8
Fine & Applied Arts	5.4
Social Sciences	3.4
Physical & Life Sciences	2.4
Education	1.6
Humanities	1.5
Agriculture	0.9

Master's Institutions	% Enrollment
Business & Management	32.1
Engineering	9.3
Math & Computer Sciences	9.0
Other	8.3
Social Sciences	7.6
Undeclared	6.4
Intensive English	5.6
Physical & Life Sciences	5.0
Education	4.6
Fine & Applied Arts	4.5
Health Professions	3.9
Humanities	3.0
Agriculture	0.6

9.b

FIELDS OF STUDY BY CARNEGIE TYPE, 1996/97

Engineering is the top choice of foreign students at research universities. At doctoral, master's and baccalaureate institutions, business is selected most often.



- Over the past two decades the popularity of the humanities has declined considerably. In 1965 it was the third most popular field, enrolling nearly 15% of all international students. By the mid-1970s, however, it drew only about 8%, and since the mid-1980s it has had less than 4% of foreign students. This year the number of international students enrolled in the humanities has continued to slide.
- For foreign students studying at research institutions, engineering (22.3%) is the field of study of choice. At these institutions majors in business (14.2%) and in the physical and life sciences (11.1%) have comparable levels of enrollments.
- At doctoral institutions, business (24.5%) is the preferred major, followed by engineering (16.1%). At institutions of this type, the fewest students are enrolled in fields other than business, engineering and the sciences.
- Master's degree institutions have the highest proportion of students studying business (32.1%). At baccalaureate institutions business (22.4%) is similarly the preferred field. Community colleges have the largest proportion of students studying in other areas (25%).

Academic Level

- The 218,743 students at the undergraduate level, including both associate and bachelor's degree programs, account for about half (47.7%) of the entire foreign student population, while the 190,244 graduate students account for 41.5%. The 48,997 "other" students, including those enrolled in practical training, nondegree and Intensive English programs, total 10.7%.
- Undergraduate enrollments by foreign students increased in associate programs by 8.6% and fell in bachelor's programs by 2.4%.

9.3

ACADEMIC LEVEL, 1995/96 - 1996/97

	1995/96			1996/97		
Academic Level	**Foreign Students**	**% of Total**	**% Change**	**Foreign Students**	**% of Total**	**% Change**
Associate	**49,113**	**10.8**	**-5.5**	**53,313**	**11.6**	**8.6**
Bachelor's	**169,507**	**37.4**	**-0.1**	**165,430**	**36.1**	**-2.4**
Freshman	32,603	7.2	-5.2	32,703	7.1	0.3
Sophomore	27,792	6.1	1.5	27,010	5.9	-2.8
Junior	33,796	7.4	1.6	32,155	7.0	-4.9
Senior	41,931	9.2	4.3	41,570	9.1	-0.9
Unspecified	33,385	7.4	-3.7	31,992	7.0	-4.2
Graduate	**190,092**	**41.9**	**-0.9**	**190,244**	**41.5**	**0.1**
Master's	97,241	21.4	3.1	93,715	20.5	-3.6
Doctoral	66,568	14.7	-1.5	67,346	14.7	1.2
Professional Training	6,105	1.3	-4.9	7,590	1.7	24.3
Unspecified	20,178	4.4	-16.5	21,593	4.7	7.0
Other	**45,075**	**9.9**	**12.6**	**48,997**	**10.7**	**8.7**
Practical Training	15,450	3.4	14.5	18,125	4.0	17.3
Non-degree	9,404	2.1	-6.1	9,960	2.2	5.9
Intensive English Language	20,221	4.5	19.9	20,935	4.6	3.5
TOTAL	**453,787**	**100.0**	**0.3**	**457,984**	**100.0**	**0.9**

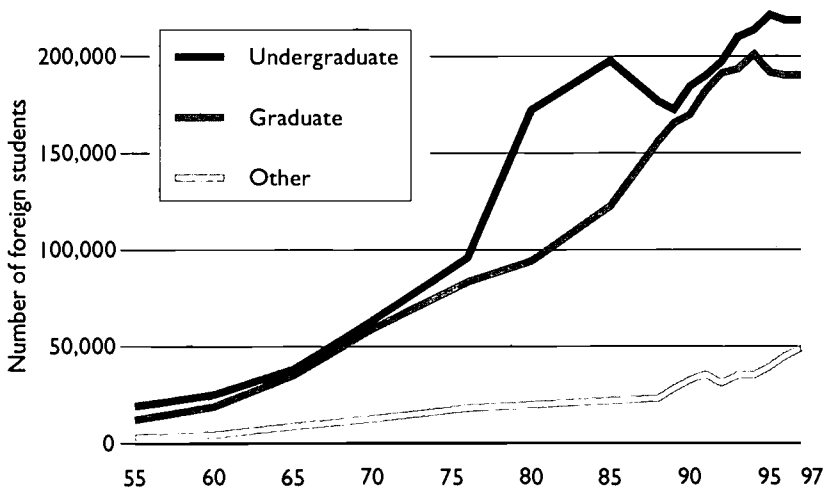
9.4

FOREIGN STUDENTS BY ACADEMIC LEVEL, SELECTED YEARS 1954/55 - 1996/97

Year	Under-Graduate	Graduate	Other
1954/55	19,101	12,118	3,012
1959/60	25,164	18,910	4,412
1964/65	38,130	35,096	8,774
1969/70	63,296	59,112	12,551
1975/76	95,949	83,395	18,073
1979/80	172,378	94,207	19,758
1984/85	197,741	122,476	21,895
1987/88	176,669	156,366	23,152
1988/89	172,551	165,590	28,209
1989/90	184,527	169,827	32,495
1990/91	189,900	182,130	35,500
1991/92	197,070	191,330	31,190
1992/93	210,080	193,330	35,210
1993/94	213,610	201,030	35,110
1994/95	221,500	191,738	39,396
1995/96	218,620	190,092	45,075
1996/97	218,743	190,244	48,997

9.c

FOREIGN STUDENTS BY ACADEMIC LEVEL, SELECTED YEARS 1955/56 - 1996/97



At the graduate level the number of foreign students increased slightly (0.1%) this year. Programs described as "other" again showed the strongest increase, up 8.7% this year.

- While foreign undergraduates have always outnumbered graduates, the discrepancy was much larger in the past. In the 1950s the percentage of graduate students (35%) was much lower. In the 1960s and 1970s the graduate-to-undergraduate ratio was more even, but in the following decade it again tilted strongly in favor of undergraduates. The pattern was changed again in the mid-1980s, when the graduate and undergraduate proportions again approached parity. This decrease in graduate enrollments has surely been affected by the previously noted drops in enrollments from Asia. Students from this area are heavily enrolled at the graduate level.

- The adjoining table presents separate profiles of foreign undergraduate and graduate students, as well as students enrolled in other programs such as practical training and intensive English.

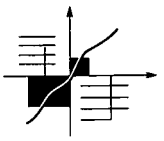
- In general, foreign undergraduates are largely male, single and full-time students who are self-financed. Their major field of study is likely to be business and management. Graduate students are even more likely than undergraduates to be male than female. Graduate students are also primarily full-time students and more of them are self-financed than receive support from their host college or university. Unlike their undergraduate counterparts, they are most likely to be enrolled in engineering programs, followed by business and the physical and life sciences. Foreign students in the "other" category of academic level are the most likely to be enrolled part-time. They are also the most likely to receive financial support from current employment. Students in this category are overwhelmingly enrolled in intensive English language programs.

- International students pursuing studies on a full-time basis continue to greatly outnumber those studying part-time, as is evident in Table 9.5. This is not surprising, given the fact that full-time enrollment in most cases is required in order for a foreign student to remain in the United States.

9.5

PERSONAL AND ACADEMIC CHARACTERISTICS BY ACADEMIC LEVEL, 1996/97

Characteristic	Under-Graduate	Graduate	Other
Gender			
Male	55.4	63.9	55.2
Female	44.6	36.1	44.8
Marital Status			
Single	92.5	74.1	86.7
Married	7.5	25.9	13.3
Enrollment Status			
Full-time	89.8	85.8	85.7
Part-time	10.2	14.2	14.3
Visa Type			
F Visa	89.4	81.8	82.4
J Visa	3.6	10.1	8.2
M Visa	0.2	0.0	0.3
Other Visa	6.7	8.0	9.2
Primary Source of Funds			
Personal & Family	81.3	47.7	60.5
U.S. College or University	6.6	34.9	4.9
Home Govt/University	4.8	6.7	4.5
Current Employment	0.8	1.1	21.7
U.S. Private Sponsor	2.2	1.8	1.3
Foreign Private Sponsor	3.0	4.1	3.8
U.S. Government	0.4	1.0	0.9
International Organization	0.3	0.9	0.7
Other	0.8	1.7	1.8
Field of Study			
Agriculture	0.9	3.3	0.7
Business & Management	26.3	16.6	10.5
Education	2.0	4.2	1.4
Engineering	11.9	21.0	6.5
Fine & Applied Arts	7.8	5.0	2.0
Health Professions	3.7	5.2	3.0
Humanities	2.2	5.3	1.7
Math & Computer Sciences	7.0	9.2	3.2
Physical & Life Sciences	4.5	13.0	3.0
Social Sciences	7.9	10.0	3.5
Other	14.2	5.5	5.1
Intensive English	1.9	0.2	48.0
Undeclared	9.8	1.3	11.3
Number of Students	**218,743**	**190,244**	**48,997**



Personal Characteristics

- Since the inception of the Census in 1949, male foreign students have consistently outnumbered female students; both the number and proportion of female international students, however, is rising steadily. In 1996/97 41% of all international students studying in the United States were women.
- An examination of Table 9.6 shows that an overwhelming majority of the international students in this country are single. More than eight out of ten (84.4%) are in this category, slightly more than in the previous year.

9.6

PERSONAL CHARACTERISTICS, SELECTED YEARS 1976/77 - 1996/97

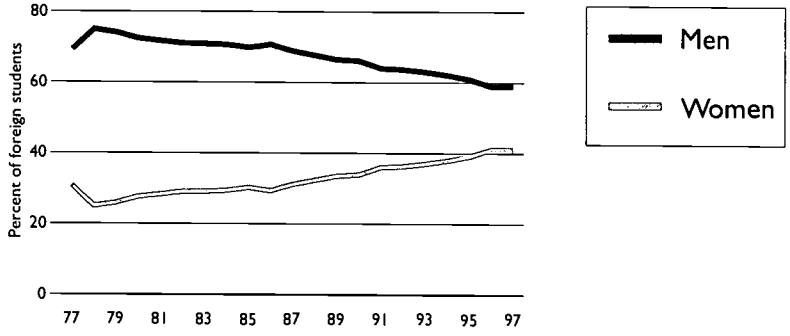
Year	% Male	% Female	% Single	% F Visa	% J Visa	% Other	% Refugee[1]	Foreign Students
76/77	69.2	30.8	73.7	75.0	10.4	7.3	7.3	203,068
77/78	75.0	25.0	77.4	78.8	9.3	6.9	5.0	235,509
78/79	74.1	25.9	74.7	80.7	9.8	5.7	3.8	263,938
79/80	72.4	27.6	78.6	82.0	7.6	6.4	4.0	286,343
80/81	71.7	28.3	80.1	82.9	6.7	5.6	4.8	311,882
81/82	71.0	29.0	79.3	84.3	6.8	4.9	4.0	326,299
82/83	70.9	29.1	80.1	84.0	7.2	5.2	3.6	336,985
83/84	70.6	29.4	80.1	83.2	8.2	5.2	3.4	338,894
84/85	69.8	30.2	80.4	83.5	8.4	5.1	3.0	342,113
85/86	70.7	29.3	80.0	81.5	9.2	5.7	3.6	343,777
86/87	68.9	31.1	79.7	81.0	11.0	5.2	2.8	349,609
87/88	67.7	32.3	79.8	79.4	12.1	6.1	2.3	356,187
88/89	66.5	33.5	80.9	79.0	12.5	6.5	2.0	366,354
89/90	66.1	33.9	80.1	78.5	12.7	6.4	2.4	386,851
90/91	64.0	36.0	78.5	80.6	11.0	6.4	2.0	407,529
91/92	63.7	36.3	80.7	84.6	9.5	6.0		419,585
92/93	63.0	37.0	82.5	85.5	8.5	6.1		438,618
93/94	62.1	37.9	83.1	86.4	7.7	5.9		449,749
94/95	60.9	39.1	83.4	85.8	7.7	6.4		452,635
95/96	58.9	41.1	82.6	84.9	7.7	7.3		453,787
96/97	59.0	41.0	84.4	85.6	6.8	7.6		457,984

[1] No longer included in the census after 1990/91

- Female representation in the international student body has traditionally been low. In the 1950s, fewer than one-fourth of the foreign students were women (23%), and by the end of that decade that proportion had fallen to a record low of 22%. By the latter half of the 1960s, however, the proportion of women had begun to rise and in 1969 was back up to nearly one-fourth of the international population. Since that time their proportion has risen steadily.
- The vast majority of foreign students (85.6%) hold F visas, which are temporary visas granted to citizens of foreign countries for full-time study in U.S. institutions of higher education. Students with J visas, the visas granted to exchange visitors, make up the second largest group, accounting for 6.8%. Other types of visas are held by 7.6% of foreign students. (Definitions of the various types of visas appear in Section 13 of this publication.)

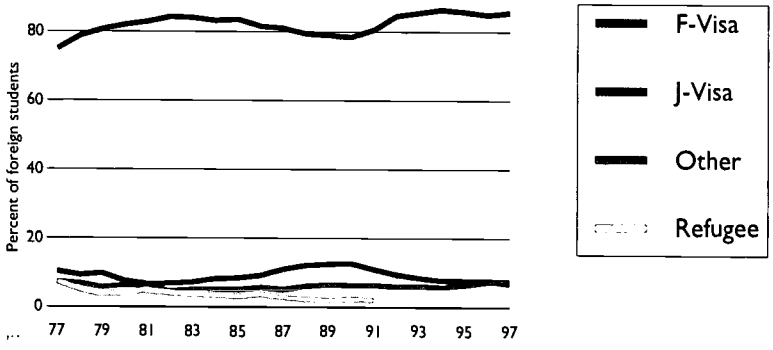
9.d

DISTRIBUTION BY SEX, 1977/78 - 1996/97



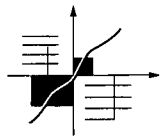
9.e

VISA STATUS, 1977/78 - 1996/97



10

Numbers and Destinations of U.S. Students Studying Overseas



U.S. STUDY ABROAD

- Over the past ten years the number of U.S. students receiving academic credit for study abroad as reported in *Open Doors* has increased from 48,483 to 89,242. Much of this growth occurred during the late 1980s. Since 1990, enrollments increased only 2% a year on an annualized basis until 1994/95, which saw a strong 10% increase over the previous year. This year the increase is 5.7%.
- The leading destinations for U.S. study-abroad students are the nations of Western Europe, especially the United Kingdom. Recently, however, a more diverse group of destinations, including China, Mexico, Ecuador and Russia, has seen gradual enrollment increases.
- Research institutions send the largest number of students abroad each year, with majors in the humanities and the social sciences (35%) predominating. Over the last ten years, nontraditional fields such as business and the technical fields have seen small increases, while the traditional study-abroad areas of the humanities, social sciences and foreign languages have seen proportionate decreases. This year, however, the percentage of students enrolled in foreign languages increased slightly, up 0.4%.
- While numbers of study-abroad enrollments have increased, the length of the sojourn is still rather brief: 53% of students study abroad for one semester or less, and only 12% for an academic year. This trend towards ever shorter sojourns appears to be quite robust.
- The "Junior year abroad" model still dominates: 41.6% of study-abroad students go during that year. Graduate students have remained a very small proportion (7.3%) of all study abroad enrollments. Most study-abroad students are female (65.3%) and white (84.4%).

- Three years ago IIE redesigned and expanded the study abroad survey; revisions included questions about the sources of support for study abroad and about the race/ethnicity of participants. Reporting institutions were also asked to include only those students enrolled for a degree at their own institution, regardless of program sponsorship. This year survey forms were sent to 1,176 accredited colleges and universities (those previously identified as having at least one study abroad student) throughout the United States. Information was obtained from 993 (84.4%) of the surveyed institutions. This overall survey response rate is identical to last year's 84.4% rate of return.

- A total of 89,242 students received academic credit for study in another country in 1995/96, 4,839 more than the 84,403 reported in 1994/95. When institutions responding this year and last are taken together, 522 institutions this year reported increases in study abroad activity compared with 363 that showed decreased study abroad participation. Of interest is that the average size of the study abroad community on campuses that reported increases is about twice the average size of study abroad communities that reported declines in study abroad activity.

10.0

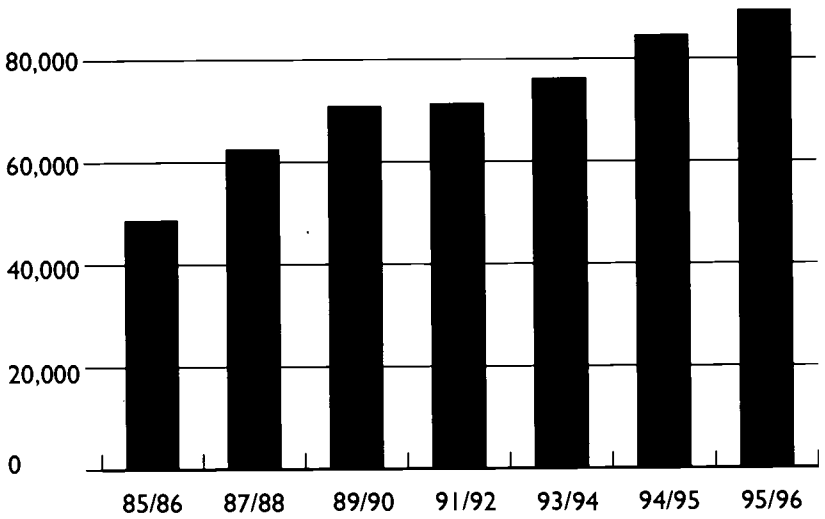
HOST REGIONS OF U.S. STUDY ABROAD STUDENTS, 1985/86 - 1995/96

Host Region	Percent of U.S. Study Abroad Students						
	1985/86	1987/88	1989/90	1991/92	1993/94	1994/95	1995/96
Africa	1.1	1.2	1.3	1.8	1.9	2.2	2.3
Asia	5.4	6.1	5.0	5.9	6.5	6.4	6.4
Europe	79.6	75.4	76.7	71.3	67.4	65.5	64.8
Latin America	7.0	9.2	9.4	12.3	13.4	13.7	15.4
Middle East	4.0	4.7	2.7	2.7	2.8	3.3	2.1
North America	0.9	1.4	0.8	0.9	0.7	0.7	0.7
Oceania	0.9	1.2	1.9	3.1	3.4	4.3	4.4
Multiple Regions	1.0	0.8	2.2	2.1	3.8	3.8	4.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Students Reported	**48,483**	**62,341**	**70,727**	**71,154**	**76,302**	**84,403**	**89,242**

10.a

MORE U.S. STUDENTS GOING ABROAD

While the total number of U.S. students studying abroad for academic credit has increased in the past years, their absolute numbers remain small compared to U.S. tertiary level enrollments, and the length of the study abroad period is decreasing.



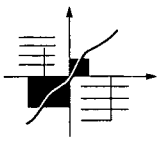
In short, not only did campuses send more students, but those already sending large numbers grew faster than those with smaller study abroad communities.

- As in past years, Europe was by far the favorite destination for Americans who studied abroad in 1995/96: 64.8% chose to study there. After Europe was Latin America, hosting 15.4% of Americans studying abroad. Asia attracted 6.4%, Oceania 4.4%, Africa 2.3%, the Middle East 2.1%, and North America (Canada) only 0.7%. The most noteworthy changes since 1985/86 are that the share of Americans studying in Europe has fallen by nearly 18% while the share going to Latin America has more than doubled, from 7% to 15.4%.
- Seven of the top 12 receiving countries were in Western Europe, and they hosted over 56% of all U.S. students studying overseas. The top 12 countries of destination hosted the vast majority (74%) of all American students studying overseas.
- The United Kingdom hosted 22% of the American students, followed by Spain, Italy and France with about 9% each. The next eight host countries were Mexico (7%), Germany and Australia (4%), Costa Rica (3%), and Japan, Israel, Ireland and Austria (2%).

10.1
HOST REGIONS AND COUNTRIES OF U.S. STUDY ABROAD STUDENTS, 1994/95 - 1995/96

Region/ Locality	Total 1994/95	Total 1995/96	% Change
AFRICA	**1,842**	**2,027**	**10.0**
Eastern Africa	**933**	**815**	**-12.6**
Kenya	795	683	-14.1
Tanzania	88	70	-20.5
Madagascar	32	52	62.5
Ethiopia	0	3	-
Reunion	0	2	-
Malawi	1	1	0.0
Mozambique	1	1	0.0
Zimbabwe	0	1	-
Zambia	3	1	-66.7
Eritrea	0	1	-
Uganda	13	0	-100.0
Central Africa	**52**	**79**	**51.9**
Cameroon	52	79	51.9
North Africa	**290**	**323**	**11.4**
Egypt	206	226	9.7
Morocco	80	85	6.3
Tunisia	4	12	200.0
Southern Africa	**143**	**371**	**159.4**
South Africa	86	297	245.3
Namibia	23	35	52.2
Botswana	30	32	6.7
Swaziland	4	7	75.0
Western Africa	**418**	**423**	**1.2**
Ghana	270	285	5.6
Senegal	52	59	13.5
Cote D'Ivoire	42	31	-26.2
Niger	5	21	320.0
Nigeria	34	18	-47.1
Gambia	0	7	-
Togo	0	1	-
Burkina Faso	0	1	-
Sierra Leone	9	0	-100.0
West Africa, Unspecified	6	0	-100.0
Africa, Unspecified	6	16	166.7
ASIA	**5,440**	**5,699**	**4.8**
Eastern Asia	**4,197**	**4,413**	**5.1**
Japan	2,212	2,010	-9.1
China	1,257	1,396	11.1
Hong Kong	153	424	177.1
Korea, Repub. of	374	411	9.9
Taiwan	201	172	-14.4
South/Central Asia	**638**	**669**	**4.9**
India	409	470	14.9
Nepal	189	163	-13.8
Bangladesh	0	13	-
Sri Lanka	21	11	-47.6
Uzbekistan	4	5	25.0
Kyrgyzstan	5	4	-20.0
Pakistan	3	3	0.0
Kazakhstan	6	0	-100.0
Myanmar	1	0	-100.0
Southeast Asia	**604**	**616**	**2.0**
Thailand	189	207	9.5
Indonesia	215	170	-20.9
Singapore	57	83	45.6
Vietnam	83	73	-12.0
Philippines	44	60	36.4
Malaysia	16	23	43.8
Asia, Unspecified	1	1	0.0
EUROPE	**55,289**	**57,785**	**4.5**
Eastern Europe	**2,744**	**2,938**	**7.1**
Russia	1,290	1,482	14.9
Czech Republic	450	600	33.3
Hungary	368	381	3.5
Poland	205	171	-16.6
Ukraine	121	74	-38.8
Yugoslavia (former)	132	57	-56.8
Bulgaria	27	44	63.0
Estonia	57	32	-43.9
Romania	17	32	88.2
Moldova	0	12	-
Bosnia & Herzegovina	0	11	-
Latvia	14	10	-28.6
Slovakia	19	7	-63.2
Albania	8	7	-12.5
Lithuania	1	3	200.0
Belarus	23	1	-95.7
Armenia	0	1	-
Croatia	1	1	0.0
Georgia	3	0	-100.0
Macedonia	3	0	-100.0
Eastern Europe, Unspecified	5	12	140.0
Western Europe	**52,388**	**54,840**	**4.7**
United Kingdom	19,410	20,062	3.4
Spain	7,473	8,135	8.9

10.1 (cont.)
HOST REGIONS AND COUNTRIES OF U.S. STUDY ABROAD STUDENTS, 1994/95-1995/96

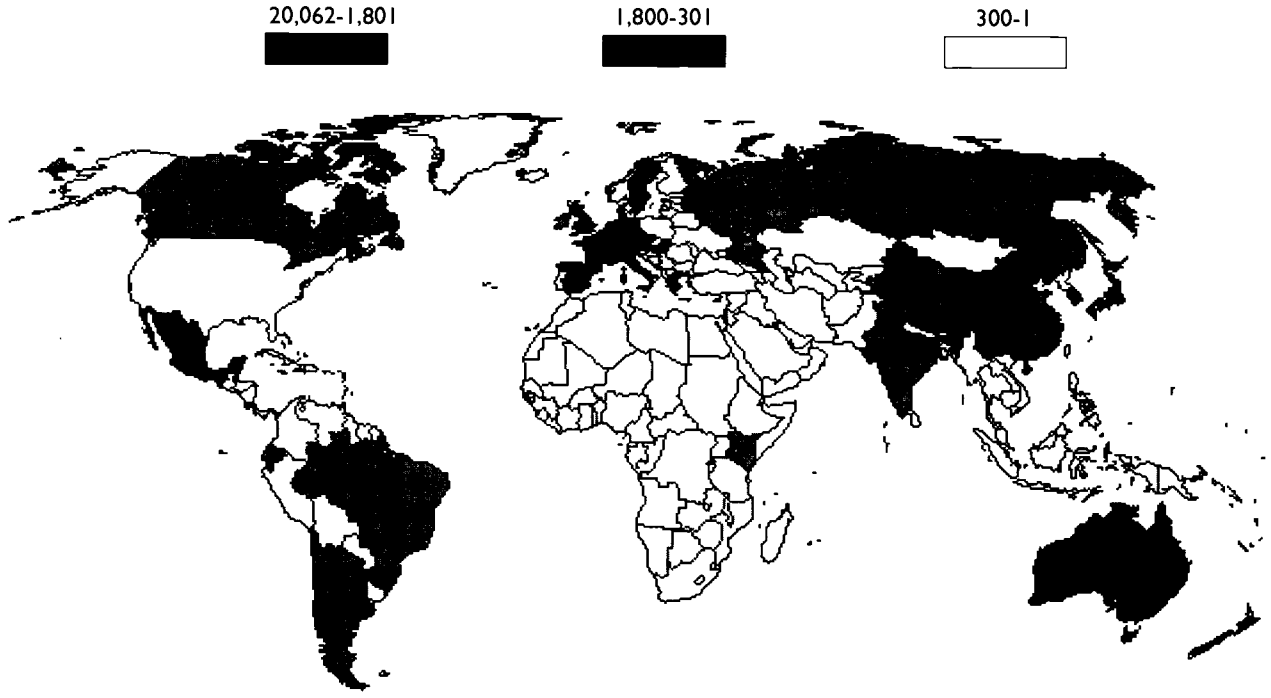


Region/ Locality	Total 1994/95	Total 1995/96	% Change
Italy	7,062	7,890	11.7
France	7,872	7,749	-1.6
Germany	3,504	3,552	1.4
Ireland	1,191	1,594	33.8
Austria	1,489	1,486	-0.2
Greece	935	898	-4.0
Switzerland	858	754	-12.1
Netherlands	711	707	-0.6
Denmark	477	510	6.9
Belgium	380	484	27.4
Sweden	404	349	-13.6
Luxembourg	318	292	-8.2
Finland	148	145	-2.0
Norway	123	100	-18.7
Malta	1	38	3,700.0
Portugal	27	16	-40.7
Iceland	4	9	125.0
Gibraltar	0	2	-
Monaco	1	1	0.0
Western Europe, Unspecified	0	67	-
Europe, Unspecified	157	7	-95.5
LATIN AMERICA	**11,590**	**13,726**	**18.4**
Caribbean	**1,196**	**1,299**	**8.6**
Jamaica	276	339	22.8
Bahamas	244	287	17.6
Dominican Republic	292	266	-8.9
Martinique	61	78	27.9
Trinidad & Tobago	35	53	51.4
Cuba	1	53	5,200.0
Barbados	52	49	-5.8
Cayman Islands	30	46	53.3
Dominica	26	21	-19.2
Haiti	10	16	60.0
Turks & Caicos Islands	25	11	-56.0
St. Lucia	0	4	-
British Virgin Islands	4	0	-100.0
Montserrat	4	0	-100.0
Caribbean, Unspecified	136	76	-44.1
Cntrl America/Mexico	**7,705**	**9,606**	**24.7**
Mexico	4,715	6,220	31.9
Costa Rica	2,302	2,298	-0.2
Belize	232	370	59.5
Guatemala	219	289	32.0
Honduras	144	272	88.9
Nicaragua	51	93	82.4
Panama	4	22	450.0
El Salvador	22	12	-45.5
Central America, Unspecified	16	30	87.5
South America	**2,683**	**2,794**	**4.1**
Ecuador	837	925	10.5
Chile	755	605	-19.9
Brazil	345	386	11.9
Argentina	275	311	13.1
Venezuela	205	207	1.0
Colombia	110	114	3.6
Peru	71	111	56.3
Bolivia	64	65	1.6
Uruguay	8	35	337.5
Guyana	8	32	300.0
Paraguay	5	3	-40.0
Latin America, Unspecified	6	27	350.0
MIDDLE EAST	**2,823**	**1,859**	**-34.1**
Israel	2,621	1,667	-36.4
Turkey	127	102	-19.7
Jordan	29	54	86.2
Syria	9	10	11.1
Cyprus	10	4	-60.0
Kuwait	3	3	0.0
Yemen	0	1	-
Saudi Arabia	21	0	-100.0
Lebanon	3	0	-100.0
Middle East, Unspecified	0	18	-
NORTH AMERICA	**590**	**653**	**10.7**
Canada	573	653	14.0
Bermuda	17	0	-100.0
OCEANIA	**3,643**	**3,884**	**6.6**
Australia	3,346	3,313	-1.0
New Zealand	234	401	71.4
Tonga	0	62	-
Western Samoa	12	42	250.0
Federated States of Micronesia	1	27	2,600.0
Palau	14	22	57.1
French Polynesia	17	7	-58.8
Fiji	12	4	-66.7
Papua New Guinea	1	3	200.0
Vanuatu	0	2	-
Cook Islands	6	1	-83.3
Multicountry	**3,180**	**3,605**	**13.4**
WORLD TOTAL	**84,403**	**89,242**	**5.7**

10.b

STUDY ABROAD DESTINATIONS, 1995/96

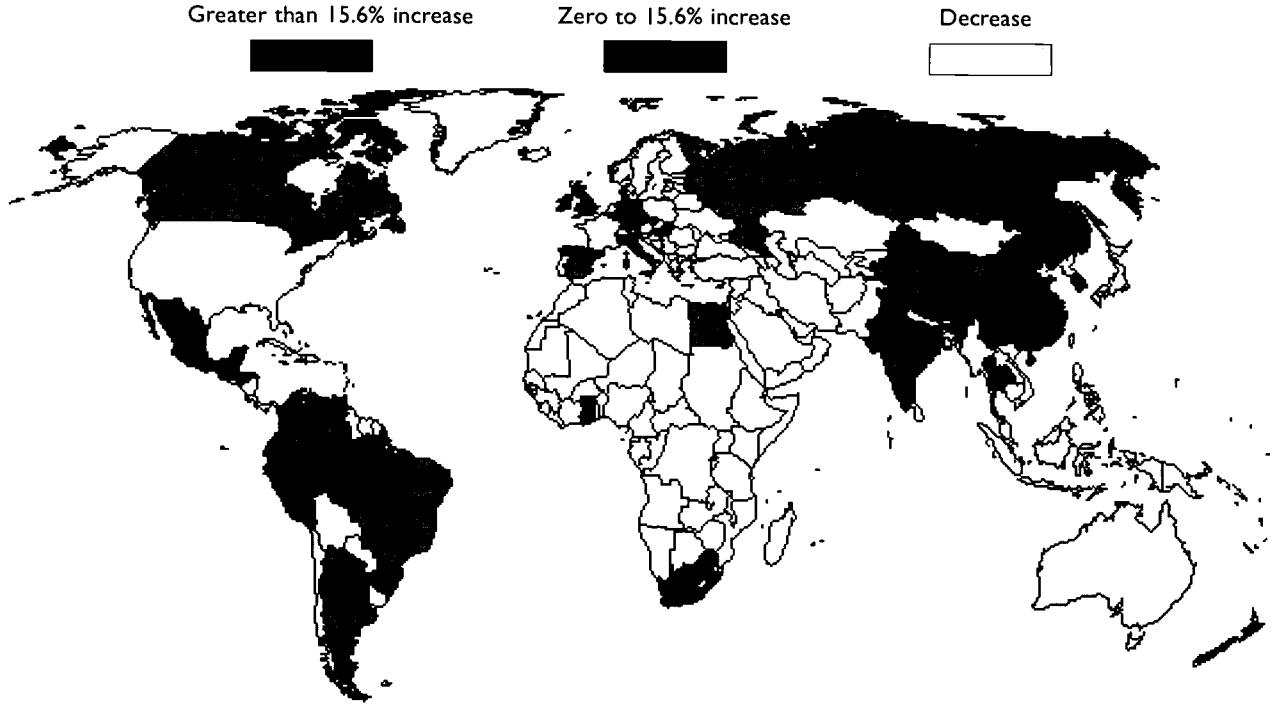
Western Europe is the destination of choice for the largest number of U.S. study abroad students.



10.c

PERCENTAGE CHANGE IN COUNTRIES RECEIVING 100+ U.S. STUDENTS

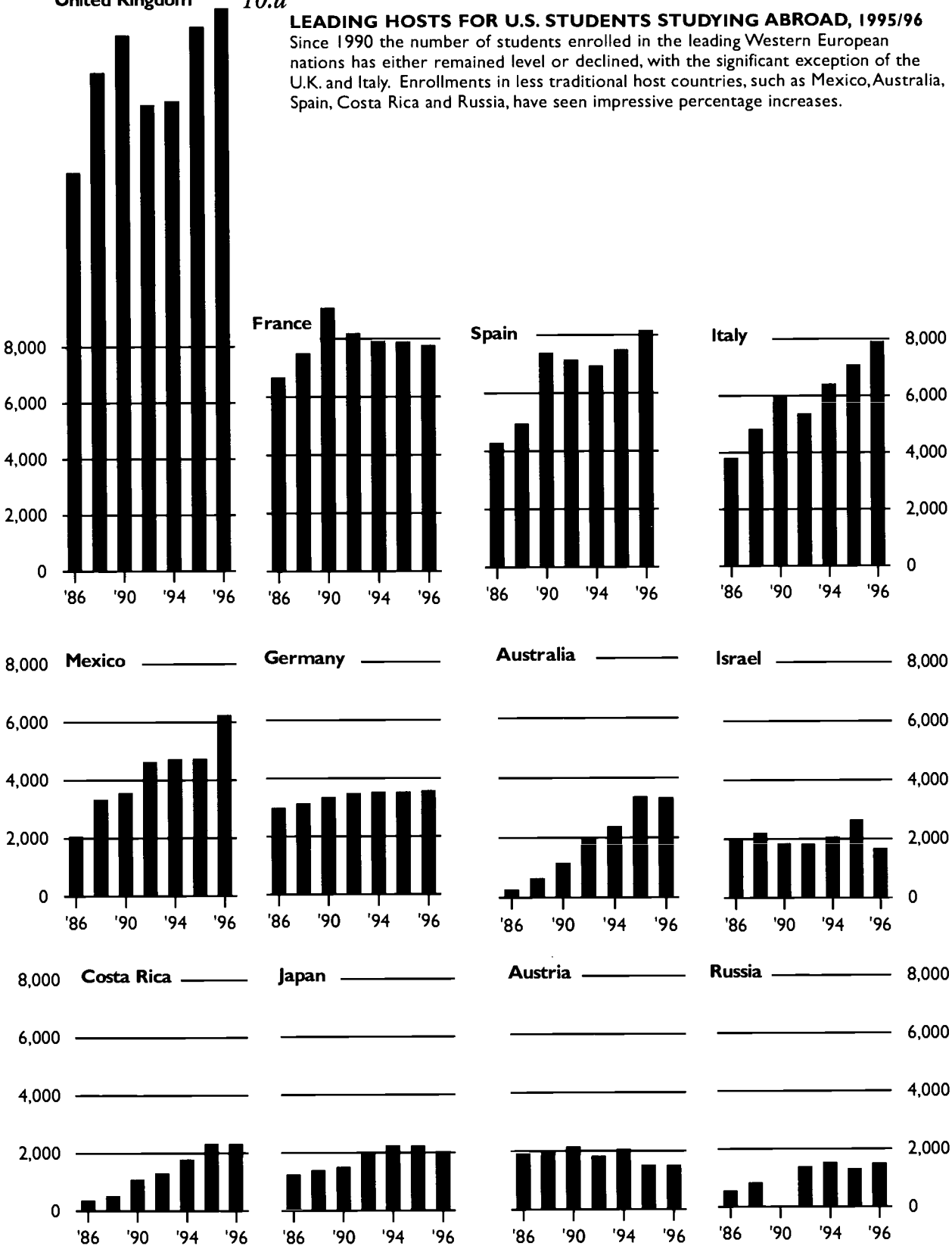
Countries outside of Western Europe are experiencing the largest percent increases in student sojourns.



10.d

LEADING HOSTS FOR U.S. STUDENTS STUDYING ABROAD, 1995/96

Since 1990 the number of students enrolled in the leading Western European nations has either remained level or declined, with the significant exception of the U.K. and Italy. Enrollments in less traditional host countries, such as Mexico, Australia, Spain, Costa Rica and Russia, have seen impressive percentage increases.



Models for the Future: Linking Academic and Experiential Programs in Education Abroad

JOHN MEYERS
Council on International Educational Exchange

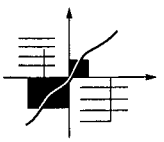
THE ongoing discussions on how to make learning more relevant to societal and workforce needs fill agendas at universities, businesses, funding agencies and ministries of education and labor around the world. Such discussions are certain to make the 1990s a period known for widespread efforts to integrate academic and experiential learning, create new pedagogies and reform curriculum. If carried out successfully, the shifting paradigm in teaching and learning will break down the isolation of education from the workplace and strengthen the links between learning institutions and communities.

The challenges faced by American educators are made all the greater by the need to educate students and provide opportunities that will allow them to contribute to and work successfully in an evolving, internationalizing society and economy. Study abroad is one obvious performance indicator as to how well the U.S. education system is doing in this area. *Open Doors* tells us that last year over 86,000 American students representing 993 institutions earned academic credit in study abroad programs. The good news is that this number documents the steady increase over the past decade of the growth in international programs on colleges around the country. The bad news is that, when this number is compared to the 457,984 international students within the U.S. in 1996/97, it provides evidence for critics to say that American education is failing to provide similar international opportunities to its students.

No matter how the data is interpreted and compared, it is certain that it does not fully reflect the overseas activities promoted by colleges and universities and the international experiences that students seek out for themselves to develop the workforce skills that will distinguish them in the job applicant pools. For instance, in 1997 nearly 5,700 U.S. students participated in the Council on International Educational Exchange's Work Abroad program. Under this program, Council provides students and recent graduates with legal work-authorization to pursue three- to six-month long employment opportunities in Great Britain, France, Ireland, Germany, Spain, Canada, Costa Rica, New Zealand and Australia. Viewed as a cost-effective alternative to study abroad and as a way to extend or supplement overseas experiences, the program allows students to legally pursue paid employment opportunities abroad that offset transportation and living costs and at the same time gain job skills and cultural immersion by working and living overseas. It is interesting to note that nearly 50% of program participants are recent graduates and approximately two-thirds will seek employment opportunities in Great Britain.

At its peak in 1989 and 1990, the program enrolled some 6,700 students each year, at a time when jobs were plentiful in Europe and word of mouth from returning students–a strong factor in enrollment–contributed significantly to the program's success. Economic factors, namely the recession in the United States and Europe in the early 1990s, contributed to declines in student travel and employment opportunities abroad. As a result the program dropped to 4,600 participants in 1992. Over the past five years, as economies on both sides of the ocean have strengthened, enrollments are up to 5,650 (+22% over five years).

The recent surge in enrollments can be attributed to the availability of seasonal and temporary jobs in Europe, the word of mouth from returning participants, and the ever increasing development of formalized international work-for-credit and credit-bearing internship programs on campuses across the country. It is the latter consideration that is important in the overall trend to link academic and experiential learning in an international context. There are two trends that are certain to contribute to the



increase and growth of overseas programs, though if the steps are not taken early on, the data to reflect this growth will not be captured. First, with the federal effort to transform the K-12 into a K-14 system, community colleges will take on an even greater role in workforce development. Doing this in an international context will necessitate the creation and expansion of international opportunities at these institutions. Secondly, individual campus departments respond differently to institutional mandates and calls for internationalization, and subsequently develop their own programs to offer overseas experiences. As part of this trend, many career service offices and work co-op programs are becoming more and more involved in overseas programming—some in conjunction with study abroad offices, some entirely independent of the study abroad offices. Some examples of new program models can be seen around the country.

■ At Iowa State University, Trevor Nelson, Study Abroad Coordinator, and Steve Kravinsky, Director of Career Placement, enrolled 29 students in "Study & Work in Britain." Developed in 1997, this program features a course co-taught with faculty at Iowa State and the University of Westminster (UK) and concludes with students pursuing employment opportunities in Britain.

■ Using Council's work abroad program, Cheryl Matherly, Director of Career Services, Rice University, enrolled 40 students in 1996 and 32 in 1997 in the Summer Work Abroad Program (SWAP), which will place students in positions with international companies with U.S. subsidiaries that recruit students from Rice University. In this program, students receive one credit for enrollment in a semester-long cross-cultural course taught in the School of the Humanities during the spring semester.

■ In California, Santa Rosa Community College enrolled 48 students, mostly from two-year colleges, to participate in the work-for-credit program directed by the Office of Cooperative Work Experience. Mt. San Antonio College established a Work & Study in London program that builds academic courses around a twelve-week work experience in London.

While the students participating in the Iowa State program will appear in the *Open Doors* data, students at Rice University and in the California community college programs will not. Additionally, students from around the country who develop independent study projects around their work experiences, too, will not be counted in the data.

The development of new programs, especially in community colleges and out of career services offices are more than just a trend. As experiential education grows in importance and as companies begin to benefit from the overseas experiences that strengthen students' capacities to excel in the workforce, it becomes imperative that efforts must be taken to record, analyze and disseminate information on overseas work experiences.

The best piece to appear in recent years is T.K. Biksun and S.A. Law's *Global Preparedness and Human Resources: College and Corporate Perspectives* (RAND: 1994). Among its recommendations, the report says that "corporations and educational institutions should assume joint responsibility for co-producing a globally competent workforce." The dialogue that the report encourages between corporate and academic stockholders takes place in different places on campus, but usually where the corporation has its strongest relationship with the university: career service offices. This includes the continued efforts to work with community colleges and to encourage relationship building between career service offices, co-op programs and study abroad offices.

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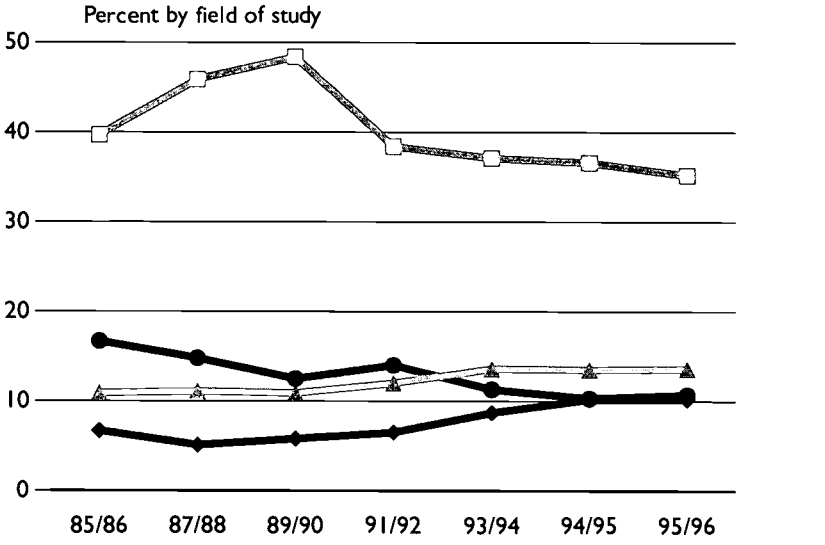
About the Sojourn

- Americans who study abroad do so for very different reasons than foreign students who come to study in the United States. In contrast to foreign nationals in this country, Americans abroad have home-campus majors largely in the humanities and social sciences, with relatively few in engineering and in hard science fields. In 1995/96, the largest group of U.S. students who went abroad to study majored in social sciences and humanities (35%). The second largest group studied toward degrees in business (14%). Relatively large shares of the Americans who studied abroad majored in foreign languages (11%). The fields of engineering, physical and life sciences, and math and computer sciences combined for only 10%.

10.e

BUSINESS OR PHILOSOPHY?

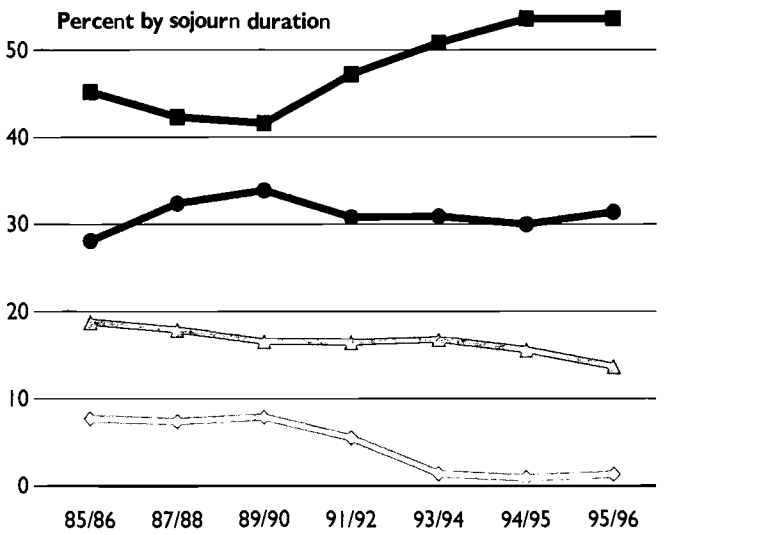
Since 1990 the proportion of U.S. students studying abroad who major in languages, social sciences and humanities has been dropping, while the share in business and scientific fields is on the rise.



10.f

STUDY ABROAD DURATIONS, 1985/86 - 1995/96

The percentage of students who spend more than a semester abroad has fallen over the past years, while the percent who go abroad for a shorter period has increased markedly.



- These field-of-study patterns have been changing over time, albeit slowly. Since 1990 the proportion of U.S. students who study abroad and major in either the social sciences and humanities or in foreign languages has been dropping (although the percentage of students studying foreign languages increased slightly this year), while the share majoring in business, the technical fields and in a wide range of other fields has stayed flat or increased slightly. This year, the percentage of American students enrolled in fine or applied arts programs overseas dropped from 9% to 6.8%.
- Over 53% of students studying abroad did so for the duration of one semester or less, while only 12% spent the entire academic year in the host country. The second most popular time period for a sojourn was the summer term (31%).

10.2
FIELD OF STUDY AND DURATION OF U.S. STUDY ABROAD, 1985/86 - 1995/96

	Percent of Study Abroad Students							1995/96
Field of study	**1985/86**	**1987/88**	**1989/90**	**1991/92**	**1993/94**	**1994/95**	**1995/96**	**Students**
Social Science & Humanities	39.7	45.9	48.4	38.4	37.1	36.6	35.2	31,390
Business & Management	10.9	11.1	10.9	12.0	13.6	13.5	13.9	12,375
Foreign Languages	16.7	14.8	12.5	14.0	11.3	10.3	10.7	9,533
Other	8.2	6.8	6.8	7.6	7.7	6.4	7.5	6,697
Physical Sciences	3.8	2.5	3.7	3.8	5.3	6.8	6.8	6,097
Fine or Applied Arts	6.9	6.4	6.1	9.9	7.7	9.0	6.8	6,088
Dual Major	-	-	-	-	3.6	4.1	4.7	4,237
Undeclared	4.2	3.8	3.4	4.1	3.6	3.3	3.9	3,474
Education	4.1	4.0	4.6	5.7	4.0	3.8	3.7	3,311
Health Sciences	1.7	1.4	1.1	1.1	1.7	2.1	2.3	2,047
Engineering	1.6	1.4	1.3	1.6	2.3	2.2	2.1	1,910
Math or Computer Science	1.3	1.2	0.8	1.1	1.1	1.2	1.3	1,187
Agriculture	1.0	0.7	0.4	0.7	0.9	0.7	1.0	895
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**89,242**

	Percent of Study Abroad Students							1995/96
Duration	**1985/86**	**1987/88**	**1989/90**	**1991/92**	**1993/94**	**1994/95**	**1995/96**	**Students**
One Semester	37.3	35.0	35.2	37.5	37.2	39.4	39.4	35,150
Summer Term	28.1	32.4	33.9	30.8	30.9	30.0	31.4	28,007
Academic Year	17.7	17.5	15.9	15.9	14.3	14.0	12.1	10,828
January Term	-	-	-	-	5.6	6.9	5.6	5,032
One Quarter	7.9	7.3	6.4	9.7	6.3	4.8	5.1	4,581
Fewer than 8 weeks	-	-	-	-	1.7	2.5	3.5	3,080
Other	7.7	7.4	7.9	5.5	1.4	0.9	1.3	1,176
Two Quarters	-	-	-	-	2.0	1.1	0.9	803
Calendar Year	1.1	0.4	0.7	0.6	0.5	0.5	0.7	584
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**89,242**

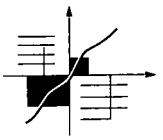
10.3 INSTITUTIONAL TYPE, PROGRAM SPONSORSHIP AND FINANCIAL SUPPORT, 1993/94 - 1995/96

Carnegie Category	1993/94 Percent	1994/95 Percent	1995/96 Percent	1995/96 Average	1995/96 Students
Research I&II	40.2	41.1	43.6	344	38,911
Baccalaureate I&II	20.8	21.5	21.2	61	18,892
Master's I&II	19.0	18.5	19.0	60	16,928
Doctoral I&II	14.9	14.5	12.2	149	10,864
Associate	2.9	2.3	2.6	19	2,277
Other Institutions	2.2	2.1	1.5	16	1,370
Total	**100.0**	**100.0**	**100.0**		**89,242**

Program Sponsorship	1993/94 Percent	1994/95 Percent	1995/96 Percent	1995/96 Students
Solely own institution	73.4	71.2	71.9	64,168
Other institutions/organizations	26.6	28.8	28.1	25,074
Total	**100.0**	**100.0**	**100.0**	**89,242**

Institutional Financal Support	1993/94 Percent of Respondents	1994/95 Percent of Respondents	1995/96 Percent of Respondents	1995/96 Reporting Institutions
a) Aid for all institutionally approved study abroad programs	46.2	62.3	54.0	417
b) Aid for institutionally approved study abroad programs but not other study abroad programs	17.0	12.0	16.2	125
c) Do not know	16.2	1.6	8.7	67
d) Other	11.4	7.9	10.6	82
e) Federal or state aid but no institutional aid	7.2	6.5	7.8	60
f) Federal aid but not state or institutional aid	2.0	9.8	2.7	21
Total	**100.0**	**100.0**	**100.0**	
Number of Responding Institutions	**631**	**573**	**772**	

About the Institutions



- Institutions that sponsor and accept study abroad credits are of all Carnegie types. Traditionally, study abroad experiences were pioneered at selective liberal arts institutions. Today, however, research institutions sponsor the largest proportion, about 43%, of study abroad students.
- Students may access study abroad programs in a variety of ways. Institutions and their study abroad offices develop and manage their own programs, and they and independent consortia may administer programs for other institutions. Nearly 72% of study abroad students completed their sojourns under the auspices of their own home institution, while 28% did so under the auspices of other institutions or consortial organizations.
- Institutions provided a range of financing options for student sojourns. Fully 54% of reporting institutions indicated that all aid was available to students for study abroad under any sponsorship arrangement. The balance reported some limitations on aid, either state or institutional, for study abroad.

■ The following tables present U.S. academic institutions with the largest number of students studying abroad, ranked by total number of study abroad students. The following tables include the top 25 institutions in each Carnegie Classification category, as described in Section 8 (Research, Doctoral, Master's, Baccalaureate, and Associate degree institutions), that sent the largest number of students abroad.

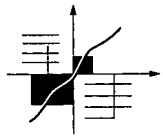
10.4
STUDY ABROAD ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 25 RESEARCH INSTITUTIONS*, 1995/96

Research Institutions	City	State	Study Abroad Students	Total Enrollment
Boston University	Boston	MA	1,416	29,664
University of Pennsylvania	Philadelphia	PA	1,126	22,148
University of Texas at Austin	Austin	TX	1,071	47,905
Michigan State University	East Lansing	MI	873	41,545
University of Arizona	Tucson	AZ	850	34,777
Brigham Young University	Provo	UT	826	31,419
University of Wisconsin-Madison	Madison	WI	821	39,826
Georgetown University	Washington	DC	764	13,411
University of Illinois Urbana-Champaign	Champaign	IL	745	36,465
Syracuse University	Syracuse	NY	725	15,105
Texas A&M University	College Station	TX	700	43,095
Pennsylvania State Univ Univ Park Campus	University Park	PA	689	39,571
Duke University	Durham	NC	672	11,511
Indiana University at Bloomington	Bloomington	IN	655	34,700
Cornell University	Ithaca	NY	653	19,290
University of North Carolina Chapel Hill	Chapel Hill	NC	640	24,141
University of Minnesota-Twin Cities	Minneapolis	MN	611	37,018
University of Notre Dame	Notre Dame	IN	605	10,281
University of Michigan-Ann Arbor	Ann Arbor	MI	602	36,450
University of Delaware	Newark	DE	597	21,380
Ohio State University Main Campus	Columbus	OH	590	48,676
University of Florida	Gainesville	FL	582	39,137
University of Washington	Seattle	WA	546	34,368
Yeshiva University	New York	NY	530	6,287
University of Utah	Salt Lake City	UT	527	26,359

* The UC study abroad system-wide office is housed at UC-Santa Barbara; system-wide enrollment totals about 240,500 and reported study abroad enrollment is 1,694.

10.5

STUDY ABROAD ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 25 DOCTORAL INSTITUTIONS, 1995/96

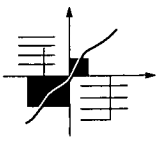


Doctoral Institutions	City	State	Study Abroad Students	Total Enrollment
Miami University-Oxford Campus	Oxford	OH	949	15,601
Dartmouth College	Hanover	NH	647	5,249
Pepperdine University	Malibu	CA	511	7,745
Georgia State University	Atlanta	GA	496	24,316
George Mason University	Fairfax	VA	422	23,310
American University	Washington	DC	389	11,285
Boston College	Chestnut Hill	MA	337	14,830
Ball State University	Muncie	IN	308	19,115
Southern Methodist University	Dallas	TX	304	9,464
College of William & Mary	Williamsburg	VA	299	7,700
Wake Forest University	Winston-Salem	NC	284	5,892
University of Alabama	Tuscaloosa	AL	267	19,046
University of Southern Mississippi	Hattiesburg	MS	259	14,257
Texas Christian University	Fort Worth	TX	248	7,050
Illinois State University	Normal	IL	241	19,409
Western Michigan University	Kalamazoo	MI	240	25,699
University of New Hampshire	Durham	NH	220	15,807
Northern Arizona University	Flagstaff	AZ	210	19,605
SUNY at Binghamton	Binghamton	NY	199	11,976
University of North Texas	Denton	TX	193	24,957
University of Memphis	Memphis	TN	180	19,977
University of Toledo	Toledo	OH	171	21,692
Bowling Green State University	Bowling Green	OH	166	17,000
University of Denver	Denver	CO	153	8,847
Portland State University	Portland	OR	153	14,768

10.6
STUDY ABROAD ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 25 MASTER'S INSTITUTIONS, 1995/96

Master's Institutions	City	State	Study Abroad Students	Total Enrollment
University of St. Thomas	Saint Paul	MN	410	10,324
James Madison University	Harrisonburg	VA	391	11,963
Santa Clara University	Santa Clara	CA	366	7,863
Appalachian State University	Boone	NC	348	12,020
Elon College	Elon College	NC	344	3,588
University of Wisconsin-Stevens Point	Stevens Point	WI	334	8,362
Western Washington University	Bellingham	WA	328	11,039
Slippery Rock University of Pennsylvania	Slippery Rock	PA	291	7,291
Truman State University	Kirksville	MO	266	6,500
Calvin College	Grand Rapids	MI	250	4,051
University of Richmond	Richmond	VA	235	4,366
Ithaca College	Ithaca	NY	230	5,400
Loyola Marymount University	Los Angeles	CA	225	6,710
Villanova University	Villanova	PA	210	10,000
Linfield College	McMinnville	OR	209	2,220
Trinity University	San Antonio	TX	185	2,495
University of Dayton	Dayton	OH	180	10,320
University of Wisconsin-Eau Claire	Eau Claire	WI	180	10,503
Loyola College in Maryland	Baltimore	MD	178	6,245
St. Cloud State University	Saint Cloud	MN	169	14,240
SUNY College at Brockport	Brockport	NY	163	9,047
University of Wisconsin-River Falls	River Falls	WI	162	5,359
SUNY College at Oswego	Oswego	NY	161	8,264
Rollins College	Winter Park	FL	153	3,294
Weber State University	Ogden	UT	152	14,867

10.7
STUDY ABROAD ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 25 BACCALAUREATE INSTITUTIONS, 1995/96



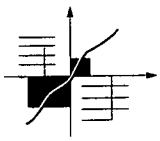
Baccalaureate Institutions	City	State	Study Abroad Students	Total Enrollment
St. Olaf College	Northfield	MN	514	2,854
DePauw University	Greencastle	IN	383	2,147
Middlebury College	Middlebury	VT	380	2,041
College of St. Benedict/ St. John	St. Joseph	MN	380	1,958
Carleton College	Northfield	MN	338	1,867
Bates College	Lewiston	ME	287	1,636
Lewis & Clark College	Portland	OR	279	3,074
Union College	Schenectady	NY	278	2,044
Eckerd College	St Petersburg	FL	270	1,400
Wesleyan University	Middletown	CT	264	2,905
Davidson College	Davidson	NC	262	1,720
Colorado College	Colorado Springs	CO	260	1,962
Colby College	Waterville	ME	259	1,813
Gustavus Adolphus College	Saint Peter	MN	257	2,399
Concordia College-Moorhead	Moorhead	MN	250	2,928
Bucknell University	Lewisburg	PA	249	3,661
Kalamazoo College	Kalamazoo	MI	219	1,305
Trinity College	Hartford	CT	213	2,142
Hobart & William Smith Colleges	Geneva	NY	212	1,974
Colgate University	Hamilton	NY	203	2,905
Dickinson College	Carlisle	PA	202	1,771
University of Dallas	Irving	TX	200	2,737
Smith College	Northampton	MA	198	2,670
Bowdoin College	Brunswick	ME	195	1,581
Skidmore College	Saratoga Sprngs	NY	195	2,215

10.8
STUDY ABROAD ENROLLMENTS BY INSTITUTIONAL TYPE: TOP 25 ASSOCIATE INSTITUTIONS, 1995/96

Associate Institutions	City	State	Study Abroad Students	Total Enrollment
College of DuPage	Glen Ellyn	IL	248	34,300
Rockland Community College	Suffern	NY	221	7,948
Santa Barbara City College	Santa Barbara	CA	191	12,084
Coast Community College	Costa Mesa	CA	149	25,170
Pasadena City College	Pasadena	CA	143	25,325
Miami-Dade Community College	Miami	FL	138	49,780
Glendale Community College	Glendale	CA	120	13,285
City College of San Francisco	San Francisco	CA	118	57,011
Mohegan Community College	Norwich	CT	88	3,977
Los Angeles City College	Los Angeles	CA	77	14,000
Montgomery CC Rockville Campus	Rockville	MD	65	12,473
Broward Community College	Coconut Creek	FL	64	30,359
Dutchess Community College	Poughkeepsie	NY	57	6,233
Palm Beach Community College	Lake Worth	FL	38	3,768
Tallahassee Community College	Tallahassee	FL	37	9,737
Front Range Community College	Westminster	CO	37	10,500
Ventura College	Ventura	CA	36	10,083
Richland College	Dallas	TX	32	11,896
Spokane Falls Community College	Spokane	WA	32	6,018
Lane Community College	Eugene	OR	30	9,917
Borough of Manhattan Community Coll CUNY	New York	NY	28	16,772
Peace College	Raleigh	NC	27	424
Mt. Hood Community College	Gresham	OR	25	12,688
Los Angeles Pierce College	Woodland Hills	CA	25	14,500
Los Angeles Harbor College	Wilmington	CA	23	7,603

10.9 PROFILE OF U.S. STUDY ABROAD STUDENTS, 1993/94 - 1995/96

Academic level	1993/94	1994/95	1995/96	1995/96 Students
Junior	40.6	43.0	41.6	37,101
Bachelor's, Unspecified	19.1	17.5	18.1	16,174
Senior	15.6	16.3	16.2	14,442
Sophomore	11.8	10.8	12.1	10,839
Master's	4.0	4.1	3.7	3,288
Graduate, Unspecified	2.3	2.6	3.2	2,874
Associate	1.6	1.3	2.0	1,822
Freshman	3.5	2.5	2.0	1,742
Other	0.8	1.5	0.7	627
Doctoral	0.7	0.5	0.4	333
Total	**100.0**	**100.0**	**100.0**	**89,242**
Sex				
Female	62.9	62.2	65.3	58,304
Male	37.1	37.8	34.7	30,938
Total	**100.0**	**100.0**	**100.0**	**89,242**
Race/Ethnicity				
White	83.8	86.4	84.4	75,314
Asian-American	5.0	4.9	5.1	4,571
Hispanic-American	5.0	4.5	5.0	4,491
African-American	2.8	2.8	2.9	2,612
Multiracial	3.1	1.1	2.3	2,011
Native American	0.3	0.3	0.3	243
Total	**100.0**	**100.0**	**100.0**	**89,242**



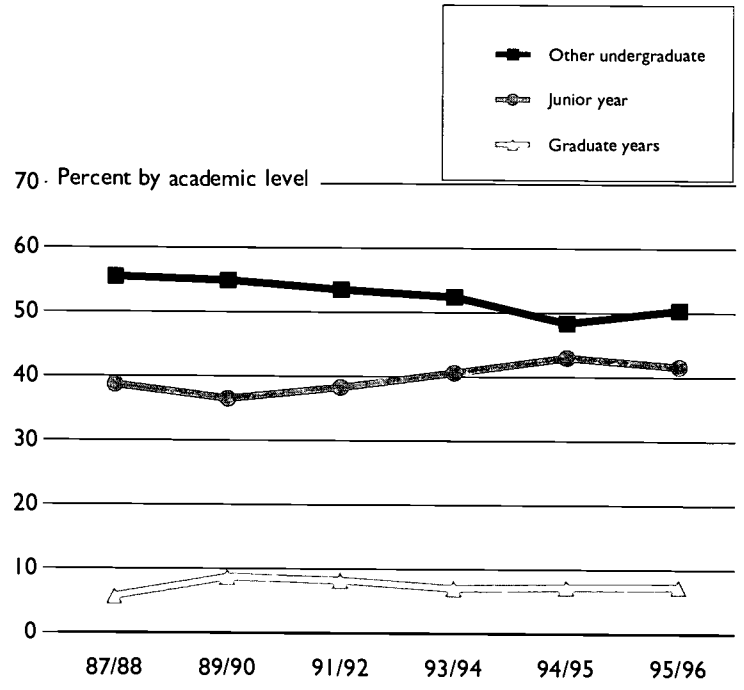
About the Students

- The vast majority (92%) of the study abroad population was at the undergraduate (bachelor and associate) level. Of those whose academic level was known, the largest group was juniors (41%), followed by seniors (16%), sophomores (12%) and freshmen (2%).
- Less than 8% of the U.S. students who studied abroad for credit were graduate students. This proportion has remained stable over the past eight years. This contrasts sharply with the European nationals studying in the United States, about 40% of whom were at the graduate level in 1995/6.
- The sex distribution of the U.S. students who travel abroad for study was the inverse of that of the foreign students in the United States. Just over one-third (35%) of the U.S. students abroad were male, while a corresponding two-thirds were female (65%). The male-to-female ratio among U.S. students studying abroad has remained stable since the 1980s.

- According to survey respondents, American students who participate in study abroad programs are largely white (84%). Hispanic and Asian-Americans constitute about 5% each of the study abroad total. African-Americans and Native Americans were 2.9% and 0.3% of all study abroad students, while 2.3% were identified as multiracial. Some caution must be exercised in interpreting these results, as most institutions do not track study abroad students by their race or ethnicity. Only 33% of all reported study abroad students were so identified.

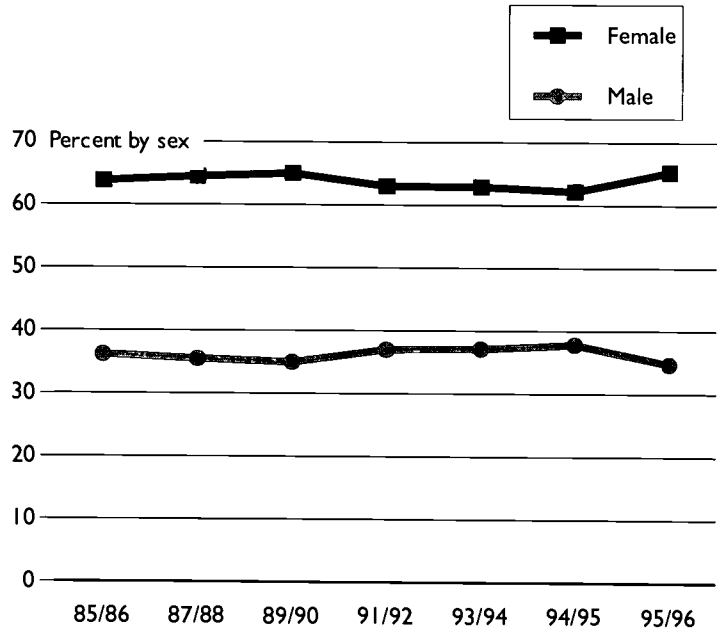
10.g

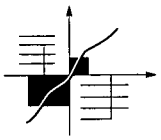
STUDY ABROAD ENROLLMENTS BY ACADEMIC LEVEL



10.h

STUDY ABROAD ENROLLMENTS BY SEX





Exploring the Framework for Entrepreneurial Growth in Study Abroad

GARY RHODES

University of Southern California

COLLEGES and universities across the United States are experiencing growth in participation in study abroad programs. At the University of Southern California (USC), the recent "Strategic Plan" focused on internationalization including study abroad as one of only four primary initiatives. Across the country, this internationalization or globalization (with study abroad as a component) is increasingly a focus of college and university presidents. Pressure to internationalize may also come out of individual academic units. At USC, institutional participation has recently doubled through an initiative by the Marshall School of Business to have every full-time MBA student participate in a short-term study abroad experience.

The entrepreneurial nature of this growth can be seen in the increasing variety of program models and places where students study as a factor in the increase in participation. Study abroad can take place from freshman to senior year, anywhere in the world and in any academic field. Program administration abroad, in the evolving models, may be through direct enrollment in a foreign university, enrollment in another U.S. institution abroad, consortial arrangements with other colleges or universities, individual faculty members taking a group of students to another part of the world, or a student participating in study abroad independent of the home institution.

Increasingly, students and parents show an interest in study abroad when selecting a college. Students are also more innovative in the way they achieve their university degree. They are finding programs outside their home institutions because of program focus, location or cost, or because they are unable to meet the language or GPA requirements of their home campus program. They are also choosing study-abroad programs in areas of the world other than Europe, including some areas about which they may have little or no knowledge.

Study abroad offices are housed in many different parts of a university administrative structure. While most units are either academic or service at a college or university, study abroad includes both sets of responsibilities.

Continued...

Exploring the Framework for Entrepreneurial Growth in Study Abroad

...Continued

Staffing ranges from complete administrative offices in the U.S. and abroad to institutions where a single professor or administrator has study abroad added to his many other responsibilities (many times with limited or no support staff provided).

Getting on With the Task: A National Mandate for Education Abroad, the Report of the National Task Force on Undergraduate Education Abroad (1990) recommended that: "By the year 1995, 10 percent of the American college and university students should have a significant educational experience abroad during their undergraduate years . . . and for the longer term 20 to 25 percent by the year 2008." The current growth is far below those recommendations.

Some institutions use study abroad to bring additional income to the home campus and others send students abroad to avoid over-enrollment on the home campus. However, for most institutions, study abroad involves extra resources. Many requests for an increase in study-abroad program participation go hand in hand with no additional resources or decreasing resources to carry this out. With limited resources, it is difficult to find the level of program support on a college campus for participation. With limited resources, faculty on campus may see study abroad as a loss of students and departmental income. Accreditation is the process by which colleges and universities in the U.S. maintain their academic standing. Study abroad has not been a priority area for review within the current framework of accreditation, leaving institutions without independent evaluation. For growth, it is important that both the academic quality and the student service support be seen as equivalent to that on the home campus.

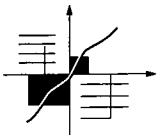
As faculty and administrators increase programs in areas outside Europe, it is increasingly difficult to guarantee sufficient expertise to effectively administer programs. This is especially difficult without clear standards and guidelines for issues ranging from international educational systems to the health and safety of students abroad (although organizations like NAFSA: Association of International Educators support publications, conferences and e-mail discussion groups to help). It is also important for students to be educated about the countries where they will be studying, and to have sufficient language skills to be able to participate at the college or university level.

Although the entrepreneurial nature of study abroad may allow for an increase in participation and in the types of programs available, it is clear that additional guidelines could also assist in improving the quality of programs, which could support increased participation.

Gary Rhodes, PhD, is the Program Coordinator at the Office of Overseas Studies at the University of Southern California. He serves the field as a NAFSA: Association of International Education Professional Development Program Trainer for Study Abroad and has developed the WWW Site Colleges and Universities Worldwide: http://www.usc.edu/dept/overseas/main.html *to support study abroad research and practice.*

11

Foreign Students in Intensive English Programs



INTENSIVE ENGLISH PROGRAMS

IIE has collected IEP enrollment data since 1979 as part of *Open Doors*. Due to funding constraints, this survey was suspended in 1995/96 but has been restored through a grant from the TOEFL Policy Council.

International students enrolled in Intensive English Programs (IEPs) are an important component of the foreign student population in the United States. Successful academic performance at a college or university requires advanced proficiency in the English language as well as significant cultural navigation skills.

Whether these programs are university-affiliated or private, they are designed to provide foreign nationals with the tools to compete successfully in U.S. academic settings. These courses are normally separate from those which serve the survival needs of refugees or recent immigrants or the remedial English language needs of U.S. citizens and permanent residents. While campus-based IEPs have much in common with conventional continuing education programs, they also face particular challenges. These may include a lack of support from the rest of the college faculty, an over-reliance on part-time positions and negative attitudes towards ESL students. Despite these concerns IEPs are integral parts of the higher education system and provide an attractive gateway into the academy for tens of thousands of international students each year.

The services these programs offer include testing and placement, orientation, foreign student counseling, a curriculum that makes use of language learning technology and cultural enrichment activities. Recent research suggests that these programs typically have high retention rates and are generally successful in helping students to qualify for mainstream higher education placements. Because these programs are an established feature in higher education, whether institutionally affiliated or private, issues of program administration, quality, integrity and outcome must continue to be addressed to ensure that IEPs continue to provide a high quality educational experience to their students.

- In the period between 1979 and 1982 the reported number of students enrolled in IEPs rose rapidly. This apparent increase was due in part to the addition of new programs to the IIE survey. Rapidly growing enrollments from Latin America and Asia, however, also contributed to the rise in IEP attendance.
- Shortly after the 1981/82 peak, IEP numbers fell off substantially, although the number of programs surveyed was increasing. During this period declining numbers of Latin Americans in IEPs and, in 1985/86, a drop in the numbers from most regions of the world were noted.
- Since that time, however, the numbers have slowly risen to the levels of the early 1980s, and this year over 43,000 foreign students are currently enrolled in IEPs. The near-doubling of enrollments in these programs, from 24,000 in the mid-1980s to this year's total, represents a remarkable increase when placed in the context of generally stable foreign student enrollments in other sectors of the U.S. higher education system.

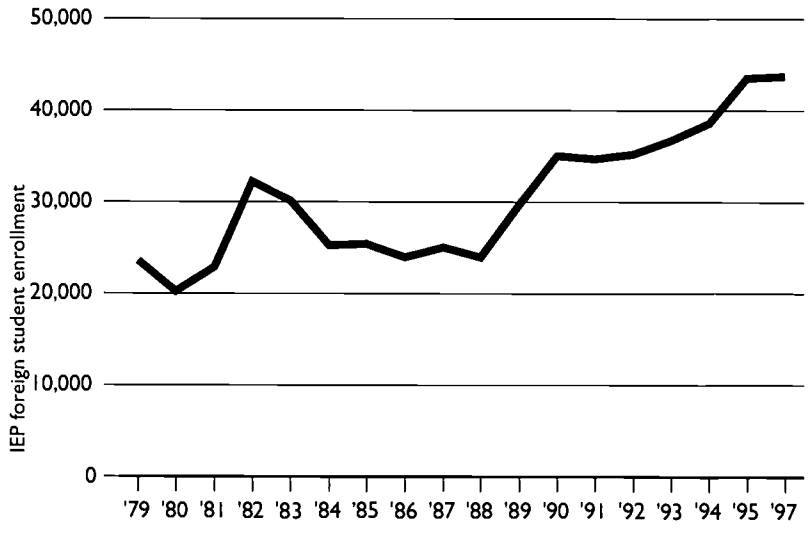
11.0

FOREIGN STUDENT ENROLLMENTS IN INTENSIVE ENGLISH PROGRAMS SURVEYED, 1978/79 - 1996/97

Year	Foreign IEP Students	Number of Programs Surveyed
1978/79	23,607	163
1979/80	20,243	190
1980/81	22,897	238
1981/82	32,224	305
1982/83	30,135	314
1983/84	25,246	308
1984/85	25,414	352
1985/86	23,956	337
1986/87	25,044	306
1987/88	23,965	291
1988/89	29,747	306
1989/90	35,036	355
1990/91	34,703	341
1991/92	35,220	353
1992/93	36,712	388
1993/94	38,606	488
1994/95	43,522	494
1996/97	43,739	464

11.a

RISING IEP ENROLLMENTS



11.1

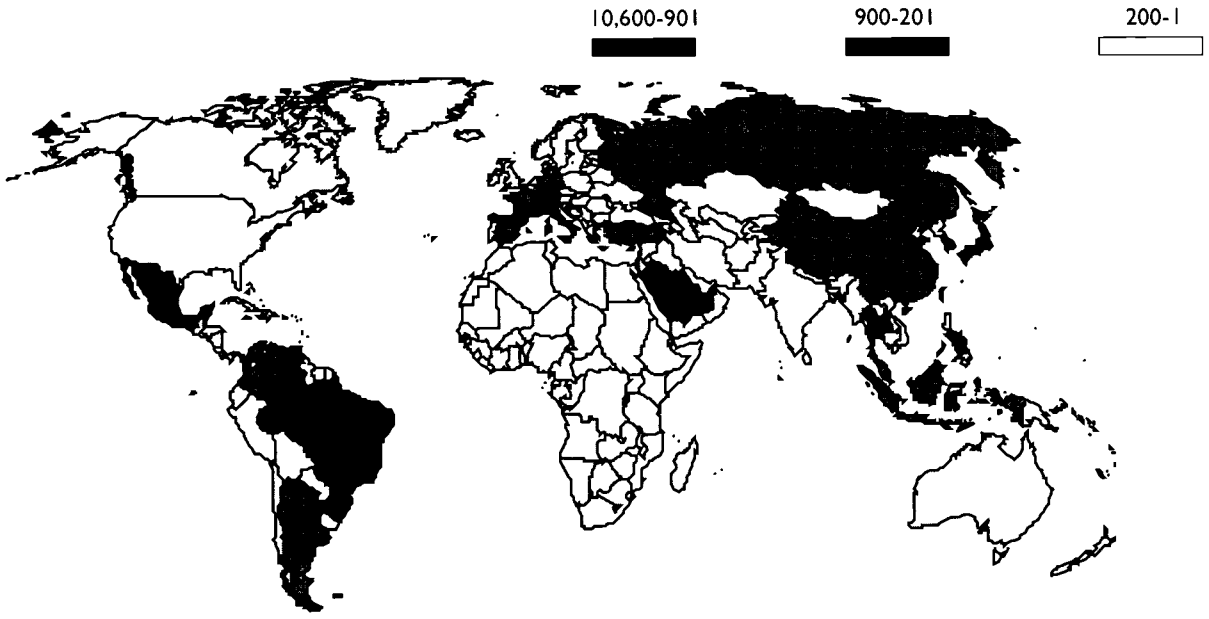
LEADING PLACES OF ORIGIN OF IEP STUDENTS, 1996/97

Locality	1994/95	1996/97	% Change	% of IEP Total
Korea, Republic of	7,771	10,226	31.6	23.4
Japan	10,624	9,803	-7.7	22.4
Taiwan	2,735	3,309	21.0	7.6
Thailand	1,883	2,206	17.2	5.0
Brazil	1,255	1,658	32.1	3.8
Mexico	2,265	1,559	-31.2	3.6
Saudi Arabia	1,168	1,233	5.6	2.8
Colombia	982	991	0.9	2.3
Venezuela	1,097	925	-15.7	2.1
China	807	891	10.4	2.0
Indonesia	822	885	7.7	2.0
United Arab Emirates	668	827	23.8	1.9
Turkey	756	797	5.4	1.8
Switzerland	885	624	-29.5	1.4
Russia	504	571	13.3	1.3
France	901	455	-49.5	1.0
Italy	695	450	-35.3	1.0
Kuwait	407	438	7.6	1.0
WORLD TOTAL	**43,522**	**43,739**	**0.5**	

- The leading home places of IEP students are the Republic of Korea (23.4%), Japan (22.4%), Taiwan (7.6%), Thailand (5%), Brazil (3.8%), Mexico (3.6%) and Saudi Arabia (2.8%).

11.b

ORIGINS OF IEP STUDENTS IN THE UNITED STATES, 1996/97



- Nearly two-thirds of the 1996/97 students in IEPs are from Asia. This year Asian enrollments have increased, especially those from Korea (up 31%), Taiwan (up 21%) and Thailand (up 17%). Japanese enrollments dropped by 8%.
- Latin American students are the second largest group of IEP students, although they showed a significant decline this year. This decline was represented in drops in percentages of students from Mexico (down 31%) and Venezuela (down 16%). Percentages of students from Brazil increased 32%. Four of the top ten sending countries to IEPs are located in Latin America.

11.2

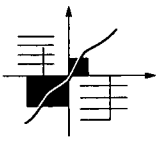
HOST REGIONS AND COUNTRIES OF IEP STUDENTS, ACADEMIC YEAR, 1994/95 AND 1996/97

Locality	1994/95	1996/97	% Change
AFRICA	**569**	**619**	**8.8**
Eastern Africa	**72**	**76**	**5.6**
Burundi	4	1	-75.0
Comoros	2	3	50.0
Djibouti	0	1	-
Eritrea	4	2	-50.0
Ethiopia	16	24	50.0
Kenya	12	19	58.3
Madagascar	2	1	-50.0
Malawi	1	2	100.0
Mozambique	11	2	-81.8
Rwanda	1	3	200.0
Tanzania	15	11	-26.7
Uganda	1	2	100.0
Zambia	3	4	33.3
Zimbabwe	0	1	-
Central Africa	**120**	**112**	**-6.7**
Angola	36	36	0.0
Cameroon	19	12	-36.8
Chad	0	3	-
Congo	4	3	-25.0
Equatorial Guinea	8	1	-87.5
Gabon	19	8	-57.9
São Tomé & Principe	3	2	-33.3
Zaire/Congo	31	47	51.6
North Africa	**176**	**227**	**29.0**
Algeria	22	20	-9.1
Egypt	35	57	62.9
Libya	2	3	50.0
Morocco	91	109	19.8
Sudan	4	17	325.0
Tunisia	22	21	-4.5

11.2 (cont.)

HOST REGIONS AND COUNTRIES OF IEP STUDENTS, ACADEMIC YEAR, 1994/95 AND 1996/97

Locality	1994/95	1996/97	% Change
Southern Africa	**9**	**10**	**11.1**
Botswana	8	3	-62.5
Namibia	0	2	-
South Africa	1	4	300.0
Swaziland	0	1	-
Western Africa	**192**	**194**	**1.0**
Benin	19	8	-57.9
Burkina Faso	2	4	100.0
Côte d'Ivoire	26	39	50.0
Gambia	2	4	100.0
Ghana	2	4	100.0
Guinea	41	37	-9.8
Guinea-Bissau	5	9	80.0
Liberia	0	1	-
Mali	28	8	-71.4
Mauritania	7	7	0.0
Niger	4	10	150.0
Nigeria	3	8	166.7
Senegal	45	39	-13.3
Sierra Leone	0	1	-
Togo	8	15	87.5
ASIA	**26,213**	**28,792**	**9.8**
East Asia	**22,564**	**24,685**	**9.4**
China	807	891	10.4
Hong Kong	493	381	-22.7
Japan	10,624	9,803	-7.7
Korea, Dem. People's Repub	1	6	500.0
Korea, Republic of	7,771	10,226	31.6
Macao	15	15	0.0
Mongolia	118	54	-54.2
Taiwan	2,735	3,309	21.0



- Europe continues to be an important source of IEP students, even though European enrollments declined by nearly one-third from last year's figure. This reflects a 40% drop in enrollments from Western Europe, partially offset by a 16% increase from Eastern Europe.
- Middle Eastern nations with students in IEPs have shown mixed patterns. Modest growth in enrollments from Kuwait, Saudi Arabia and Turkey are accompanied by a significant decrease in enrollments from Jordan. Saudi Arabia ranks seventh among leading countries of origin of IEP students worldwide.

11.2 (cont.)

HOST REGIONS AND COUNTRIES OF IEP STUDENTS, ACADEMIC YEAR, 1994/95 AND 1996/97

Locality	1994/95	1996/97	% Change
South & Central Asia	**420**	**401**	**-4.5**
Afghanistan	0	2	-
Bangladesh	35	58	65.7
India	43	68	58.1
Kazakhstan	230	68	-70.4
Kyrgyzstan	6	9	50.0
Nepal	18	85	372.2
Pakistan	39	51	30.8
Sri Lanka	6	14	133.3
Tajikistan	16	18	12.5
Turkmenistan	10	2	-80.0
Uzbekistan	17	26	52.9
Southeast Asia	**3,229**	**3,706**	**14.8**
Cambodia	10	21	110.0
Indonesia	822	885	7.7
Laos	3	7	133.3
Malaysia	256	332	29.7
Myanmar	16	3	-81.3
Philippines	172	44	-74.4
Singapore	20	21	5.0
Thailand	1,883	2,206	17.2
Vietnam	47	187	297.9
EUROPE	**5,460**	**3,803**	**-30.3**
Eastern Europe	**976**	**1,130**	**15.8**
Albania	6	15	150.0
Armenia	7	7	0.0
Azerbaijan	10	8	-20.0
Belarus	11	10	-9.1
Bosnia & Herzegovina	3	2	-33.3
Bulgaria	32	33	3.1
Croatia	7	9	28.6
Czech Republic	31	40	29.0
Estonia	10	7	-30.0
Former Yugoslavia	28	28	0.0
Georgia	28	15	-46.4
Hungary	60	55	-8.3
Latvia	26	6	-76.9
Lithuania	11	3	-72.7
Macedonia	0	8	-
Moldova	3	2	-33.3
Poland	118	183	55.1
Romania	13	15	15.4
Russia	504	571	13.3
Slovakia	18	15	-16.7
Slovenia	2	11	450.0
Ukraine	48	87	81.3
Western Europe	**4,484**	**2,673**	**-40.4**
Andorra	2	0	-100.0
Austria	67	28	-58.2
Belgium	55	48	-12.7
Denmark	32	14	-56.3
Finland	11	11	0.0
France	901	455	-49.5
Germany	757	382	-49.5
Greece	85	67	-21.2
Iceland	2	3	50.0
Ireland	7	0	-100.0
Italy	695	450	-35.3
Liechtenstein	2	3	50.0
Luxembourg	4	1	-75.0
Monaco	2	0	-100.0
Netherlands	47	28	-40.4
Norway	30	31	3.3
Portugal	25	19	-24.0
Spain	731	401	-45.1
Sweden	132	89	-32.6
Switzerland	885	624	-29.5
United Kingdom	12	19	58.3
LATIN AMERICA	**7,290**	**6,479**	**-11.1**
Caribbean	**111**	**122**	**9.9**
Bahamas	0	1	-
Barbados	1	1	0.0
Cuba	4	18	350.0
Dominican Republic	52	77	48.1
Haiti	41	22	-46.3
Martinique	7	0	-100.0
Netherlands Antilles	2	2	0.0
Trinidad & Tobago	4	1	-75.0

11.2 (cont.)

HOST REGIONS AND COUNTRIES OF IEP STUDENTS, ACADEMIC YEAR, 1994/95 AND 1996/97

Locality	1994/95	1996/97	% Change
Cntrl Amer/Mexico	**2,750**	**1,841**	**-33.1**
Belize	0	1	-
Costa Rica	62	36	-41.9
El Salvador	45	43	-4.4
Guatemala	93	59	-36.6
Honduras	64	34	-46.9
Mexico	2,265	1,559	-31.2
Nicaragua	88	23	-73.9
Panama	133	86	-35.3
South America	**4,429**	**4,516**	**2.0**
Argentina	409	321	-21.5
Bolivia	106	63	-40.6
Brazil	1,255	1,658	32.1
Chile	75	86	14.7
Colombia	982	991	0.9
Ecuador	249	229	-8.0
Guyana	5	2	-60.0
Paraguay	39	33	-15.4
Peru	203	196	-3.4
Uruguay	9	12	33.3
Venezuela	1,097	925	-15.7
MIDDLE EAST	**3,848**	**3,902**	**1.4**
Bahrain	16	17	6.3
Cyprus	36	18	-50.0
Iran	115	77	-33.0
Iraq	9	11	22.2
Israel	66	75	13.6
Jordan	332	144	-56.6
Kuwait	407	438	7.6
Lebanon	44	30	-31.8
Oman	86	81	-5.8
Qatar	69	89	29.0
Saudi Arabia	1,168	1,233	5.6
Syria	35	32	-8.6
Turkey	756	797	5.4
United Arab Emirates	668	827	23.8
Yemen	41	33	-19.5

Locality	1994/95	1996/97	% Change
NORTH AMERICA	**21**	**30**	**42.9**
Canada	21	30	42.9
OCEANIA	**103**	**95**	**-7.8**
Australia	3	2	-33.3
Cook Islands	1	3	200.0
Fiji	9	2	-77.8
French Polynesia	19	28	47.4
Kiribati	9	7	-22.2
Marshall Islands	0	1	-
Micronesia, Fed. States of	8	2	-75.0
New Caledonia	0	1	-
New Zealand	2	1	-50.0
Palau	4	3	-25.0
Papua New Guinea	1	0	-100.0
Tonga	26	22	-15.4
Western Samoa	21	23	9.5
Stateless	**18**	**19**	**5.6**
WORLD TOTAL	**43,522**	**43,739**	**0.5**

The "New" English Language Institute

DR. B. JANE STANFIELD

English Language Institute, University of Alabama

THE day of the sleepy little university language institute precariously perched on the edge of campus, housed in a down-at-the-heels white clapboard home which once held someone else's dreams, is fast becoming an artifact. Once largely thought of as the place where you sent foreign students with "language" problems or faculty wives seeking a potential employer, the "new" university English Language Institute is an integrated and valued part of the progressive campus seeking to encourage and provide international experiences for its community.

One manifestation of this emerging dynamic is the language institute's new emphasis on external programs, which may be called by a variety of names, such as "special" or "contract" programs. Unlike the traditional IEP program, which is designed for the individual and based on individual tuition payments, these programs are largely contract based, designed for groups of internationals who share a common goal regarding their specific use of the English language. They are financially supported by ministries of education, governments, embassies and private corporations as well as through individual tuition payments. Such groups may consist of international English language teachers, graduate students about to embark on master's or Ph.D. level studies, university students from abroad who wish to supplement their own English language curriculum with an in-country experience, ARAMCO accountants who wish to improve their technical writing skills, or employees of local international industries who wish to improve their English communication skills and to more closely monitor their cultural sensitivity to a new environment.

Such programs represent myriad opportunities for internationalization of the campus, including: provision of an on-campus international experience for domestic students as well as an opportunity for cooperation with various colleges on campus, strengthening of pre-existing international relationships, exploration of new relationships for the university, support of city and state projects and last, but by no means least, for the largely self-supporting unit, opportunities for greater financial stability.

One of the most visible and highly rewarding benefits of such programs for the administration and the domestic student is the opportunity such programs

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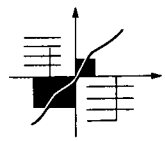


The "New" English Language Institute

...Continued

afford the local student for an "international experience"—usually the student's first. The American student assistants for these programs take most of their meals with the group participants, drive the vans on local field trips, participate in all weekend trips, often live in the dorm, and serve as trouble-shooters and general goodwill ambassadors. Someone who works as a student assistant in this type of program often goes on to enroll in foreign language study and apply for university exchange programs.

A second way these types of group programs benefit the entire campus is the opportunity they offer for campus-wide cooperation and for helping other units to build international relationships. For a number of years, the ELI has conducted a short-term group program for English study for approximately 25 undergraduates from Chiba University in Japan. From working with this program, a new relationship was built with our own College of Nursing, which often hosts nursing majors in the group for the weekend homestay portion of the program as well as arranges hospital tours and opportunities for nursing class observations.

A third opportunity which presents itself with the external program is that of cooperation with the city and state. At a time when state universities strive more and more to enlighten legislatures regarding the "practical" and "applied" nature of academe, the contract program affords the hands-on support to industrial recruitment that is readily recognized and appreciated. Two notable examples are the location of the AAV vehicle plant of Mercedes in the Tuscaloosa area, as well as the Japan Victor Corporation's opening of a disc and magnetics plant. In the case of Mercedes, a special summer day program was designed for the first arrival group of employees' children, an evening course for plant managers and a two-week conversation and American culture course conducted monthly for all European employees of the Stuttgart, Germany and U.S. AAV plant. In other words, every Mercedes AAV employee who wished to do so spent two weeks on the University of Alabama campus during the 1995-96 school year.

The versatility of the dynamic, innovative and progressive English Language Institute makes it an invaluable resource for the university seeking to internationalize its community and desiring to play a role in supporting its city and state in industrial development.

Dr. B. Jane Stanfield is Co-Director/Director of External Programs at the English Language Institute of the University of Alabama.

11.3

IEP STUDENTS BY STATE, 1994/95 AND 1996/97

State	1994/95 IELP Enrollment	1996/97 IELP Enrollment	Percent Change
Alabama	323	323	0.0
Alaska	0	0	0.0
Arizona	479	528	10.2
Arkansas	371	436	17.5
California	7,610	9,572	25.8
Colorado	1,053	996	-5.4
Connecticut	269	201	-25.3
Delaware	394	422	7.1
District of Columbia	2,056	838	-59.2
Florida	2,045	2,054	0.4
Georgia	829	1,337	61.3
Hawaii	1,684	1,207	-28.3
Idaho	195	181	-7.2
Illinois	1,041	1,149	10.4
Indiana	691	773	11.9
Iowa	286	427	49.3
Kansas	710	623	-12.3
Kentucky	144	160	11.1
Louisiana	1,331	205	-84.6
Maine	83	48	-42.2
Maryland	253	207	-18.2
Massachusetts	1,884	1,930	2.4
Michigan	639	1,309	104.9
Minnesota	258	195	-24.4
Mississippi	239	226	-5.4
Missouri	426	495	16.2
Montana	0	44	-
Nebraska	218	308	41.3
Nevada	114	168	47.4
New Hampshire	0	97	-
New Jersey	553	458	-17.2
New Mexico	61	49	-19.7
New York	6,183	5,173	-16.3
North Carolina	300	223	-25.7
North Dakota	0	0	0.0
Ohio	723	862	19.2
Oklahoma	928	654	-29.5

States with the Most IEP Students

- California and New York have the largest IEP enrollments, and they also host the largest enrollment of international students in academic programs generally. Texas, Washington, Florida, Massachusetts, Georgia, Michigan, Hawaii and Illinois also enroll considerable numbers of IEP students. Most of the leading IEPs are also located in the leading host states for foreign students.

- Programs affiliated with higher education institutions—either as integral parts of the academic program or as administratively independent extensions, operating under the name of a college—serve the bulk of IEP students in this country. Collectively these institutions, affiliated and independent, constitute a resource for their respective states' higher education systems.

11.3 (cont.)

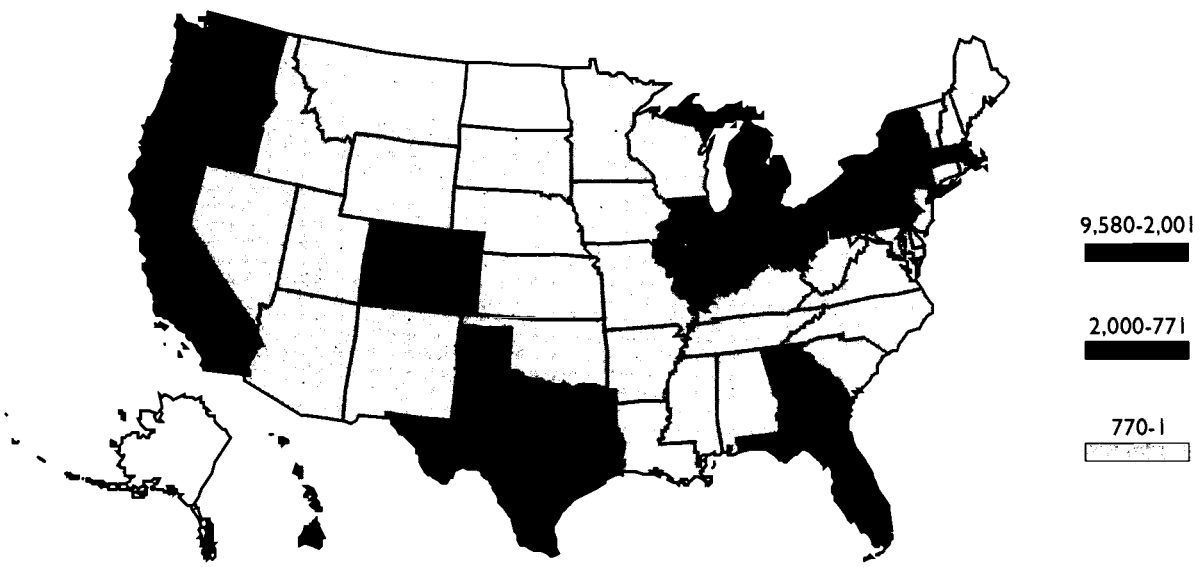
IEP STUDENTS BY STATE, 1994/95 AND 1996/97

State	1994/95 IELP Enrollment	1996/97 IELP Enrollment	Percent Change
Oregon	787	931	18.3
Pennsylvania	987	895	-9.3
Rhode Island	103	123	19.4
South Carolina	78	186	138.5
South Dakota	30	30	0.0
Tennessee	501	604	20.6
Texas	2,706	2,547	-5.9
Utah	545	640	17.4
Vermont	111	93	-16.2
Virginia	335	459	37.0
Washington	2,231	2,481	11.2
West Virginia	123	178	44.7
Wisconsin	604	662	9.6
Wyoming	8	32	300.0
TOTAL	**43,522**	**43,739**	**0.5**

11.c

IEP CONCENTRATIONS IN THE UNITED STATES, 1996/97

California, New York, Texas, Washington and Florida are the largest host states.



IEP Student Distribution and Characteristics

■ IEP students, like international students in general, are not distributed randomly across the United States. Students from different countries appear to have preferences for different parts of this country. Differential student choice may arise through word of mouth, differential recruitment or ties with established local communities who share a cultural heritage. Mexicans and other Latin American IEP students can be found in greater proportions in states in the Southwest such as Texas. European students appear to prefer New York and California. East Asian students, because of their large numbers, are important constituents throughout the United States but are found in highest proportions on the East and West coasts.

11.4

INSTITUTIONS WITH MOST IEP STUDENTS, FALL 1996/97

Institution	State	IEP Students
San Diego State University	California	826
Mercer University, Cecil B. Day Campus	Georgia	802
Hunter College - C U N Y	New York	700
Hawaii Pacific University	Hawaii	700
Boston University	Massachusetts	659
El Paso Community College/IEP	Texas	634
University of California Riverside/IEP	California	624
Los Angeles City College	California	624
LaGuardia Community College - C U N Y	New York	600
University of California Berkeley Program	California	562
Center for English Studies	New York	550
Queens College - C U N Y	New York	515
Language Institute for English	California	485
University of California Extension	California	451
Western Michigan University	Michigan	434
University of Delaware	Delaware	422
Columbia University	New York	417
University of Washington Extension	Washington	412
University of North Texas	Texas	383
Indiana University at Bloomington	Indiana	377
University of California San Diego	California	375
EF International School of English	California	368
University of Florida	Florida	357
Language Institute for English	New York	349
Florida International University/IEP	Florida	349
San Jose State University	California	330
Michigan State University	Michigan	300
California State University Los Angeles	California	300
EF International School of English	California	287
George Institute of Techology	Georgia	286
New York University	New York	276

11.5

TOP 12 PLACES OF ORIGIN FOR IEP STUDENTS IN SELECTED LEADING STATES

Students' Origin	California %
Japan	26.9
Republic of Korea	21.9
Taiwan	11.0
Brazil	6.5
Thailand	4.5
Switzerland	3.6
Indonesia	2.7
Germany	1.9
China	1.7
Turkey	1.7
France	1.7
Italy	1.6
TOTAL	**9,572**

Students' Origin	New York %
Republic of Korea	26.6
Japan	23.4
Brazil	6.9
Taiwan	5.5
China	3.0
Turkey	3.0
Switzerland	2.4
Russia	2.3
Italy	2.1
Colombia	2.1
Germany	1.9
France	1.8
TOTAL	**5,173**

Students' Origin	Texas %
Mexico	32.3
Republic of Korea	15.7
Japan	11.4
Taiwan	9.1
Thailand	6.3
Saudi Arabia	2.6
Colombia	2.3
Venezuela	1.8
Indonesia	1.4
China	1.3
Brazil	1.2
Russia	1.1
TOTAL	**2,547**

Students' Origin	Florida %
Republic of Korea	12.3
Venezuela	10.6
Japan	10.0
Brazil	8.9
Colombia	5.9
Taiwan	5.2
Turkey	3.8
Switzerland	3.4
Thailand	3.3
Saudi Arabia	3.2
France	3.1
Kuwait	2.9
TOTAL	**2,054**

- Almost half of IEP students (47%) are women, compared with 41% of foreign students in general. The proportion of women in IEPs declined slightly this year.
- The overwhelming majority of IEP students (91%) hold F visas, compared to the 86% of all foreign students with F visas. Over the past year, the number of IEP students on F visas has risen, while the numbers of students holding J visas has declined, and the number on M visas is up only slightly.

11.6

SEX OF IEP STUDENTS, 1993/94 - 1996/97

Sex	1993/94 Percent	1994/95 Percent	1996/97 Percent	1996/97 Number
Male	52.9	51.6	52.4	22,916
Female	47.1	48.4	47.6	20,823
TOTAL	**38,606**	**43,522**		**43,739**

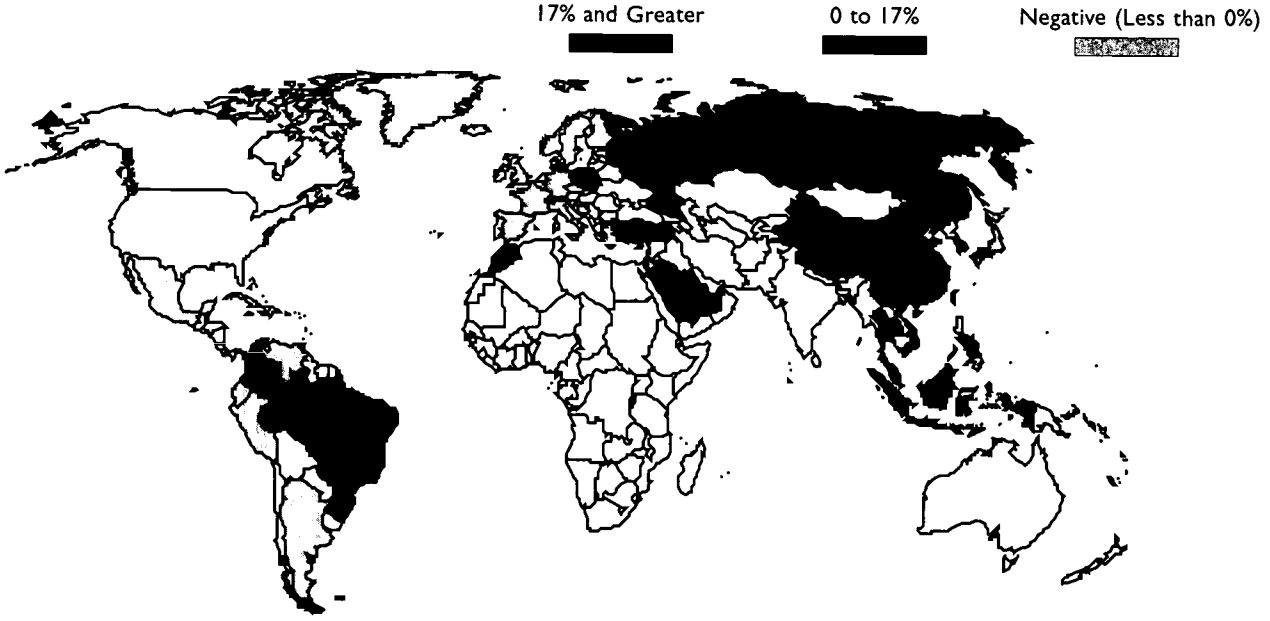
11.7

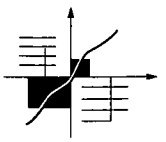
IEP STUDENTS BY IMMIGRATION (VISA) STATUS, 1993/94 - 1996/97

Visa Type	1993/94 Percent	1994/95 Percent	1996/97 Percent	1996/97 Number
F Visa	89.0	87.3	90.9	39,760
J Visa	3.4	3.1	1.8	778
M Visa	0.3	0.1	0.3	128
Other Visa	7.3	9.5	7.0	3,073
TOTAL	**38,606**	**43,522**		**43,739**

11.d

U.S. ENROLLMENT GROWTH RATES OF IEP STUDENTS BY HOME COUNTRY WITH MORE THAN 100 STUDENTS IN THE UNITED STATES





Intensive English Programs: Gateways for International Education on the University Campus

BILL WALLACE

Past President of the consortium of University & College Intensive English Programs

INTENSIVE English programs* (IEPs) are alive and well in the United States today. Numbers from the 1995/96 edition of *Open Doors* indicate that IEP students accounted for roughly 5% of all international students who studied in the U.S. during the 1995/96 academic year. While the overall growth rate of students coming to the U.S. for higher education has slowed somewhat in the past few years—just 0.3% growth from 1994/95 to 1995/96—the rate of growth for enrollment in IEPs remains relatively high, at 13.5% growth from 1994/95 to 1995/96. Another sign that IEPs are on the move is the establishment of a national accreditation process, with the first accreditation site visits scheduled to take place in the fall of 1998. There is no doubt that students from around the world continue to want and need to learn English as a Second Language (ESL), and it is equally certain that a great number of these students choose to study ESL in intensive English programs located on college and university campuses in the United States.

But what is the role of the intensive English program on the university campus? Why should a college or university support the presence of an IEP at its institution? What contribution does the IEP make toward the overall educational mission of the school? In short, why does the campus-based IEP exist?

First of all, intensive English programs draw and feed international students into university academic degree programs. Since most IEPs are self-supporting units on their campuses, they must take an active role in recruiting students. A high percentage of these students enrolled in campus-based IEPs intend to pursue an academic degree at the same institution. The IEP provides the professional ESL instruction necessary for its students to gain satisfactory proficiency in English to enroll in an academic degree program. In sum, IEPs recruit international students for their institutions, and the presence of these international students at a college or university is important for several reasons:

- Additional tuition revenue becomes available to the institution. The value of this tuition income from international students becomes even greater at state-supported schools at which the tuition paid by nonresidents of the state is often two or three times higher than that paid by in-state students.
- Economic benefits are received by both the local community and the state at large. Not only do international students pay tuition and fees to their university, they also impact the area economically by their spending on other items, such as housing, food and other goods and services. In 1994-95, for example, international students and their dependents contributed over $76.3 million to the state of Alabama's economy.
- International students often serve as graduate teaching assistants. At major research universities where graduate teaching assistants (GTAs) are em-

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* For purposes of this article, an IEP is defined as a unit which provides a minimum of 18 hours of classroom ESL instruction per week in at least three different levels of proficiency for a minimum of 28 weeks during the academic year.

Intensive English Programs: Gateways for International Education on the University Campus

...Continued

ployed to teach selected undergraduate courses, international students typically comprise a sizeable percentage of these GTAs.

• Perhaps most importantly, international students help to cultivate an international atmosphere on the university campus. Therefore, American students receive, in addition to the academic content of their education, the added benefit of exposure to and contact with people from other cultures. Those Americans who are able to take advantage of this opportunity to interact with international students typically gain immeasurable educational and career benefits, including motivation to study a foreign language and perhaps study abroad, as well as the formation of international friendships and future educational, social and business contacts.

For these reasons and others, the presence of international students on U.S. university campuses is extremely important and beneficial, not only financially but also for helping to provide, in the broad sense, an "international education" for all students enrolled. Furthermore, it is clear that IEPs play a major role in making this aspect of international education a reality by drawing students from abroad to the university and by preparing them for academic success.

Actually, intensive English programs are typically only one of several programs run under the umbrella of a broader unit which may be referred to as the "language institute." (Common names of such language institutes on U.S. campuses include "English Language Institute," "American Language Program," "Center for English as a Second Language," or some variation.)

While the IEP is normally the major function of language institutes, they also frequently run other programs which serve the university and advance the cause of international education on the campus. Other important programs run by language institutes on university campuses include:

• An International Teaching Assistant Program, which trains and evaluates international students who serve as graduate teaching assistants at the university. Programs such as these usually have responsibility for ensuring that international GTAs have the appropriate English proficiency and cultural sensitivity to succeed in the classroom.

• Support ESL courses for matriculated international students, both undergraduate and graduate. With some exceptions, the majority of campus-based IEPs offer mainly noncredit ESL courses designed for international students who have not obtained adequate English proficiency to begin full-time course work toward their degree. However, students who bypass the IEP by demonstrating adequate English proficiency and begin their degree course work immediately upon arrival on

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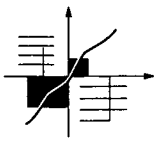

Intensive English Programs: Gateways for International Education on the University Campus

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campus often need supplemental ESL courses to ensure their success. Language institutes often provide these support courses, either through the IEP or through a separate program.

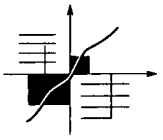
• Short-term contract programs for specialized groups of international students. These "special programs" are usually offered at various times throughout the year and demand a custom-tailored curriculum for each group served. They allow language institutes to create ties with international universities, businesses and governments which often lead to beneficial relationships and further ties for the university as a whole. (For further information on short-term contract programs, see the sidebar entitled "The "New" English Language Institute" located in this section of *Open Doors*.)

One other service that language institutes can provide to the university community pertains to their collaboration and cooperation with graduate degree programs in TESOL that are offered by the university. Qualified IEP administrators and faculty may teach graduate courses in TESOL and related areas, and the IEP itself may provide an observation and practical-training arena for graduate students in the field.

Finally, language institutes, assuming they are administered and staffed by employees with the proper education and training, provide the university with a solid base of professionals who have expertise in the field of TESOL, have a keen awareness of cross-cultural issues, and are committed to the successful integration of international students on the college campus. The presence of such a group and the expertise that becomes available is indeed a valuable asset.

In sum, language institutes and the variety of ESL programs which they run are invaluable resources on the university campus. They serve as gateways for the promotion and advancement of international education for all university students. IEPs and their parent language institutes, however, must be given the proper degree of autonomy and support from their college or university if they are to flourish and function as effectively as possible. Universities which recognize the value of the language institute and support its staff and programs accordingly are taking a huge step toward reaping the benefits of successful international education on their campuses.

Bill Wallace is Co-Director/Director of Internal Programs at the English Language Institute, the University of Alabama. He currently serves as Past-President of UCIEP, the consortium of University & College Intensive English Programs.



12

The Number and Activities of Foreign Scholars on U.S. Campuses

FOREIGN SCHOLARS

- This year there were 62,354 foreign scholars attending U.S. institutions, up 4.9% over the 59,403 scholars reported in 1995/96. The changes this year reflect an increase in scholar flow for the second year in a row, following two years of falling numbers. The 1994/95 total was 6.5% less than the 62,148 scholars recorded in 1991/92 (the survey was then biennial).
- Over four in ten (42.5%) of the foreign scholars in the United States come from Asia. This year their numbers increased 6.6% over last year, to 26,500. Asians have traditionally had a strong presence among foreign scholars because of the comparatively high numbers coming from China, Japan, India and South Korea. This year, each of these countries saw an increase in scholars in the United States. South Korea's number was up a whopping 26.5%, China's 5.4%, Japan's 4.6% and India's 3%.

- The number of scholars from Europe continues to rise, albeit slightly. European scholars make up nearly 38% of the scholars here and number 23,479. Predominant among these Europeans are Germans. German scholars (totaling 4,301) outnumber those from the United Kingdom (2,794), France (2,444), Italy (1,738) and Spain (1,512). Although not as numerous as some Western European groups, Russians (2,471) and Poles (802) also make up a sizable proportion of the European total. The 3.1% increase in scholars from Europe is attributable to increases from countries in both Eastern and Western Europe.
- The countries with the largest number of scholars in the United States are China with 9,724, Japan with 5,365, Korea with 4,419, Germany with 4,301 and India with 3,731. While most of the leading countries are in Asia or Europe, two Latin American countries, Brazil and Mexico, also have relatively high numbers of scholars here, with 1,176 and 787 respectively. Other countries with large numbers are Canada with 2,613, Israel with 1,000 and Australia with 862.

12.0

FOREIGN SCHOLAR SURVEY RESPONSE RATE, 1993/94 - 1996/97

Institutions	1993/94	1994/95	1995/96	1996/97
Surveyed	403	403	409	405
Responding	347	374	367	356
Percent Responding	86.1	92.8	89.0	87.9
TOTAL	**59,981**	**58,074**	**59,403**	**62,354**

12.1

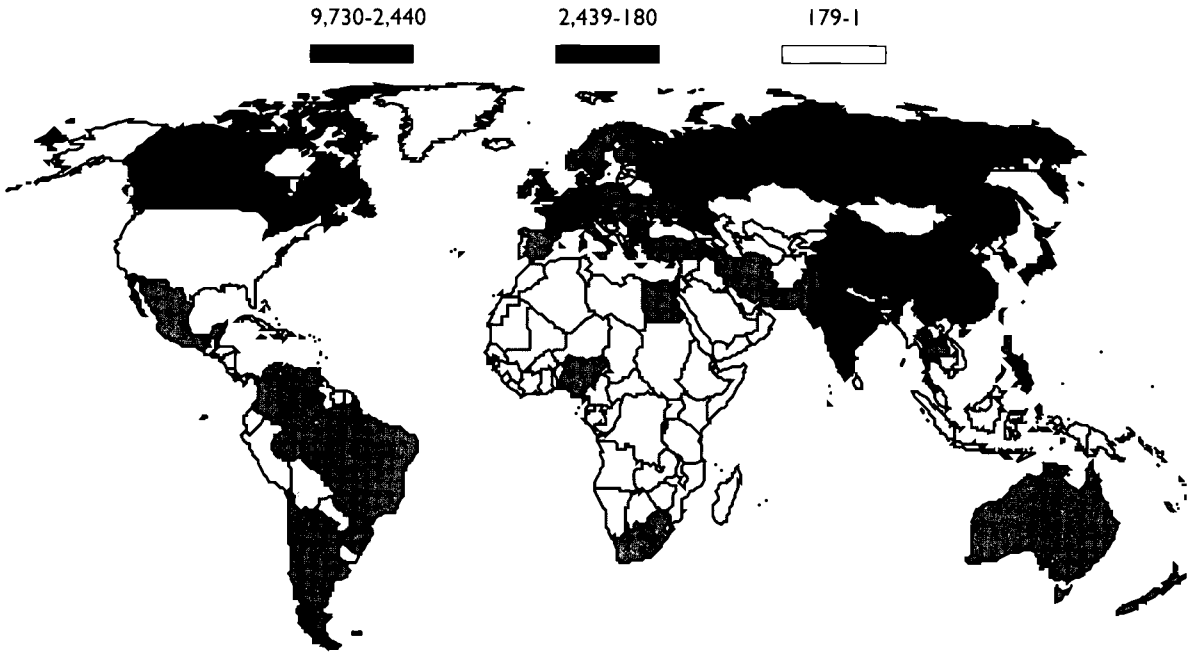
REGIONS OF ORIGIN OF FOREIGN SCHOLARS IN THE UNITED STATES, 1993/94 - 1996/97

	Percent of Scholars			
Region of Origin	**1993/94**	**1994/95**	**1995/96**	**1996/97**
Africa	3.3	3.4	3.4	3.4
Asia	45.7	43.4	41.9	42.5
Europe	35.6	37.1	38.3	37.7
Latin America	5.7	5.9	6.3	6.2
Middle East	4.0	4.1	4.4	4.2
North America	4.1	4.3	4.0	4.2
Oceania	1.6	1.8	1.7	1.8
TOTAL	**59,981**	**58,074**	**59,403**	**62,354**

12.a

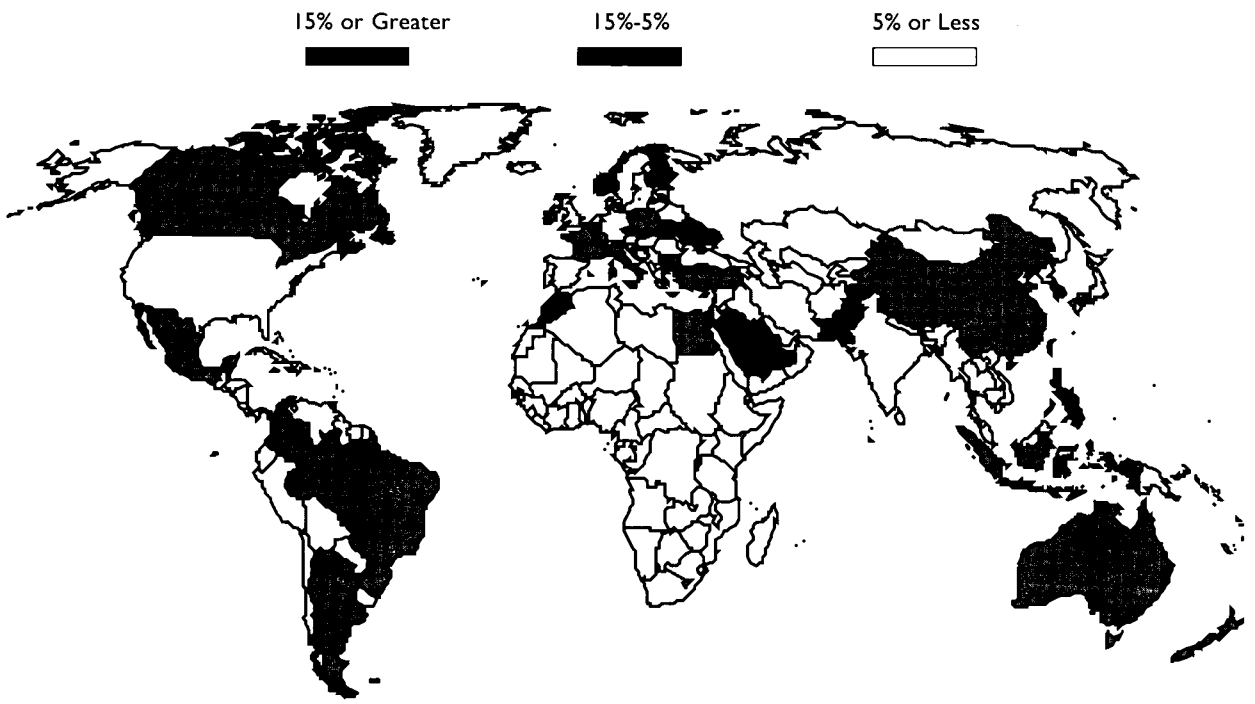
COUNTRIES OF ORIGIN OF FOREIGN SCHOLARS, 1996/97

Most foreign scholars come to the United States from countries within Asia or Europe. China, Japan, Korea, and Germany are the leading places of origin.



12.b

PERCENTAGE CHANGE AMONG COUNTRIES WITH MORE THAN 100 SCHOLARS IN THE UNITED STATES



12.2

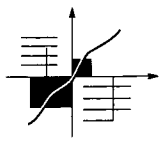
FOREIGN SCHOLAR TOTALS BY LEADING PLACES OF ORIGIN, 1995/96-1996/97

Place of Origin	1995/96	1996/97	% Change
AFRICA	**1,993**	**2,099**	**5.3**
Eastern Africa	**351**	**373**	**6.3**
Kenya	126	122	-3.2
Ethiopia	49	62	26.5
Tanzania	63	52	-17.5
Zimbabwe	36	42	16.7
Uganda	28	30	7.1
Zambia	13	14	7.7
Mauritius	7	10	42.9
Somalia	3	10	233.3
Madagascar	3	8	166.7
Malawi	8	6	-25.0
Rwanda	5	6	20.0
Mozambique	5	4	-20.0
Eritrea	2	3	50.0
Burundi	0	3	-
Comoros	1	0	-100.0
Seychelles	1	0	-100.0
East Africa, Unspecified	1	1	0.0
Central Africa	**75**	**68**	**-9.3**
Cameroon	35	36	2.9
Zaire	23	21	-8.7
Congo	7	6	-14.3
Chad	2	2	0.0
Central African Republic	2	1	-50.0
Gabon	2	1	-50.0
São Tomé & Principe	1	1	0.0
Equatorial Guinea	2	0	-100.0
Angola	1	0	-100.0
North Africa	**847**	**933**	**10.2**
Egypt	603	634	5.1
Morocco	88	130	47.7
Algeria	73	83	13.7
Tunisia	46	49	6.5
Sudan	34	35	2.9
Libya	3	2	-33.3

Place of Origin	1995/96	1996/97	% Change
Southern Africa	**303**	**296**	**-2.3**
South Africa	278	288	3.6
Botswana	17	4	-76.5
Swaziland	5	2	-60.0
Namibia	2	2	0.0
Lesotho	1	0	-100.0
Western Africa	**417**	**429**	**2.9**
Nigeria	237	225	-5.1
Ghana	82	94	14.6
Senegal	25	31	24.0
Côte d'Ivoire	24	20	-16.7
Sierra Leone	14	13	-7.1
Mali	10	10	0.0
Gambia	5	8	60.0
Liberia	5	8	60.0
Togo	3	8	166.7
Benin	6	7	16.7
Niger	3	3	0.0
Mauritania	2	2	0.0
Guinea	1	0	-100.0
ASIA	**24,866**	**26,500**	**6.6**
East Asia	**19,327**	**20,833**	**7.8**
China	9,228	9,724	5.4
Japan	5,127	5,365	4.6
Republic of Korea	3,493	4,419	26.5
Taiwan	1,201	1,092	-9.1
Hong Kong	263	217	-17.5
Mongolia	13	14	7.7
Korea, DPR	0	1	-
Macao	2	1	-50.0

12.2 (cont.)

FOREIGN SCHOLAR TOTALS BY LEADING PLACES OF ORIGIN, 1995/96-1996/97



Place of Origin	1995/96	1996/97	% Change
South & Central Asia	**4,345**	**4,552**	**4.8**
India	3,623	3,731	3.0
Pakistan	297	363	22.2
Bangladesh	135	135	0.0
Sri Lanka	126	121	-4.0
Kazakhstan	32	62	93.8
Nepal	73	61	-16.4
Uzbekistan	27	36	33.3
Kyrgyzstan	13	26	100.0
Turkmenistan	7	7	0.0
Tajikistan	5	6	20.0
Afghanistan	7	3	-57.1
Bhutan	0	1	-
Southeast Asia	**1,194**	**1,115**	**-6.6**
Philippines	283	314	11.0
Thailand	341	312	-8.5
Malaysia	238	143	-39.9
Indonesia	134	143	6.7
Singapore	91	107	17.6
Vietnam	90	73	-18.9
Myanmar	9	10	11.1
Laos	5	9	80.0
Cambodia	1	3	200.0
Brunei	2	1	-50.0
EUROPE	**22,766**	**23,479**	**3.1**
Eastern Europe	**5,619**	**5,793**	**3.1**
Russia	2,432	2,471	1.6
Poland	760	802	5.5
Hungary	547	463	-15.4
Ukraine	286	342	19.6
Czech Republic	256	288	12.5
Romania	245	256	4.5
Bulgaria	217	229	5.5
Yugoslavia (former)	185	155	-16.2
Croatia	96	125	30.2
Latvia	43	101	134.9
Slovakia	84	100	19.0
Belarus	44	67	52.3
Lithuania	71	65	-8.5
Slovenia	64	58	-9.4
Georgia	57	51	-10.5
Armenia	42	43	2.4
Estonia	32	43	34.4
U.S.S.R. (former)	34	36	5.9
Bosnia & Herzegovina	31	30	-3.2
Albania	36	17	-52.8
Azerbaijan	11	17	54.5
Moldova	10	14	40.0
Macedonia	26	10	-61.5
Czechoslovakia (former)	10	10	0.0
Western Europe	**17,147**	**17,686**	**3.1**
Germany	4,251	4,301	1.2
United Kingdom	2,698	2,794	3.6
France	2,320	2,444	5.3
Italy	1,584	1,738	9.7
Spain	1,532	1,512	-1.3
Netherlands	1,000	1,015	1.5
Switzerland	778	734	-5.7
Sweden	546	561	2.7
Denmark	410	419	2.2
Greece	406	384	-5.4
Austria	366	376	2.7
Norway	308	367	19.2
Belgium	271	309	14.0
Finland	263	304	15.6
Ireland	178	201	12.9
Portugal	149	149	0.0
Iceland	66	53	-19.7
Luxembourg	15	14	-6.7
Malta	5	9	80.0
Gibraltar	0	1	-
Monaco	0	1	-
Vatican City	1	0	-100.0

12.2 (cont.)

FOREIGN SCHOLAR TOTALS BY LEADING PLACES OF ORIGIN, 1995/96-1996/97

Place of Origin	1995/96	1996/97	% Change
LATIN AMERICA	**3,740**	**3,889**	**-100.0**
Caribbean	**317**	**254**	**-19.9**
Jamaica	134	78	-41.8
Trinidad & Tobago	59	54	-8.5
Dominican Republic	30	37	23.3
Cuba	31	28	-9.7
Barbados	17	11	-35.3
Haiti	7	9	28.6
Bahamas	16	8	-50.0
Netherlands Antilles	6	8	33.3
St. Kitts-Nevis	1	6	500.0
St. Lucia	2	3	50.0
Antigua	3	2	-33.3
Dominica	2	2	0.0
Grenada	1	2	100.0
St. Vincent	1	2	100.0
British Virgin Islands	2	1	-50.0
Martinique	0	1	-
Windward Islands	0	1	-
Montserrat	2	0	-100.0
Anguilla	1	0	-100.0
Caribbean, Unspecified	2	1	-50.0
Central America/Mexico	**915**	**973**	**6.3**
Mexico	732	787	7.5
Guatemala	46	51	10.9
Costa Rica	42	50	19.0
Panama	42	26	-38.1
Honduras	13	21	61.5
El Salvador	23	19	-17.4
Nicaragua	17	18	5.9
Belize	0	1	-
South America	**2,508**	**2,662**	**6.1**
Brazil	1,103	1,176	6.6
Argentina	444	486	9.5
Colombia	283	302	6.7
Venezuela	255	240	-5.9
Chile	181	189	4.4

Place of Origin	1995/96	1996/97	% Change
Peru	129	131	1.6
Ecuador	48	53	10.4
Uruguay	28	36	28.6
Guyana	13	18	38.5
Bolivia	10	17	70.0
Paraguay	8	11	37.5
Suriname	6	3	-50.0
MIDDLE EAST	**2,637**	**2,624**	**-0.5**
Israel	1,031	1,000	-3.0
Turkey	638	711	11.4
Iran	303	298	-1.7
Lebanon	131	146	11.5
Jordan	160	141	-11.9
Saudi Arabia	91	112	23.1
Syria	121	96	-20.7
Kuwait	31	31	0.0
Cyprus	38	30	-21.1
Iraq	34	28	-17.6
Yemen	7	14	100.0
Oman	11	9	-18.2
United Arab Emirates	40	7	-82.5
Bahrain	1	1	0.0
NORTH AMERICA	**2,355**	**2,615**	**11.0**
Canada	2,350	2,613	11.2
Bermuda	5	2	-60.0
OCEANIA	**1,038**	**1,135**	**9.3**
Australia	797	862	8.2
New Zealand	236	264	11.9
Papua New Guinea	0	4	-
Niue	2	1	-50.0
Fiji	1	1	0.0
French Polynesia	0	1	-
New Caledonia	0	1	-
Western Samoa	0	1	-
Vanuatu	1	0	-100.0
Palau	1	0	-100.0
Stateless	8	10	25.0
WORLD TOTAL	**59,403**	**62,354**	**5.0**

12.3

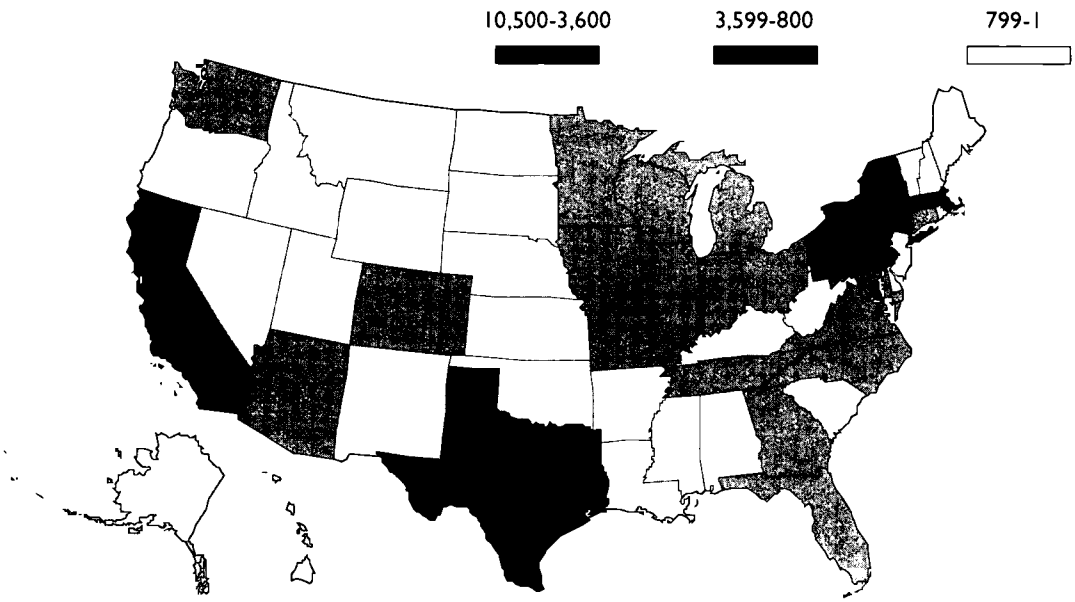
INSTITUTIONS HOSTING THE MOST FOREIGN SCHOLARS, 1995/96 - 1996/97

Institutions	City	Number of Scholars 1995/96	1996/97
Harvard University	Cambridge	2,301	2,382
University of California, Berkeley	Berkeley	2,208	2,358
University of California, Los Angeles	Los Angeles	1,714	1,519
University of California, San Diego	La Jolla	1,379	1,451
Massachusetts Institute of Technology	Cambridge	1,318	1,376
University of Washington	Seattle	1,185	1,236
University of Pennsylvania	Philadelphia	1,168	1,220
University of Minnesota-Twin Cities	Minneapolis	1,219	1,188
Cornell University	Ithaca	1,193	1,155
Stanford University	Stanford	619	1,143
University of California, Davis	Davis	1,160	1,134
University of Illinois Urbana-Champaign	Champaign	-	1,034
University of Michigan- Ann Arbor	Ann Arbor	639	1,022
University of Wisconsin-Madison	Madison	847	976
Pennsylvania State Univ U Park	University Park	715	968
University of California, Irvine	Irvine	865	965
University of Florida	Gainesville	731	943
Yale University	New Haven	765	832
University of North Carolina Chapel Hill	Chapel Hill	708	817
University of Texas at Austin	Austin	802	799

- Harvard University continues to host the most foreign scholars. Harvard has 2,382 foreign scholars, only 24 more than the University of California at Berkeley which, with 2,358 scholars, was the second largest host. The University of California at Los Angeles was third with 1,519, followed by the University of California, San Diego, with 1,451 and M.I.T. with 1,376. These Research I institutions are known to house nationally and internationally recognized programs in the sciences and/or engineering, fields of major interest to foreign scholars (see Section 13 for description of types of institutions surveyed and not surveyed).

12.c

DISTRIBUTION OF FOREIGN SCHOLARS IN THE UNITED STATES, 1996/97



■ California is host to the largest number of foreign scholars (10,485), but Massachusetts (5,044) and New York (4,311) also have considerable numbers in their research universities.

12.4

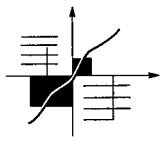
FOREIGN SCHOLARS BY STATE, 1993/94 - 1996/97

State	1993/94 Total	1994/95 Total	1995/96 Total	1996/97 Total	% Change
Alabama	808	652	591	659	11.5
Alaska	31	50	24	31	29.2
Arizona	688	515	835	887	6.2
Arkansas	207	214	307	157	-48.9
California	9,986	10,314	11,723	10,485	-10.6
Colorado	1,062	1,156	922	946	2.6
Connecticut	60	33	985	1,040	5.6
Delaware	793	328	363	366	0.8
District of Columbia	330	731	779	742	-4.7
Florida	1,633	1,820	1,661	1,822	9.7
Georgia	1,030	1,246	2,201	1,434	-34.8
Hawaii	975	188	188	234	24.5
Idaho	54	46	321	272	-15.3
Illinois	2,340	2,374	1,741	2,847	63.5
Indiana	1,700	1,438	1,550	1,672	7.9
Iowa	830	774	922	1,139	23.5
Kansas	595	362	313	413	31.9
Kentucky	305	368	445	482	8.3
Louisiana	444	539	505	486	-3.8
Maine	47	63	54	28	-48.1
Maryland	912	668	737	1,117	51.6
Massachusetts	5,807	5,185	5,274	5,044	-4.4
Michigan	1,402	2,165	1,725	2,430	40.9
Minnesota	1,306	1,227	1,231	1,197	-2.8
Mississippi	255	178	171	164	-4.1
Missouri	2,154	1,473	1,429	1,485	3.9
Montana	73	93	113	128	13.3
Nebraska	281	300	244	357	46.3
Nevada	141	98	185	167	-9.7
New Hampshire	188	195	240	234	-2.5

12.4 (cont.)

FOREIGN SCHOLARS BY STATE, 1993/94 - 1996/97

State	1993/94 Total	1994/95 Total	1995/96 Total	1996/97 Total	% Change
New Jersey	1,006	919	520	472	-9.2
New Mexico	200	210	222	168	-24.3
New York	4,620	4,599	4,067	4,311	6.0
North Carolina	1,511	1,424	1,463	1,414	-3.3
North Dakota	174	53	57	98	71.9
Ohio	1,681	1,862	1,920	2,103	9.5
Oklahoma	363	450	219	456	108.2
Oregon	878	715	792	729	-8.0
Pennsylvania	3,594	3,681	3,277	4,012	22.4
Rhode Island	281	341	399	449	12.5
South Carolina	486	469	422	547	29.6
South Dakota	19	10	23	35	52.2
Tennessee	1,105	1,197	1,000	1,087	8.7
Texas	3,610	3,574	3,243	3,616	11.5
Utah	338	448	383	505	31.9
Vermont	228	207	200	189	-5.5
Virginia	1,030	1,015	1,017	1,042	2.5
Washington	1,202	1,215	1,309	1,397	6.7
West Virginia	53	54	40	28	-30.0
Wisconsin	1,044	750	888	1,077	21.3
Wyoming	65	56	103	83	-19.4
Puerto Rico	56	32	60	71	18.3
U.S. TOTAL	**59,981**	**58,074**	**59,403**	**62,354**	**5.0**



- Research is the primary activity of most of the foreign scholars at U.S. universities around the country. Over three-quarters (81.9%) of the foreign scholars here are involved solely in research activities. Only 11.5% were here primarily for teaching, and a smaller 6.6% were concerned with both. Since the early 1990s, there has been a marked shift away from research combined with teaching, perhaps reflecting a continuing debate on campuses about the role of foreign scholars in teaching activities, particularly at the undergraduate level. While research and graduate education are vital research university functions, a consensus has emerged that the central mission of these institutions is high quality undergraduate education. This emphasis may gradually have reduced the number of teaching posts for foreign scholars.

- The greatest share of scholars are concentrated in the fields of health sciences (27.1%). The next largest group of fields are those most closely tied to the development of technologically-based industrial economies in the home countries of many foreign scholars. These fields include life and biological sciences (15.4%), the physical sciences (13.8%) and engineering (11.8%). Despite current U.S. interests in the evolution of the global economy, business was the field of only 2.6% of the scholars. Social sciences and fields in the humanities also attracted less than 5% of the scholars.

12.5

PRIMARY ACTIVITY OF FOREIGN SCHOLARS IN THE UNITED STATES, 1993/94 - 1996/97

	Percent of Scholars			
Primary Function	**1993/94**	**1994/95**	**1995/96**	**1996/97**
Research	79.8	80.7	82.6	81.9
Teaching	12.1	12.2	11.5	11.5
Both	8.1	7.1	5.9	6.6
TOTAL	**59,981**	**58,074**	**59,403**	**62,354**

12.6

MAJOR FIELD OF SPECIALIZATION OF FOREIGN SCHOLARS, 1993/94 - 1996/97

	Percent of Scholars			
Major Field of Specialization	**1993/94**	**1994/95**	**1995/96**	**1996/97**
Health Sciences	27.4	28.6	27.6	27.1
Life and Biological Sciences	13.1	14.1	12.8	15.4
Physical Sciences	14.7	12.8	14.3	13.8
Engineering	11.6	11.9	13.4	11.8
Social Sciences and History	4.6	4.0	4.2	4.6
Agriculture	3.7	3.4	3.5	4.1
Mathematics	2.9	2.5	2.8	2.8
Business Management	3.2	2.8	2.9	2.6
Foreign Languages and Literature	2.2	2.3	2.0	2.3
Computer and Information Sciences	2.3	2.3	2.7	2.2
Letters	1.5	1.4	1.7	1.8
Other	2.2	3.1	1.5	1.6
Area and Ethnic Studies	1.7	1.8	1.5	1.6
Visual and Performing Arts	1.6	1.2	1.7	1.5
Education	1.5	1.8	1.6	1.4
Law and Legal Studies	1.2	1.1	1.0	1.0
Philosophy and Religion	1.1	1.1	0.7	0.9
Psychology	0.9	0.9	0.9	0.8
Public Affairs	0.7	0.6	0.8	0.7
Architecture & Environmental Design	0.7	0.7	0.8	0.7
Home Economics	0.4	0.4	0.4	0.5
Communication	0.6	0.6	0.6	0.4
Library Sciences	0.3	0.2	0.2	0.3
Marketing	0.1	0.1	0.1	0.1
TOTAL	**59,981**	**58,074**	**59,403**	**62,354**

12.7

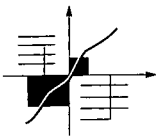
SEX OF FOREIGN SCHOLARS IN THE UNITED STATES, 1993/94 - 1996/97

	Percent of Foreign Scholars			
Gender	**1993/94**	**1994/95**	**1995/96**	**1996/97**
Male	75.0	73.8	73.7	74.2
Female	25.0	26.2	26.3	25.8
TOTAL	**59,981**	**58,074**	**59,403**	**62,354**

12.8

VISA STATUS OF FOREIGN SCHOLARS IN THE UNITED STATES, 1993/94 - 1996/97

	Percent of Foreign Scholars			
Visa Status	**1993/94**	**1994/95**	**1995/96**	**1996/97**
J Visa	73.8	76.6	77.0	75.9
H Visa	17.8	16.0	16.2	17.6
Other	8.4	7.4	6.8	6.5
TOTAL	**59,981**	**58,074**	**59,403**	**62,354**



- Most foreign scholars in the United States are male. Men outnumber women by almost three to one. The percentage of female scholars is decreasing slightly. In the foreign student population, the ratio of male to female students is closer to 60% - 40%.
- Foreign scholars most often arrive in the United States on J visas (75.9%). While J visas are granted to sponsored students, they are predominantly granted to exchange visitors who come to the United States in a teaching, trainee or research capacity. H visas, the temporary visa granted to persons of extraordinary ability and distinguished merit or to workers performing services unavailable outside the United States, are the visa type of 17.6% of the scholars. A smaller 6.5% are on other types of visas.

Internationalism and Insularity: American Faculty and the World

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THE metaphor of a shrinking planet has become commonplace. We live in an era of economic and cultural globalization. It is inevitable that academic as well as economic boundaries are becoming blurred. We are interested here in understanding how the American academic profession, the heart of the university, is reacting to trends toward internationalization on campus and in society.

To examine this and other questions about the contemporary academic profession, the Carnegie Foundation for the Advancement of Teaching carried out the first international study of the professoriate. The survey includes 14 middle-income or wealthy countries with well-developed, well-supported higher education systems: the United States; England, Germany, the Netherlands, Russia and Sweden in Europe; Hong Kong, Japan and Korea in Asia; Brazil, Chile and Mexico in Latin America; Israel in the Middle East; and Australia. Altogether, the sample was more than 20,000 respondents, with number per country ranging from more than 3,500 to fewer than 1,000. To ensure that the sample was random, a common methodology was used to select institutions and individuals.

In the 14 countries surveyed, the professoriate generally welcomes greater involvement with their counterparts across national boundaries. They report that the curriculum has taken on a more international focus; to a lesser extent, from what they report, science and scholarship have become more international in scope. Many academics travel abroad to international meetings and work with colleagues in other countries. A spirit of international collaboration is obvious. It is also apparent that the contemporary professoriate is poised between the national and the international.

At the same time, the data show that the American professoriate is least committed to internationalism. Only a little more than half of the American sample feels that connections with scholars in other countries are very important. The figures for 10 other countries are over 80%, and in another two countries they are 78 and 79%. More than 90% of the faculty in 13 countries believe that a scholar must read books and journals published abroad to keep up with scholarly developments; only 62% of Americans believe this. American faculty were similarly indifferent about further internationalizing the curriculum: only 45% agree that it should be more international. In only one other country are faculty less supportive. In seven other countries over 60% of the faculty want to broaden course offerings.

The data also show that 65% of American academics–the overwhelming majority of whom are more committed to teaching and are only marginally concerned with research in their disciplines–did not go abroad for study or research in the past three years. This compares with 25% of Swedes, 47% of English, and just 7% of Israelis. Here again, the Americans were last among the 14 countries.

Of the between 45 and 60% of the American respondents who answered the questions about their international activities for the previous three years, there had been little publication in another country or in another language, and not a great deal of time had been spent working on research with colleagues from abroad, traveling abroad for study or research, serv-

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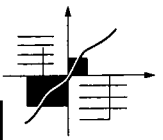

Internationalism and Insularity: American Faculty and the World

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from abroad, traveling abroad for study or research, serving as faculty in another country, or spending a sabbatical leave abroad. On all of these items, faculty members who indicate a primary interest in research are twice as likely to be internationalists as their compeers who focus mainly on teaching. They are the ones most likely to attend a professional conference. The internationalist perspective was also strongest among faculty in research institutions (scientists and engineers are more likely to work with colleagues, but not necessarily more likely to travel or teach in other countries). For the most part, female faculty are less likely than male to be involved in international activities.

At the same time, American colleges and universities are more international than ever. Of more than one million students attending a college outside their own countries, over 40% matriculate in American institutions of higher learning. American professors had much more contact with international students than their counterparts in other countries– 96% report that they had foreign students enrolled at their institutions. Not only does the United States now educate over 450,000 students from other countries, thousands of visiting scholars participate in American higher education and many additional thousands from abroad are employed in U.S. academe.

These findings reflect a complex relationship with internationalism on the part of the American professoriate. American faculty seem to feel that U.S. higher education is at the center of an international academic system. As in the case of agriculture, they are more exporters of knowledge than importers. The world comes to the United States, and therefore international initiatives are superfluous. The belief seems to be that U.S. higher education can contribute more than it can gain from intellectual exchange. There is a grain of truth to this perception, and it is reinforced by the relative ignorance of foreign languages by American faculty. English is increasingly the language of science and scholarship internationally, and it is the dominant language of the new communications technologies such as the Internet. Most of the top journals in the majority of scientific fields are edited in the United States and are published in English. International conferences often use English as the primary language. American academics seldom seem to use or have a need to use other languages.

American academics do not often cite work by scholars in other countries in their research. The American research system is remarkably insular, especially when compared to scientific communities in other countries. A few countries, such as Singapore and Hong Kong, make it a priority to hire scholars from abroad, frequently from the United States, precisely to ensure an international perspective.

The American system accepts scholars and scientists from abroad, but only if they comply with American academic and scientific norms. International journals edited from the United States expect contributors, regardless of nationality or scientific background, to conform to the norms of the dominant American scholarly paradigms. Generations of foreign-born and foreign-trained scholars have been welcomed in the American academic system, contributing much to American science and scholarship. Their founding

Continued...

Internationalism and Insularity: American Faculty and the World

...Continued

of the New School for Social Research and central role in the research that contributed to the Manhattan Project come immediately to mind. Ultimately, however, they have been assimilated into the American system. Their research and scholarly accomplishments may have had an impact, but their ideas about higher education have had little salience.

Other countries look to the United States as the academic center; the American academic system is seen as the best in the world–and is widely imitated. In most disciplines, Americans are among the leaders, and scholars from abroad find the United States an attractive place. In 1995, more than 59,000 visiting scholars studied in the United States. America still dominates the Nobel prizes in the sciences. Although its domination is decreasing, the U.S. remains by far the largest producer of basic research. This situation means that the American academic system attracts an international clientele, but not necessarily that it is itself international in its focus or perspectives. Indeed, the Carnegie data tell us that American academics may be less open to international trends than are scholars in other countries.

With the exception of the United States, international-mindedness in the surveyed countries is quite high. However, international involvement lags somewhat behind sentiments, even among those most heavily involved in research. American academics have an ambivalent relationship with the rest of the academic world. In spite of welcoming scholars from abroad as visitors or as permanent colleagues, and a willingness to accept students from abroad in their classes and seminars, they pay little attention to the knowledge that the rest of the world produces. They are unenthusiastic about internationalizing the curriculum. Americans want to share but on their terms. To American academics, internationalization is a one-way process: foreign students, who keep a number of graduate programs flourishing, are welcome. Yet the American academics, it is believed, have little to gain from intellectual exchanges. Only a minority belong to an international disciplinary or scientific society. All of this smacks of a neocolonialism characteristic of an earlier era. This set of attitudes and values will not help American higher education provide leadership in the 21st century. American academics do not believe or want higher education to be parochial, although it could become so.

What is needed are programs that promote faculty and student exchange, both governmental and privately funded. These could have invaluable worth in teaching faculty and students about the world around them, in strengthening international ties, and in stimulating more widespread knowledge of foreign languages. Fulbright grants have provided many opportunities, but much more could be done. Too many American academics see work in other countries as having worth only to those engaged in research. Teaching can be enhanced by an international perspective as well. If we begin with a recognition of our international backwardness, we can put initiatives into place that will enable American higher education to effectively function in today's interdependent world.

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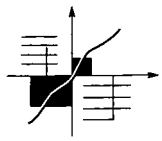


13

About the Surveys

METHODOLOGY

- **History of the Census**

  Since its founding in 1919, the Institute of International Education (IIE) has conducted an annual census of foreign students in the United States. For the first 30 years this effort was carried out jointly by IIE and the Committee on Friendly Relations Among Foreign Students. IIE's first independent publication of the results of the annual census was *Education for One World*, containing data for the 1948/49 academic year. It was renamed *Open Doors* in 1954/55, and began receiving USIA support in the early 1970s. *Open Doors* is generally considered the primary source for basic statistics about foreign students in the United States. The strong response to the *Open Doors* survey (95.6% in 1996/97) means that the survey constitutes the most comprehensive set of data on the U.S. foreign student population.

- **Research Methodology and Data Characteristics**

  The data presented in *Open Doors 1996/97* were obtained by the Research Division of IIE through a survey conducted, in fall 1996 and spring 1997, of campus officials in 2,732 regionally accredited institutions of higher education in the United States.

■ **Response Rate**

Of the institutions surveyed, 2,613 or 95.6%, responded to the questionnaire, as is shown in Table 13.0. The response rate, although always high, has fluctuated over the history of the Census, reaching the lowest point in the mid-1970s. However, in the past decade it has been very high, ranging from 92.6% in 1979/80 to 99.5% in 1987/88, then dipping to 92.8% in 1992/93 and this year 95.6%.

■ **Types of Responses**

Over nine-tenths (2,428) of the institutions that responded to the survey reported enrolling international students (Table 13.0). Of the schools with international students, a total of 620 (representing 25.5%) provided only total foreign student counts (Step 1), as shown in Table 13.1. The majority (82.1%), however, provided information not only on the total but on the students' countries of origin, fields of study, academic levels, sex and other characteristics (Step 2) as well.

13.0

INSTITUTIONS SURVEYED AND TYPE OF RESPONSE, SELECTED YEARS 1964/65 - 1996/97

Year	Institutions Surveyed	Institutions w/Foreign Students	Institutions w/o Foreign Students	Total Institutions Responding	% Response
1964/65	2,556	1,859	434	2,293	89.7
1969/70	2,859	1,734	265	1,999	69.9
1974/75	3,085	1,760	148	1,908	61.8
1979/80	3,186	2,651	299	2,950	92.6
1984/85	2,833	2,492	274	2,766	97.6
1989/90	2,891	2,546	294	2,840	98.2
1990/91	2,879	2,543	241	2,784	96.7
1991/92	2,823	2,436	228	2,646	94.4
1992/93	2,783	2,417	166	2,583	92.8
1993/94	2,743	2,451	163	2,614	95.3
1994/95	2,758	2,517	167	2,684	97.3
1995/96	2,715	2,403	176	2,579	95.7
1996/97	2,732	2,428	185	2,613	95.6

13.1

INSTITUTIONS REPORTING FOREIGN STUDENTS AND TYPE OF RESPONSE, 1994/95 - 1996/97

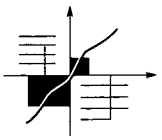
	1994/95		1995/96		1996/97	
Type of Response	Number	%	Number	%	Number	%
Total Only- STEP 1	338	13.4	376	15.6	620	25.5
Institutional Data-STEP 2	2,178	86.6	2,027	84.4	1,993	82.1
Individual Data- STEP 3	-[1]	-[1]	1,470	61.2	-[1]	-[1]
TOTAL	**2,517**		**2,403**		**2,428**	

[1] Step 3 data collected biannually, so none requested in 1994/95 or 1996/97.

13.2

INSTITUTIONS REPORTING FOREIGN STUDENTS BY INDIVIDUAL VARIABLES, 1996/97

Category	Base Number	% of Foreign Students
Country of Origin	382,826	83.6
Sex	381,132	83.2
Field of Study	371,944	81.2
Enrollment Status	353,520	77.2
Academic Level	352,910	77.1
Visa (Immigration) Status	335,518	73.3
Marital Status	210,446	46.0
Primary Source of Funds	209,984	45.8
Total Reported	**457,984**	



- A high proportion of the colleges and universities with foreign students sent data on all of the characteristics on the questionnaire, as Table 13.2 shows. Some variables commanded a greater number of responses: data on academic level exist for 77.1% of all foreign students reported, country of origin information for 83.6% and field of study breakdowns for 81.2%. Conversely information on the students' primary source of funding and on their marital status is available for less than half of the total number reported (45.8% and 46%, respectively).

- The accuracy of this survey or any survey depends upon the joint effect of sampling and nonsampling errors. The data reported here would be somewhat different if a complete census had been obtained. Nonsampling errors arise because of problems in survey design, data processing and nonresponse bias. In general the effects of nonsampling errors are both harder to detect and lead to greater caution in interpretation than errors arising from sample variability.

■ Imputation

Throughout this document, student counts other than the total foreign student enrollment are determined by imputation. Estimates of the number of students from each country of origin, field of study, academic level and all other breakdowns are imputed from the world total of 457,984 foreign students, which is the actual number of all non-immigrant students reported in the survey in 1996/97. For each imputation, base or raw counts were multiplied by a correction factor which reflects the ratio of difference between the sum of the categories being imputed and the world total. For example, the sum of the number of all students with sex data in this year's Census was 381,132. The ratio of the total reported number of foreign students to those whose sex is known is 1.201641426068. Thus the imputed number of students from each country is derived by multiplying the male and female base or raw student count by 1.201641426068. It should be noted that foreign student numbers vary slightly within this publication. Due to rounding, percentages do not always add up to 100%. This is also true for some imputations. In these instances the total percent column is listed as 100% to indicate that all categories are accounted for. A relatively large discrepancy exists between the academic level figures reported by country and those provided for all foreign students in general. This discrepancy results from the differential response rates to the nationality question and the academic level question. Further, a number of institutions are unable to provide nationality by academic level data.

13.3
PLACES OF ORIGIN IN WORLD REGIONS

1000 AFRICA

1100 Eastern Africa

1115 Burundi
1120 Comoros
1105 Djibouti
1195 Eritrea
1125 Ethiopia
1130 Kenya
1135 Madagascar
1140 Malawi
1145 Mauritius
1150 Mozambique
1155 Réunion
1165 Rwanda
1170 Seychelles
1175 Somalia
1180 Tanzania
1185 Uganda
1190 Zambia
1160 Zimbabwe

1200 Central Africa

1210 Angola
1220 Cameroon
1230 Central African Rep
1240 Chad
1250 Congo
1260 Equatorial Guinea
1270 Gabon
1280 São Tomé & Principe
1290 Zaire

1300 North Africa

1310 Algeria
1320 Canary islands
1330 Egypt
1340 Libya
1350 Morocco
1370 Sudan
1380 Tunisia
1360 Western Sahara

1400 Southern Africa

1410 Botswana
1420 Lesotho
1430 Namibia
1440 South Africa
1450 Swaziland

1500 Western Africa

1510 Benin
1585 Burkina Faso
1505 Cape Verde
1535 Côte d'Ivoire
1515 Gambia
1520 Ghana
1525 Guinea
1530 Guinea-Bissau
1540 Liberia
1545 Mali
1550 Mauritania
1555 Niger
1560 Nigeria
1565 St. Helena
1570 Senegal
1575 Sierra Leone
1580 Togo

2000 ASIA

2100 East Asia

2110 China
2120 Taiwan
2130 Hong Kong
2140 Japan
2150 Korea, Democratic People's Rep of
2160 Korea, Republic of
2170 Macao
2180 Mongolia

2200 South and Central Asia

2205 Afghanistan
2210 Bangladesh
2215 Bhutan
2220 India
2260 Kazakhstan
2265 Kyrgyzstan
2225 Maldives, Rep of

13.3(cont.)

PLACES OF ORIGIN IN WORLD REGIONS

2230 Nepal
2235 Pakistan
2245 Sri Lanka
2270 Tajikistan
2250 Turkmenistan
2255 Uzbekistan

2300 Southeast Asia
2305 Brunei
2320 Cambodia
2315 Indonesia
2325 Laos
2330 Malaysia
2310 Myanmar
2335 Philippines
2345 Singapore
2350 Thailand
2360 Vietnam

3000 EUROPE

3100 Eastern Europe
3110 Albania
3189 Armenia
3174 Azerbaijan
3181 Belarus
3193 Bosnia & Herzegovina
3120 Bulgaria
3191 Croatia
3131 Czech Republic
3130 Czechoslovakia (frmr)
3183 Estonia
3188 Georgia
3150 Hungary
3184 Latvia
3185 Lithuania
3194 Macedonia
3187 Moldova
3160 Poland
3170 Romania
3186 Russia
3132 Slovakia
3192 Slovenia
3182 Ukraine
3180 U.S.S.R. (former)
3190 Yugoslavia (former)

3200 Western Europe
3203 Andorra
3206 Austria
3210 Belgium
3213 Denmark
3220 Finland
3223 France
3226 Germany
3233 Gibraltar
3236 Greece
3243 Iceland
3246 Ireland
3250 Italy
3253 Liechtenstein
3256 Luxembourg
3260 Malta
3263 Monaco
3266 Netherlands
3270 Norway
3273 Portugal
3276 San Marino
3280 Spain
3283 Sweden
3286 Switzerland
3290 United Kingdom
3240 Vatican City

4000 LATIN AMERICA

4100 Caribbean
4103 Aruba
4105 Bahamas
4110 Barbados
4115 Cayman Islands
4120 Cuba
4125 Dominican Republic
4130 Guadeloupe
4135 Haiti
4140 Jamaica
4150 Leeward Islands
4155 Anguilla
4151 Antigua
4152 British Virgin Islands
4153 Montserrat

■ Analytic Notes

Much of the weight of analysis in this report is borne by figures and data maps. The use of these graphic devices poses problems that are not shared by numerical analysis. The key difficulty is that there is not a commonly accepted set of fast standards for the production of figures. In this report we have attempted to follow the guidelines for graphical excellence described by Edward Tufte in *The Visual Display of Quantitative Information* (1983) and *Envisioning Information* (1990). In general we have attempted to keep our figures clean to maximize "data ink" and to minimize "chart junk." Further we have attempted to build multivariate figures. These figures, such as the bar chart matrix in the Study Abroad section, require the reader to spend some moments exploring the figures. Our broader intention is to invite discussion, thought and further analysis of student flow data. In the production of our data maps, Tufte's work and Mark Monmonier's volume *How to Lie With Maps* (1991) were helpful. The chances for distortion using data maps are many times greater than for figures. The look and feel of our graphics has been heavily influenced by the graphic excellence of the map and figure displays regularly carried in *The New York Times*. We are also in the debt to practitioners of the art of transforming data into meaning. Individuals such as Dita Smith of the *Washington Post* regularly exemplify the kind of excellence in figurative displays we hope to emulate. In building data maps we have used two principal means to establish grouping categories. For some maps categorizations were made by constructing intervals by means of searching for a "natural break" in the data. For other displays, the "natural break" technique was customized for clarity.

Maps are typically dense multi-layered objects which have an aesthetic quality of their own. In our use of maps we have stripped down their individual information density to better tell a single story. The reader is encouraged to view each map together with others. By considering a series of maps, rather than individual ones in isolation, a reader can add back layers of meaning.

■ **Country Classification System**

The classification of countries into regional groupings reported in Section 2 of this report follows IIE practices which were originated when the *Open Doors* Census was first conducted in 1954.

■ **Guidelines for Release of Census Data**

Reports based on Census data are available to individuals, agencies or corporations for clearly identified purposes of scholarly research, public information or employment recruitment. Reports will be produced for employment recruitment purposes only when the employer has indicated that the openings are for employment in the students' home countries or, in some instances, home regions; students' obligations to the sponsors of their study in the United States and/or to their own governments will be respected; and the corporation or agency does not engage in discriminatory practices. Student names obtained as a by-product of the Census will not be released in any case.

IIE reserves the right to request that the proposed use of data be documented and to withhold data when the request is not deemed to be for appropriate scholarly, public information or employment recruitment purposes.

13.3(cont.)

PLACES OF ORIGIN IN WORLD REGIONS

4154 St. Kitts-Nevis
4160 Martinique
4170 Netherlands Antilles
4180 Trinidad & Tobago
4185 Turks & Caicos Isles
4190 Windward Islands
4191 Dominica
4192 Grenada
4193 St. Lucia
4194 St. Vincent

4200 Cntrl Amer/Mexico
4210 Belize
4230 Costa Rica
4240 El Salvador
4250 Guatemala
4260 Honduras
4270 Mexico
4280 Nicaragua
4290 Panama

4300 South America
4305 Argentina
4310 Bolivia
4315 Brazil
4320 Chile
4325 Colombia
4330 Ecuador
4335 Falkland Islands
4340 French Guyana
4345 Guyana
4350 Paraguay
4355 Peru
4360 Suriname
4365 Uruguay
4370 Venezuela

2400 MIDDLE EAST
2405 Bahrain
2410 Cyprus
2415 Iran
2420 Iraq
2425 Israel
2430 Jordan
2435 Kuwait
2440 Lebanon
2445 Oman
2443 Palestinian Authority
2450 Qatar
2455 Saudi Arabia
2460 Syria
2465 Turkey
2470 United Arab Emirates
2485 Yemen

5000 NORTH AMERICA
5110 Bermuda
5120 Canada

6000 OCEANIA

6100 Australia & New Zealand
6110 Australia
6120 New Zealand

6200 Pacific Ocean Island Areas
6210 Cook Islands
6215 Fiji
6220 French Polynesia
6225 Kiribati
6227 Marshall Islands
6260 Micronesia, Federated States of
6230 Nauru
6235 New Caledonia
6250 Niue
6255 Norfolk Island
6263 Palau
6240 Papua New Guinea
6205 Solomon Islands
6270 Tonga
6271 Tuvalu
6245 Vanuatu
6275 Wallis & Futuna Isles
6280 Western Samoa

13.4

MAJOR FIELD OF STUDY CATEGORIES*

AGRICULTURE
- 01 Agricultural, Business and Production
- 02 Agricultural Sciences
- 03 Conservation and Renewable Natural Resources

ARCHITECTURE AND RELATED PROGRAMS
- 04 Architecture and Related Programs

AREA, ETHNIC AND CULTURAL STUDIES
- 05 Area, Ethnic and Cultural Studies

BUSINESS MANAGEMENT AND ADMINISTRATIVE SERVICES
- 52 Business Management and Administrative Services
- 08 Marketing Operations and Distribution

COMMUNICATIONS
- 09 Communications
- 10 Communication Technologies

COMPUTER AND INFORMATION SCIENCES
- 11 Computer and Information Sciences

PERSONAL AND MISCELLANEOUS SERVICES
- 12 Personal and Miscellaneous Services

EDUCATION
- 13 Education

ENGINEERING
- 14 Engineering
- 15 Engineering-related Technologies

FOREIGN LANGUAGES AND LITERATURE
- 16 Foreign Languages and Literature

HEALTH
- 51 Health Professions and Related Sciences

HOME ECONOMICS
- 19 Home Economics
- 20 Vocational Home Economics

LAW AND LEGAL STUDIES
- 22 Law and Legal Studies

ENGLISH LANGUAGE AND LITERATURE/LETTERS
- 23 English Language and Literature/Letters

LIBERAL/GENERAL STUDIES
- 24 Liberal/General Studies

LIBRARY SCIENCES
- 25 Library Sciences

LIFE SCIENCES
- 26 Biological Sciences/Life Sciences

MATHEMATICS
- 27 Mathematics

MILITARY TECHNOLOGY
- 29 Military Technologies

MULTI/INTERDISCIPLINARY STUDIES
- 30 Multi/Interdisciplinary Studies

PARKS, RECREATION, LEISURE AND FITNESS STUDIES
- 31 Parks, Recreation and Leisure Studies

PHILOSOPHY AND RELIGION
- 38 Philosophy
- 39 Theological Studies and Religious Vocations

PHYSICAL SCIENCES
- 40 Physical Sciences
- 41 Sciences Technologies

PSYCHOLOGY
- 42 Psychology

PROTECTIVE SERVICES AND PUBLIC ADMINISTRATION
- 43 Protective Services
- 44 Public Administration and Services

SOCIAL SCIENCES AND HISTORY
- 45 Social Sciences

TRADE AND INDUSTRIAL
- 46 Construction Trades
- 47 Mechanics and Repairers
- 48 Precision Production
- 49 Transportation and Material Moving

VISUAL AND PERFORMING ARTS
- 50 Visual and Performing Arts

INTENSIVE ENGLISH LANGUAGE
- 60 Intensive English Language

UNDECLARED
- 90 Undeclared

* Source: National Center for Educational Statistics, *Classification of Instructional Programs, 1990* (Washington, D.C.: NCES, 1991).

■ Selected Terms

Foreign Student. A foreign student is defined as anyone who is enrolled in courses at institutions of higher education in the United States who is not a U.S. citizen, an immigrant (permanent resident) or a refugee.

F Visa. A student visa granted to bona fide students who satisfy requirements for pursuing a full program of study and who enter the United States for a temporary stay and solely to study.

H Visa. A temporary visa, given to persons of extraordinary ability, workers of distinguished merit and ability, workers performing services unavailable in the United States and some trainees.

J Visa. A temporary exchange-visitor visa granted for a variety of educational purposes to students, trainees, teachers, professors, research scholars, international visitors or professional trainees.

M Visa. Issued to students enrolled in a vocational training course (other than English language training) in the United States.

Fields of Study. The fields of study used in this book are those from *A Classification of Instructional Programs 1990*, published by the U.S. Department of Education, National Center for Education Statistics (NCES). See Table 13.4 for a list of major fields of study.

U.S. regions used in this study are composed of states and territories as indicated in Table 13.5.

■ About the Individual Data Survey (*Profiles*)

Section 5 contains the results of a biennial survey of all regionally accredited two- and four-year institutions of higher education in the United States (as listed in the *HEP 1993 Higher Education Directory*). The survey was conducted from fall 1995 to spring 1996, in conjunction with the Annual Census of Foreign Students in the United States. The results of both of these projects are

13.5

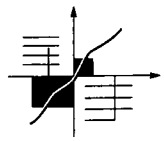
STATES WITHIN U.S. REGIONS

NORTHEAST	State Code
Connecticut	16
Maine	11
Massachusetts	14
New Hampshire	12
New Jersey	22
New York	21
Pennsylvania	23
Rhode Island	15
Vermont	13
SOUTH	
Alabama	63
Arkansas	71
Delaware	51
District of Columbia	53
Florida	59
Georgia	58
Kentucky	61
Louisiana	72
Maryland	52
Mississippi	64
North Carolina	56
South Carolina	57
Tennessee	62
Virginia	54
West Virginia	55
SOUTHWEST	
Arizona	86
New Mexico	85
Oklahoma	73
Texas	74

13.5(cont.)

STATES WITHIN U.S. REGIONS

MIDWEST	**State code**
Illinois	33
Indiana	32
Iowa	42
Kansas	47
Michigan	34
Minnesota	41
Missouri	43
Nebraska	46
North Dakota	44
Ohio	31
South Dakota	45
Wisconsin	35
MOUNTAIN	
Colorado	84
Idaho	82
Montana	81
Nevada	88
Utah	87
Wyoming	83
PACIFIC	
Alaska	94
California	93
Hawaii	95
Oregon	92
Washington	91
OTHER	
Guam	90
Puerto Rico	98
Virgin Islands	96



published in this edition of *Open Doors*. The survey is known as the Individual Data Survey or, because it calls for more in-depth data than those collected in the two stages or steps of the Annual Census, the "Step 3" survey. It asks college and university officials for information on the country of citizenship, field of study, academic level, sex and primary source of financial support of each foreign student separately. In previous years the results of the Individual Data Survey were published in the now discontinued *Profiles* publication.

The Individual Data Survey was mailed to the same 2,715 regionally accredited institutions of higher education to which the Annual Census of Foreign Students was sent. (The *HEP 1993 Higher Education Directory* was used as the reference for accreditation status of institutions). Since completing the Individual Data Survey form is a very time-consuming task and since a number of schools simply do not have the needed data, not all institutions were able to submit the detailed data this survey calls for. Thus, only 1,470, or 61.2%, of the 2,403 institutions with international students provided detailed Step 3 data in 1995/96. As shown in Table 13.6, these institutions enrolled a total of 232,617 international students, who represent about one-half (51.3%) of the 453,787 students reported on the Annual Census. This discrepancy, between the proportion of schools responding to the survey and the number of students reported, reflects the inability of a proportion of institutions with large foreign student enrollments to provide detailed Step 3 data.

Although complete information was not provided for every individual, as Table 13.7 shows, the response rate on all but one major characteristic was high, ranging from 86.6% to 95.2%. The exception was primary source of support, which was given for only 36% of the students reported on in the Step 3 survey.

Analysis of this variable, therefore, is not included although it is available for supplementary studies.

Statistical evidence is strong for the assumption that Step 3 data are representative of Census data. The characteristics of students in the two surveys (nationality, field of study, academic level and sex) are quite similar, as can be seen in Table 13.8. Also, the distribution of these students in the United States closely matches the distribution of those responding to the Census. Therefore, Step 3 (or *Profiles*) data may be assumed to be representative of Census (or *Open Doors*) data.

The interested reader can combine Census data (*Open Doors*) and Individual data (*Profiles*) analyses reported in Section 5. For instance, it is known from Table 5.0 that, in 1995/96, 19.6% of the German students were studying business and from *Open Doors* 1995/96 that the total number of German students reported was 9,017. By taking 19.6% of 9,017 (9,017 multiplied by 0.196) one can estimate that the total number of German students in this field was approximately 1,767.

13.6

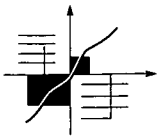
ANNUAL CENSUS AND INDIVIDUAL DATA SURVEY: RESPONSE RATES, 1979/80-1995/96

	Institutions				Students				
Year	Number Surveyed	Number Responding to Open Doors	% Responding	Number w/ Foreign Students	Number Responding to Step 3	% of Schools w/ Foreign Students	Reported in Open Doors	Reported in Step 3	% Step 3 of Open Doors
1979/80	3,186	2,950	92.6	2,651	1,961	74.0	286,340	158,240	55.3
1981/82	2,862	2,693	94.1	2,454	1,845	75.2	326,300	197,089	60.4
1983/84	2,844	2,766	97.3	2,498	2,007	80.3	338,890	216,280	63.8
1985/86	2,902	2,803	96.6	2,507	2,116	84.4	343,780	227,966	66.3
1987/88	2,893	2,878	99.5	2,552	1,925	75.4	356,190	225,999	63.4
1989/90	2,891	2,840	98.2	2,546	2,002	78.6	386,850	252,998	65.4
1991/92	2,823	2,646	94.4	2,436	1,849	75.9	419,590	273,321	65.1
1993/94	2,743	2,614	95.3	2,451	1,745	71.2	449,749	258,300	57.4
1995/96	2,715	2,579	95.7	2,403	1,470	61.2	453,787	232,617	51.3

13.7

INDIVIDUAL DATA SURVEY: RESPONSE RATE TO MAJOR FOREIGN STUDENT CHARACTERISTICS, 1995/96

Characteristics	Number of Students Reported	% of All Students 232,617
Nationality	221,565	95.2
Field of Study	212,724	91.4
Academic Level	209,323	90.0
Sex	201,537	86.6
Primary Source of Support	83,724	36.0



■ About the Foreign Scholar Survey

In 1989/90, IIE conducted a pilot survey of approximately 200 major research universities in the United States to determine the number and characteristics of foreign scholars. A second survey was conducted, including a larger number of institutions, in 1991/92 and again in 1993/94 . The 1996/97 survey is the fifth effort following the 1989/90 pilot. The Foreign Scholars survey measures the flow of foreign scholars to doctoral degree-granting institutions of higher education.

The foreign scholars who are at other types of institutions, such as the National Institutes of Health (NIH) and other national research labs, are not included in this survey, even though their numbers are substantial. The 1996/97 foreign scholars survey was mailed to a total of 405 doctoral degree-granting institutions throughout the United States, since most foreign scholars are likely to be in such schools. *The 1989 Summary Report of the Survey of Earned Doctorates* (National Research Council: Washington, D.C.: National Academy Press, 1990) was used as an initial reference source for determining which institutions were to be included in the survey. This basic list was supplemented by institutions which identified themselves as offering a doctoral program in the

College Board's annual survey of higher education institutions. For the purposes of this survey, foreign scholars are defined as non-immigrant, non-student academics (teachers and/or researchers). The institutions polled were asked to give us as much information as possible on scholars who were at their institutions in the period from June 1, 1996 to May 31, 1997. The forms requested information on the primary function of the scholars (research, teaching or both), on their geographic origin, field of specialization, sex and immigration status. Responses were received from 356 of the 405 institutions polled, a response rate of 87.9%, which is down from the 89.7% obtained last year. Not all universities reporting foreign scholars in 1996/97 were able to provide detailed information on the characteristics of their scholars. The proportion of institutions that were able to give breakdowns for individual variables ranged from 92.9% for visa status to 88.2% for primary function. Detailed data on country of origin are available for 90.8% of the total number of scholars reported, on field of specialization for 88.4% and on sex for 88.3%.

While this overall response rate is satisfactory for drawing a general picture of the flows and characteristic of foreign scholars in the United States, the data has limitations. First, the definition of a "foreign scholar" is left up to the reporting institution. Some institutions report only those individuals who have completed terminal degrees, who are working as researchers or teachers and who are not taking further course work. Other institutions will report individuals who may also be teaching or doing research and who are taking course work. Shifts in definition within an institution over time may also have affected the number of scholars reported.

Second, participation in this survey by major academic research institutions is not uniform throughout the country.

The occasional or uneven participation by large institutions which may host over 1,000 foreign scholars may affect overall state participation rates as well as bias other variables such as field of specialization or primary function.

13.8

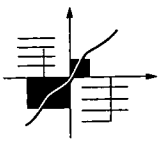
FOREIGN STUDENT CHARACTERISTICS: ANNUAL CENSUS AND INDIVIDUAL DATA SURVEY, 1995/96

CHARACTERISTIC	Step 2 Annual Census 1995/96	Step 3 Individual Data Survey
WORLD REGION		
Africa	4.6	4.7
Asia	57.3	56.3
Europe	14.8	15.0
Latin America	10.4	10.7
Middle East	6.7	6.8
North America	5.2	5.6
Oceania	0.9	0.8
FIELD OF STUDY		
Agriculture	1.8	2.2
Business and Management	20.4	21.1
Education	2.9	3.0
Engineering	16.0	16.1
Fine and Applied Arts	5.9	5.6
Health Sciences	4.6	4.4
Humanities	3.6	3.8
Math and Computer Sciences	7.9	7.6
Physical and Life Sciences	8.2	8.3
Social Sciences	8.4	9.0
Other	9.3	9.0
Intensive English Language	4.9	3.5
Undeclared	6.1	6.4
SEX		
Male	58.9	60.9
Female	41.1	39.1
ACADEMIC LEVEL		
Undergraduate	48.2	50.1
Graduate	41.9	43.0
Other	9.9	6.9
U.S. REGION		
Northeast	24.6	22.8
Midwest	23.1	26.8
South	20.2	17.6
Pacific	17.6	14.6
Southwest	10.5	13.0
Mountain	3.8	4.9
Other	0.2	0.3
TOTAL STUDENTS REPORTED	**453,787**	**232,617**

13.9

RESPONSE RATE TO INDIVIDUAL VARIABLES, FOREIGN SCHOLAR SURVEY, 1994/95 - 1996/97

	1994/95 Percent	1995/96 Percent	1996/97 Precent
Visa Status	92.4	90.8	92.9
Country of Origin	86.6	88.3	90.8
Field of Specialization	90.5	85.9	88.4
Sex	83.2	81.3	88.3
Primary Function	75.2	77.1	88.2
Total	**58,074**	**59,403**	**62,354**



■ **About the U.S. Study Abroad Survey**

In 1985/86, in response to strong interest in U.S. higher education circles, IIE designed a new survey to gauge study abroad flows. This methodology yields the most comprehensive data on U.S. study abroad, capturing students going abroad through programs sponsored by a U.S. university or other entity, as well as those directly enrolled in overseas institutions. Until 1993/94 the survey was carried out biennially. This survey focuses on study abroad for academic credit.

The study abroad population has been narrowly defined as only those students who received academic credit from a U.S. accredited institution of higher education after they returned from their study abroad experience.

Students studying abroad without credit transfers are not included here. Also not included are U.S. students enrolled overseas for degrees, as reported in UNESCO figures. The number of students who receive academic credit is inevitably lower than the number of all students who go abroad. Hence, the figures presented here give a conservative picture of study abroad activity.

Survey forms were sent to 1,176 accredited colleges and universities throughout the United States which either had reported study abroad students in one of the four previous surveys, or were listed as having study abroad programs in IIE's *Academic Year Abroad* and *Vacation Study Abroad*. Campus officials were asked to provide information on the total number of their own students (students intending to receive their degree from the home institution) to whom they awarded credit for study abroad in 1995/96, including the summer of 1996. They were also asked to provide breakdowns, where possible, on the duration of their study; their academic level, program sponsorship, institutional policies for the award of financial aid, sex, race/ethnicity and current major field of study; and on the countries in which they studied.

For the last three years, study abroad officials have reported only students studying toward a degree at their institution who participated in study abroad, regardless of whether the reporting school awarded the first credit for the study abroad activity. The purpose of this change was to tie study abroad activity closely to each home campus.

13.10

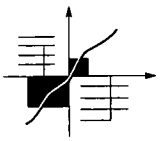
RESPONSE RATE TO INDIVIDUAL VARIABLES, STUDY ABROAD SURVEY, 1991/92 - 1995/96

Category	1991/92 Percent	1993/94 Percent	1994/95 Percent	1995/96 Percent	Number
Program Sponsorship	-	90.7	73.8	92.2	82,321
Duration of Study	79.4	93.1	77.7	91.2	81,415
Host Country	83.6	91.3	79.5	91.0	81,237
Academic Level	65.0	80.1	63.6	77.8	69,444
Sex	62.6	80.3	65.6	76.1	67,952
Field of Study	46.2	64.3	45.9	60.2	53,690
Race/Ethnicity	-	43.3	33.0	39.7	35,446
Students Reported	**71,154**	**76,302**	**84,403**		**89,242**

13.11

RESPONSE RATE TO INDIVIDUAL VARIABLES, INTENSIVE ENGLISH PROGRAM SURVEY, 1996/97

Category	Number	Percent
Place of Origin	39,733	90.8
Sex	34,513	78.9
Visa Status	32,605	74.5
Students Reported	**43,739**	

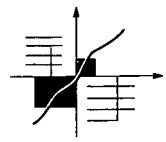


Study abroad information was obtained from 993 or 84.4% of the 1,176 surveyed institutions. A list of the institutions responding to the survey, and the number of students to whom each institution awarded study abroad credit, is contained in the disk in the back of this publication.

Not all institutions that reported giving credit for study abroad in 1995/96 provided detailed information about the characteristics of the students, as shown in Table 13.10. The proportion of schools that gave breakdowns for individual variables ranged from 39.7% for race/ethnicity to 92.2% for the program sponsorship of the sojourn.

About the IEP Survey

Using *English Language and Orientation Programs in the United States* (New York, IIE, 1992) as a baseline directory of IEPs, IIE surveyed 464 programs offering a minimum of 15 hours of classroom instruction per week. Some of these programs are sponsored by colleges or universities, while others are sponsored by independent organizations. Officials connected with each program were asked to report the total number of foreign (non-immigrant, non-refugee) students enrolled in their program during the fall of 1996 and to give a breakdown by sex, visa type and geographic origin. The findings reported in this section include students in both the college- or university-affiliated IEPs and the independent English language programs.



ODSTATS

Data Extreme

THE CARE AND FEEDING OF ODSTATS

- ODSTATS was developed in response to requests from many users who wanted to have access to student mobility data so that they could perform analysis of their own choosing. As interest in mobility data has increased, so too has the interest of many policy makers and analysts who wish to join specialized data sets with *Open Doors* data. Users interested in the management of university enrollments have created their own comparison groups and policy analysts have added country-based economic indicators. We are interested in the kinds of questions users pose of these data sets and comments and suggestions for future versions of ODSTATS are welcome. Comments may be directed to: Director, Research Division; Institute of International Education; 809 UN Plaza; New York, NY 10017 or via E-mail at tdavis@iie.org.

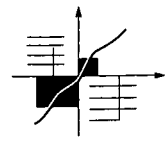
WHY ODSTATS?

- This electronic data boutique was developed to allow all users maximum access to the basic tables most frequently called for by users of student mobility data published in *Open Doors*. The user community consists of individuals who operate on a wide variety of computer systems and who have a range of interests and capabilities. For these reasons we have elected to present this data in two file formats; 1) DOS ASCII Tab delimited files – (the .txt files) and 2) Microsoft Excel spreadsheet files (the .xls files). The separate files are presented on a single 3 1/2 inch diskette bound into the *Open Doors 1996/97* edition.

WHAT'S IN ODSTATS?

- ODSTATS contain 22 files 12 in .txt and 10 in .xls. The individual files and variables contained in each are as follows:

1. APP-A-97: (.txt only) Foreign Student Enrollment by Institution — Breakdown by state of every responding institution to the annual survey. Variables include the unique NRC code, institutional name, city, state, 1995/96 foreign student totals, 1996/97 foreign student totals, percent change and actual/estimate flag.
2. APP-B-97: Intensive English Program Student Enrollment by Institution — Breakdown by state of every responding institution to the IEP survey. Variables include the unique NRC code, institutional name, city, state, 1994/95 IEP student totals, 1996/97 IEP student totals and percent change.
3. APP-C-97: Foreign Scholar Enrollment by Institution — Breakdown by state of every responding institution to the Foreign Scholar Survey. Variables include the unique NRC code, institutional name, city, state, 1995/96 foreign scholar totals, 1996/97 foreign scholar totals and percent change.
4. APP-D-97: U.S. Study Abroad Enrollment by Institution — Breakdown by state of every responding institution to the U.S. Study Abroad Survey. Variables include the unique NRC code, institutional name, city, state, 1994/95 and 1995/96 U.S. Study Abroad total and percent change.
5. TB3-0: Foreign Student Totals by Places of Origin, 1995/96 & 1996/97 — An electronic version of Table 3.0 of this volume. Foreign student totals by country for the years 1995/96 and 1996/97, percent change with countries grouped by region and sub-region.
6. TB4-1: (.txt only) Foreign Student Totals by Academic Level, 1996/97 — Foreign student totals for undergraduates, graduate students and those classified as others and totals by country for the year 1996/97. Countries are grouped by region and sub-region.
7. TB10-1: U.S. Study Abroad Totals by Places of Origin, 1994/95 & 1995/96 — An electronic version of Table 10.1 of this volume. U.S. Study Abroad student totals by country for the years 1994/95 and 1995/96, percent change with countries grouped by region and sub-region.
8. TB11-2: Intensive English Student Totals by Places of Origin, 1996/97 — An electronic version of Table 11.2 of this volume. Foreign Student totals by country for the year 1996/97 for countries grouped by region and sub-region.



9. TB12-2: Foreign Scholar Totals by Places of Origin, 1995/96 & 1996/97 — An electronic version of Table 12.2 of this volume. Foreign Scholar totals by country for the years 1995/96 and 1996/97, percent change with countries grouped by region and sub-region.

10. TB2-5PRF: Field of Study of Foreign Students by Leading Country within World Region of Origin, Selected Years, 1949/50 - 1995/96 — An update of Table 2.5 of Profiles 91/92 and in previous years. Percent of enrollment in 13 fields of study by foreign students in 28 leading places of origin and total number reported in *Open Doors* and *Profiles* surveys.

11. CNTY-FOS: Place of Origin of Foreign Students by Field of Study, 1995/96 — Percentage of foreign students enrolled in 13 fields of study for all countries and total number reported in *Open Doors* and *Profiles* surveys.

12. CNTY-SEX: Sex of Foreign Students by Place of Origin, 1995/96 — Country, percent male, percent female and total number of students reported in *Open Doors* and *Profiles* surveys.

Getting into ODSTATS

- The files on ODSTATS can be read by virtually all computer systems. Before you use ODSTATS remember to write protect the original diskette by closing the write protect tab on the diskette. If you intend to use ODSTATS directly from the diskette be sure to make a backup copy, placing the original diskette in a safe place. For DOS/Windows systems copy ODSTATS from drive A to a directory on your hard drive using the copy procedure appropriate to your system. The files on the diskette occupy over a megabyte of disk space. For Macintosh users, the superdrive will accommodate this diskette. Consult your user's manual for instructions on the use of the Apple File Exchange application, the dos-mac file translation utility provided with every Macintosh.

- ODSTATS files can be opened by any spreadsheet, database and word processing software that can read a tab delimited ASCII file or an Excel 3.0 spread sheet file. Once you have opened an ODSTATS file you can manipulate the data and export it in any way that your application allows.

- ODSTATS ".xls" files are Microsoft Excel (version 3.0) spreadsheet files. We have chosen to include the Excel files on this disk because Excel files are recognized by many other spreadsheet and database programs (including Lotus 123, Quattro Pro, Access, Paradox and Dbase) and can be easily opened in or imported to those programs. If your database program does not import Excel files we suggest you use the ASCII text, tab-delimited or ".txt" files.

Tip: Excel files can also be imported into Word Perfect version 5.1 or higher. Simply start Word Perfect and open the file with the .xls extension. Word Perfect will import the file and present it in table format. Font, page size, margins and column widths can be adjusted to make most tables fit an 11 x 8.5 inch landscape page size.

- ODSTATS ".txt" files are DOS ASCII, tab-delimited text files which can be opened in most word processing programs as well as in spreadsheet and database programs. If you choose to open these files in a word processing program, the tabs may need to be adjusted to line up properly. We recommend that these files be used for uploading to microcomputer databases or to mainframe computers.

SO NOW WHAT?

- ODSTATS was created to serve a variety of uses of which some are listed here. Let us know of your particular application!

* Developing institutional comparisons for student recruitment
* Evaluating the effectiveness of different institutional practices with respect to international students by matching ODSTATS data with other institutional data available from the College Board
* Comparing states and regional groupings of states
* Comparing city totals and major metropolitan area totals
* Examining the effectiveness of international aid policies by tracking student flows for selected countries or country groupings
* Comparing national flow data over time with institutional data on foreign students over time
* Assessing institutional strengths and focusing recruitment efforts on groups of students likely to have special interests in particular academic programs

GIVING CREDIT

- In any publication or dissemination of data based on ODSTATS or the *Open Doors* publication, please be sure to include a citation of the source.
- The suggested citation format is as follows:

Open Doors 1996/97
Report On International Educational Exchange, 1997.
Todd M. Davis, ed.
New York: Institute of International Education.

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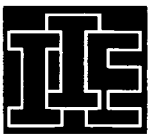

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The Institute of International Education, the largest and most experienced U.S. higher educational exchange agency, has conducted an annual statistical survey of the foreign student population of the United States since 1948. Grant support for this effort is provided by the Bureau of Educational and Cultural Affairs of the U.S. Information Agency (USIA). Results are published annually as *Open Doors*.

Open Doors reports on 457,984 international students from over 200 homelands. These students are enrolled at over 2,428 accredited U.S. colleges and universities.

Open Doors also reports on 62,354 foreign scholars who teach and conduct research at 356 of our nation's doctoral degree granting universities. Finally, through a survey of 1,206 colleges and universities that sponsor U.S. students who study abroad, a statistical portrait of the 89,242 U.S. students who studied abroad is presented. This year, *Open Doors* marks the return of the Intensive English Program Survey. Included is data from 434 programs and 43,000 IEP students.

The book provides over 170 pages of data on topics such as national origin and destination, finances, fields of study, academic level and institutional and personal characteristics of these three populations of internationally mobile students and scholars. This year, detailed information on individual student characteristics formerly published as *Profiles* is now available on the bound-in diskette in formats that are accessible by most popular word processors, database packages and spreadsheets.

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