Measuring Internationalization at Comprehensive Universities

Funded by the Ford Foundation



AMERICAN COUNCIL ON EDUCATION The Unifying Voice for Higher Education

Center for Institutional and International Initiatives

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Madeleine F. Green

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Executive Summary

What strategies are common among institutions that have actively pursued internationalization? This report addresses these questions by examining the responses given by 188 comprehensive universities to an institutional survey conducted in 2001 by the American Council on Education (ACE) and funded by the Ford Foundation. Descriptive data from that national survey also were presented in the 2003 ACE report titled *Mapping Internationalization on U.S. Campuses*. This report expands on the earlier descriptive report's findings. By creating an "internationalization index," we have re-examined the data to measure internationalization along six key dimensions, and distinguish "high activity" institutions from other, less active institutions. The six dimensions of the internationalization index are:

- Articulated commitment.
- Academic offerings.
- Organizational infrastructure.
- External funding.
- Institutional investment in faculty.
- International students and student programs.

Major Findings

Overall Internationalization Scores

• On a five-point scale ("zero," "low," "medium," "medium-high," and "high"), the majority of comprehensive universities scored "medium" (55 percent) or "medium-high" (26 percent) as a measure of their overall level of internationalization. Only 1 percent scored "high."

Articulated Commitment

- Only 13 percent of comprehensive universities scored "high" in this dimension.
- The majority of comprehensive universities had guidelines to enable students to study abroad without delaying their graduation (80 percent), and highlighted international education in their recruitment literature (75 percent).
- Highly active institutions were likely to include international education in their mission statement (72 percent), have guidelines that allow funds to be used for study abroad through other institutions (72 percent), and have assessed their internationalization efforts in the last three years (69 percent). Less active institutions were far less likely to have these forms of articulated commitment.
- Although only a minority of comprehensive universities considered international work when evaluating faculty for promotion (7 percent), highly active universities were three times more likely than less active universities to do so (12 percent compared with 4 percent).

Academic Offerings

- The majority of comprehensive universities scored either "medium" (56 percent) or "medium-high" (33 percent) on the availability of internationally focused academic offerings; just 3 percent scored "high."
- The most prevalent strategy for all comprehensive universities was offering study abroad for credit (88 percent).
- Highly active comprehensive universities were likely to require students to take a general education course with an international focus (70 percent).

Organizational Infrastructure

- More than one-third (36 percent) of the respondents scored "medium-high" on having an infrastructure that supported international education (human resources and facilities dedicated to international education), and another 11 percent scored "high."
- The most prevalent strategies among all institutions were having an office that administered international education programs (92 percent), and using internal e-mail to communicate about international education (75 percent).
- Highly active universities were likely to have a system to communicate about students' study abroad experiences (81 percent), and have a campus-wide internationalization task force (79 percent).

External Funding

- Although comprehensive universities registered a wide range of scores in terms of seeking and receiving external funding from federal, state, and private sources, approximately half (47 percent) scored "zero" or "low" in this dimension. Just 8 percent scored "high."
- The majority of comprehensive universities actively sought external funds for internationalization (64 percent); the single most important source for all institutions was private funding (received by 43 percent of institutions).
- Highly active universities were much more likely than less active institutions to seek external funds for international education (95 percent), and to receive external funding from all sources: 69 percent received private funding, 46 percent received federal funding, and 26 percent received state funding.

Institutional Investment in Faculty

- The majority of comprehensive universities were weak on investment in faculty members' international education: 18 percent scored "zero" and 37 percent scored "low." Few scored "high" (5 percent) or "medium-high" (9 percent) in this dimension.
- More than half of comprehensive universities provided funding for faculty to lead study abroad programs (60 percent), or to travel abroad to meetings or conferences (55 percent). A minority provided funding for faculty to study or conduct research abroad (33 percent), or to teach abroad (27 percent). Overall, comprehensive universities were unlikely to offer on-campus opportunities for faculty to develop their internationalization skills.
- In addition to using these strategies, 45 percent of highly active universities provided funding for faculty to internationalize their courses, and 48 percent offered workshops to help faculty internationalize their curriculum.

International Students and Student Programs

- Fifty-one percent of comprehensive universities scored "medium" in their efforts to offer various international extracurricular activities, or to promote contact with international students, and 45 percent scored "low." None scored "high."
- The most commonly used strategy by all institutions was offering ongoing international festivals and events on campus (78 percent).
- Highly active comprehensive universities were likely to provide a meeting place for students to discuss international topics (72 percent), funds for students to study or work abroad (69 percent), funds for recruitment officers to travel abroad (69 percent), and funds for scholarships for international students (68 percent).

Common Strategies of Highly Active Comprehensive Universities

- 1. Seeking and receiving external funding for international education.
- 2. Having an office that oversees international education programs and a campus-wide committee that works solely on advancing international efforts on campus.
- 3. Using the university's internal e-mail system to communicate with faculty and students about international education programs and opportunities and establishing a system for communicating students' study abroad experiences.
- 4. Requiring undergraduate students to take a general education course with an international focus.
- 5. Administering study abroad programs for undergraduate credit, and funding students to study or work abroad.
- 6. Emphasizing education abroad by highlighting international education in recruitment literature, issuing formal guidelines concerning students' ability to study abroad without delaying graduation, and allowing institutional funds to be used for study abroad through other institutions.
- 7. Funding faculty to lead students on study abroad programs, and to travel abroad to meetings or conferences.
- 8. Providing international activities and events on campus, and a meeting place for students to discuss international topics.
- 9. Funding efforts to attract international students, such as international student scholarships and recruitment efforts abroad.

Introduction

In the secondary schools. Thus, internationalization should be an integral part of the education offered by comprehensive universities.

How are comprehensive universities internationalizing their curricula and student experiences? What strategies are common among institutions that have actively pursued internationalization? How do institutional efforts relate to faculty participation in international activities and programs? This report addresses these questions by examining the responses given by 188 comprehensive universities to an institutional survey conducted in 2001 by the American Council on Education (ACE) and funded by the Ford Foundation.³ Of the 188 universities that responded, 52 percent were public institutions and 48 percent were private institutions. Descriptive data from that national survey were first presented in the 2003 ACE report titled *Mapping Internationalization on U.S. Campuses*.

This report expands on the earlier descriptive report's findings. By creating an "internationalization index," we have re-examined the data to measure internationalization along six key dimensions of internationalization, and distinguish "high activity" universities from other, less active institutions. ACE developed the survey that forms the basis of the index by conducting a literature review, and consulting an advisory board of international education experts. The institutional survey instrument created to measure comprehensive internationalization comprised six dimensions:

- Articulated commitment.
- Academic offerings.
- Organizational infrastructure.
- External funding.
- Institutional investment in faculty.
- International students and student programs.

ACE distributed the survey to a national sample of comprehensive universities. With data collected from a total of 188 comprehensive universities, we quantitatively defined institutional levels of internationalization

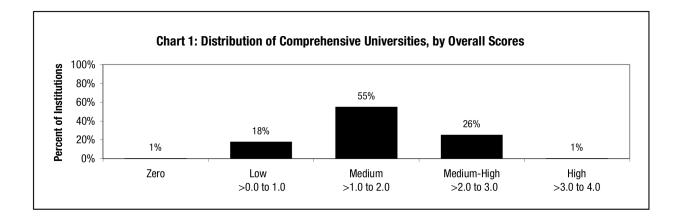
¹ American Council on International Intercultural Education and the Stanley Foundation. (n.d.). *Building the global community: The next step.* November 28–30, 1994, convened at Airlie Center, Warrenton, VA.

² The Carnegie Foundation for the Advancement of Teaching. (2000). *The Carnegie classification of institutions of higher education*. New York: Author.

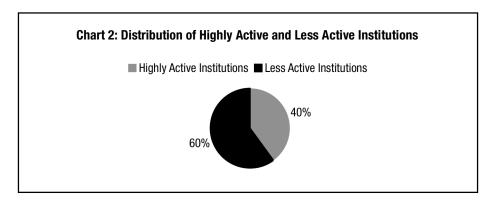
³ At the time this study was conducted, the 1994 version of the Carnegie Classifications was in use.

in each dimension, and rated their overall levels of internationalization.⁴ Each of the scores was based on a five-point scale, ranging from "zero" (0) to "high" (4) levels of internationalization.

Scores for each of the six dimensions were derived by summing the values of the variables being measured. After we derived scores for each dimension, we averaged the dimensional scores for each institution to determine its overall score. The majority of comprehensive universities surveyed received an overall internationalization score of "medium" (>1.0 to 2.0) or "medium-high" (>2.0 to 3.0) (see Chart 1).



To define which comprehensive universities would be categorized as "highly active" and which as "less active," the responding institutions were assigned to quintiles based on their overall internationalization score. Each of the quintiles contained approximately 37 institutions. Therefore, of the 188 comprehensive universities, 40 percent (75 institutions) were placed in the top two quintiles (the fourth and fifth quintiles) and were labeled "highly active," and 60 percent (113 institutions) were placed in the bottom three quintiles (the first through third quintiles) and labeled "less active" (see Chart 2). The resulting overall score cut-off separating the top two and bottom three quintiles was calculated to be 1.72. In other words, comprehensive universities categorized as "highly active" had an overall score less than 1.72. (For more information on the methodology and index scores, see the Methodology section on page 21.)



⁴ Note that in the charts that appear throughout this report, percentages may not total 100 percent due to rounding.

This report describes how comprehensive universities scored in each dimension of the index, the relationships among the sub-elements of the six dimensions of institutional internationalization, and the distinguishing characteristics of highly internationalized institutions. Frequency analysis and significance testing on the index items were conducted to reveal broad trends among comprehensive universities and differences between highly active and less active institutions.⁵

 $^{^5}$ Statistically significant findings are reported when p $\!\leq\!$ 05.

Comparing Highly Active and Less Active Comprehensive Universities

Most Likely Strategies

The strategies used by the majority of highly active comprehensive universities are sometimes used by many of the less active institutions, as well. This chapter focuses on a series of strategies that were implemented by the majority of highly active universities (70 percent or more) but were significantly less likely to be implemented by less active comprehensive universities (determined by a gap of at least 20 points between the percentage of highly active and less active institutions that employed that strategy). They are presented in the table below.

	Highly Active Institutions (%)	Less Active Institutions (%)
Articulated Commitment		
Had a mission statement that includes international education.	72	26
Highlighted international education in recruitment literature.	93	63
Had policies to enable students to study abroad through other institutions.	72	38
Academic Offerings		
Had an international general education requirement.	70	49
Organizational Infrastructure		
Had a campus-wide task force exclusively for international education.	79	38
Used internal e-mail to communicate about international education.	95	61
• Used an established system to communicate about students' study abroad experiences.	81	46
External Funding		
Actively sought funding for international education.	95	44
Institutional Investment in Faculty		
Earmarked funds for faculty to lead study abroad programs.	89	40
Earmarked funds for faculty to travel abroad for meetings or conferences.	83	37
Student Programs		
• Earmarked funds for regular, ongoing international activities on campus.	88	51
Offered international festivals and events on campus.	96	66
Had a meeting place for students to discuss international issues.	72	35

Table 1: Strategies of Highly Active and Less Active Comprehensive Universities

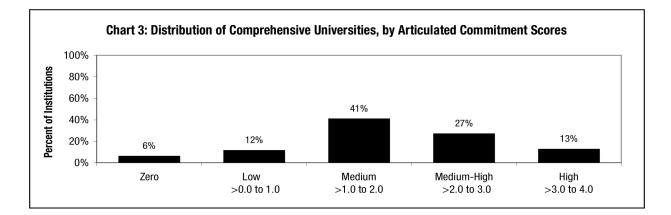
Articulated Commitment

Articulated commitment is the extent to which an institution has written statements or established policies supporting internationalization. It was assessed through questions about the institution's mission statement, strategic plan, formal assessments, recruitment literature, and guidelines for study abroad and faculty promotions. (For a complete list of questions, see Box A on next page.)

Box A: Survey Questions on Articulated Commitment

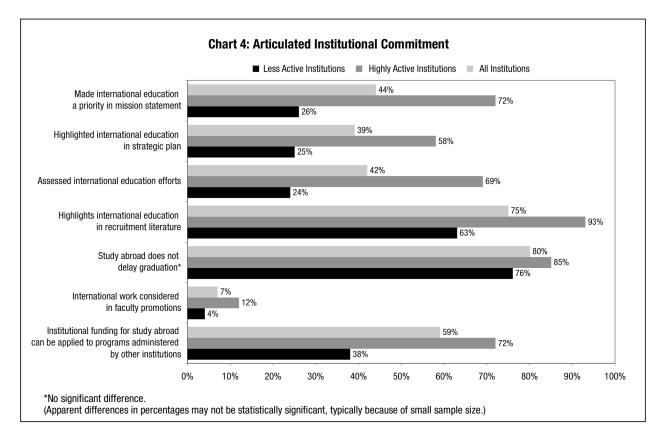
- Does your institution's mission statement specifically refer to international education?
- Is international education specifically stated as one of the top five priorities in your current strategic plan?
- Has your institution formally assessed the impact or progress of its international education efforts in the last five years?
- Does your institution highlight international education programs, activities, and opportunities in student recruitment literature?
- Does your institution have guidelines that specify international work or experience as a consideration in faculty promotion and tenure decisions?
- Does your institution have guidelines to ensure that undergraduate students can participate in approved study abroad programs without delaying graduation?
- Can institutional funding awarded to undergraduate students for study abroad be applied to study abroad opportunities administered by other institutions?

The majority of comprehensive universities displayed some degree of articulated commitment, as shown by the preponderance of scores at the mid- and high ends of the scale (see Chart 3).



Highly Active and Less Active Institutions Compared

Overall, comprehensive universities were more likely to have articulated their commitment by issuing formal guidelines concerning students' ability to study abroad without delaying graduation and highlighting international education in recruitment literature than through mission statements, strategic plans, and formal assessments. Highly active comprehensive universities had a stronger articulated commitment to international education than less active institutions. They were more likely to make international education part of their mission statement and strategic plan, assess their internationalization efforts, highlight their efforts in student recruitment literature, and have guidelines to allow student funding to be used on study abroad sponsored by other institutions. It was generally uncommon for comprehensive universities to have guidelines to consider international work in faculty promotion and tenure decisions, but highly active institutions were still more likely to have these guidelines than less active ones (see Chart 4 on next page).

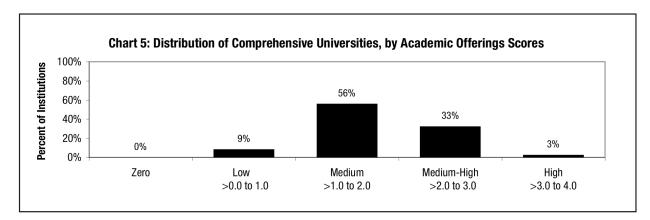


Academic Offerings

The second dimension of the internationalization index examined the availability of for-credit, undergraduate academic offerings with an international focus. This included foreign language learning, internationalized general education requirements and course offerings, study abroad, and other programs offered abroad for credit. It did not include noncredit or extracurricular activities. (For a complete list of questions, see Box B.)

Box B: Survey Questions on Academic Offerings

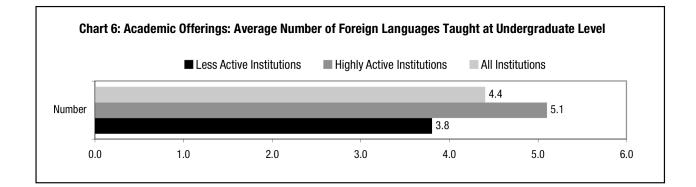
- Does your institution have a foreign language admissions requirement for incoming undergraduates?
- Does your institution have a foreign language graduation requirement for undergraduates?
- List the different foreign languages that were taught at the undergraduate level during the 2000–01 academic year. Do not count English as a Second Language (ESL) or American Sign Language (ASL).
- To satisfy their general education requirement, are undergraduates required to take courses that primarily feature perspectives, issues, or events from specific countries or areas outside the United States?
- At your institution, what percentage of undergraduate courses offered by the following departments had an international focus?
 - o Business
 - o History
 - o Political science
- Did your institution administer for credit any of the following undergraduate programs last year?
 - o Study abroad
 - International internships
 - o International service opportunities
 - o Field study
- How many undergraduate students at your institution studied abroad last year?

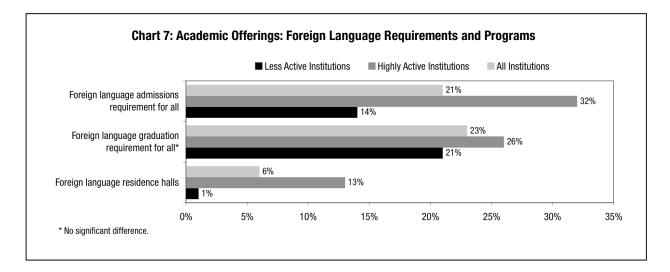


Most comprehensive universities scored "medium" or "medium-high" on the academic offerings dimension (see Chart 5).

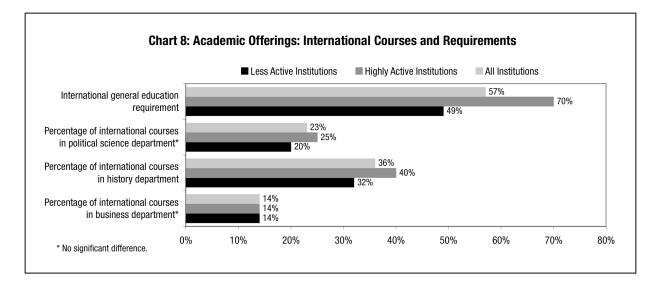
Highly Active and Less Active Institutions Compared

Overall, comprehensive universities did not place a strong emphasis on foreign language learning. The average number of foreign languages taught at the undergraduate level was four, less than a quarter of the institutions had foreign language admissions and graduation requirements for all students, and very few had foreign language residence halls. However, foreign language learning did separate highly active universities from less active ones. Highly active institutions offered more foreign languages, were more likely to have foreign language admissions requirements for all students, and were more likely to have foreign language residence halls where particular foreign languages are spoken. Highly active and less active universities were almost equally likely to have foreign language graduation requirements for all students. Chart 6 (below) and Chart 7 (on next page) detail these findings.





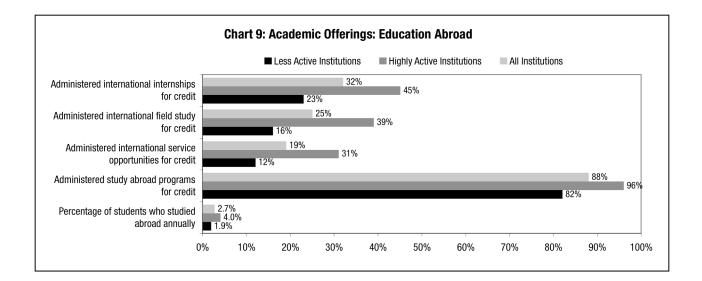
An institution's emphasis on international education was more likely to be found in general education requirements. Highly active institutions were more likely than less active institutions to require undergraduates to take a general education course that primarily featured perspectives, issues, or events from specific countries or areas outside the United States. History departments of highly active institutions were more internationalized, having a higher proportion of courses with an international focus than history departments at less active institutions. However, there were no statistically significant differences between highly active and less active institutions in the internationalization of business or political science departments (see Chart 8).⁶



⁶ Apparent differences in percentages may not be statistically significant, typically because of small sample size.

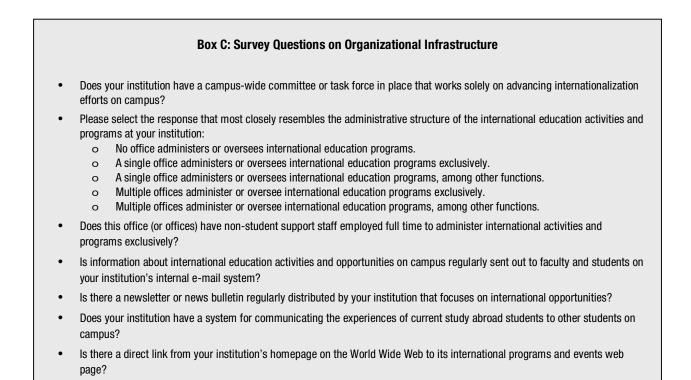
Institutions highly active in their internationalization efforts also were more likely than less active comprehensive universities to administer for-credit programs that involve education abroad, such as international internships, field study, and international service opportunities.

Across all comprehensive institutions, study abroad was the most common type of for-credit education abroad program. Almost all (96 percent) of the highly active institutions administered study abroad programs, a greater percentage than less active institutions. There also was a significant difference in the reported number of students who studied abroad annually-the percentage of students who studied abroad in highly active institutions (4.0 percent compared with 1.9 percent) (see Chart 9). The reason may be related to a specific aspect of articulated commitment that allowed students to use institutional funds to study abroad through other institutions. Highly active institutions were not only more likely to administer study abroad programs, but also were more likely to have established guidelines allowing students to use funds to study abroad through other institutions (72 percent compared with 38 percent).

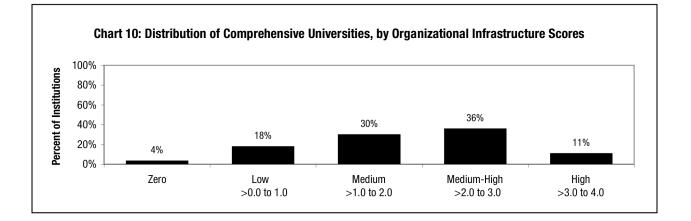


Organizational Infrastructure

This dimension reflects the resources institutions provide to support and promote internationalization on campus. These resources include physical facilities, such as dedicated office space; human resources, such as standing campus-wide committees and international education office staff; and communications and technological support, through e-mail, newsletters, web pages, or other communication means. These resources promote internationalization primarily by organizing, publicizing, and supporting new internationalization goals and initiatives. (For a complete list of questions, see Box C on next page.)



Most of the scores in Chart 10 range from "low" to "medium-high," suggesting a moderate level of organizational infrastructure among comprehensive institutions.

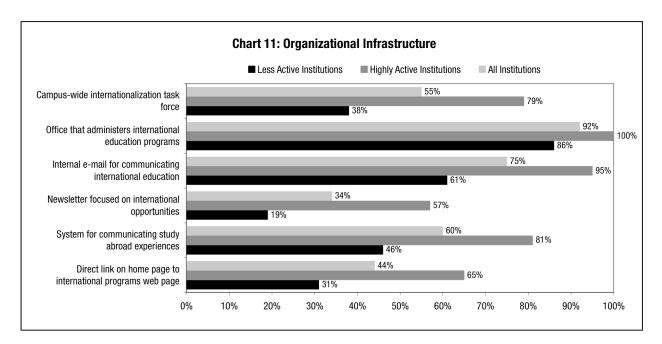


Highly Active and Less Active Institutions Compared

Highly active comprehensive universities generally had a more developed organizational infrastructure than less active institutions. They were more likely to maintain an office that oversaw international education programs (although most of both types of institutions had such an office), and were far more likely to have a campus-wide committee that worked solely on advancing international efforts on campus.

Efforts to disseminate information about international education also were far more prevalent among highly active institutions than less active institutions. Highly active institutions were much more likely to use their internal e-mail system to inform faculty and students about international education activities and opportu-

nities, regularly use a newsletter or bulletin for such communications, have a system for publicizing the experiences of study abroad students to their peers, and include a direct link on their web sites' homepages to international programs web pages (see Chart 11).



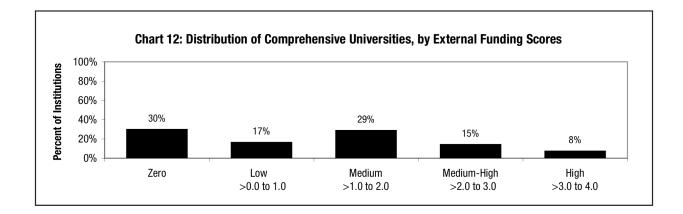
External Funding

This dimension represents the effort that institutions put forth to seek external funds specifically earmarked for international education programs and activities and the extent to which they receive federal, state, or private funding dedicated to advancing internationalization. (For a complete list of questions, see Box D.)

Box D: Survey Questions on External Funding

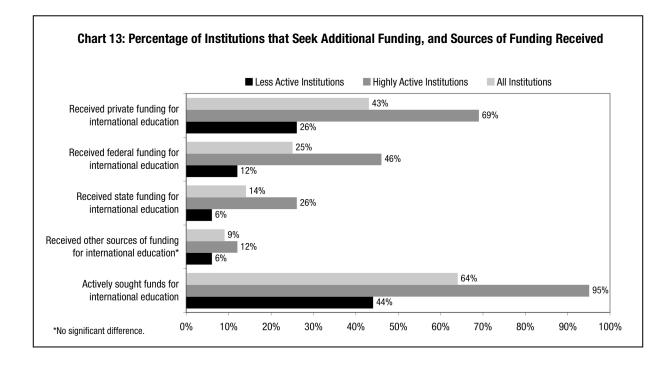
- Does your institution actively seek funds specifically earmarked for international education programs and activities?
- Did your institution receive external funding specifically earmarked for international programs and activities from any of the following sources in the last three years?
 - o Federal government
 - o State government
 - o Private (foundations, corporations, alumni)
 - o Other

Most scores in Chart 12 range from "zero" to "medium," suggesting some weakness in external funding among comprehensive institutions overall.



Highly Active and Less Active Institutions Compared

Highly active institutions were much more likely to receive funding from private, federal, and state sources to support international programs and activities, with private funding being the most common source. They also were more likely to actively seek funds for their internationalization efforts (see Chart 13).



Institutional Investment in Faculty

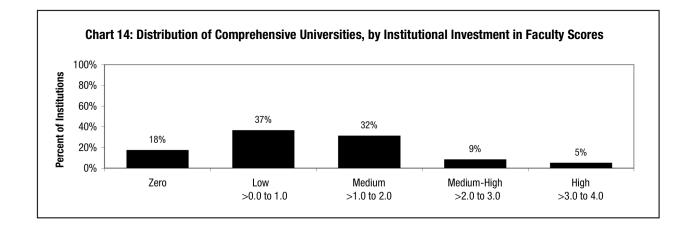
Faculty involvement is key to internationalization. Faculty members have the most direct contact with students and create the curriculum. In addition, because few students participate in education abroad or attend international extracurricular activities, the classroom remains the primary means to expose students to international issues, events, and cultures. This dimension measures the professional development opportunities available to faculty to help them increase their international skills and knowledge and internationalize their courses. Specifically, the survey questioned whether an institution had earmarked funds to support international activities by faculty (leading study abroad excursions, teaching and conducting research abroad, and internationalizing their courses), faculty participation in workshops on internationalizing courses, foreign language opportunities for faculty, or recognition awards for their international activity. (For a complete list of questions, see Box E.)

Box E: Survey Questions on Institutional Investment in Faculty

• Did your institution specifically earmark funds for full-time faculty to participate in any of the following international activities last year?

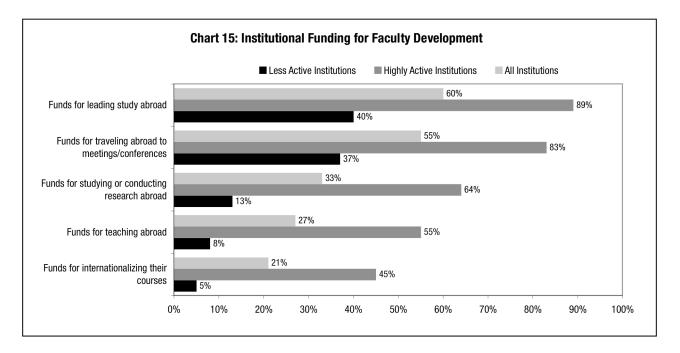
- o Leading undergraduate students on study abroad
- o Teaching at institutions abroad
- o Travel to meetings or conferences abroad
- o Study or conduct research abroad
- o Internationalization of courses
- o Other
- Did your institution offer any of the following opportunities to faculty members in the last three years?
 - o Workshops on internationalizing their curricula
 - o Workshops on how to use technology to enhance the international dimension of their courses
 - o Opportunities for faculty to increase their foreign language skills
 - o Recognition awards specifically for international activity

Most scores in Chart 14 range from "zero" to "medium," suggesting some weakness in institutional investment in faculty among comprehensive institutions overall.

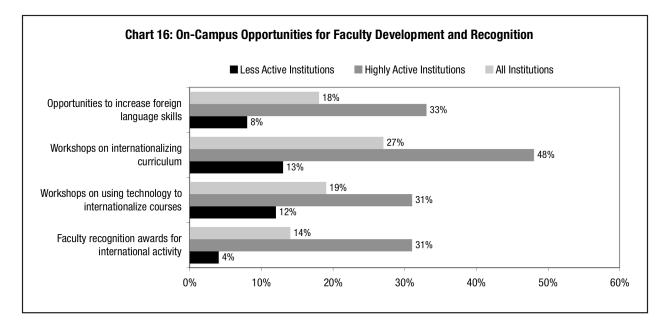


Highly Active and Less Active Institutions Compared

The funding provided to faculty to develop their international skills and knowledge distinguished highly active institutions from less active institutions. Highly active institutions were much more likely to finance faculty to (1) lead undergraduate study abroad programs; (2) travel to meetings or conferences abroad; (3) study, teach, or conduct research abroad; or (4) internationalize their courses. Most common among comprehensive universities was funding faculty to lead study abroad programs or travel to international meetings or conferences. Of the five types of faculty funding listed, funding for faculty to internationalize their courses was the least common and the only on-campus activity that directly affects student learning. Highly active comprehensive universities were much more likely than less active universities to provide funding for faculty to internationalize their courses (45 percent compared with 5 percent) (see Chart 15).



Offering faculty development opportunities and providing recognition were less likely than funding faculty travel. However, they were more common among highly active institutions than those that were less active. Highly active institutions were more likely to offer workshops for faculty to internationalize their curriculum, and were more likely to offer workshops on how to use technology to accomplish this. They also were more likely to offer faculty to increase their foreign language skills, and to offer faculty recognition awards specifically for international activity (see Chart 16 on next page).



On the whole, comprehensive universities were more likely to provide funding for faculty to participate in international activities abroad, and less likely to fund or offer on-campus, curriculum-related faculty activities, such as workshops to help faculty internationalize their courses or other workshops. These institutions generally supported faculty efforts to enhance their international skills and knowledge through research and travel, but not their efforts to enhance students' international learning in the classroom.

International Students and Student Programs

Students learn about international events, cultures, and issues through the various extracurricular activities offered on and off campus and through their contact with international students. This dimension aims to measure institutional support for the unscripted learning that takes place on every campus. The survey included questions about the number of international students on campus; the amount of funding to recruit international students, educate students abroad, and offer internationally focused campus activities; and the existence of programs aimed at socially integrating U.S. and international students on campus. (For a complete list of questions, see Box F on next page.)

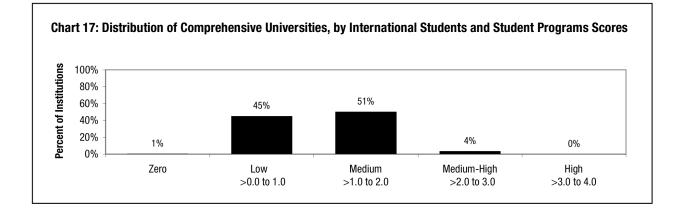
Box F: Survey Questions on International Students and Student Programs

- Did your institution specifically earmark funds for any of the following activities to aid recruitment of full-time, degreeseeking international students at the undergraduate level?
 - o Travel for recruitment officers
 - o Scholarships for international students

o Other

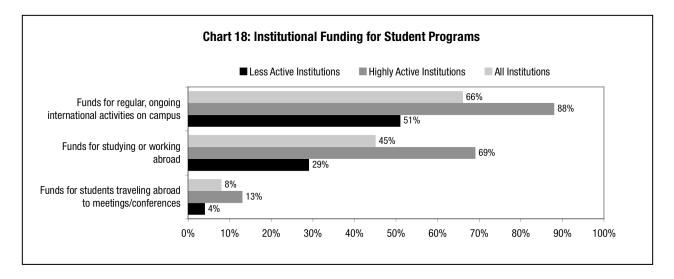
- What percentage of full-time undergraduate students are international students? Do not count English as a Second Language (ESL)-only students.
- Did your institution specifically earmark funds for undergraduate students to participate in any of the following international opportunities last year (2000–01)?
 - Travel to meetings or conferences abroad
 - Study or work abroad opportunities
- Did your institution specifically earmark funds for ongoing international activities on campus (speaker series, language houses, international centers) last year (2000–01)?
- Did your institution offer any of the following extracurricular activities to undergraduate students last year (2000-01)?
 - o Buddy program that pairs U.S. and international students
 - \circ \quad Language partner program that pairs U.S. and international students
 - o Meeting place for students to discuss international issues and events
 - \circ \quad Regular and ongoing international festivals or events on campus
 - o International residence hall open to all, or a roommate program to integrate U.S. and international students

Chart 17 indicates that the majority of comprehensive institutions scored "low" or "medium" in the international students and student programs dimension.

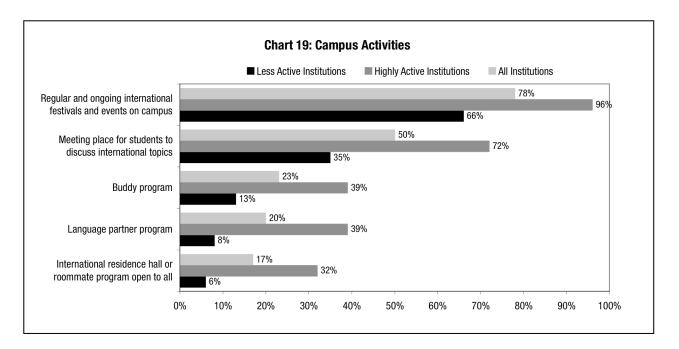


Highly Active and Less Active Institutions Compared

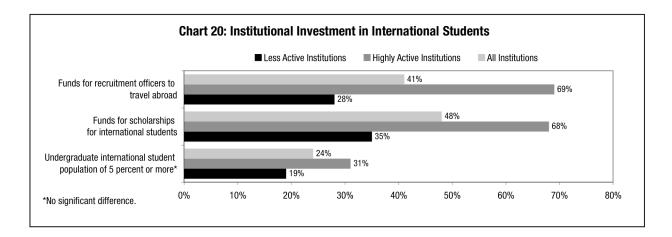
Comprehensive institutions that were highly active in their internationalization efforts were more likely than less active institutions to fund on-campus international activities and students who study abroad. Specifically, they were more likely to earmark funds for ongoing international activities on campus–such as speaker series, language houses, or international centers–and for undergraduates to study, work, or attend conferences abroad. Overall, the majority of comprehensive institutions funded on-campus international activities. Just under half funded students to study or work abroad. Undergraduate student travel abroad for meetings or conferences was less likely to be funded (see Chart 18 on next page).



Highly active institutions were more likely than less active institutions to offer regular and ongoing international festivals or events on campus, and to provide a meeting place for student discussions of international topics. Furthermore, they were more likely to offer programs that focus on the integration of U.S. and international students outside of the classroom, such as buddy programs, language partner programs, international residence halls, and international roommate programs (see Chart 19).



However, it appears that there was some intention among highly active institutions to focus on recruiting international students. Highly active institutions were more likely than less active institutions to finance recruitment officers to travel abroad and scholarships for international students. But funding international student recruitment did not appear to translate into these institutions being more likely to have a high percentage of international students. Although highly active institutions had a greater percentage of undergraduate international students than less active institutions, this difference was not statistically significant (see Chart 20 on next page).



Least Likely Strategies

The survey responses also revealed a series of strategies that were unlikely to be used by either highly active or less active comprehensive universities. We identified internationalization efforts used by 50 percent or fewer of either type of institution (see Table 2).

	Highly Active Institutions (%)	Less Active Institutions (%)
Articulated Commitment		
Had guidelines to consider international work in faculty promotion and tenure.	12	4
Academic Offerings		
Had foreign language admission requirements for all undergraduates.	32	14
Had foreign language graduation requirements for all undergraduates.	26	21
Had foreign language residence halls open to all.	13	1
Administered international internships for undergraduate credit	45	23
Administered international field study for undergraduate credit.	39	16
Administered international service opportunities for undergraduate credit.	31	12
External Funding		
Received federal funding for international education.	46	12
Received state funding for international education.	26	6
Institutional Investment in Faculty		
Earmarked funds for faculty to internationalize their courses.	45	5
Offered workshops for faculty to internationalize their courses.	48	13
Offered workshops for faculty to use technology to internationalize courses.	31	12
Offered opportunities for faculty to increase their foreign language skills.	33	8
Offered faculty recognition awards for international activity.	31	4
International Students and Student Programs		
Earmarked funds for students to travel abroad to meetings or conferences.	13	4
Had a buddy program.	39	13
Had a language partner program.	39	8
Had international residence halls or roommate programs open to all.	32	6

Table 2: Strategies Least Likely to Be Used by Comprehensive Universities

Significant Correlations

F ollowing these broad institutional comparisons, we conducted a correlation analysis to determine if there were statistically significant relationships between and among index items.⁷ Statistically significant relationships were found for almost all items in the index. (Some of the relationships between the various types of internationalization efforts are carefully discussed here, noting only the possibility of cause and effect, and cautioning against assumptions of causation.)

- The dimension most central to internationalization at comprehensive institutions appears to be external funding. Whether institutions actively sought funds for international education programs and activities and received federal and private funding earmarked for international programs and activities significantly related to most items in all other dimensions of internationalization.
- Having an articulated commitment to international education was strongly related to most other aspects of institutional internationalization. Having a mission statement that specifically refers to international education, having international education stated as one of the top five priorities in the strategic plan, having a formal assessment of international efforts in the last five years, and highlighting international education in recruitment literature were all strongly related to aspects of other dimensions. When these formal commitments to internationalization were made, institutions also were likely to support faculty in internationalizing their curricula, travel and study abroad opportunities for both faculty and students, and efforts to recruit international students.
- Another form of articulated commitment-having guidelines that specify international work or experience as considerations in faculty promotion and tenure decisions-was strongly related to other strategies: earmarking funds for faculty to internationalize their courses, offering workshops for faculty to internationalize their curriculum, offering workshops to use technology to internationalize courses, and offering faculty recognition awards for international activity. These relationships allow speculation that at comprehensive institutions, promotion and tenure guidelines may drive institutional support for faculty to be involved in international education.
- Comprehensive universities' organizational infrastructures appeared to have two core elements: a campuswide task force or committee exclusively for internationalization efforts and an office that administers international education programs. The influence of these two strategies appeared to be broad, with strong relationships to almost all dimensions.
- Requiring undergraduates to take courses with an international focus to meet their general education requirements was found to strongly relate to the percentage of undergraduates who study abroad annually. This relationship suggests that having an international general education requirement may contribute to student awareness or interest in studying abroad.
- If comprehensive universities emphasized travel opportunities, they likely emphasized both faculty and student travel. Earmarking funds for faculty to lead students on study abroad programs, to teach abroad, to travel abroad to meetings or conferences, and to study or research abroad were all significantly related to the percentage of undergraduate students who study abroad, earmarking funds for students to study or work abroad, and administering study abroad, international internship, and international field study programs for credit.

⁷ Statistically significant relationships with p≤.01 are reported.

Conclusion: What the Data Suggest

he internationalization index enables comparisons among similar institutions and allows individual comprehensive institutions to compare their own practices and policies to those of their peers. Further institutional analysis would be required to determine the importance of different dimensions of internationalization or their impact on faculty or students. The index provides a useful beginning, however, in identifying what key strategies highly active institutions use, especially when these are put in the larger context of other qualitative and quantitative research.

Case studies of internationalization practices developed by ACE through its Promising Practices project, its Global Learning for All project, and its Internationalization Laboratory corroborate the centrality of the strategies used by highly active institutions. Thus, the following conclusions reinforce the tenets of good practice that have been articulated throughout the literature and other investigations. They hold no surprises for internationalization leaders and practitioners:

- The core of comprehensive institutions' organizational infrastructure is having an office dedicated to overseeing internationalization, which along with having a campus-wide task force that works solely on advancing international efforts is strongly related to many other internationalization strategies. In addition, the organizational infrastructure includes having established systems to communicate with students and faculty about international opportunities and activities.
- Highly active comprehensive universities articulate their commitment to international education in their recruitment literature and study abroad guidelines, but often lack other more formal commitments, such as having internationalization included in mission statements and strategic plans and having regular assessments of internationalization efforts. These more formal commitments are related to an array of other internationalization practices, and may help set the foundation for improved internationalization.
- Although external funding is central to internationalization, it is weak among comprehensive institutions. Private funding is the most important source of external funding.
- Most comprehensive institutions offer study abroad programs, although few students study abroad. Comprehensive institutions determined to increase education abroad may need to expand international opportunities via internships, field study, service opportunities, or meetings and conferences.
- Highly active institutions invest in faculty by providing funding for them to lead study abroad programs and travel to meetings or conferences. Less likely is support for faculty to enhance student learning (e.g., workshops that help faculty to internationalize their courses).
- Formal guidelines to consider international activity in faculty promotion and tenure decisions are rare among comprehensive universities, but are strongly related to efforts to support faculty in internationalizing their courses. Because faculty members are the direct link to student learning, promotion and tenure guidelines may be crucial to improving internationalization.
- The primary venues for internationalization in student programs are on-campus activities, such as providing international festivals and events, and having meeting places for students to discuss international issues. Initiatives that provide opportunities for U.S. and international students to learn from each other outside the classroom, such as buddy programs, language partner programs, and international residence halls or roommate programs, may be valuable but are not currently central to comprehensive institutions' efforts.
- The mere presence of international students on campus does not appear to be a major contributor to internationalization. Having an undergraduate international student population that makes up more than 5 percent of undergraduates was not related to other internationalization measures.

Methodology

In 2001, ACE began to explore the extent of institutional commitment to internationalization and the strategies that institutions use to promote internationalization. To reach these goals, ACE conducted a national survey of institutions of higher education. Following is a description of the research methodology used in the investigation of comprehensive universities. This methodology details the sample and response rate, survey development, the internationalization index, the six dimensions into which questions were categorized, and statistical analyses.

Sample

The sample for the institutional survey was drawn from the population of regionally accredited comprehensive universities in the United States. Data were collected during the 2001-02 academic year, from institutional surveys mailed to the presidents of the sample institutions in September 2001. Of the 530 regionally accredited comprehensive institutions in the nation (as defined in the Carnegie classification system), a random sample of 364 (69 percent) was surveyed, of which 188, or 52 percent, responded. Eighty-one percent of the 188 universities were Master's Universities and Colleges I, and 19 percent were Master's Universities and Colleges II.⁸

Survey

To determine the characteristics of an institution "highly active" in internationalization, ACE conducted a literature review and convened an advisory board of experts in international education. Based on this input, ACE defined "highly active" to mean having a high level of integration of international/global themes and content in the teaching, research, and service functions of the institution. An institutional survey instrument measuring internationalization was developed. The survey contained questions regarding the extent of the institution's international activities, funds to support such activities for both faculty and students, and stated commitment to internationalization. (For a list of questions, see Boxes A-F in this report.)

The Internationalization Index

The institutional survey designed to measure internationalization at postsecondary institutions also formed the basis for an "internationalization index," which was used to assign a level of internationalization for each institution and allow categorization as highly active or less active. This categorization would become a variable used in further analysis.

ACE included several different types of questions on the survey. Some questions required a yes or no response; some offered a range of response choices (i.e., no students, some students, all students), and some were open-ended (i.e., the number of students studying abroad). In order to create the index, all of the questions used in the computation were coded to a zero/one scale so they would have the same relative weight in the index. Response values were recoded so that the possible valid range was from zero to one. Dichotomous questions (those with a yes or no response) were coded as zeros and ones. Questions with more than two responses, in which each response is progressively "better" than the previous one, were recoded so that each

⁸ At the time this study was conducted, the 1994 version of the Carnegie Classifications was in use.

response was worth a progressively higher increment, and all increments were of equal value. For example, if a question had three possible responses, valid values would be 0.0, 0.5, and 1.0. Continuous variables, such as the number of students who studied abroad or the number of foreign languages offered, were coded as follows: 0.0 for none; 0.5 for those with a response value equal to or less than the average for all responding comprehensive institutions; or 1.0 for those with a response value above the average for all responding comprehensive institutions. ACE eliminated several survey questions because they did not lend themselves to quantitative analysis or because of low response rates.

Six Dimensions and Scores

Based upon the literature review and the qualitative analysis of survey items by experts in international education, ACE grouped the survey questions into six dimensions:

- Articulated commitment.
- Academic offerings.
- Organizational infrastructure.
- External funding.
- Institutional investment in faculty.
- International students and student programs.

Scores for each of the six dimensions were derived by summing the values of the variables used. These dimension scores were then corrected to reflect a zero-to-four-point scale. Correcting the scores for each dimension to the same zero-to-four-point scale normalized the dimension scores so that, although one dimension may contain more questions than another, no one dimension is weighted more than another. The dimension scores were used to calculate the overall internationalization score.

Overall Internationalization Score

After deriving scores for each dimension, ACE averaged the dimension scores for each institution to determine an overall score for that institution. When computing the overall score, the analysts viewed the academic offerings dimension as being more important than the others; consequently, this section was then adjusted to weigh 50 percent more than others.

An overall quintile ranking was achieved by assigning comprehensive institutions to quintiles based on their overall score. Because the institutions were placed into quintiles, 20 percent of the total was placed into each of the quintiles. Therefore, of the 188 comprehensive universities in the sample, 40 percent (75 institutions) were placed in the top two quintiles (the fourth and fifth quintiles) and were labeled "highly active"; 60 percent (113 institutions) were placed in the bottom three quintiles (the first through third quintiles) and labeled "less active." The resulting overall score cut-off between the top two and bottom three quintiles was 1.72. Therefore, comprehensive universities categorized as "highly active" had an overall score greater than or equal to 1.72, and those categorized as "less active" had an overall score less than 1.72.

Adjusted and Unadjusted Scores

Two sets of overall scores were computed, an unadjusted set and an adjusted set. The unadjusted computation was made based on the data as submitted by the institution. However, not all institutions responded to all questions. Therefore, adjusted overall scores also were computed in an attempt to compensate for non-response to the survey questions. If an institution responded to at least one-half of the questions within a survey section, its missing responses were replaced with the average response to that question by all other

comprehensive institutions. Once the missing responses were replaced, overall scores and quintiles were computed in the same manner as for those that were unadjusted.

Analysts then compared a cross-tabulation of quintile assignment prior to adjustments with the assignment after the adjustments were made. In 174 of the cases, or 93 percent, the quintile assignment was the same regardless of which methodology was used; those that differed only did so by one quintile. For example, with the adjusted computation, two institutions moved out of the third quintile and into the second, and three moved out of the fourth quintile and into the fifth. The concern with the unadjusted computation is that it introduces more bias into the results than the adjusted computation; therefore, the adjusted index was used for the analysis.

Analysis

Frequencies or means for each survey item were calculated for highly active and less active comprehensive universities, and across all comprehensive universities. Chi-square tests were conducted to determine where statistically significant differences existed between proportions of highly active and less active institutions. Student *t*-tests were conducted to determine where statistically significant differences existed between means of highly active and less active institutions. Statistically significant differences were reported and discussed only when $p \le .05$ for a particular comparison.

Finally, ACE conducted correlation analysis on the relationships among survey items. Statistically significant correlations were reported and discussed only when $p \le .01$.

