



Measuring Internationalization at Liberal Arts Colleges

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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Executive Summary

How are liberal arts colleges internationalizing their curricula and student experiences? What strategies are common among colleges that have actively pursued internationalization? This report addresses these questions by examining the responses given by 187 liberal arts colleges 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, distinguishing "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"), almost half of liberal arts colleges scored "medium" (49 percent). Only 1 percent scored "high."

Articulated Commitment

- Just 12 percent of liberal arts colleges scored "high" in this dimension.
- The majority of liberal arts colleges had guidelines to enable students to study abroad without delaying their graduation (81 percent), and highlighted international education in their recruitment literature (69 percent).
- Highly active institutions were likely to include international education in their mission statement (64 percent) and strategic plan (65 percent), have guidelines that allow institutional funds to be used for study abroad through other institutions (69 percent), and have assessed their internationalization efforts in the last three years (60 percent). Less active institutions were unlikely to have these forms of articulated commitment.
- Very few liberal arts colleges considered international work when evaluating faculty for tenure and promotion (3 percent).

Academic Offerings

- The majority of liberal arts colleges scored either "medium" (51 percent) or "medium-high" (27 percent) on the availability of internationally focused academic offerings; just 7 percent scored "high."
- The most prevalent strategy for all liberal arts colleges was offering study abroad for credit (80 percent).
- Highly active liberal arts colleges were likely to require students to take a general education course with an international focus (66 percent).

Organizational Infrastructure

- Just 10 percent of liberal arts colleges scored “high” in this dimension.
- The most prevalent strategies among all colleges were having an office that administered international education programs (83 percent), and using internal e-mail to communicate about international education (62 percent).
- Highly active colleges were likely to have a system to communicate about students’ study abroad experiences (83 percent), and have a campus-wide internationalization task force (75 percent).

External Funding

- Thirty-nine percent of liberal arts colleges scored “zero” in this dimension. Just 2 percent scored “high.”
- More than half of liberal arts colleges (54 percent) actively sought external funds for internationalization; the single most important source for all institutions was private funding (received by 45 percent of colleges).
- Highly active colleges were much more likely than less active colleges to seek external funds for international education (87 percent), and to receive external funding from all sources: 79 percent received private funding, 19 percent received federal funding, and 7 percent received state funding.

Institutional Investment in Faculty

- The majority of liberal arts colleges were weak on investment in faculty members’ international education: 26 percent scored “zero,” 29 percent scored “low,” and 39 percent scored “medium.” Very few scored “high” (1 percent) or “medium-high” (6 percent) in this dimension.
- Approximately half of liberal arts colleges provided funding for faculty to lead study abroad programs (56 percent), or to travel abroad to meetings or conferences (49 percent). A minority provided funding for faculty to study or conduct research abroad (36 percent), or to teach abroad (19 percent). Overall, liberal arts colleges were unlikely to offer on-campus faculty development opportunities aimed at enhancing internationalization.
- In addition to using these strategies, 45 percent of highly active colleges provided funding for faculty to internationalize their courses.

International Students and Student Programs

- Just under half (45 percent) of liberal arts colleges scored “medium” in this dimension, and approximately half (49 percent) scored “low.” None scored “high.”
- The most commonly used strategies by all colleges were funding international activities on campus (58 percent), offering ongoing international festivals and events on campus (59 percent), and funding scholarships for international students (59 percent).
- Highly active liberal arts colleges were likely to provide a meeting place for students to discuss international topics (63 percent), funds for students to study or work abroad (71 percent), and funds for recruitment officers to travel abroad (63 percent).

Common Strategies of Highly Active Liberal Arts Colleges

1. Seeking external funding and receiving private 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. Emphasizing education abroad by highlighting international education in recruitment literature, and issuing formal guidelines concerning students’ ability to study abroad without delaying their graduation.
4. Using the college’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.

5. Administering study abroad programs for undergraduate credit, and funding students to study or work abroad.
6. Funding faculty to travel abroad to meetings or conferences, and to lead students on study abroad programs.
7. Requiring students to take a general education course with an international focus and a foreign language.
8. Holding international activities and events on campus, and providing 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

Liberal arts colleges make up 15 percent of all higher education institutions, and enroll almost 7 percent of students.¹ Liberal arts colleges are typically private and residential, with enrollments of 1,000 to 1,500 students. The colleges emphasize teaching, close faculty contact, and small class sizes.² Popular conception holds that students at liberal arts colleges are more likely than students at other types of institutions to study abroad and to have international interests. But is the image of liberal arts colleges as highly internationalized accurate? What distinguishes liberal arts colleges that are highly active in internationalization from those that are not? How are liberal arts colleges 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 187 liberal arts colleges to an institutional survey conducted in 2001 by the American Council on Education (ACE) and funded by the Ford Foundation. Twenty-six percent of these colleges were Baccalaureate Colleges I and 74 percent were Baccalaureate Colleges II.³ 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, and distinguish "high activity" colleges from other, less active colleges. 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 liberal arts colleges. With data collected from a total of 187 liberal arts colleges, we quantitatively defined institutional levels of internationalization 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

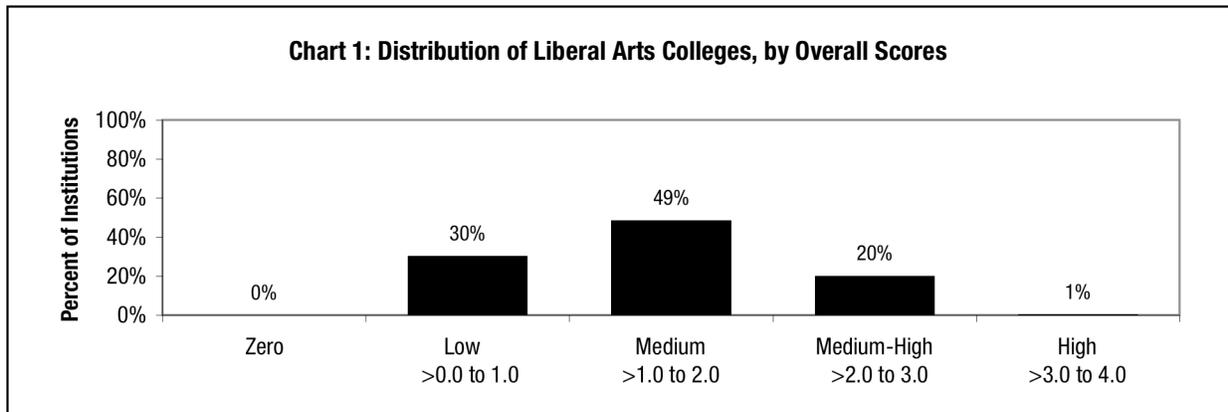
¹ The Carnegie Foundation for the Advancement of Teaching. (2000). *The Carnegie classification of institutions of higher education*. New York: Author.

² Amey, M. (2002). Liberal arts colleges. In J. F. Forest & K. Kinser (Eds.), *Higher education in the United States: An encyclopedia* (pp. 403–404). Santa Barbara, CA: ABC-CLIO.

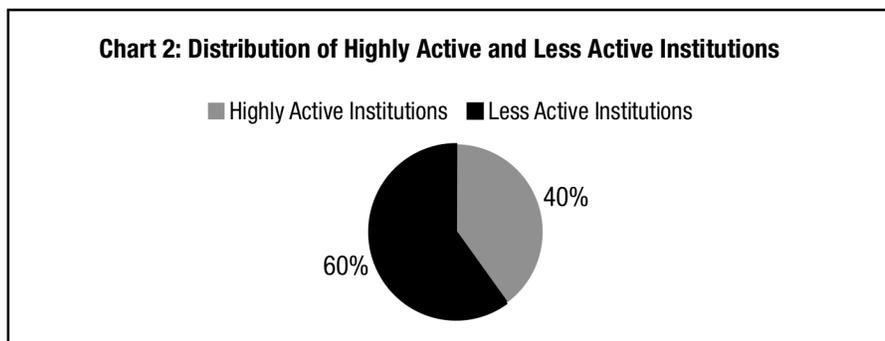
³ At the time this study was conducted, the 1994 version of the Carnegie Classifications was in use.

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

determine its overall score. Almost half (49 percent) of the liberal arts colleges surveyed received an overall internationalization score of “medium” (>1.0 to 2.0) (see Chart 1).



To define which liberal arts colleges would be categorized as “highly active” and which as “less active,” the responding colleges were assigned to quintiles based on their overall internationalization score. Each of the quintiles contained approximately 37 institutions. Therefore, of the 187 liberal arts colleges, 40 percent (75 institutions) were placed in the top two quintiles (the fourth and fifth quintiles) and were labeled “highly active,” and 60 percent (112 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 1.56. In other words, liberal arts colleges categorized as “highly active” had an overall score greater than or equal to 1.56, and those categorized as “less active” had an overall score less than 1.56. (For more information on the methodology and index scores, see the Methodology section on page 22.)



This report describes how liberal arts colleges 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 liberal arts colleges 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 Liberal Arts Colleges

Most Likely Strategies

The strategies used by the majority of highly active liberal arts colleges 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 liberal arts colleges (70 percent or more) but were significantly less likely to be implemented by less active colleges (determined by a gap of at least 20 points between the percentage of highly active and less active colleges that employed that strategy). They are presented in the table below.

Table 1: Strategies of Highly Active and Less Active Liberal Arts Colleges

	Highly Active Institutions (%)	Less Active Institutions (%)
Articulated Commitment		
• Highlighted international education in recruitment literature.	97	49
• Had policies to enable students to study abroad without delaying their graduation.	97	68
Academic Offerings		
• Administered study abroad programs for undergraduate credit.	99	67
Organizational Infrastructure		
• Had a campus-wide task force exclusively for international education.	75	26
• Had an office that administers international education programs.	100	72
• Used internal e-mail to communicate about international education.	84	46
• Used an established system to communicate about students' study abroad experiences.	83	38
External Funding		
• Actively sought funding for international education.	87	32
• Received private funding for international education.	79	22
Institutional Investment in Faculty		
• Earmarked funds for faculty to lead study abroad programs.	84	37
• Earmarked funds for faculty to travel abroad for meetings or conferences.	80	29
Student Programs		
• Earmarked funds for regular, ongoing international activities on campus.	88	37
• Earmarked funds for students to study or work abroad.	71	27
• Offered international festivals and events on campus.	83	44
• Earmarked funds for scholarships for international students.	77	47

Articulated Commitment

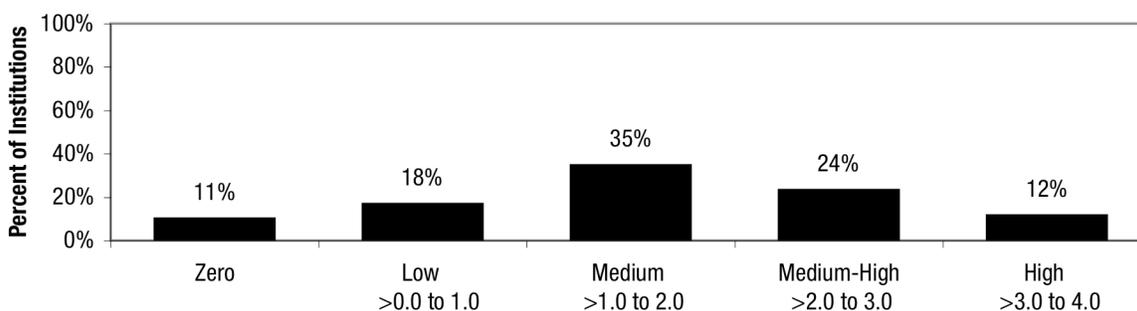
Articulated commitment is the extent to which an institution has written statements or established policies supporting internationalization. It was assessed through questions about the institution’s mission statement, strategic plan, formal assessments, recruitment literature, and guidelines for study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

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 articulated commitment scores were broadly distributed, suggesting that liberal arts colleges greatly vary in their degree of articulated commitment to international education (see Chart 3).

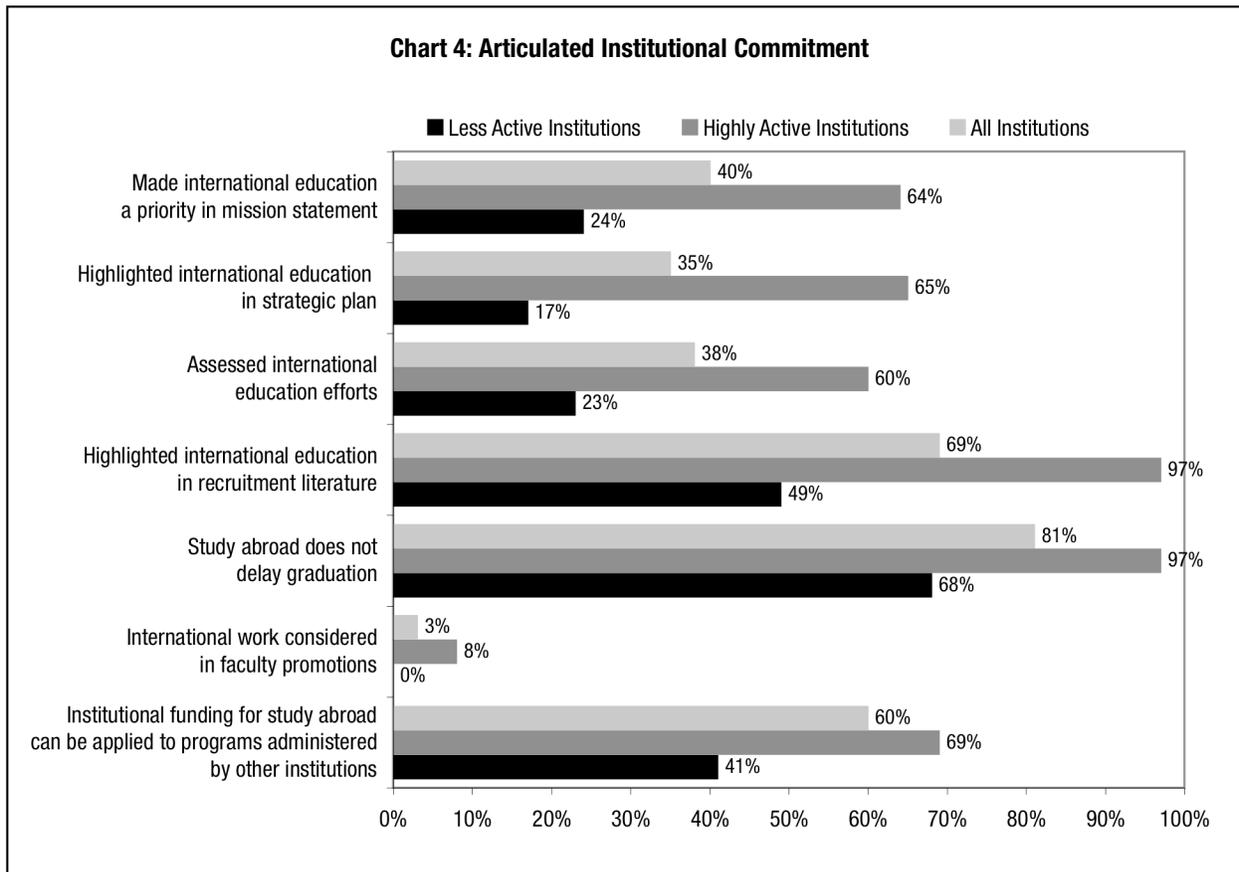
Chart 3: Distribution of Liberal Arts Colleges, by Articulated Commitment Scores



Highly Active and Less Active Institutions Compared

Liberal arts colleges were most likely to have articulated their commitment to international education by issuing formal guidelines about students’ ability to study abroad without delaying graduation, allowing students to apply institutional funds for study abroad through programs administered by other institutions, and highlighting international education in their recruitment literature. Overall, less than half of liberal arts colleges had articulated commitments to international education via their mission statements, strategic plans,

or formal assessments, and almost none had guidelines to consider international work in faculty promotion and tenure decisions. It appears that liberal arts colleges were more likely to be formally committed to efforts directly affecting students than to efforts affecting faculty or to institution-level statements. Highly active colleges were significantly more likely to exhibit all these forms of articulated commitment than were less active colleges (see Chart 4).



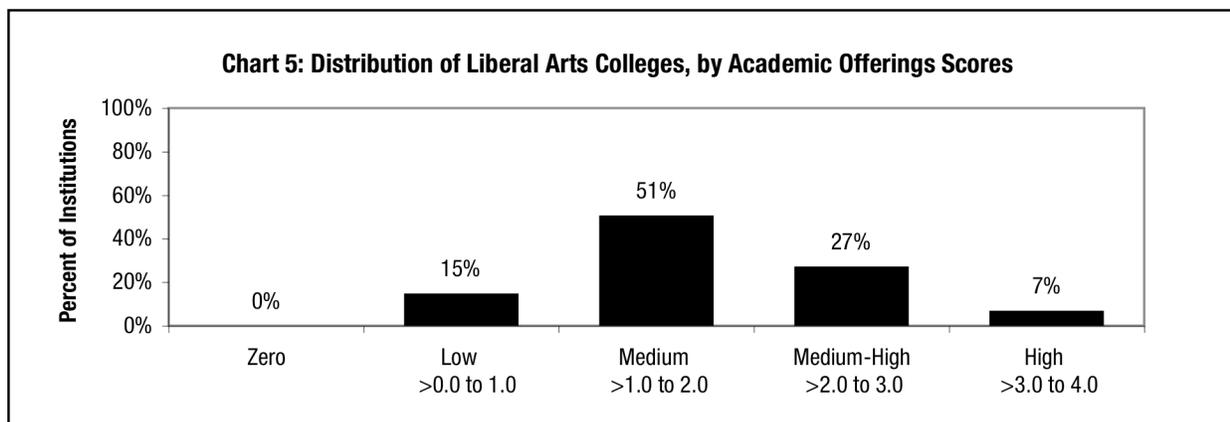
Academic Offerings

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 on next page.)

Box B: Survey Questions on Academic Offerings

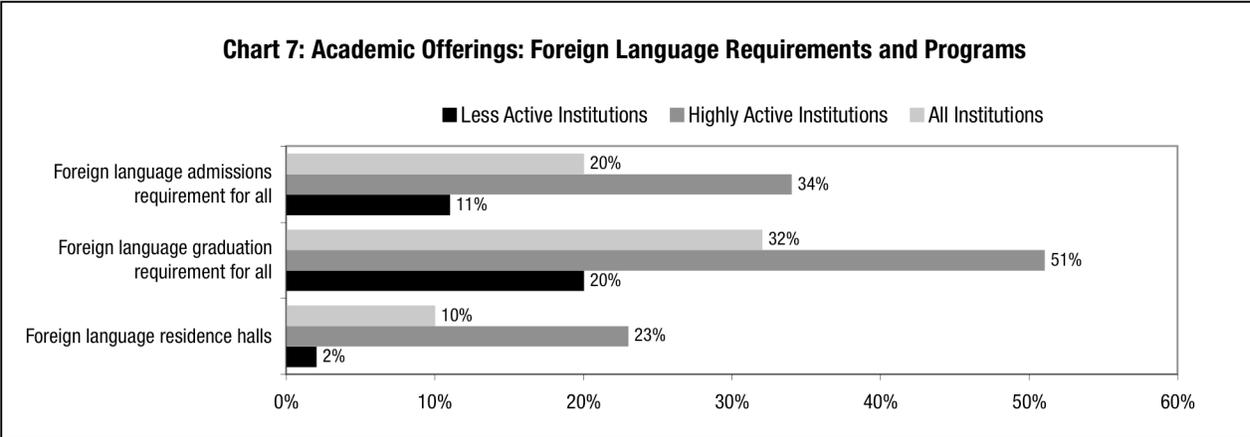
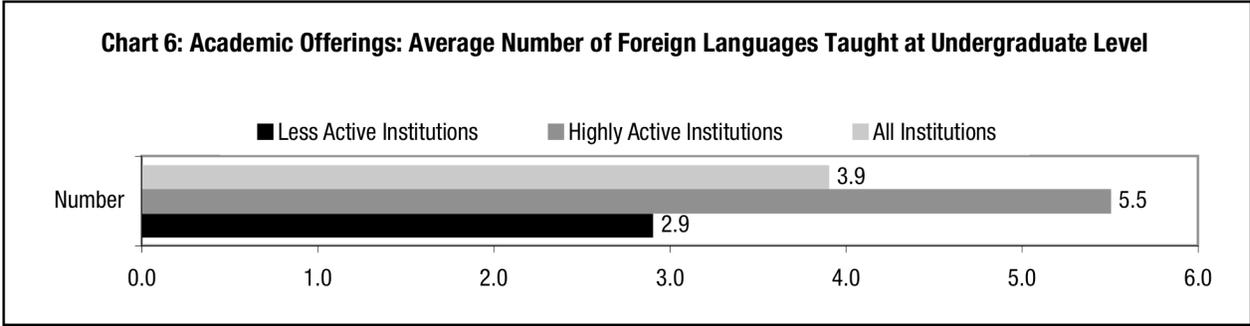
- Does your institution have a foreign language admissions requirement for incoming undergraduates?
- Does your institution have a foreign language graduation requirement for undergraduates?
- List the different foreign languages that were taught at the undergraduate level during the 2000–01 academic 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?
 - Business
 - History
 - Political science
- Did your institution administer for credit any of the following undergraduate programs last year?
 - Study abroad
 - International internships
 - International service opportunities
 - Field study
- How many undergraduate students at your institution studied abroad last year?

Most liberal arts colleges scored “medium” or “medium-high” in the academic offerings dimension (see Chart 5).

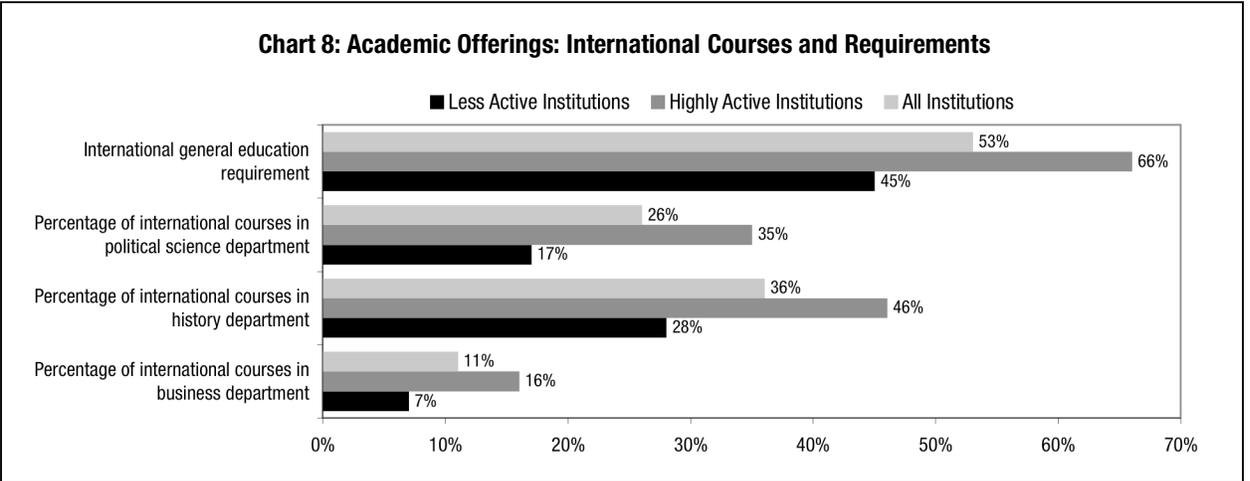


Highly Active and Less Active Institutions Compared

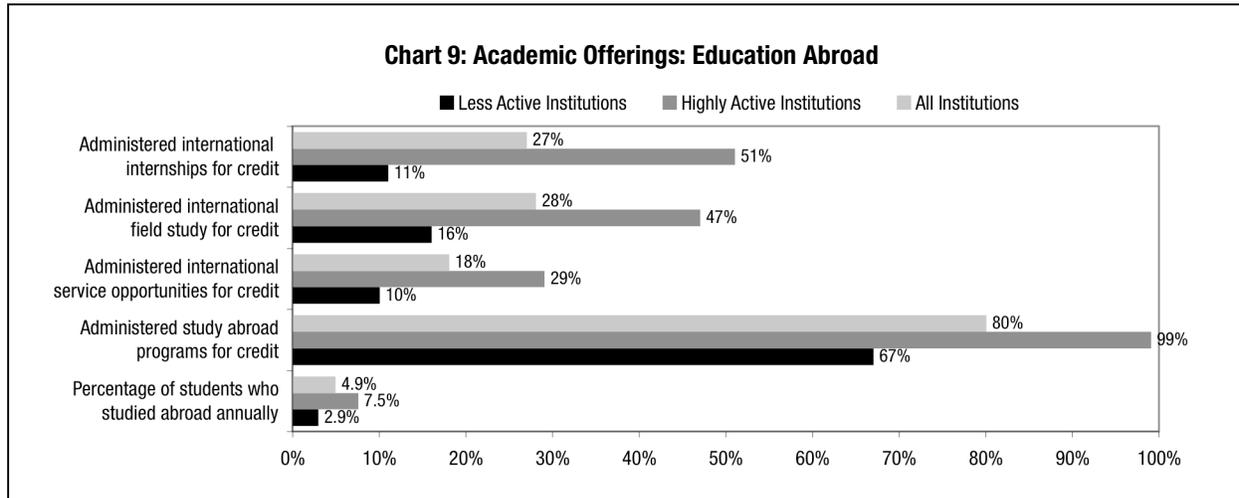
Overall, liberal arts colleges did not place a not a strong emphasis on foreign language learning. Less than one-third had foreign language graduation requirements for all students, 20 percent had foreign language admissions requirements, and only 10 percent had foreign language residence halls. An average of four foreign languages were taught at the undergraduate level at liberal arts colleges. However, highly active colleges were significantly more likely to be committed to foreign language learning. They offered more foreign languages at the undergraduate level (5.5 compared with 2.9) and were more likely to have foreign language admissions and graduation requirements for all students. Chart 6 and Chart 7 (see next page) detail these findings.



Many liberal arts colleges emphasized international education through their international course offerings. More than half had an international general education requirement. Thirty-six percent of history departments' courses and 26 percent of courses in political science departments had an international focus. Few courses in business departments (11 percent) had an international focus. Highly active colleges were significantly more likely to have international general education requirements and more internationalized history, political science, and business departments than were less active colleges (see Chart 8).



Liberal arts colleges were active in providing study abroad programs, in which 5 percent of undergraduates study abroad annually. The majority of liberal arts colleges administered study abroad for undergraduate credit, but just a little more than one-fourth administered international field study and internships. Relative to less active colleges, highly active colleges were significantly more likely to administer all types of education abroad programs, and have a significantly higher proportion of students who study abroad annually (7.5 percent compared with 2.9 percent) (see Chart 9).



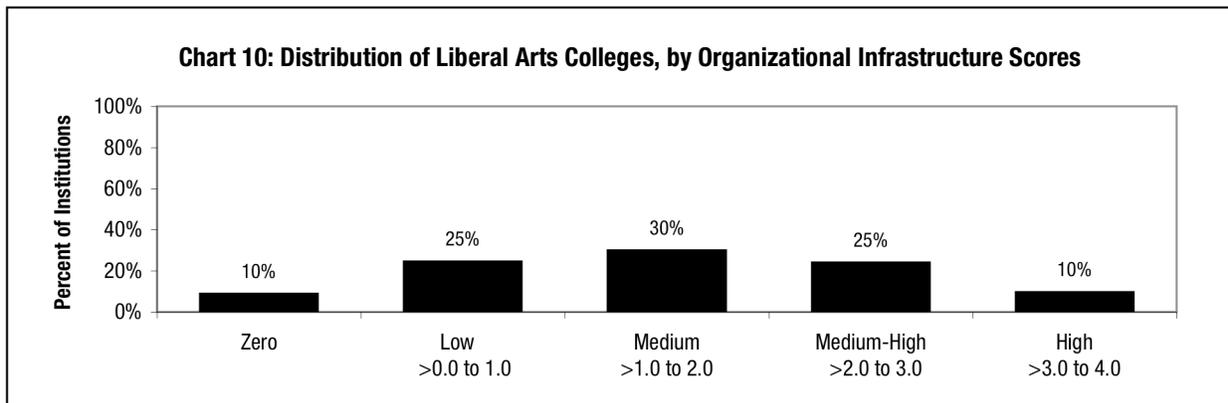
Organizational Infrastructure

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 internationalization goals and initiatives. (For a complete list of questions, see Box C on next page.)

Box C: Survey Questions on Organizational Infrastructure

- Does your institution have a campus-wide committee or task force in place that works solely on advancing internationalization efforts on campus?
- Please select the response that most closely resembles the administrative structure of the international education activities and programs at your institution:
 - No office administers or oversees international education programs.
 - A single office administers or oversees international education programs exclusively.
 - A single office administers or oversees international education programs, among other functions.
 - Multiple offices administer or oversee international education programs exclusively.
 - Multiple offices administer or oversee international education programs, among other functions.
- Does this office (or offices) have non-student support staff employed full time to administer international activities and programs exclusively?
- Is information about international education activities and opportunities on campus regularly sent out to faculty and students on your institution's internal e-mail system?
- Is there a newsletter or news bulletin regularly distributed by your institution that focuses on international opportunities?
- Does your institution have a system for communicating the experiences of current study abroad students to other students on campus?
- Is there a direct link from your institution's homepage on the World Wide Web to its international programs and events web page?

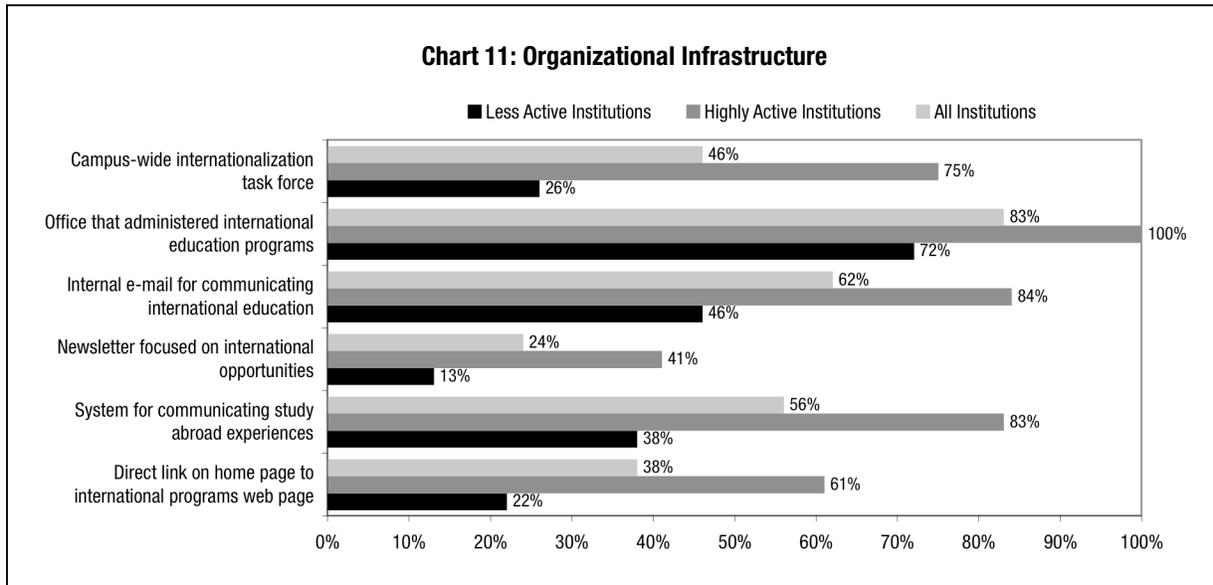
The organizational infrastructure scores were evenly distributed, suggesting that liberal arts colleges greatly vary in this dimension (see Chart 10).



Highly Active and Less Active Institutions Compared

The majority of liberal arts colleges had an office that administers international education programs, used an internal e-mail system to communicate with faculty and students about international opportunities and activities, and had a system to communicate students' study abroad experiences. Less than half of liberal arts colleges had a campus-wide task force exclusively for international education, and just 38 percent had direct links from their web sites' homepages to international programs web pages. Approximately one-fourth used a newsletter or bulletin to communicate about international opportunities. Highly active colleges were

significantly more likely than less active colleges to make these efforts to support international education (see Chart 11).



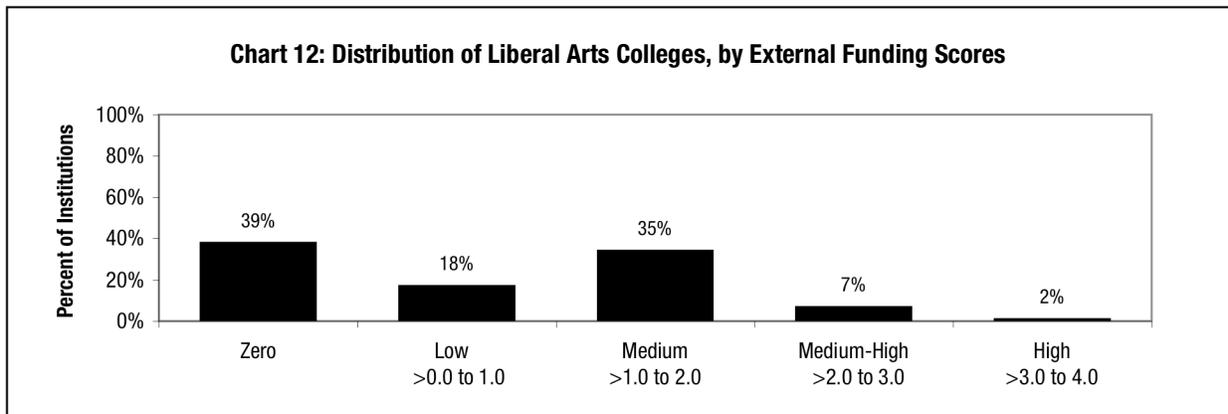
External Funding

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 external federal, state, or private funding specifically dedicated to advancing internationalization. (For a complete list of questions, see Box D.)

Box D: Survey Questions on External Funding

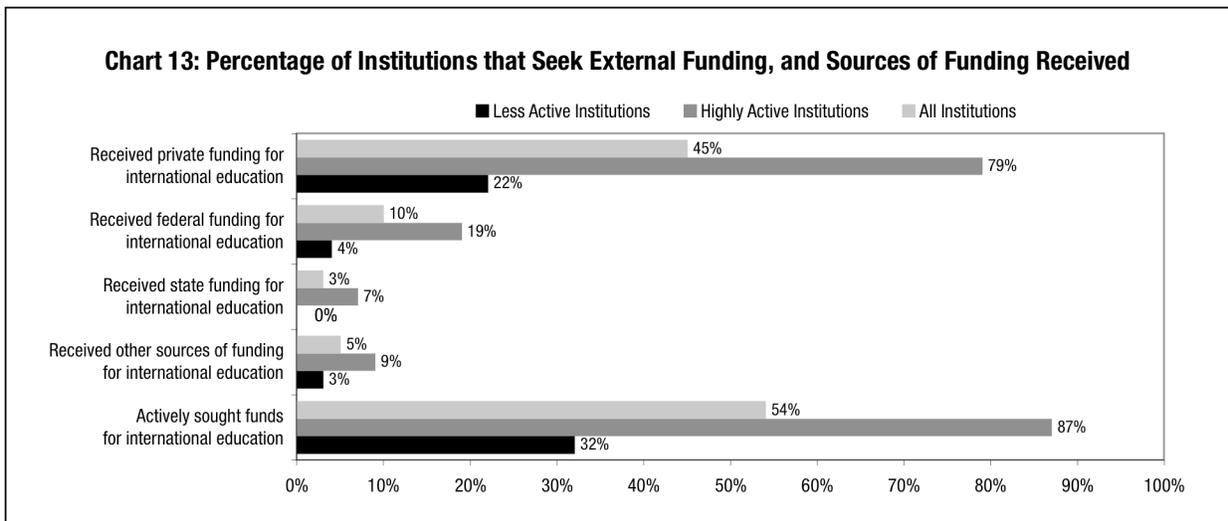
- Does your institution actively seek funds specifically earmarked for international education programs and activities?
- Did your institution receive external funding specifically earmarked for international programs and activities from any of the following sources in the last three years?
 - Federal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

Most scores in Chart 12 range from “zero” to “medium,” with the largest proportion scoring “zero.” This suggests weakness in external funding for international education among liberal arts colleges.



Highly Active and Less Active Institutions Compared

Overall, liberal arts colleges did not place a strong emphasis on external funding. A little more than half actively sought funding for international education, and just under half received funding for international education from private sources. Very few received funds from federal, state, or other sources. Highly active institutions were significantly more likely than less active institutions to actively seek funds (87 percent compared with 32 percent) and receive private funds (79 percent compared with 22 percent) (see Chart 13).



Institutional Investment in Faculty

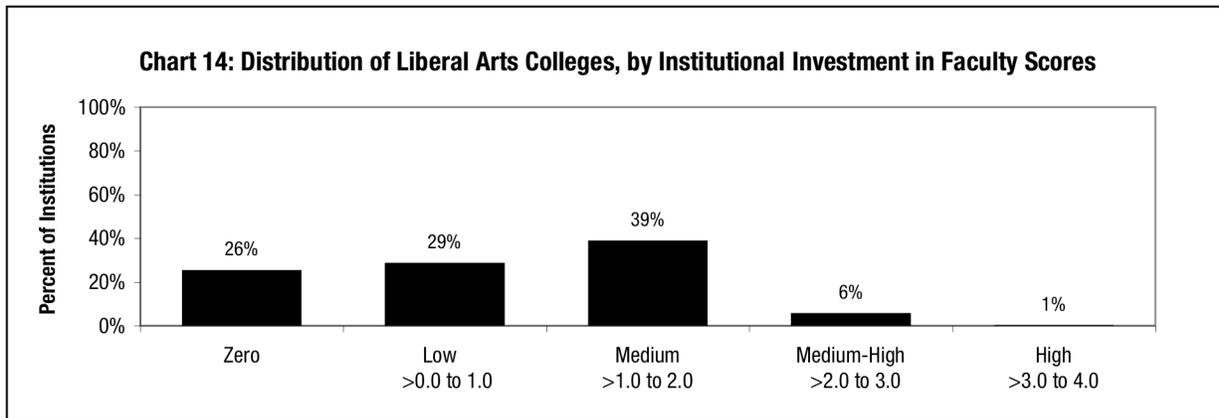
Faculty involvement is key to internationalization. Faculty members have the most direct contact with students and create the curriculum. In addition, because few students participate in education abroad or attend international extracurricular activities, the classroom remains the primary means to expose 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 groups, 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

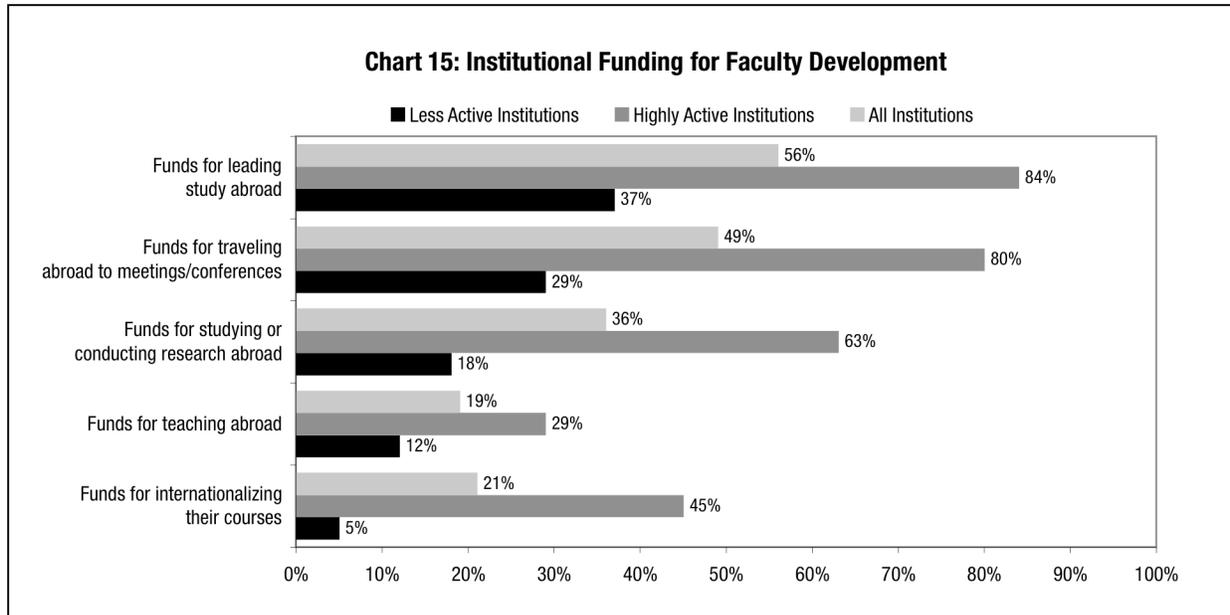
- Did your institution specifically earmark funds for full-time faculty to participate in any of the following international activities last year?
 - Leading undergraduate students on study abroad
 - Teaching at institutions abroad
 - Travel to meetings or conferences abroad
 - Study or conduct research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

Most scores in Chart 14 range from “zero” to “medium,” suggesting some weakness in institutional investment in faculty for international education among liberal arts colleges overall.



Highly Active and Less Active Institutions Compared

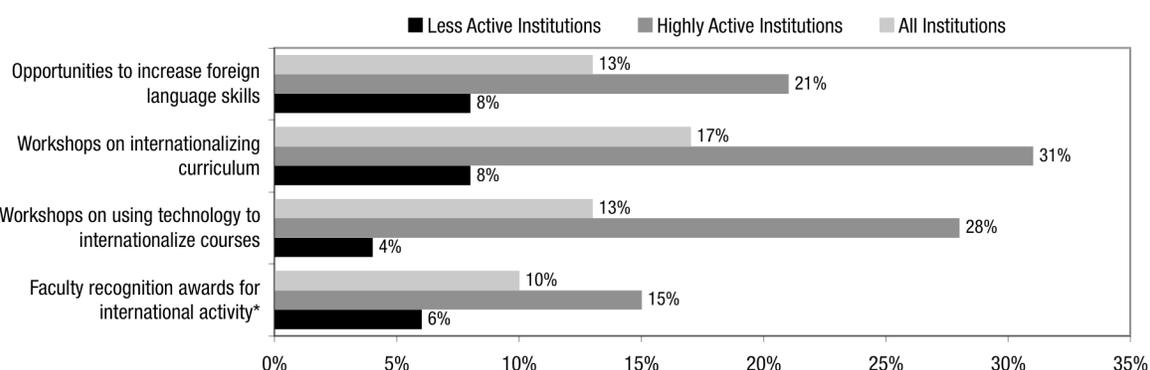
Liberal arts colleges were most likely to invest in international faculty activities by earmarking funds for faculty to lead study abroad programs or to travel abroad to meetings or conferences. Funding faculty course development was less common: Just one-fifth of liberal arts colleges earmarked funds for faculty to internationalize their courses. However, highly active colleges were significantly more likely than less active institutions to earmark funds for faculty to internationalize courses and to travel abroad for academic purposes (see Chart 15).



Overall, liberal arts colleges were unlikely to offer opportunities for faculty development in international education. Only a small minority of liberal arts colleges offered faculty workshops to internationalize curricula, opportunities for faculty to increase their foreign language skills, and recognition for faculty specifically for international activity. However, highly active liberal arts colleges were significantly more likely than less active colleges to offer these faculty workshops and opportunities for faculty to increase their foreign language skills. There was no statistically significant difference in the percentages of highly active and less active colleges that recognize faculty with awards specifically for international activity (see Chart 16 on next page).⁶

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

Chart 16: On-Campus Opportunities for Faculty Development and Recognition



*No significant difference.
(Apparent differences in percentages may not be statistically significant, typically because of small sample size.)

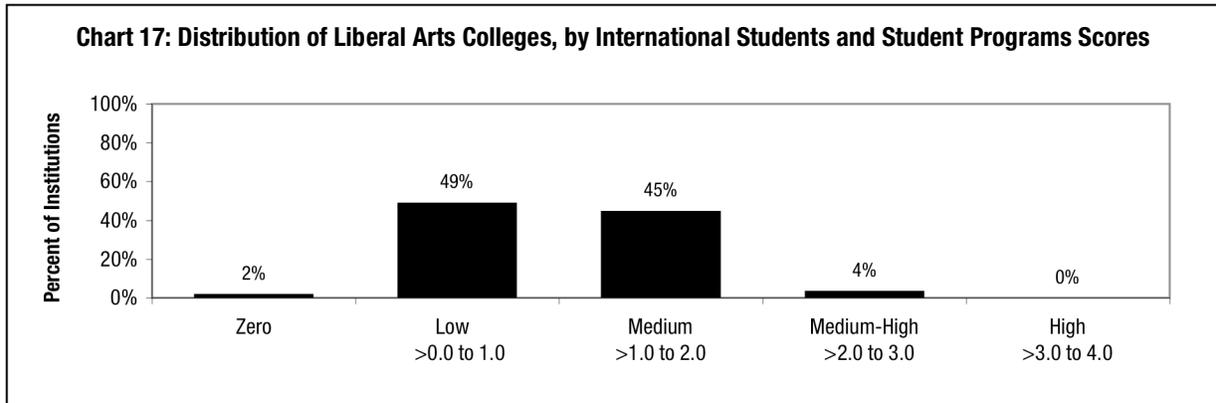
International Students and Student Programs

Students learn about international events, cultures, and issues through the various extracurricular activities offered on or 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.)

Box F: Survey Questions on International Students and Student Programs

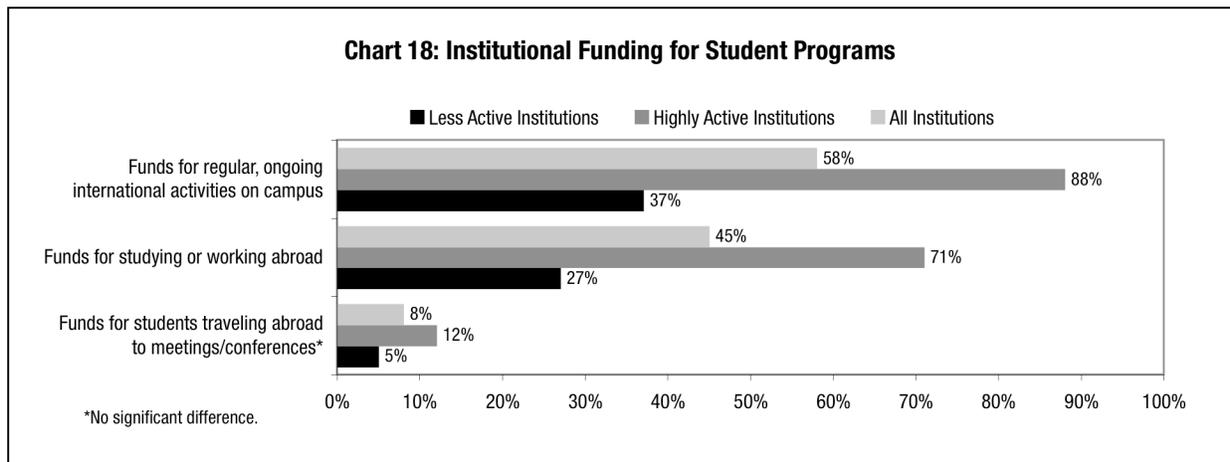
- Did your institution specifically earmark funds for any of the following activities to aid recruitment of full-time, degree-seeking international students at the undergraduate level?
 - Travel for recruitment officers
 - Scholarships for international students
 - Other
- What percentage of full-time 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)?
 - Buddy program that pairs U.S. and international students
 - Language partner program that pairs U.S. and international students
 - Meeting place for students to discuss international issues and events
 - Regular and ongoing international festivals or events on campus
 - International residence hall open to all, or a roommate program to integrate U.S. and international students

Most liberal arts colleges scored “low” or “medium” in the international students and student programs dimension (see Chart 17).

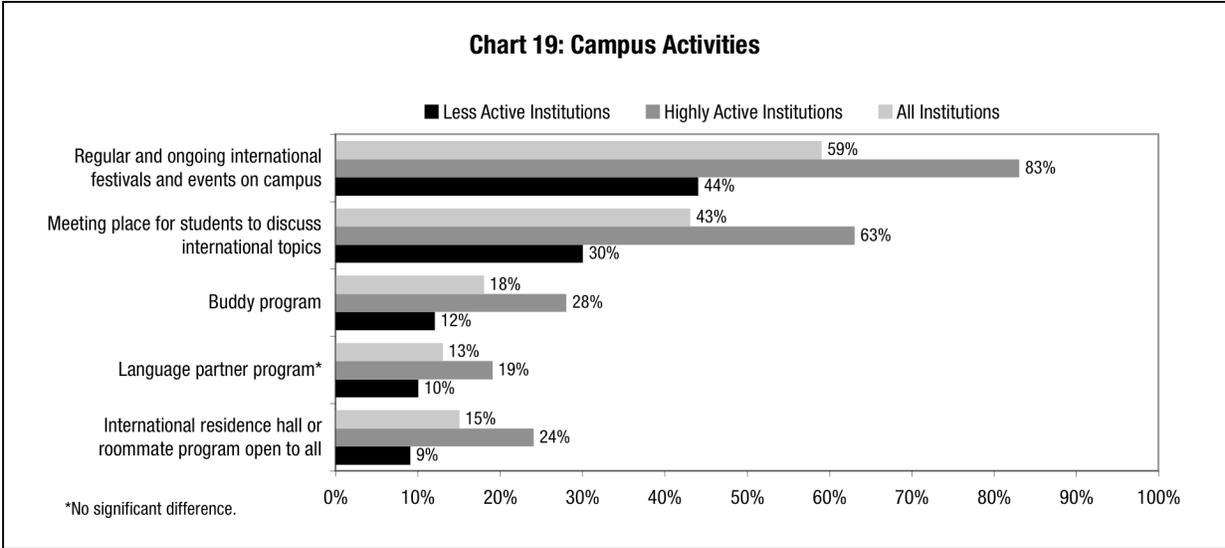


Highly Active and Less Active Institutions Compared

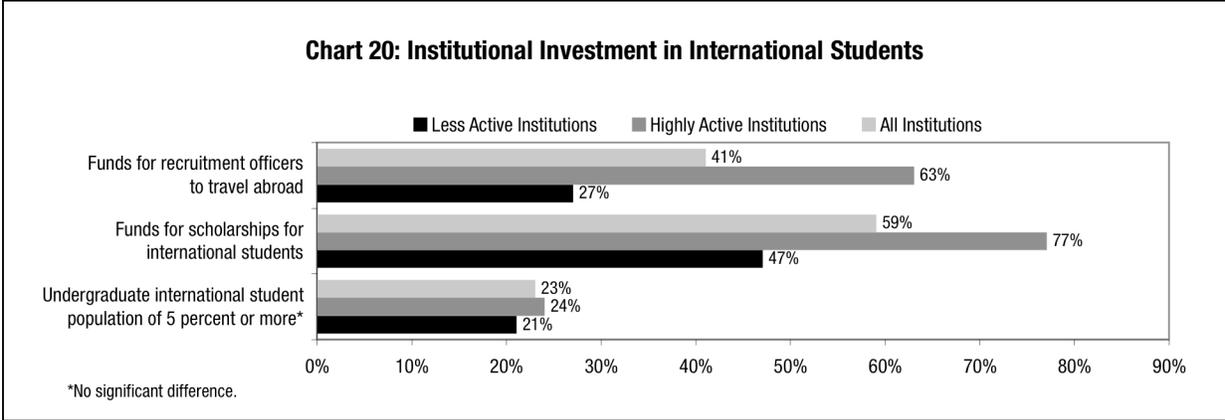
Liberal arts colleges were most likely to earmark funds for student programs such as regular, ongoing international activities on campus. Just under half earmarked funds for students to study or work abroad. Very few earmarked funds for students to travel abroad to meetings or conferences. Highly active institutions were significantly more likely than less active colleges to earmark funds for both on-campus and study abroad student programs, with the exception of student travel abroad to meetings or conferences, which highly active and less active colleges were equally unlikely to fund (see Chart 18).



Liberal arts colleges were most likely to provide on-campus international activities such as regular international festivals and events, and a meeting place for students to discuss international issues and events. A small minority of colleges offered activities such as buddy programs, language partner programs, or an international residence hall or roommate program. Highly active colleges were significantly more likely than less active colleges to offer all these type of activities, except for a language partner program, which both highly active and less active colleges were unlikely to offer (see Chart 19 on next page).



Liberal arts colleges placed some emphasis on international students. Approximately 60 percent earmarked funds for scholarships for international students, and 41 percent earmarked funds for recruitment officers to travel abroad. Furthermore, almost one-quarter of liberal arts colleges had an international student population of 5 percent or more of their full-time student population. Highly active liberal arts colleges were significantly more likely than less active colleges to fund the recruitment of and scholarships for international students. However, there was no statistically significant difference in the percentages of the two types of colleges with international student populations of 5 percent or more (see Chart 20).



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 liberal arts colleges. We identified internationalization efforts used by 50 percent or fewer of either type of institution (see Table 2).

Table 2: Strategies Least Likely to Be Used by Liberal Arts Colleges

	Highly Active Institutions (%)	Less Active Institutions (%)
Articulated Commitment		
• Had guidelines to consider international work in faculty promotion and tenure.	8	0
Academic Offerings		
• Had foreign language admission requirements for all undergraduates.	34	11
• Had foreign language residence halls open to all.	23	2
• Administered international field study for undergraduate credit.	47	16
• Administered international service opportunities for undergraduate credit.	29	10
Organizational Infrastructure		
• Had a newsletter focused on international opportunities.	41	13
External Funding		
• Received federal funding for international education.	19	4
• Received state funding for international education.	7	0
Institutional Investment in Faculty		
• Earmarked funds for faculty to internationalize their courses.	45	5
• Earmarked funds for faculty to teach abroad.	29	12
• Offered workshops for faculty to internationalize their courses.	31	8
• Offered workshops for faculty to use technology to internationalize courses.	28	4
• Offered opportunities for faculty to increase their foreign language skills.	21	8
• Offered faculty recognition awards for international activity.	15	6
International Students and Student Programs		
• Earmarked funds for students to travel abroad to meetings or conferences.	12	5
• Had a buddy program.	28	12
• Had a language partner program.	19	10
• Had international residence halls or roommate programs open to all.	24	9

Significant Correlations

Following 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.)

- Actively seeking funding and receiving private funding for international education appear to be central to internationalization at liberal arts colleges. These items were significantly related to all other aspects of internationalization. Receiving federal and state funding was related to few efforts. These relationships suggest that private funding is a key strategy of highly active liberal arts colleges.
- Liberal arts colleges with an organizational infrastructure for international education were likely to implement a variety of strategies. Having a campus-wide task force and an office exclusively for international education, and having established systems to communicate with faculty and students about international education opportunities and activities (e-mail, newsletters, and web pages) were strongly related to most other internationalization efforts.
- Having an articulated commitment to internationalization, such as having mission statements and strategic plans that specifically refer to international education, having a formal assessment of international efforts, and highlighting international education in recruitment literature, were strongly related to almost all other internationalization efforts at liberal arts colleges. Another form of articulated commitment—having guidelines to ensure that students can study abroad without delaying their graduation—was strongly related to many education abroad strategies: administering study abroad, funding students to study or work abroad, the percentage of students who study abroad, funding faculty to lead study abroad programs, and having systems established to communicate with faculty and students about international education opportunities and activities. It appears that when liberal arts colleges articulate formal commitments to international education, they are likely to translate those commitments into policies and practices.
- Education abroad appears to be the core academic offering in international education at liberal arts colleges. Administering study abroad programs or international internship programs and the percentage of students who study abroad were all strongly related to all other dimensions of internationalization.
- The likelihood of offering workshops that help faculty use technology to add an international dimension to their courses was strongly related to the percentage of undergraduates who study abroad. Furthermore, earmarking funds for faculty to internationalize their courses and offering workshops for faculty to internationalize their curriculum were strongly related to the percentages of courses with an international focus in the business and political science departments, respectively. These relationships prompt speculation that providing support for faculty to internationalize their courses may increase the number of internationalized courses offered to students and student interest in studying abroad.
- If liberal arts colleges support education abroad opportunities, they are likely to support both faculty and student participation. Earmarking funds for students to study or work abroad was significantly related to financing faculty to lead students on study abroad programs, teach abroad, travel abroad to meetings or conferences, and study or conduct research abroad.
- On-campus activities are central to internationalization at liberal arts colleges. Funding and offering international on-campus events and activities, and having a meeting place on campus for students to discuss international topics and issues were strongly related to many other internationalization efforts.

⁷ Statistically significant relationships with $p \leq .01$ are reported.

Conclusion: What the Data Suggest

The internationalization index enables comparisons among similar institutions and allows individual liberal arts colleges to compare their own practices and policies with 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 articulated throughout the literature and other investigations. They hold no surprises for internationalization leaders and practitioners:

- Highly active liberal arts colleges consistently articulate to students 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 international efforts. These more formal commitments could translate into a broader array of policies and practices, and may help set the foundation for improved internationalization.
- An established organizational infrastructure is not consistently found across liberal arts colleges. Having an office dedicated to internationalization and a campus-wide task force or committee that works solely on advancing internationalization are strongly related to most other efforts, suggesting that they are key aspects of an institution's infrastructure for advancing internationalization. In addition, having established systems for communicating with students and faculty about international opportunities and activities—internal e-mail or other systems that publicize students' study abroad experiences—distinguishes highly active colleges from less active colleges, and are useful for improving awareness.
- Although external funding is central to internationalization, it is generally weak among liberal arts colleges. Highly active colleges are more likely than less active colleges to seek external funds and receive private support.
- Although study abroad programs are often overemphasized in defining an institution's internationalization efforts, for liberal arts colleges, study abroad programs are key international opportunities for students. At highly active liberal arts colleges, almost 8 percent of students study abroad. Liberal arts colleges are much less likely to provide students with education abroad experiences via internships, field study, service learning opportunities, or by attending meetings or conferences than via traditional study abroad.
- International education in on-campus student programs is most likely offered through international festivals and events, and meeting places for students to discuss international issues. Least likely to be offered are opportunities for U.S. and international students to interact outside the classroom, such as buddy programs, language programs, and residence hall or roommate programs.
- 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, and did not distinguish highly active colleges from less active colleges. To benefit from the presence of international students, institutions must develop strategies to promote their integration and provide opportunities for students to learn from them.

- Internationalization efforts at liberal arts colleges include funding faculty to travel abroad to meetings or conferences and to lead study abroad programs, but do not include an investment in faculty to internationalize their courses. Formal guidelines to consider international activity in faculty promotion and tenure decisions, and funding workshops for faculty to internationalize their courses are very uncommon. More support for faculty could increase international course offerings and student interest in international education.

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 liberal arts colleges. 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 liberal arts colleges 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 627 regionally accredited liberal arts colleges in the nation (as defined in the 1994 Carnegie classification system), a random sample of 362 (58 percent) was surveyed, of which 187, or 52 percent, responded. Twenty-six percent of the 187 colleges were Baccalaureate Colleges I, and 74 percent were Baccalaureate 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 an 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 others 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 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 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

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

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 liberal arts colleges; or 1.0 for those with a response value above the average for all responding colleges. 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 the others.

An overall quintile ranking was achieved by assigning liberal arts colleges to quintiles based on their overall score. Because the colleges were placed into quintiles, 20 percent of the total was placed into each of the quintiles. Therefore, of the 187 colleges 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 (112 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 1.56. Therefore, liberal arts colleges categorized as “highly active” had an overall score greater than or equal to 1.56, and those categorized as “less active” had an overall score less than 1.56.

Adjusted and Unadjusted Scores

Two sets of overall scores were computed, an unadjusted 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 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 175 of the cases, or 94 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 two 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 liberal arts colleges, and across all liberal arts colleges. 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 $p \leq .05$ for a particular comparison.

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

