Internationalization of U.S. Higher Education

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This report presents an overview of international education at U.S. colleges and universities. Funded by a grant from The Ford Foundation, it reviews both published and unpublished accounts of curricular and co-curricular undergraduate internationalization. Given the inconsistency and spotty availability of much of the data, formulating definitive conclusions about the state of internationalization is difficult. However, the data do suggest that in spite of an apparent growing national interest in international education, relatively few undergraduates gain international or intercultural competence in college.

**Foreign Languages**

Foreign language enrollments, as a percentage of total higher education enrollments, have declined significantly over the past 40 years, from 16 percent of enrollments in the 1960s to an average of less than 8 percent from the mid-1970s to the present. Data from 1986 indicate that just over 48 percent of college and university students sign up for any foreign language course during their degree programs. Most of these are humanities and social science majors and few reach even an elementary level of competence. Language offerings also are highly concentrated, with Spanish (55 percent), French (17 percent), and German (8 percent) accounting for the bulk of foreign language enrollments. Training in the languages of Asia (6 percent), the Middle East (less than 2 percent), and Africa (0.15 percent) is very limited. Declines in language instruction at U.S. colleges and universities in past years stand in contrast to enrollments in other developed countries, where language study continues to be emphasized.

**Study Abroad**

Despite numerous calls for increases in study abroad participation, national numbers are very low at about 0.8 percent of total enrollments per year and 3 percent of students during their undergraduate studies. While the breadth of disciplines represented and number of countries visited has increased in recent years, study abroad participants overwhelmingly remain social science and humanities majors and exhibit little ethnic or economic diversity. Another trend is the shift toward shorter periods of international study—between 1985 and 1997, the number of students spending more than a semester abroad shrunk from 18 percent to 10 percent.

**Curricula**

Effectively measuring the international content of college and university courses is difficult. For instance, while language, area study, and other such classes are widely understood to be international in nature, reaching consensus on what constitutes international content and how it should be measured has proven elusive. Despite differences in interpretation, research suggests there is much
room for improvement: Broad curricular internationalization is lacking; postsecondary graduates are poorly informed about other countries, people, and events; and offerings by institutional type are uneven, with two-year institutions providing far fewer international education opportunities than their four-year counterparts. Competency represents an even more pressing concern—one study indicates that less than 7 percent of all higher education students meet even basic standards of “global preparedness.”

**International Education Requirements**

Admission and graduation requirements represent key indicators of the importance higher education institutions attach to language and international education. Over the past three decades, the number of four-year colleges and universities requiring a foreign language for admission has dipped dramatically, from nearly 34 percent in 1965 to just over 20 percent in 1995. Just over 3 percent of two-year colleges required a foreign language for admission in 1995. Among those four-year institutions that have programs with language graduation requirements, 90 percent require a language for humanities majors, 75 percent for majors in social sciences, and only 20 percent and 17 percent in business and education, respectively. Seventeen percent of institutions have a language graduation requirement for all their students. Most colleges and universities offer limited exposure to non-Western cultures and history.

**International Awareness**

Efforts to measure the level of international awareness among postsecondary students have not been encouraging. Mirroring the wider American public, college students consistently perform more poorly on global competency and geography surveys than do students from other developed countries. The authors of one global understanding measure concluded that only a very small proportion of American students command a level of knowledge necessary for even an adequate understanding of global situations and processes.

**International Students and Faculty**

The United States has had more success in attracting students from other countries. International students accounted for almost 3 percent of all four-year U.S. undergraduate enrollments and 11 percent of graduate enrollments in 1998–99. About 43 percent are studying at the graduate level, with most attending research and master’s institutions. Enrollments at community colleges also have increased in recent years, as has international competition for foreign students. At 490,933, U.S. colleges and universities enroll more international students than any other country. The number of international scholars visiting U.S. institutions is on the rise, both in the aggregate and relative to other countries. Statistics from 1998–99 indicate that colleges and universities hosted more than 70,000 international scholars, an increase of 21 percent in just five years. Science disciplines accounted for the bulk of this inflow. Nearly 42 percent of international scholars were from Asia.

**Institutional Support for Internationalization**

The mastery of international concepts and skills is widely understood to be an important component of an effective college education. In recent years, this has translated into greater opportunities for student and faculty travel, and a number of modifications to existing curricula. Today, the vast majority of four-year institutions provide some level of senior administrative or faculty support for internationally oriented activities, such as study abroad and foreign student services. Current data about the number of faculty involved in international education are
sparse. A 1991 study on international staffing trends suggests that area studies faculty—especially those in Soviet, Eastern European, and some Asian studies—will not be replaced at self-sustaining rates. Another study suggests that the number of language faculty is declining nationwide. While reliable figures are not available, support for international initiatives does not appear to have increased significantly in recent years.

**Funding**

Federal funding for almost all postsecondary international areas has declined over the last decade. This includes support for educational and cultural exchanges, language study, and faculty research, as well as a number of other international initiatives. The lone bright spots have been the National Security Education Program (NSEP), begun in 1994 although cut significantly in 1995, and funding since 1990 for the U.S. Department of Education Higher Education Act (HEA)-Title VI Programs and Department of Education Fulbright-Hays Programs. President Clinton’s April 2000 “Memorandum on International Education Policy” outlined the need for a more robust commitment to college- and university-level internationalization efforts, and has produced new optimism that additional funding may be made available in the future. Funding at the state level also has declined, although several states have increased their involvement with international higher education in recent years. Among foundations, sweeping geopolitical changes have produced new funding priorities, with mixed results for higher education. Although monies given for international programming have doubled since the early 1980s, funding has shifted away from fundamental educational goals like educating leaders, facilitating student and scholarly exchanges, and conducting long-term scientific and policy research, and toward more short-term, practical interventions intended to address crisis issues. It appears that the new priorities are unlikely to facilitate internationalization.

**Employment Demands**

Outside of a few state studies, little detailed information exists about the employment market’s needs for workers with international expertise. If recent shifts at a number of federal agencies are any indication, however, there is a growing demand for workers with foreign language skills. Although only anecdotal evidence exists to support a similar rise in interest for cross-culturally competent employees in the private sector, it is reasonable to expect that a burgeoning demand exists there as well.

**Attitudinal and Experiential Data**

Attitudinal and experiential data are key to understanding campus culture related to internationalization. Unfortunately, very few data of this nature are available for college and university students and staff. One important comparative survey of university faculty indicates that U.S. scholars regard international academic activity—work, research, and collaboration—as less important than do their foreign counterparts, although it indicates nothing about the importance they attach to introducing international content into the undergraduate curriculum. Asked for their opinion on the topic, most senior administrators answered that an understanding of international affairs was very or moderately important for undergraduates. There are limited attitudinal or experiential data on college and university students at the national and institutional levels. In a recent survey of high school seniors by the Art & Science Group, studentPOLL, however, 48 percent expressed an interest in participating in study abroad. A recent American Council on Education (ACE) national survey shows strong public support for internationalizing U.S. higher education, with the majority of
respondents indicating that students should be required to study abroad and learn foreign languages.

Conclusion
International education at U.S. colleges and universities is a poorly documented phenomenon. Many of the data available for analysis are methodologically suspect, inappropriate for comparison, and/or too outdated to be of much contemporary value. When carefully scrutinized as a whole, however, a snapshot of the state of internationalization emerges. Unfortunately, this picture leaves much to be desired: Foreign language enrollments are low; international courses constitute only a small part of college and university curricula; study abroad, although increasingly available in a variety of contexts, remains an under-valued and underutilized means of instruction; internationalization as an institutional concept worthy of campus-wide integration is rare; and most graduates are ill-prepared to face the global marketplace of employment and ideas. Indeed, this review suggests that internationalization in the United States has not improved from the low levels found when ACE carried out its general assessment in 1986–87. The challenge to higher education institutions is clear. We need to increase the participation of students in international programs, reshape and internationalize the curriculum and co-curriculum of our higher education institutions, and develop a comprehensive international agenda for undergraduates across the curriculum. Now is the time to begin better preparing our graduates for productive roles in a world of new and rapidly changing realities.
Internationalization of U.S. Higher Education
Preliminary Status Report 2000

In an increasingly interconnected and complex world, most U.S. colleges and universities acknowledge the need to equip students with skills and knowledge that will allow them to function effectively across cultures and nations. Nevertheless, there is little evidence that this is being done. While most institutions acknowledge the need to be responsive to globalization, this preliminary review suggests that there have been few significant advancements in internationalization at U.S. postsecondary institutions since the American Council on Education (ACE) last reviewed the state of international education 12 years ago. By all appearances, with a few notable exceptions, efforts to internationalize have to date been more symbolic than real. Though the data are far from complete (and we hope to provide a fuller picture in the future), our findings suggest that there is serious cause for concern.

What do we know about the state of international education in the year 2000? What can we say about internationalization of the undergraduate curriculum? What changes have occurred since ACE studied international education in 1986–87? To get a general sense of what has transpired in recent years, we have examined both published and unpublished material on the internationalization of the undergraduate curriculum and co-curriculum. We found less data on internationalization at the national level than we had hoped. Some regional and institutional studies have been very useful for this effort, but much of the recent material is anecdotal. The picture that emerges, though incomplete, indicates that we have much work to do—few institutions have made a major effort to respond comprehensively to the demands of the new global order. Our review suggests both the need to collect more data in areas in which we have inadequate information and the importance of moving quickly to improve the quality of international programs in U.S. undergraduate education. That effort can be facilitated by building on the successes of institutions that have already enhanced their international programs and by developing new approaches to the internationalization of the curriculum and co-curriculum.

Foreign Languages

Significant current information exists on the study of foreign languages, especially enrollment information collected by the Modern

This report is part of a project entitled, “Mapping the Landscape: A Status Report on the International Dimensions of U.S. Higher Education,” which is supported by a grant from The Ford Foundation. It has significantly benefited from the contributions of ACE staff members Barbara Turlington, Director, Office of International Education, Laura M. Siaya, and David E. Engberg, as well as from the suggestions and comments of a number of other ACE staff and members of the project’s advisory board. Material on federal, state, and foundation funding is based on a report prepared for the project by Miriam A. Kazanjian, consultant, International Education and Government Relations, August 10, 2000.
Language Association (MLA), data on Advanced Placement (AP), and evidence from two studies of transcripts using U.S. Department of Education data. The findings from this material are not encouraging. While absolute numbers of students studying foreign languages have increased, the most recent data show that aggregate college and university language enrollments continue to decline from a high of 16 percent of total enrollments in the 1960s, to an average of less than 8 percent from the mid-1970s to the present (see figure 1, Modern Foreign Language Enrollments).*

While the most recent MLA data show a slight increase in the number of students enrolled in modern foreign languages since 1995, language enrollments continue to decline from the highs of the 1960s.3 The drop in college and university language enrollments as a percentage of total enrollments may be offset somewhat by the increase in language study in secondary schools, which has gone from 28 percent of enrollments in 1970 to 42 percent in 1994.4 We also know that the number of AP tests given in the major languages (French, German, and Spanish) has increased substantially from 1990 to 1999.5 The increase over this period has been 40 percent for French, 57 percent for German, and 111 percent for Spanish. The total number taking the AP language tests in 1999 was 35,323—approximately 3 percent of the total number of high school language students.6 About half those taking the AP examination received language credit at the undergraduate level.7 While some people have suggested that AP testing is being used to avoid college and university language study, the data suggest otherwise. More than half of all language AP students enroll in language courses at the

*Percentages over 10 have been rounded.

Figure 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Enrollments</th>
<th>MFL Enrollments</th>
<th>MFL as % of Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>3,789,000</td>
<td>608,749</td>
<td>16.1</td>
</tr>
<tr>
<td>1965</td>
<td>5,920,864</td>
<td>975,777</td>
<td>16.5</td>
</tr>
<tr>
<td>1968</td>
<td>7,513,091</td>
<td>1,073,097</td>
<td>14.3</td>
</tr>
<tr>
<td>1970</td>
<td>8,580,887</td>
<td>1,067,217</td>
<td>12.4</td>
</tr>
<tr>
<td>1972</td>
<td>9,214,820</td>
<td>883,222</td>
<td>10.5</td>
</tr>
<tr>
<td>1977</td>
<td>11,285,787</td>
<td>777,691</td>
<td>7.8</td>
</tr>
<tr>
<td>1980</td>
<td>12,096,895</td>
<td>922,439</td>
<td>7.3</td>
</tr>
<tr>
<td>1983</td>
<td>12,464,661</td>
<td>960,588</td>
<td>7.7</td>
</tr>
<tr>
<td>1986</td>
<td>12,503,511</td>
<td>960,588</td>
<td>7.7</td>
</tr>
<tr>
<td>1990</td>
<td>13,818,637</td>
<td>1,138,880</td>
<td>8.2</td>
</tr>
<tr>
<td>1995</td>
<td>14,261,781</td>
<td>1,096,603</td>
<td>7.7</td>
</tr>
<tr>
<td>1998</td>
<td>14,590,000</td>
<td>1,151,283</td>
<td>7.9</td>
</tr>
</tbody>
</table>

Source: Data adapted from MLA Data compiled from the Digest of Education Statistics, published by the National Center for Education Statistics, U.S. Department of Education. Prepared by Laura M. Siaya, American Council on Education.
postsecondary level, and they are more than twice as likely to take language courses as non-AP students.8

What percentage of undergraduate students enroll in foreign language study? Lambert’s findings, using 1986 transcript data, showed that 48 percent of students took some foreign language courses in college.9 Data from 1972–93 Department of Education transcript studies10 indicate a much lower language study total at 27 percent.11 The Department of Education data are from two samples, one from roughly the same period and the other from a slightly earlier period when foreign language enrollments were higher. Thus, the substantial difference between the Department of Education total and Lambert’s finding is puzzling and should be explored further. We do not have more recent transcript data on students taking languages, but given the relative stability of language enrollments between 1977 and 1998, the participation rate is unlikely to have increased much since 1977.

These findings indicate that the majority of U.S. college students are not taking any courses in foreign languages and even fewer enroll in languages beyond elementary levels. The highest level of instruction for more than 40 percent of those who took courses in foreign languages was the elementary level12—yet another indication of the limited exposure of U.S. students to languages.

Of those students who take foreign languages in high school and/or as undergraduates, what do we know about their language competence? This important question is difficult to answer because data are limited. A national language competence testing project initiated by the Educational Testing Service (ETS), with pilot tests in Spanish and Russian, was dropped because of lack of demand. Some universities carry out their own competency testing, but the results seldom are reported and the tests are usually unique to each institution.

A very useful approach to measuring student language competence is provided in the recent analysis of 1981–93 National Center for Education Statistics (NCES) transcript data by Adelman. In an attempt to standardize how competency is measured, Adelman proposes a scale that measures students’ competence based on years of language study in high school and college, or a combination of both.13 The measure is based on seat time rather than performance. For example, one acceptable combination is eight credits of advanced foreign language study in college. This assumes prior language study with passing grades (a measure of competence) and at least two advanced language courses.

Adelman reports that only 18 percent of bachelor’s degree recipients across the country meet his test of “basic language competence.” That is less than half the number of students taking languages at college and university levels. Taken in the context of the total undergraduate student population, this measure of competence shows that only one out of six undergraduates achieves a modest level of language competence.14

Which students are gaining language competence? In what fields are we training the majority of competent language learners? Adelman breaks down language competence further by major. The results are not surprising, with humanities having the highest level of competence, at 49 percent of majors. For the social sciences, the level is 32 percent; 32 percent in the physical sciences; 23 percent in the life sciences; and 18 percent in math and computer sciences. The results show that 8 percent of business majors, 7 percent of engineering and architecture majors, and 6 percent of education majors display language competence.15 The latter is a cause for concern in that teachers are powerful role models for their students, and without language training themselves they are unlikely to instill excitement about languages in their students.
What languages are studied? How broadly do U.S. colleges and universities cover the wide array of world languages? The popularity of Spanish has been growing over several decades (see figure 2, Enrollments in Spanish Compared to Other Languages). French enrolled 34 percent of language students in 1968, compared to 32 percent enrollment in Spanish, but Spanish had eclipsed French by the 1980s. In 1998 Spanish was the choice of 55 percent of language students, followed by French with 17 percent, German with 8 percent, and Italian and Japanese each with 4 percent. This is not surprising given the large number of people who speak Spanish in the United States, in addition to our geographic proximity to Latin America.

Looking at the 12 most popular languages taught in the United States, we get a sense of the narrow focus of postsecondary language study (see table 1, next page, The 12 Most Commonly Taught Languages as a Percentage of Total Enrollments by Year). Following Spanish, the second focus is on other major European languages, at approximately 35 percent of the total. That is followed by Asian languages, at 6 percent of the total. Languages of the Middle East—Arabic (0.5 percent) and Hebrew (1.3 percent including Biblical Hebrew)—make up less than 2 percent of the total. American Sign Language is 1 percent of enrollments, with “other languages” making up 1.5 percent of registered students. The languages of Africa (excluding Arabic, a small part of the total noted above) constitute only 0.15 percent of enrollments. Hausa (spoken by about 50 million people—equivalent to one and a half times the population of Canada) and Swahili (a lingua franca of East Africa) had enrollments of only 43 and 1,241 students, respectively. The lack of training in the languages of three major

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**Figure 2**

*Enrollments in Spanish Compared to Other Languages, 1960–1998*

<table>
<thead>
<tr>
<th>Year</th>
<th>Other Languages (in Thousands)</th>
<th>Spanish (in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>490.06</td>
<td>178.69</td>
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<tr>
<td>1968</td>
<td>708.23</td>
<td>364.87</td>
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<td>1980</td>
<td>498.31</td>
<td>379.98</td>
</tr>
<tr>
<td>1986</td>
<td>549.30</td>
<td>411.29</td>
</tr>
<tr>
<td>1990</td>
<td>604.94</td>
<td>533.94</td>
</tr>
<tr>
<td>1996</td>
<td>490.32</td>
<td>606.27</td>
</tr>
<tr>
<td>1998</td>
<td>494.69</td>
<td>656.59</td>
</tr>
</tbody>
</table>

Prepared by Laura M. Siaya, American Council on Education.
parts of the world—Asia, Africa, and the Middle East—is striking and suggests another major area of weakness in language preparation.

The decline in language study at U.S. colleges and universities contrasts with that of most other developed countries. Even Britain, which has seen a decline in demand for language specialists, has experienced an increase in the number of students taking languages as part of a degree, and has added specialized courses such as “French for Lawyers,” “Spanish for Chemists,” or “German for Engineers.” In Germany, 85 percent of students reported that their English was very good to satisfactory. Forty-six percent said they had good or very good abilities in one other foreign language. Ten percent said they had good or very good abilities in two or more languages. American students are far behind their German and other European counterparts in foreign language proficiency.

**Study Abroad**

Although recent data about participation in study abroad programs show a modest increase over the previous year, overall numbers are very low at about 3 percent of students during their undergraduate career or 0.8 percent of total enrollments in a given year (113,959 in 1997–98). This is a far cry from the Presidential Commission’s target of 10 percent by 2000 (see figure 3, next page, U.S Students Who Study Abroad as a Percentage of Total Enrollment Rates).

Nationwide, some colleges and universities do have robust participation numbers, however. For instance, more than 22 percent of Middlebury College and 15 percent of Macalester students study abroad. At Beaver College, an international study

### Table 1

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>0.1</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
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</tr>
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<td>1.7</td>
<td>1.6</td>
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<td>French</td>
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<td>26.9</td>
<td>27.4</td>
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<td>18.0</td>
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<tr>
<td>German</td>
<td>19.2</td>
<td>13.7</td>
<td>12.1</td>
<td>11.3</td>
<td>8.5</td>
</tr>
<tr>
<td>Ancient Greek</td>
<td>1.7</td>
<td>2.4</td>
<td>1.8</td>
<td>1.4</td>
<td>1.4</td>
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<tr>
<td>Hebrew</td>
<td>0.9</td>
<td>2.1</td>
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<td>1.1</td>
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<td>Italian</td>
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<td>4.1</td>
<td>4.2</td>
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<tr>
<td>Japanese</td>
<td>0.4</td>
<td>1.2</td>
<td>2.3</td>
<td>3.9</td>
<td>3.9</td>
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<td>Latin</td>
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<td>Portuguese</td>
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<td>0.5</td>
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<td>Russian</td>
<td>3.6</td>
<td>2.6</td>
<td>3.4</td>
<td>3.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Spanish</td>
<td>32.4</td>
<td>41.0</td>
<td>41.0</td>
<td>45.1</td>
<td>53.2</td>
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<tr>
<td>Other</td>
<td>0.7</td>
<td>1.5</td>
<td>1.4</td>
<td>1.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Total Registrations</td>
<td>1,127,363</td>
<td>924,837</td>
<td>1,003,234</td>
<td>1,184,100</td>
<td>1,138,772</td>
</tr>
</tbody>
</table>

program is offered annually to all members of each freshman class. Participation rates in recent years have grown to nearly two-thirds of all enrollees.

Of those students who go abroad, the vast majority go to Europe (64 percent, down from almost 80 percent in 1985), demonstrating greater breadth in study abroad experiences than previously. Almost 23 percent of students go to Britain. Latin America is the second major region of choice for study abroad with 16 percent, followed by Asia with 6 percent. Africa received 3 percent of study abroad students.26

One encouraging change over the last decade is the increased breadth of disciplines represented. For example, the number of study abroad students majoring in business increased from about 11 percent to 16 percent since 1985 and those in technical fields rose from about 7 percent to 12 percent. The largest number of students continues to be from humanities and social sciences, representing about 35 percent of the total. Forty-two percent of those who go abroad are from research institutions. Women continue to make up about 65 percent of participants, while minorities constitute 16 percent.27

A notable trend is the shift toward shorter periods of study abroad. While in theory shorter stays abroad might make it possible for many more students to experience foreign study, this has not happened. In addition, a shorter experience is likely to have less depth and impact. In the last 15 years, the number of students spending more than a semester abroad has dropped from about 18 percent to 10 percent. About 34 percent spend a summer term abroad; around 54 percent spend one semester or less in international study programs.28 The current rate of participation is disappointing, especially in contrast to the 490,900 international students who are enrolled in U.S. institutions.

Figure 3
U.S. Students Who Study Abroad as a Percentage of Total Enrollment Rates, by Year


Note: The data in Open Doors are, in part, from the College Board Survey of Colleges for 1998/99. The rates include undergraduate and graduate enrollments, but international student enrollment numbers have been subtracted.
It is instructive to compare U.S. study abroad with that in Europe where significant emphasis and resources have been devoted to student mobility. Total student movement abroad in Europe is about 2 percent of the total student population, compared to 0.8 percent in the United States. European participation varies from lows of less than 1 percent for Finland and the Mediterranean countries, to 5.6 percent in Austria, 4 percent in the United Kingdom, and 3.6 percent in Belgium. In Germany, the current rate of student participation in study abroad is 6 percent. About 33 percent of European students who study abroad in Europe are involved in European Union (EU) programs such as Erasmus. For those students, the focus is on management (22 percent), foreign languages (21 percent), engineering (10 percent), social science (9 percent), and law (8 percent). While the EU is far from its target of 10 percent student mobility, it has achieved greater success than the United States in fostering study abroad.

International Dimensions of the Curriculum

Other than language enrollments, very little recent national data exist to show undergraduate involvement in the international curriculum. Part of the problem is ambiguity about the definition of “international curriculum.” Is it made up of courses that focus primarily on international subject matter? Are all area studies courses international? What about language courses? Do we exclude introductory foreign language courses but not advanced language courses? Are non-U.S. literature courses international or must they make cross-cultural comparisons to be international? While we will not try to solve definition problems here, we want to emphasize the ambiguity of the term. That ambiguity is reflected in the data that are available. For this review, we assume that those who gathered data were talking about the same general conceptualization of international curriculum, unless they state otherwise.

Where we are aware of differences, we have tried to show them.

The data available on student participation in international dimensions of the curriculum are limited and dated. The ACE/Lambert study (1989) found that 69.6 percent of students who graduate from four-year institutions had at least one course (nonlanguage) designated as international in content, with the average number of such courses being 2.3 per student. In contrast, of those with associate’s degrees from two-year institutions, only 21 percent had any international courses. Lambert found that while a very large number of internationally oriented courses were offered on campuses, international content was more common in elective than general education courses.

Adelman’s analysis of 1981–93 NCHES transcript data provided another indicator of student participation in the international curriculum. Adelman identified students with more than four undergraduate credits of international studies as meeting a minimal qualification for inclusion among those with significant preparation in international studies. A very small number of students (14 percent) met these criteria. Why is Adelman’s finding so much lower than Lambert’s? Primarily because Adelman’s threshold is higher. Making the primary cut-off “more than four credits” excludes students who took a single course of three or four credits, the course credit norm at most institutions. This results in a lower level of participation for Adelman—below even Lambert’s lowest tally of 21 percent for two-year institutions. In effect, the Lambert data showed a broad range of contact while the Adelman findings gave a sense of the depth of knowledge. Their data sets are, on average, also more than a decade old. Ultimately, these two studies are not comparable and provide only an outline of the breadth and depth of international study at the undergraduate level. Indeed, the differences suggest the need for much more
detailed analysis. Since an understanding of the international dimensions of the curricula is an important area of concern in our effort to examine the state of internationalization, it is vital that additional data are collected using common definitions to obtain a clearer picture of the student experience.

Adelman further presents some very interesting comparative data on the study of Western and non-Western culture and society. The 1981–93 data suggest that most U.S. undergraduate study in international areas is narrowly focused. Adelman found that 88 percent of students had courses in Western culture. However, only 18 percent of students had any non-Western culture and society courses. Thus only a very small proportion of students got exposure to traditions and practices beyond the cultural milieu in which they lived. As with study abroad, we see a Eurocentric concentration of U.S. undergraduate education—where there is an international focus at all.

In a survey prepared for Campus Trends in 1992, college and university leaders were asked about the percentage of courses that have international content. Eleven percent reported that none of their courses had international content and 23 percent reported that only 1 to 2 percent of courses did. The lowest level of participation in international courses was at community colleges, where 26 percent reported that none of their courses had international content. An additional 32 percent reported that only 1 to 2 percent did. A 1996 national study of community colleges provides encouraging data on the increased internationalization of community college curricula. This study found that 79 percent of community colleges offered some international courses in 1996, a slight improvement over the 74 percent finding in the 1992 Campus Trends study.

At the regional level, a 1999 study by the Indiana Consortium for International Programs has produced suggestive data on the number of courses, by institution, which are regarded as international, area studies, or foreign language related. While the size of institutions and number of courses vary widely (40 at Franklin College, 200 at Butler College, and more than 850 at Purdue University), some indication of magnitude can be gained from these data by looking at the ratio of student enrollment to the number of courses offered (1:22, 1:35, and 1:43, respectively, at the above institutions). An indication of breadth can be seen by looking at the number of disciplines and programs in which international courses are offered. The data show considerable breadth and include fields such as biology, gender studies, law, business, music, environmental studies, chemistry, and computer science. Nonetheless, at the national level, we have little information about the extent of international content in the curriculum.

Major components of an internationalized curriculum are related to specific majors, minors, and certificates. These may be in area studies (e.g., Africa, Asia, Europe, Latin America, and the Middle East), international relations, or parts of disciplinary programs (e.g., comparative politics, international economics, and international law). Anecdotal evidence suggests that the number of international relations programs has increased in recent years as a consequence of student demand, but there are no solid national data. For concrete numbers, we must go back to the 1987 ACE study in which 55 percent of four-year institutions reported international majors and minors, with the total ranging from 84 percent for universities to 46 percent for baccalaureate institutions. The Indiana Consortium study in 1999 listed the number of international majors and minors for each of the participating institutions. Of this regional grouping of institutions, 90 percent had international majors or minors and 95 percent had language majors or minors.
In the end, the question is less one of how many courses, majors, certificates, or minors are available in international areas (though some reasonable number are necessary to afford students a variety of options), than of whether or not students enroll in the language and international courses that are available. Here again, the Adelman study painted a disturbing picture of enrollment patterns and, in the long run, of global competence. Adelman defined two levels of “global preparedness.” The higher level includes study abroad, four or more credits of international studies, and foreign language competence (as defined earlier). The less demanding level of “global preparedness” omits study abroad, but includes the same measures of international studies and languages. Adelman’s findings suggest that the levels of undergraduate competence are very low indeed. Less than 2 percent of students met his high competence measure and less than 7 percent met the lower standards. Most of the students (91.3 percent) met none of the requirements set out for language, international studies, or study abroad.41

**Academic Requirements**

One indication of the importance colleges and universities attach to language and international education is whether or not they are required for admission, specific degrees, or graduation. The number of colleges and universities requiring language for admission has declined significantly since 1965, when 33.6 percent of four-year institutions had foreign language entrance requirements. By 1995, the total had declined to 20.7 percent. While there was an increase in the numbers from 1982 to 1995, it has not returned to the levels of 1965 (see figure 4, Entrance and

---

**Figure 4**

**Entrance and Degree Language Requirements, by Type of Institution and Year**

<table>
<thead>
<tr>
<th>Year</th>
<th>Entrance Requirement for Four-Year Institutions</th>
<th>Degree Requirement for Four-Year Institutions</th>
<th>Entrance Requirement for Two-Year Institutions</th>
<th>Degree Requirement for Two-Year Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965–66</td>
<td>33.6</td>
<td>88.9</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1970–71</td>
<td>27.4</td>
<td>76.7</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1974–75</td>
<td>18.6</td>
<td>53.2</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1982–83</td>
<td>14.1</td>
<td>47.4</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1987–88</td>
<td>20.3</td>
<td>58.1</td>
<td>3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>1994–95</td>
<td>20.7</td>
<td>67.5</td>
<td>18.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>

Prepared by Laura M. Siaya, American Council on Education.
Degree Language Requirements, by Type of Institution and Year). These findings correspond closely to those of Andersen’s ACE study that found 16 percent of four-year institutions had a language requirement for admission.

The number of four-year institutions with language requirements for a degree also has declined from 89 percent in 1965 to 68 percent in 1995. In a 1987 ACE study, Andersen reported that 66 percent of four-year institutions had a language requirement for graduation in some disciplines (about the same as the 68 percent in the ADFL study). Andersen also noted that only 17 percent of these institutions had a language graduation requirement for all students. Of those institutions with requirements, 90 percent pertained to humanities majors, 75 percent to students in social sciences, 20 percent to business undergraduate majors, and 17 percent to education majors. We have no reason to think that this pattern has changed substantially since 1987.

Very few two-year institutions reported a foreign language entrance requirement for admission—3.4 percent in 1987; 3.2 percent in 1995. Over the same period, the number of two-year colleges with language requirements for degrees has increased slightly from 18 percent in 1987 to 23 percent in 1995. Existing data on degree requirements do not tell us much about the breadth of these requirements or the percentage of the student body affected by them.

Beyond language, most four-year institutions report some requirements for international courses. The Lambert study showed that 77 percent of four-year institutions reported some international content in their general education requirement. For 47 percent of those, it was Western history or civilization; for 35 percent, it was world history or culture; 29 percent distributed the requirement among a number of international possibilities; and slightly more than 20 percent required non-Western history, civilization, or culture. Although the percentage of institutions with an international requirement was high, the fact that it could be met for almost half of them with Western civilization courses suggests that exposure to non-Western cultures and history was limited. It would be useful to know whether this has changed since 1987. It would be especially important to know what percentage of institutions lack foreign language and international course requirements.

**International Awareness**

Most of the efforts to measure the level of international awareness of students and the general public were carried out in the 1980s. These studies paint a very bleak picture of international knowledge. The most comprehensive study, which was conducted by the Educational Testing Service (ETS), found that:

Seniors achieved an average score of only one-half of the knowledge questions correct, while the average freshman and the average student at two-year institutions got only about 40 percent of them correct. Less than 15 percent of the seniors and less than 10 percent of the freshmen and two-year students got more than two-thirds correct.

The authors concluded: “This suggests that a very small proportion of the students have the level of knowledge necessary for an adequate understanding of global situations and processes.” The results of the ETS study suggested that college students learn little about international affairs from their undergraduate education and questioned whether or not colleges and universities had any impact on the international education of students.

The ETS study of international knowledge was replicated at Ohio University in
The Ohio study showed an increase in knowledge between freshman and senior years, but one that was too small to be encouraging. The results of both surveys provoked some controversy about the questions asked—some people contended they were too difficult—and about the utility of measuring contemporary knowledge as an indicator of internationalization.

A 1988 National Geographic Society survey, *Geography: An International Gallup Survey*, is equally discouraging in its findings about U.S. global knowledge—especially when compared to the responses of citizens from other countries. While this survey polled not just undergraduate students but a range of U.S. respondents, we can isolate data for people between the ages of 18 and 24. Overall, U.S. citizens had lower scores than their counterparts in other countries. In identifying countries on a world map, U.S. 18-to-24-year-olds fared worse than the citizens of any other country in the study, which included Sweden, Germany, Japan, France, Canada, the United Kingdom, Italy, and Mexico. Even among people who had a geography course, U.S. respondents did poorly, with only Mexico having a lower score among the 18-to-24-year age cohort.

**International Students and Faculty**

Students and faculty from other countries represent a pool of potentially rich resources for campuses. Some institutions make a major effort to recruit international students to enhance the international presence on campus. In addition, many institutions see foreign students as an important source of enrollment and revenue. Most international students are funded from outside the United States, with 70 percent covering the costs of their education, usually from personal or family sources. It is estimated that international students annually bring more than $13 billion into the U.S. economy.

We have good data from the College Board Annual Survey on the numbers of international students studying in the United States. In the 1998–99 academic year, 490,933 international students studied in the United States, representing 3 percent of four-year undergraduate students and 11 percent of graduate students. They are widely dispersed throughout the United States, although most are concentrated in 10 urban areas. About 43 percent of international students are studying at the graduate level, with the majority attending research and master’s institutions. In recent years an increasing number of international students have enrolled at community colleges. While the potential contribution of international students to the undergraduate international educational experience is high, only a few colleges and universities have programs designed to integrate them into their institution’s international activities.

In absolute terms, the United States has the highest number of international students of any of the receiving countries. However, at 4 percent of all U.S. enrollments, the proportion of international students in the United States is not particularly high when compared to other developed countries. In Switzerland, for example, 16 percent of undergraduates are international students; in Australia the total is over 12 percent, while it is slightly over 11 percent in Austria and the United Kingdom. Japan, on the other hand, has less than 1 percent international students.

The number of international scholars on our campuses continues to increase. In 1998–99, there were 70,500 international scholars in the United States. This is an increase of 21 percent from only five years ago. Most of them (over 80 percent) were doing research, with 20 percent teaching. Of the total, over 68 percent were in the sciences and engineering, 25 percent in the health sciences, 15 percent in the biological sciences,
15 percent in the physical sciences, and 13 percent in engineering. The next largest number (4 percent) were in social sciences and history, followed by 3 percent in agriculture. Of this total, 42 percent were from Asia, followed by the United Kingdom with 5 percent, and Canada and France with 4 percent. The largest number of scholars was from China, with a total of almost 12,000 scholars (17 percent of the total).55

While many U.S. institutions involve international scholars in campus programs, we do not have national data about the ways they are incorporated into campus programs, nor about the breadth of their participation. Lacking adequate data, it is hard to draw conclusions about the impact of international scholars on undergraduate education. Certainly their presence provides some diversity. Nonetheless, the fact that almost 70 percent are in the sciences, with 80 percent of those doing research, suggests that contact with undergraduate students is minimal. On the other hand, over 14,000 international scholars are involved in instruction, representing 3 percent of total full-time instructional staff.56 Given the breadth of institutions hosting these scholars, their impact should be substantial. While some colleges and universities involve visiting scholars and international students in their international programs in formal and systematic ways, this is not generally the case. Research in this area would be useful to gain a better understanding of the long-term impact of international students and faculty on institutions, their linkages abroad, faculty ties, their costs, and benefits.

Institutional Support for Internationalization

Increasingly, college and university leaders are emphasizing a commitment to internationalization and its importance on their campuses. Many institutions highlight international studies in their mission statements and strategic plans. In the 1987 ACE study, 89 percent of senior administrators reported that the acquisition of knowledge about, and understanding of, international affairs were important for their institution.57 A Canadian survey58 of senior administrators in 1999 found that 94 percent regarded internationalization as a priority. If questioned today, we would expect a similar response rate in the United States. The key issue is how this rhetoric is translated into practice. How is a public commitment reflected in the allocation of financial and human resources, recruitment and tenure decisions, scholarships, and other support for international programs?

ACE data from 1987 suggested that the commitment to internationalization had increased in comparison to that during the previous five years (1982–87). Two-thirds of institutions reported greater opportunities for U.S. students to study abroad. About half the four-year institutions noted greater opportunities for faculty travel abroad. A little over half reported increased curriculum development, the hiring of new faculty with international expertise, and an increase in the size of the international collection in their libraries. Almost half reported increased integration of international material into regular courses.59 We do not know if this pattern continued after 1987.

Staffing and International Programs

There is very little information about the number of faculty available to staff the international curriculum and co-curriculum or about the level of support staff for international programs. The 1987 Andersen data provide a limited picture of institutional support staff for international programs. The vast majority of four-year institutions had some level of senior administrative or faculty support for internationally oriented activities. At community colleges the level of support was lower, with only 38 percent providing staff. The most common area of
institutional support was for administrative and support staff for foreign student services—provided at 75 percent of baccalaureate colleges and 94 percent of research universities. Slightly more than half the institutions had administrative support for foreign language instruction; about 73 percent reported having administrators for study abroad programs. The level of staffing in this area at community colleges was considerably lower, with only 22 percent of institutions reporting such staffing. Most institutions also had administrators for institutional linkages abroad and many (37 percent) for the international studies curriculum. More than half of these administrators were part time. 60

Little information is available about the number of faculty members engaged in international education. We know that recruitment at most U.S. institutions was affected by severe budget pressures from the early 1980s to the mid-1990s, and we expect that this had a negative impact on both new hires in international areas and on the replacement of staff who retired or departed for other reasons. The budget crisis coincided with a significant bulge in the cohort of faculty members between 50 and 65 years of age. Area studies faculty made up a disproportionately large number of people in this age group, partly as the result of significant growth in area studies from the 1950s to 1970s. Thus, to the extent that faculty losses were not replaced, the impact on international education would have been disproportionately large.

One of the few studies of staffing in international education was undertaken by the National Council of Area Studies Associations (NCASA) in 1991. The NCASA report looked at existing faculty positions in five areas, examining expected retirements, numbers of students in the pipeline, and projections about the likelihood of replacements for faculty losses (for faculty over age 55 at the time of the study). The study showed that two-thirds of the respondents expected to be replaced on departure. Replacement estimates ranged from a low of 51 percent in Middle Eastern studies to 86 percent in Latin American programs. If these estimates were correct, one-third of the faculty in major area studies programs would have been lost over the 10- to 15-year period from 1991 to 2005. Since the expected retirement rate in these programs was 38 percent of total staff between 1990 and 1999, and expected attrition was one-third, we would expect about 13 percent of those losses to have shown up by 2000. Unfortunately, we do not have current data to verify the predictions. 61

In most of the areas included in the study, the number of Ph.D.s in the pipeline was greater than the expected losses, although in several cases the difference was small. The African and Latin American programs seemed to be the best able to replace losses. A shortfall of replacement faculty was predicted for Soviet and Eastern European studies and for some areas of Asian studies. Almost 43 percent of Soviet and Eastern European studies faculty expected to retire or depart between 1990 and 2000, while 41 percent of those in Asian studies expected to leave by that time. That sharply contrasts to overall expected faculty departures in humanities and social sciences during roughly the same period, 62 which were at about 18 percent of the total. In Asian studies, the demand for new faculty was also skewed—at an annual professional meeting, 40 percent of the jobs advertised were for Japanese language instruction and 50 percent of the interviews were in that area. 63

In gauging the accuracy of these projections, we consulted with a number of people in area studies. There was general agreement that losses were sustained as predicted overall, and that they resulted in a significant decline in area studies expertise and capacity. One or two people suggested that replacements were hired in most instances but noted that a large
proportion of new hires had substantive international interests without language expertise or much area training. Others acknowledged the losses but suggested that area studies were “out of fashion” and that new people replaced losses with expertise in international business, law, and other professions. No one suggested that growth had taken place in faculty positions in the international area. Given the growth in student enrollment, even constant numbers would produce a decline in staff capacity. Only additional research will clarify these changes.

Several recent studies have noted a decrease in the number of language faculty nationwide. One report suggested that almost half of foreign language departments during the 1990–94 period made changes in staffing and course offerings because of a shortage of teaching staff. These conclusions were based on interviews rather than actual statistics, but general agreement among observers affirm the decline. That would be in keeping with other evidence on language instruction. Nonetheless, we need hard data on staffing to verify or counter the assumptions among language faculty and administrators about the loss of teaching staff.

Financial Support for International Programs and Activities

Not surprisingly, there are virtually no data on overall institutional financial commitments to international education. The 1995 ACE Campus Trends reports the results of a survey that included several questions about financial support for specific program areas related to internationalization. They included institutional funding for faculty travel, research abroad, release time to develop courses with an international perspective, student study abroad, and support for students from other countries. A significant percentage of the respondents replied positively when asked whether or not their institutions provided such funding from institutional sources (see table 2, Institutional Funding of Specific International Activities). About a quarter of institutions noted increased levels of funding over those in 1990, although total funding amounts were not recorded. As would be expected, funding levels were somewhat lower in two-year colleges than in comprehensive and research institutions.

Beyond these data, there is only spotty institutional evidence of financial allocations and infrastructure support for international

### Table 2

**Institutional Funding of Specific International Activities**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage of Institutions Providing Funding Activity</th>
<th>Percentage of Institutions with Increased Funding Since 1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing institutional financial support for faculty travel abroad</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>Providing institutional financial support for faculty to conduct cross-national research</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Providing financial support or released time for faculty to develop courses with an international perspective</td>
<td>34</td>
<td>21</td>
</tr>
<tr>
<td>Providing institutional financial support for U.S. students to study abroad</td>
<td>30</td>
<td>21</td>
</tr>
<tr>
<td>Offering institutional support to students from other countries</td>
<td>38</td>
<td>22</td>
</tr>
</tbody>
</table>

programs. Andersen collected infrastructure data about library holdings in 1987, focusing on newspapers and periodicals, and asking institutions if the size of their international library collections had increased in the previous five years. Ten percent of community colleges reported an increase, as did the majority of four-year institutions, with 75 percent of research institutions reporting increases.65

Overall, we know very little about the level of institutional support for international education and whether it has decreased or increased in recent years. There are indications of modest increases in some areas, although we do not know how large they were. Recent discussions with chief academic officers about funding for international programs lead us to suspect that funding has remained relatively constant at best over the last decade at most institutions—but more likely, it has decreased in real terms. However, lacking solid data, we can only speculate.

Institutional Policies Regarding International Programs

Very few data are available about institutional policies regarding faculty and staff international activity. In a 1995 survey in Campus Trends, questions were asked about whether or not the institution included international activity as a factor in faculty hiring or in promotion and tenure decisions. Sixteen percent of institutions reported using international criteria in hiring, but only 6 percent said they included them as part of promotion and tenure decisions.66 An ongoing Harvard study about tenure also noted a few instances of international experience coming up in tenure review. However, these were responses to an open-ended question and thus not reliable indicators of the extent of its use or importance. Faculty and staff perceptions of benefits and costs of international activities are a key to their level of commitment to internationalization and their ability to devote time to international programs, and we know little about them.

Other Indicators of Commitment to Internationalization

Other indicators of international activity include grants, contracts, and linkages in international areas. Not all of these will have an effect on internationalization at the undergraduate level, and it is important to distinguish those that do from those that do not when assessing their impact. The faculty research that is incorporated in teaching or language instruction is a case in point, as is a grant enabling students to participate in fieldwork abroad. Unfortunately, most of the data collected to date do not help us make those distinctions. The 1987 Andersen study provides information about the percentage of institutions of various types that have grants and/or contracts focusing on international activities. The percentages ranged from 76 percent of research institutions to 10 percent of two-year colleges.67 However, we are not able to determine whether or not there were direct or even indirect links to the undergraduate experience as a result of these contracts. The question here is the extent to which grants and contracts had any spillover effect on the undergraduate curriculum.

Data on international linkages present similar difficulties in assessing whether or not they are tied to the curriculum and co-curriculum. Such assessments can be made at the time of data collection but were not attempted in the Andersen study. Campus Trends (1995) presented data about the percentage of institutions that have increased activity in developing international agreements and partnerships abroad. About half of all institutions did so, ranging from 29 percent of two-year colleges to 70 percent of research universities.68 It is probably safe to assume that most of these agreements focused on exchanges or study abroad programs, but we do not know that for certain.
We also do not know about the extent of these linkages. The Association Liaison Office for University Cooperation in Development (ALO) collected data in 1993\textsuperscript{69} that show a large number of linkages at selected institutions, though it was not systematic and thus only suggestive for our purposes. The existence of grants, contracts, cooperative agreements, linkages, and partnerships indicates an interest in international issues and areas at institutions that have them and helps fill out the picture of their international activity. In more recent years, ALO has been a major focus of linkages between U.S. and foreign institutions of higher education.\textsuperscript{70}

### Federal, State, and Foundation Support for International Education

To what extent is there external support for the internationalization of undergraduate education? Has federal, state, or private funding increased for international education? What is the level of external support? To find answers to these questions we examined federal, state, and foundation support for international education.\textsuperscript{71}

#### Federal Funding for International Education

Federal funding for most international areas has declined over the last decade. This includes support for educational and cultural exchanges, student support, faculty research, and a wide range of other direct and indirect federal support for international programs. The only bright spots have been the National Security Education Program (NSEP) begun in 1994, although cut significantly in 1995, and an increase in funding since 1990 for Department of Education Title VI Programs and for the relatively small Department of Education Fulbright-Hays Programs associated with Title VI.

Examination of federal funding trends for international education is complicated, as statistics have been compiled somewhat differently over the years. Congress does not appropriate funds for many international programs as separate line items, and the programs put under particular funding umbrellas change over time. Nonetheless, it is possible to get a fairly clear picture of the pattern of expenditures in international areas from an examination of the following three federal agencies for the 10-year period from FY 1990 to FY 2000: the Educational and

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Appropriation (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1990</td>
<td>$156.50</td>
</tr>
<tr>
<td>FY 1991</td>
<td>163.20</td>
</tr>
<tr>
<td>FY 1992</td>
<td>194.20</td>
</tr>
<tr>
<td>FY 1993</td>
<td>224.95</td>
</tr>
<tr>
<td>FY 1994</td>
<td>241.15</td>
</tr>
<tr>
<td>FY 1995</td>
<td>238.28</td>
</tr>
<tr>
<td>FY 1996</td>
<td>200.00</td>
</tr>
<tr>
<td>FY 1997</td>
<td>185.00</td>
</tr>
<tr>
<td>FY 1998</td>
<td>197.73</td>
</tr>
<tr>
<td>FY 1999</td>
<td>202.50</td>
</tr>
<tr>
<td>FY 2000</td>
<td>205.00</td>
</tr>
</tbody>
</table>

**Comparison of FY 2000 with Fiscal Year High**

<table>
<thead>
<tr>
<th></th>
<th>Current dollars</th>
<th>Constant FY 1999 Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1994</td>
<td>$241.15</td>
<td>$270.95</td>
</tr>
<tr>
<td>FY 2000</td>
<td>205.00</td>
<td>205.00</td>
</tr>
<tr>
<td>Difference</td>
<td>($36.15)</td>
<td>($65.95)</td>
</tr>
<tr>
<td>% Difference</td>
<td>(15%)</td>
<td>(24%)</td>
</tr>
</tbody>
</table>


Note: Figures for fiscal years 1998 through 2000 (but not the previous years) include salaries and expenses, which in FY 1998 were $21 million. Because of the way the figures were documented in these years, it was not possible to separate out the S&E without further investigation.
Cultural Exchange Programs in the U.S. Department of State (formerly in the U.S. Information Agency); the NSEP in the Department of Defense; and the Higher Education Act (HEA)—Title VI and Fulbright-Hays 102 (b)(6) Programs at the Department of Education. Some of these programs affect undergraduate international programs only indirectly (for example, most of the Fulbright Programs). Regardless, their national impact on undergraduate education is significant and the shifts in federal funding levels are indicative of national support.

U.S. Department of State

Most of the international programs in the Department of State and the former U.S. Information Agency (now part of State) are grouped under the heading “Education and Cultural Exchanges.” The high point in funding for the last decade was FY 1994 at $241 million.72 In constant dollars, current funding represents a 24 percent reduction since the levels of 199473 (see table 3, previous page, Appropriations History for Education and Cultural Exchanges).

Figure 5 provides a more accurate picture of funding levels, as it represents the actual expenditure data for all academic programs (excluding cultural exchanges). There has been a 43 percent reduction in funding for academic exchanges in constant dollars since the high point in FY 1994.

Figure 6 (a subset of figure 5; next page) shows the actual expenditures for the Department of State’s Fulbright Program. The high point was again in FY 1994 at about $179 million. The FY 1999 level represents a 43 percent reduction in constant dollars. It is important to note that 84 percent of the reduction in academic exchanges from FY 1994 to FY 1999 was absorbed by the Fulbright Program.

U.S. Department of Defense

Funding for the NSEP began in FY 1994, with the undergraduate scholarship and

Figure 5

Expenditure History for Academic Exchanges, in Constant Dollars (Fiscal Years 1990–1999)

![Graph showing expenditure history for academic exchanges, in constant dollars (Fiscal Years 1990–1999)]

graduate fellowship programs. Funding for the institutional grants program was first provided in FY 1995 (see table 4, next page, Expenditure History for National Security Education Program). The NSEP reached its highest funding level overall in FY 1995, about the same time the House of Representatives initiated drastic budget cuts and Congress reduced the trust fund by about $70 million. In spite of modest increases beginning in 1997, the program has not recovered from these earlier losses. Expenditures in FY 2000 were 36 percent below those in FY 1995 in constant dollars. Among its three programs, funding for institutional grants has increased slightly (by $82,083) since FY 1995, while the undergraduate scholarship and graduate fellowship funding has declined.

U.S. Department of Education
The decade’s bright spot in federal funding trends for international education is the increased level of support for the Department of Education’s HEA-Title VI and Fulbright-Hays Programs. Figure 7, next page, illustrates the appropriations figures for HEA-Title VI. Except for a slight dip in FY 1995, and one in FY 1996, and one in FY 1998, due to budget cuts, funds for the program have steadily increased since FY 1990, climbing 82 percent in current dollars and 42 percent in constant dollars. Another increase of $5 million for FY 2001 is currently pending in Congress. It is important to note, however, that while in the last decade Title VI funding has been considerably ahead of the inflationary curve, the high point in funding continues to be FY 1967 ($15.8 million). In FY 1999 dollars, that would be roughly $79 million. The $68 million level pending in Congress for FY 2001 (at the time of writing) is about 14 percent below that.

Figure 6
Expenditure History for Fulbright Programs, in Constant Dollars (Fiscal Years 1990–1999)


Note: These figures are for students, long- and short-term scholars, and teachers only. These figures do not include the Humphrey Fellowship Program, which is currently part of the Fulbright Program but was not in the early part of the decade.
Table 4

Expenditure History for National Security Education Program (Fiscal Years 1994–2000)

<table>
<thead>
<tr>
<th>Award Year</th>
<th>Undergraduate Scholarships</th>
<th>Graduate Fellowships</th>
<th>Institutional Grants</th>
<th>Totals by Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1994</td>
<td>$2,434,915</td>
<td>$2,880,201</td>
<td>$0</td>
<td>$5,315,604</td>
</tr>
<tr>
<td>FY 1995</td>
<td>2,491,350</td>
<td>2,483,300</td>
<td>2,481,577</td>
<td>7,456,658</td>
</tr>
<tr>
<td>FY 1996</td>
<td>752,752</td>
<td>1,414,104</td>
<td>2,216,853</td>
<td>4,383,914</td>
</tr>
<tr>
<td>FY 1997</td>
<td>1,132,585</td>
<td>1,353,975</td>
<td>2,054,496</td>
<td>4,541,257</td>
</tr>
<tr>
<td>FY 1998</td>
<td>1,235,536</td>
<td>1,549,813</td>
<td>2,194,132</td>
<td>4,979,710</td>
</tr>
<tr>
<td>FY 1999</td>
<td>1,329,958</td>
<td>1,616,111</td>
<td>2,456,109</td>
<td>5,402,423</td>
</tr>
<tr>
<td>FY 2000</td>
<td>1,067,850</td>
<td>1,556,175</td>
<td>2,563,660</td>
<td>5,187,929</td>
</tr>
<tr>
<td>Totals</td>
<td>$10,444,946</td>
<td>$12,853,679</td>
<td>$13,966,827</td>
<td>$37,267,495</td>
</tr>
</tbody>
</table>

Comparison of FY 2000 with Fiscal Year High

<table>
<thead>
<tr>
<th>Current dollars</th>
<th>Constant FY 1999 Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1995</td>
<td>$7,456,658</td>
</tr>
<tr>
<td>FY 2000</td>
<td>$5,187,929</td>
</tr>
<tr>
<td>Difference</td>
<td>($2,268,729)</td>
</tr>
<tr>
<td>% Difference</td>
<td>(30%)</td>
</tr>
</tbody>
</table>


Note: NSEP programs are funded from a trust fund, originally totaling about $150 million. Congress reduced the fund by approximately $70 million in FY 1994–95. These figures represent obligations committed to be spent in each fiscal year.

Figure 7

Appropriations History for HEA-Title VI (Fiscal Years 1990–1999)

Source: Congressional conference reports to the Labor, Health and Human Services, and Education Appropriations Bills, FY 1990–2000. In FY 1994, the Title IV figures include the newly funded Title VI-C, the Institute for International Public Policy. Data prepared by Miriam A. Kazanjian, International Education and Government Relations consultant, August 2000. Table prepared by Laura M. Siaya, American Council on Education.
For Fulbright-Hays,\textsuperscript{25} the increase has not been as dramatic, as table 5 shows. In fact, while it has increased by 30 percent in current dollars, this translates into an increase of only 1 percent in constant dollars. It should also be noted that the programs in the Department of Education are small in terms of absolute dollar amounts.

Overall, the most severe reduction in funding has occurred in the Department of State’s Education and Cultural Exchange programs, which represent the largest portion of federal funding for international education.

On the other hand, the emergence of NSEP and increased funding for Title VI/Fulbright-Hays programs over the last 10 years at the Department of Education are positive trends in funding for international education. It is hoped that President Clinton’s April 2000 “Memorandum on International Education Policy” will bring renewed attention to international education. In spite of the positive news in these two areas—which represent relatively small programs compared to the overall federal budget dedicated to international education—funding basically declined over the previous decade. Even the new NSEP has been cut significantly since its high point in 1995, and the 43 percent declines in funding in real terms for both the Academic Exchange and Fulbright Programs have significantly weakened those programs.

### Table 5

**Appropriations History for the Department of Education’s Fulbright-Hays 102(b)(6) Program (Fiscal Years 1990–2000)**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Appropriation (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1990</td>
<td>$5.14</td>
</tr>
<tr>
<td>FY 1991</td>
<td>5.86</td>
</tr>
<tr>
<td>FY 1992</td>
<td>6.00</td>
</tr>
<tr>
<td>FY 1993</td>
<td>5.84</td>
</tr>
<tr>
<td>FY 1994</td>
<td>5.84</td>
</tr>
<tr>
<td>FY 1995</td>
<td>5.79</td>
</tr>
<tr>
<td>FY 1996</td>
<td>4.75</td>
</tr>
<tr>
<td>FY 1997</td>
<td>5.27</td>
</tr>
<tr>
<td>FY 1998</td>
<td>5.77</td>
</tr>
<tr>
<td>FY 1999</td>
<td>6.54</td>
</tr>
<tr>
<td>FY 2000</td>
<td>6.68</td>
</tr>
</tbody>
</table>

**Comparison FY 2000 with FY 1990**

<table>
<thead>
<tr>
<th></th>
<th>Current Dollars</th>
<th>Constant FY 1999 Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1990</td>
<td>$5.14</td>
<td>$6.61</td>
</tr>
<tr>
<td>FY 2000</td>
<td>6.68</td>
<td>6.68</td>
</tr>
<tr>
<td>Difference</td>
<td>(1.54)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>% Difference</td>
<td>(30%)</td>
<td>(1%)</td>
</tr>
</tbody>
</table>


Note: All appropriations data obtained from the Congressional conference reports to the Labor, Health and Human Services, and Education Appropriations Bills, FY 1990–2000.

### State Funding for International Education

State funding for higher education dropped from about 10 percent of state budget allocations in the 1980s to 7 percent by 1995. While most state budgets have improved since 1995, the increased focus on prisons and health care has meant that the losses in higher education are not, for the most part, being restored. While we do not specifically have data on state funding for international education, it is likely that the overall decline in funding has had a proportionate, negative affect on international programs in most states. However, several states have undertaken a major effort to increase their involvement with international higher education in recent years.

Florida made international education a key element in its world trade strategy in the mid-1980s. Wisconsin and Texas have enacted new programs in recent years to support study abroad. In 1997, Governor Tommy Thompson directed the Wisconsin International Education Trade Council to form a task force on international education to evaluate current efforts and future needs relating to international education. Among
the recommendations in the report was a proposal to provide resources to allow more students to study overseas. In the 1999-2000 biennial budget, the governor requested and was allocated $1 million annually for grants to increase the number of University of Wisconsin students who study abroad. The funds provide grants of up to $2,000 to cover a portion of the costs associated with study abroad.\textsuperscript{76} In 1989, the Texas state legislature passed legislation enabling state universities to begin a student surcharge to fund study abroad, and the first study abroad scholarships were awarded in 1990. A $1 “International Education Fee” is charged to each student, each semester, for a university International Education Fee Scholarship Fund.\textsuperscript{77} Some other states may be making similar progress in enhancing international education. Nonetheless, our impression is that the level of state funding for international education has declined in proportion to the overall reduction of state support for higher education. This is another area in which we have very little information.\textsuperscript{78}

\textbf{Foundation Funding}

Foundation funding for international activities increased from 1990 to 1994, growing by about $200 million, to $966 million for all international activities. Grants specifically for international higher education initiatives were estimated to have increased from almost $90 million to a little over $116 million by 1996.\textsuperscript{79} While foundation funding is a vital part of higher education funding overall, it constitutes only 0.15 percent of total national expenditures on higher education.\textsuperscript{80}

The first comprehensive review of trends in U.S. foundation funding for international projects was conducted by the Foundation Center in collaboration with the Council on Foundations in 1997.\textsuperscript{81} Some of the major findings of the 1997 report are worth noting. No major shifts in either the share of international grant dollars, or the share of the number of grants, were evident during the study years. Roughly one in nine grant dollars and one in 11 grants went to international programs in 1990 and 1994. The amount of foundation funding for international activities has doubled since the early 1980s and U.S. funders became far more active overseas in the 1990s. Despite rapid growth, United States-based recipients received about 57 percent of all international funding in 1994, down from 67 percent in 1990. During the Cold War and through the start of the 1990s, international affairs (peace and security) was a preeminent funding area. In the 1990s, sweeping geopolitical changes caused funders to reassess their international programs, and dramatic shifts occurred in broad funding priorities. These included a greater emphasis on development, health and family planning, education, human rights, and civil liberties. Funding dropped sharply for international affairs policy and research, exchanges, and peace and security. Overall the emphasis was on short-term, practical interventions to address crises.

As Chandler points out in her recent book, \textit{Paying the Bill for International Education},\textsuperscript{82} there has been a shift in foundation priorities with a “move away from such fundamental educational goals as educating leaders, facilitating student and scholarly exchanges, and conducting long-term scientific and policy research.” Chandler notes that only three areas saw increased funding: higher education (excluding graduate and professional), international affairs, and the social sciences. Arts and culture, graduate and professional education, general and rehabilitative health, medical research, and science all decreased, as did grants for environmental protection and human rights programs. Chandler suggests that these trends are damaging to the higher education community, “which relies on foundation funding for the ‘marginal’ dollars that support flexibility and change.”\textsuperscript{83} She notes the
urgent need to support the transition to curricula, research, and graduate study designed to prepare higher education for a globalized world. Overall, foundation support continues to play a critical role in funding international education programs, although it appears that such support has not increased in recent years in those areas most likely to facilitate internationalization of the curriculum and co-curriculum.

**Employment Demands**

What are the demands of business and commerce in the international area? Are business and industry calling for more language training and greater expertise in international areas? Are colleges and universities meeting their needs? Research on the needs of government and business for people with international and language training is also limited. However, recent research on language needs for national security provides some useful information about the demand for language expertise and deficits in the supply of competent personnel. One indication of the increased demand for language expertise is the growing need of federal agencies for foreign language competence. In 1985, only 19 agencies had language requirements for some of their positions; now 67 federal agencies require language proficiency in any one of more than 100 languages. The Department of Defense alone has 30,000 jobs requiring foreign language proficiency in 70 different languages. Evidence of demand from the private sector is seen in the more than 20,000 language proficiency tests administered for business from 1992 to 1997 in more than a dozen languages by Language Testing International. In addition to the languages one would expect, such as Spanish, French, German, Chinese, and Japanese, tests covered proficiency in Korean, Hindi, Vietnamese, Tagalog, and Arabic.

Information about success in meeting demands for language competence is sketchy. However, the State Department recently reported that only 60 percent of its Foreign Service positions requiring foreign language proficiency were filled. In 1998, NATO Supreme Commander Wesley Clark stated that the military “never have enough language capabilities.” The U.S. Chamber of Commerce in Japan recently reported that less than one-third of U.S.–Japan bilateral agreements have been implemented since 1980, due partly to a shortage of personnel with competence in Japanese. Aside from these data, actual documentation of the national language deficit is limited.

While we do not have much information about business-related requirements for international expertise, it is reasonable to suspect that they have grown as well, as some of the material below indicates. The University of Texas interviewed alumni in major business firms and found growing concern about the lack of language and international training at Texas institutions, though the actual needs of business were not clear—nor was the magnitude of the demand. Data about what businesses view as major international education requirements for potential employees were reported in 1996 by John Holm, et al. The authors found that international business regards knowledge about other cultures, language skills, and knowledge of economic and political systems abroad to be the most important requirements. These skills were even more important than knowledge of business practices, marketing skills, and international finance. The authors concluded:

The clear message from all three of our surveys is that international business education requires a mix of business and liberal arts disciplines. American business leaders expect international business professionals to have a well-rounded knowledge of international business operations, be
fluent in a second language, understand the impact various economic and political forces have upon business practices, and be culturally sensitive and empathetic.91

While the focus of this study was on graduate business education needs, these conclusions are suggestive for internationalization at the undergraduate level as well. The authors conclude that basic changes are needed in higher education to meet the needs of the business community—to end the “disjuncture between the needs of the American business community and American higher education.” That will require higher education, especially the liberal arts, to rethink traditional approaches to teaching courses on international politics, culture, and society, as well as language instruction. Part of the change suggested involves a new dialogue between higher education and business. In the long run, the authors conclude, “the internationalization of the U.S. economy requires a similar, innovative response with regard to international business education.”92 Concerns expressed elsewhere suggest that the response should go beyond business and include undergraduate education as a whole.

Attitudinal and Experiential Data
Attitudinal and experiential data are key to understanding the campus culture related to internationalization. People’s attitudes are central to understanding whether or not international education is valued. For example, we know from a recent survey of high school seniors by studentPOLL93 that 48 percent of high school seniors polled, who planned to attend a four-year college, wanted to study abroad. If that is the case, why do only 3 percent do so during their undergraduate career? Is there something in our institutions that causes this marked decrease? Is it cost, academic obstacles, or faculty attitudes? Is it administrative difficulties or a sudden loss of interest? At the moment we can only guess.

Faculty and Staff
Very little data exist about faculty and staff attitudes and experience. The comparative work done by Altbach paints a disturbing picture of U.S. faculty regard for, and cooperation with, scholars from other countries—in stark contrast to other societies in the 14 countries sampled. U.S. scholars are less likely than most other world scholars to regard international activity as important. They are the least likely to work abroad, collaborate with scholars abroad, or express interest in literature from abroad. Indeed, while more than 90 percent of faculty in the other 13 countries think it important to keep up with research abroad, only 62 percent of U.S. respondents think that is the case.94

Students
There are very limited attitudinal and experiential data on college and university students, either nationally or at the institutional level. The exception to this is the work on study abroad, focusing in particular on the effects of participation in these programs. While findings are limited to specific institutions and foreign study programs, a few draw general conclusions about these experiences, suggesting improved language skills, increased knowledge about the cultures and politics of other countries, and enhanced employment prospects.95

Administrators
Some attitudinal data were collected in the Andersen study from a questionnaire sent to senior administrators. As noted earlier, it showed that most presidents and CEOs thought an understanding of international affairs was very or moderately important for undergraduates.96 In a 1996 American Association of Community Colleges study, administrators were asked about their major
challenges in international education. Thirty-two percent noted financial concerns, 12 percent staffing, and 9 percent raising international awareness on campus. Recent data from a 2000 Canadian study are instructive, with 35 percent of senior officials reporting internationalization as a moderate priority and almost 60 percent as a high priority.

The MLA collected attitudinal data about foreign languages from administrators in the humanities in 1993. Less than half of them (46 percent) reported that foreign language study was essential to a well-rounded education. Another 19 percent said it was “indispensable for all undergraduates.” Less than 1 percent said that it was a “frill that could be dispensed with.” Almost one in five (19 percent) said that foreign language was useful for all undergraduates but not essential, and another 15 percent said that it should be available to interested students. This is not a ringing endorsement for language study from the very people who are close to it. These responses may help explain the decline in language enrollments in U.S. colleges and universities.

Public Attitudes

While the data are limited on public attitudes about internationalization of higher education, what polls exist suggest public support for international education. This is in keeping with public interest in international affairs and a sense of being “citizens of the world.” A recent ACE national public opinion survey showed strong support for internationalizing U.S. higher education, with 78 percent of respondents favoring college and university course requirements on international topics, 71 percent believing foreign languages should be required for students that don’t already know one, and 75 percent stating that students should have a study abroad experience during college. Seventy-two percent indicated that students should have a work or internship experience abroad before completing their postsecondary studies.

Findings in Kull and Destler’s Misreading the Public suggest that national leaders in government, NGOs, and the press perceive strong public hostility to U.S. international involvement. Their data on public attitudes suggest this is not the case, however, with 66 percent of respondents indicating that the United States should take an active part in world affairs. The ACE public opinion survey supports this finding, with 78 percent of informants giving a similar response.

The gap between public support for international education in 2000 and the low levels of international study and competence demonstrated by students in the 1980s and 1990s is noteworthy. Why is the international dimension of the undergraduate curriculum weak? Are faculty attitudes significantly at odds with those of the general public? Are institutional policies and processes discouraging students from studying international topics and languages?
Conclusion

What conclusions can we draw from this review of existing studies? What does it suggest about the current state of internationalization in the United States? The picture that emerges is mixed. Much of the data is more than a decade old. Some of it is available only at local or regional levels. Some of the findings are ambiguous or contradictory. In addition, there are whole areas in which there are few or no data at all—as is the case of college student and faculty attitudes about international education. It is also likely that there are exciting, innovative activities going on in international education about which we are unaware—programs that are missed by traditional measures or reflect innovative techniques using the Internet or other new technology. We hope to identify such activities as we work with a number of colleges and universities on a project in which the American Council on Education will collaborate with institutions identified as outstanding in their internationalization efforts.

In one sense, we have a paradox. There are a number of exciting higher education programs that demonstrate a new, broader interest in international education—programs that reflect an understanding of the information and technological revolution which is taking place and that position graduates to be leaders in their professions and thoughtful creative participants in an increasingly complex global environment. At the same time, national data paint a disturbing picture of the state of internationalization in U.S. higher education as a whole and suggest that we are slipping even further behind the poor performance levels found when ACE carried out its assessment in 1986–87. We are teaching languages to fewer undergraduates (as a percentage of total enrollments) than we were in the 1960s, and competence levels are generally quite low.

Many of our institutions have only limited offerings in languages and international studies. Indeed, the number requiring a foreign language for admission continues to decline. It also appears that language and international staffing levels have been allowed to shrink—whether by design or by default. Additionally, the level of global competence of our students seems to be alarmingly low. Though the data are more than a decade old, the evidence at the time was overwhelming that most Americans knew little about the rest of the world.

Less than 3 percent of students study abroad at some time while undergraduates. Most college graduates are unprepared for either the rigors of international competitiveness or roles as informed citizens in a highly unpredictable world. And while we may be riding high on the technological wave we have done so much to create, we may be unprepared to ride the next one unless it emanates from our own shores. In the coming era, it seems highly unlikely that we will have a monopoly on either new discoveries or their development. Indeed, much of the creativity
of the next century is very likely to result from cooperative efforts that cross national boundaries—efforts we are increasingly ill-prepared to join.

To be sure, much of the rest of the world speaks English. Yet, in the long run, that is to their advantage—not ours. They have a kind of access to our society that we deny ourselves to theirs, given our ignorance of their languages and cultures. If we continue to evidence little interest in the rest of the world, even their use of English will not raise our level of understanding. In an era of global business, industry, and commerce, it is their graduates who are better placed to obtain the best jobs and are more likely to be in a position to take advantage of new discoveries, innovations, and advancements from both the English and non-English speaking world. In the long run, those who can move seamlessly between different nations, cultures, and languages will be positioned to capitalize on the next scientific, technological, or information revolution. Many are already better situated to be dominant global forces in the 21st century. In the glow of our current successes, we run the risk of overconfidence that could lead the United States to miss out on the next great transformations. We also run the risk of being out of touch with major social, political, and economic revolutions already underway in many parts of the world. If we fail to become effective global citizens, we may cease to be major players at all.

What is to be done? Part of our task is to understand better where we are as a nation.

Without more information about the state of internationalization we will be unable to initiate and implement strategies for effectively dealing with future challenges. Even without further proof, however, we know enough to begin to alter the state of affairs in our undergraduate programs. We need to increase the participation of students in international programs, reshape and internationalize the curriculum and co-curriculum of our higher education institutions, and develop a comprehensive international agenda for undergraduates across the curriculum. Now is the time to strengthen the preparation of our graduates for productive roles in a world of new and rapidly changing realities.
Notes


2 Of particular value is the report of the Center for the Study of Global Change, *International Resources Inventory: Summary* (Indiana University, 1999).


5 Based on personal communication with Rick Morgan, ETS, June 2000. Advanced Placement tests are scored from 1 to 5, with 3 usually regarded as the minimum score necessary to obtain credit. Some more selective institutions require a score of 4 or 5.

6 Data based on personal communication with Rick Morgan, ETS, June 2000.


8 Rick Morgan and Behroz Maneckshana, *Advanced Placement Students in College: An Investigation of Course-Taking and College Majors*, unpublished, March 2000. The authors also report that on average, AP students receive higher grades and are more likely to study abroad than non-AP students.

9 Lambert, ibid., 66. Based on transcript analysis of students in universities, comprehensive institutions, baccalaureate colleges, and two-year colleges.


12 Lambert, op. cit., 66.

13 Adelman, op. cit. Based on a combination of years of high school and college, or years of college language study, e.g., three or more years of a foreign language in high school and more than eight credits in college, or eight credits of advanced foreign language study in college.


15 Ibid., 22.

Percentages calculated using data from table 1.
Ibid., table 5.
Ibid., table 6.
Anne Sebba, “Don’t Just Talk the Talk,” *The Times of Higher Education*, June 9, 2000. Although not yet substantial, similar efforts to promote certain types of language study within specific majors are underway at colleges and universities in the United States.


IIE puts the total of students studying abroad at 9.3 percent, but that total is achieved using figures for degrees awarded in 1995 (for 1997–98 data) and is not a good reflection of the number who participate in study abroad as a percent of the potential pool. Reanalysis of the IIE data suggests the total is about 0.8 percent of students—about 3 percent of the potential pool at the university level. See Todd M. Davis, *Open Doors 1998-99: Report on International Educational Exchange* (IIE, 1999); *Campus Trends* data for 1992 suggest a figure around 2 percent based on institutional estimates (1992, p. 46).

Adelman’s analysis of transcript data from 1987–93 tends to support this figure. He found 4.1 percent of bachelor’s degree recipients taking part in study abroad, a figure that does not include community colleges that would result in a lower total.


Davis, 45, 67. Percentages were calculated using total enrollment and study abroad data, discounting foreign student numbers.

Ibid., 16, 58.
Even these data suggest the difficulty of understanding the significance of these numbers. For example, Purdue and Notre Dame have course totals listed as 856 and 984, with enrollments of 36,878 and 10,307, respectively, which yield ratios of 1:43 and 1:10, respectively. These data also do not tell us how often a course is taught. Indiana University, Bloomington, has courses across 37 departments, whereas Butler has them across six departments. While useful, this study suggests some of the problems involved in trying to understand the depth and breadth of internationalization.

These include majors and minors in area studies (e.g., African and Latin American studies), academic programs (such as international studies or international law), and disciplines (e.g., comparative politics, environmental studies, and international economics). Indiana Consortium, op. cit., ACE calculations.


Brod and Huber, op. cit.


Barrows, op. cit., 135.

See Robert B. Woyach, Understanding the Global Arena: A Report on the Ohio State University Global Awareness Survey (Ohio State University, 1988). The replicated study shows a statistically significant difference between freshmen and seniors. Seniors correctly answered approximately 59 percent of the knowledge questions, while freshmen correctly answered 49 percent.

62 Ibid., 30, 31, 46.
63 Ibid., 51.
65 Andersen, op. cit., 26.
67 Andersen, op. cit., 24.
68 ACE, Campus Trends, op. cit., 45.
70 In 1995, ALO began a modest program of linkages with U.S. and Mexican higher education institutions. That effort served as model for a broader linkage program started in FY 1998. Since 1998, they have facilitated 80 linkages between U.S. colleges and universities and overseas partners. Seven more linkages are about to be announced, as are 10 sustainability grants. For more information, link to the ALO web site <http://www.aascu.org/alo>.
71 Much of the data in this section was prepared for this report by Miriam Kazanjian, a consultant to the project. Her August 2000 report is titled Federal, State, and Foundation Funding Trends for International Higher Education.
72 Since FY 2000 expenditure data is not yet available, the comparison was made with FY 1999.
73 Appropriations data for FY 1998-2000 include salaries and expenses, which were as high as $21 million in FY 1998. Taking this factor into consideration, the reduction in funding is considerably higher than 24 percent and likely closer to 30 percent.
74 It should be noted that in FY 67 there were only three programs in Title VI, which continues to exist, compared to 10 programs today. That complicates the comparison. The three programs are the National Resource Centers, Foreign Language and Areas Studies Fellowships (FLAS), and Research and Studies. Their combined funding for FY 99 is $39.7 million, nearly 50 percent below their FY 67 high point in constant dollars. In fact, half as many FLAS fellowships are being given today as were awarded in FY 67.
75 The Fulbright programs in the Department of Education are much smaller than those in the Department of State and are generally tied to Title VI programs. The former equaled $6.6 million in 1999; the latter $101.5 million.
76 Cynthia P. Williams, Deputy Director, Center for World Affairs and the Global Economy (WAGE), University of Wisconsin, Madison.
77 If the university, for example, has a student enrollment of 25,000 students in the fall and spring semesters, that creates a $50,000 scholarship pool. Additional scholarship money is created from summer enrollments, which vary. University presidents in Texas met in Austin on July 12, 2000, to appeal to the legislators to increase the fee to $4. Before the university can charge the fee to the student body, there must be a student referendum to approve the surcharge. They report no problems getting approval from the students. Personal communication by Miriam Kazanjian with Jacque Behrens, director of International Programs, Texas Tech University, and Jerry Wilcox, International Office, University of Texas at Austin.
78 In checking with the Association of International Education Administrators, Congressional Research Service, Council of Chief State School Officers, Council of State Governments, Joint National Committee on Languages, and the National Governors’ Association, it does not appear that any comprehensive state study or survey has been
conducted in the last decade to discover state funding trends for international higher education. Miriam Kazanjian, op. cit.


80 Ibid., 53.


83 Ibid., 58.


85 Ibid., xi.

86 Ibid., 93

87 Ibid., 97

88 Ibid., 101–102.


90 Ibid., 3.

91 Ibid., 4.

92 Ibid., 7.

93 Personal communication with Rick Hesel, Principal, studentPOLL (Art & Science Group Inc., 2000).


95 See, for example, Susan Opper, Ulrich Teichler, and Jerry Carlson, *Impacts of Study Abroad Programmes on Students and Graduates* (London: Jessica Kingsley, 1990), 23–24. This study includes an attitudinal before-and-after study of 890 students in the pre-study interview (of whom 358 were from the United States), and 439 on the post-study questionnaire (of whom 140 were from the United States). While the authors determine that study abroad generally results in improved language skills, an increase in knowledge about the culture, politics, and society of the host country, and enhanced professional and employment prospects, their data did not show any other significant outcomes.

96 Andersen, op. cit., 26–27.

97 Chase and Mahoney, op. cit., 38–39.

98 Jane Knight, op. cit., 15. Figures are also given for students, faculty, researchers, and administrative staff, but they are in fact responses of senior administrators and their perceptions of the views of each group.


100 *ACE Survey of International Attitudes and Knowledge*, September 2000. This was a national random sample of 1,006 respondents 18 years of age and older. A report on this survey, to include all questions and a more comprehensive review of findings, will be published in late 2000.

101 Data from a 1999 Michigan State University (MSU) survey of Michigan residents also showed strong public support for international education, with 71 percent indicating that languages should be taught in high schools and 56 percent stating that they should be taught in colleges and universities. Seventy-four percent thought college students should be encouraged or required to


103 The project, funded by the Carnegie Corporation, is called “Promising Practices: Institutional Models of Comprehensive Internationalization.”
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