# Enhancing Student Success and Retention throughout Undergraduate Education **ANATIONAL SURVEY**



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John N. Gardner Institute for Excellence in Undergraduate Education

www.jngi.org

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# Introduction

The John N. Gardner Institute, as a non-profit organization serving the public good, plays a unique leadership role in higher education by supporting colleges and universities as they pursue the attainment of excellence in undergraduate education. By focusing its expertise on the development of assessment-based action plans with measurable outcomes, the Institute fosters institutional change by enhancing accountability, coordination, and the delivery of efforts associated with student learning, success, and retention during the undergraduate experience. While the Institute undertakes activities to strengthen all of undergraduate education, it places particular emphasis on special efforts to improve the success of beginning college students.

In October of 2010, the Gardner Institute administered a national survey entitled "Enhancing Student Success and Retention throughout Undergraduate Education: A National Study." The purpose of this survey was to investigate selected initiatives designed to improve the success and retention of undergraduate students at four-

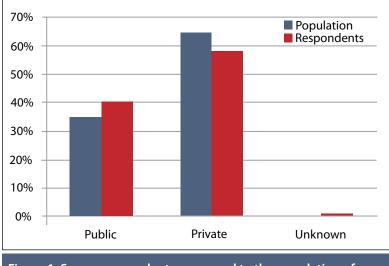


Figure 1. Survey respondents compared to the population of baccalaureate institutions by institutional control.

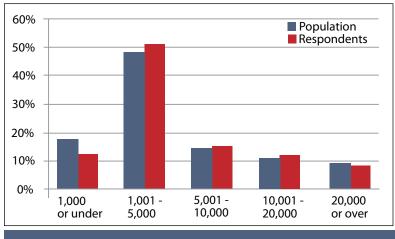


Figure 2. Survey respondents compared to the population of baccalaureate institutions by size of enrollment.

year colleges and universities. The survey did not cover all student success initiatives, but focused on seven that are widely used in higher education institutions in the United States: summer bridge programs, pre-term orientation, special academic/ transition seminars, learning communities, early warning/academic alert systems, service learning, and undergraduate research.

The survey, which was administered electronically using the Qualtrics online survey software system, included 90 questions and utilized branching logic. The survey was sent to 1,373 chief academic officers (CAOs) at four-year colleges and universities in the U.S. There were 527 responses from CAOs or their surrogates, resulting in a 38.4% response rate. Survey respondents were reasonably representative of all four-year institutions by control and size. Figures 1 and 2 provide a comparison of the overall population of U.S. four-year institutions with the survey respondents by institutional control (public/private) and by size. Private institutions and institutions in the under-1,000student category were under-represented in the response pool.

The original survey can be viewed at http://jngi. info/NatlSrvy or by clicking here.

# Summer Bridge Programs

In this survey, summer bridge programs were defined as "academic programs offered for students before the first year of college." Such programs are generally designed to offer students additional academic and/or social support before they begin the first term of the first year.

## Summer Bridge Programs by Institutional Enrollment and Public/Private Control

As Table 1 indicates, a majority of respondents (55.3%) indicated that their institution does not offer summer bridge programs. Such programs are significantly more likely to be offered at large institutions than at small institutions (under 5,000 students), and at public (64.4%) rather than private institutions (29.8%)

Table 1. Summer Bridge Programs by Institutional Enrollment						
	1,000 or under (n=62)	1,001 – 5,000 (n=236)	5,001 – 10,000 (n=74)	10,001 – 20,000 (n=56)	20,001 or over (n =37)	All (n =465)
Yes	12.9%	39.8%	59.5%	62.5%	67.6%	44.3%
No	87.1%	59.7%	40.5%	37.5%	29.7%	55.3%
Don't know	0.0%	0.4%	0.0%	0.0%	2.7%	0.4%

#### Levels of Student Participation in Summer Bridge Programs

As the data show in Table 2, rates of first-year student participation in summer bridge programs tend to be low. Differences in participation rates between enrollment categories are not statistically significant.

Table 2. Summer Bridge Participation Rates by Institutional Enrollment							
1,000 or under (n=8)	1,001 – 5,000 (n=79)	5,001 - 10,000 (n=74)	10,001 – 20,000 (n=56)	20,001 or over (n =22)	All (n =174)		
17.6%	11.8%	13.3%	11.3%	12.0%	12.3%		

#### Summer Bridge as a Requirement

Respondents were asked whether summer bridge "is required for any students at your institution." Table 3 shows the percentages by institutional enrollment. The differences are significant at the .05 level. When reviewing the data by institutional control, public institutions (55.1%) are more likely than private institutions (41.6%) to require at least some students to participate in summer bridge. The differences between public and private rates are not significant.

Table 3. Summer Bridge Requirement for Some Students by Institutional Enrollment						
	1,000 or under (n=8)	1,001 – 5,000 (n=90)	5,001 – 10,000 (n=42)	10,001 - 20,000 (n=33)	20,001 or over (n =24)	All (n =197)
Yes	37.5%	44.4%	66.7%	45.5%	45.8%	49.2%
No	62.5%	54.4%	33.3%	45.5%	54.2%	48.7%
Don't know	0.0%	1.1%	0.0%	9.1%	0.0%	2.0%

#### Which Students Are Required to Participate in Summer Bridge

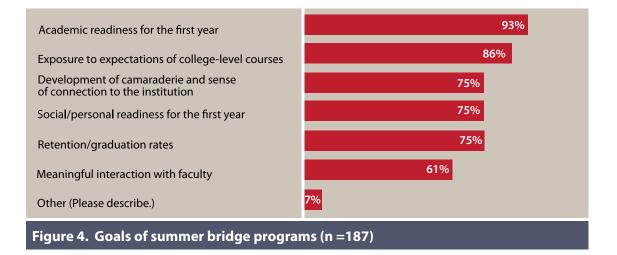
Summer bridge programs, when they are part of an institution's roster of student success initiatives, are often required for certain students. Figure 3 provides data from respondents on which students must meet this requirement. Responses in the "other" category included "students new to American sign language," "students receiving certain grant-based scholarships," and "students with lower family income."

Provisionally admitted students	48%					
Students eligible for federal or state equal opportunity programs (EOP) (e.g., TRIO)	38%					
Developmental/remedial students	36%					
Other (Please describe.)	17%					
STEM students	7%					
Students who have not passed essential admissions examinations (e.g., NY Regents exams)	<mark>7%</mark>					
Athletes	<mark>6%</mark>					
Figure 3. Which students are required to participate in summer bridge (n =94)						

In a follow-up question, respondents were asked about voluntary participation in summer bridge. Of the 160 responses to this question, 47 respondents (29%) indicated that their institution permits "any students," including honors students, to participate in summer bridge.

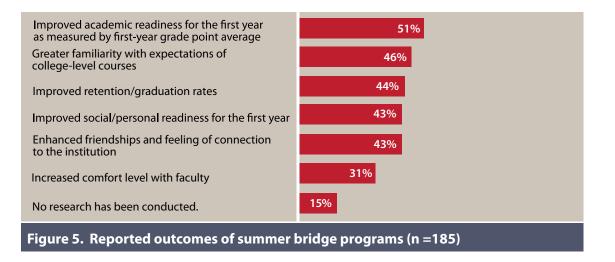
## **Goals and Outcomes of Summer Bridge Programs**

Survey respondents were asked to identify both goals and outcomes of summer bridge programs at their institution. Figures 4 and 5 provide responses. Goals of summer bridge are consistent with goals of many other student support initiatives offered during the first year.



In the "other goals" category, respondents mentioned "recruitment," "participation in summer portion of the BSMD program, a 6-yr program in which the students earn a medical degree," "providing a transition to STEM majors, especially for women and students of color," and "building cohort and learning communities."

Respondents were asked to check those summer bridge outcomes that had been "determined by either quantitative or qualitative research." Several respondents to this question indicated that "research is ongoing" and is yet to be reported.



## Funding for Summer Bridge Programs

A common issue for many institutions is how to fund summer bridge programs. This survey included a question about sources of funding, and Figure 6 provides the responses.

Institution/Unit funding	59%				
State or federal funding	50%				
Tuition paid by participants	30%				
Private or foundation funding	15%				
Other (Please describe.)	4%				
Figure 6. Sources of funding for summer bridge programs (n =184)					

In the "other" response category, respondents mentioned the following: "Institutional funds are set aside to meet the goals of the strategic plan," "grants from Walmart," "State Girls STEM Collaborative," and "National Science Foundation STEM grants."

## Perceived Cost-Effectiveness of Summer Bridge Programs

A final question for each section of the survey was about perceived cost-effectiveness. With respect to summer bridge programs, the question was as follows: "In your opinion, considering both cost and educational benefits, what is the level of cost-effectiveness for summer bridge programs at your institution?" Table 4 provides responses by institutional enrollment.

Table 4. Perceived Cost-Effectiveness of Summer Bridge Programs by Institutional Enrollment						
	1,000 or under (n=7)	1,001 – 5,000 (n=88)	5,001 – 10,000 (n=40)	10,001 - 20,000 (n=31)	20,001 or over (n =20)	All (n =186)
High	57.1%	36.4%	35.0%	19.4%	50.0%	35.5%
Medium	42.9%	37.5%	35.0%	48.4%	35.0%	38.7%
Low	0.0%	10.2%	7.5%	6.5%	0.0%	7.5%
Don't Know	0.0%	15.9%	22.5%	25.8%	15.0%	18.3%

While an average of 18.3% of respondents indicated that they "don't know" about cost-effectiveness, only 7.5% evaluated the cost-effectiveness of these programs as "low." The remaining 84.2% indicated that, in their opinion, the programs were cost-effective at a medium or high level. Differences in responses between enrollment categories were not significant.

# **Pre-term Orientation**

Pre-term orientation includes orientation activities that occur during a period of time (e.g., spring or summer) preceding the beginning of a new term. For the purposes of the survey, pre-term orientation was defined as including pre-term advisement/registration programs, activities during a preceding term or immediately prior to the beginning of the term. The definition excluded "extended orientation" courses (e.g., first-year seminars), which are included in another section of the survey. The survey questions were based on the assumptions that virtually all institutions have at least some form of pre-term orientation and that many offer more than one form.

The first question on pre-term orientation provided a list of types of orientation from which respondents were asked to check all available at their institution. Of the 442 individuals who responded to this item, no one checked that their institution did not have orientation. The most common form of pre-term orientation was on-campus activities immediately preceding the beginning of the term (e.g., welcome week) (87.6%). Almost as many respondents indicated they have pre-term advisement/registration programs (86.4%) and an on-campus pre-term introduction to services, issues, and challenges (80.3%). Adventure or wilderness orientation (21.5%) and online orientation (18.3%) were less common forms of pre-term orientation.

The "other" option was selected by 43 respondents who provided 48 comments elaborating on other forms or aspects of their pre-term orientation programs. Community or public service, listed for 14 institutions, was the most frequently mentioned additional form of orientation. Some form of academic experience was mentioned by five institutions; examples included writing and thinking, common reading, and discipline-based programs. Other types of pre-term orientations specifically described for multiple institutions included convocations (4), orientations for special populations (e.g., international, adult, and transfer students) (4), and leadership activities (2).

The survey responses suggest that the forms of pre-term orientation programs offered at public and private institutions are quite similar. However, as shown in Table 5, private institutions are somewhat more likely to offer on-campus activities immediately preceding the term, (e.g. ,welcome week activities), and public institutions were more likely to offer an online orientation.

Table 5. Percent of Public and Private Institutions Offering Forms of Pre-term Orientation						
	Public (n=174)	Private (n=266)	All (n=442)			
Advisement/registration	87.4%	86.1%	86.6%			
On-campus pre-term activities	82.8%	79.0%	80.5%			
On-campus immediately preceding term	79.3%	92.9%	87.8%			
Adventure/wilderness	20.7%	21.8%	21.5%			
Online orientation	23.0%	15.4%	18.4%			

The forms of pre-term orientation were also very similar across institution size with the notable exception of an increasing tendency to offer online orientation as the size of the institution increased (see Table 6).

Table 6. Percent of Institutions Offering Forms of Pre-term Orientation by Institutional Enrollment						
	1,000 or under (n=59)	1,001 – 5,000 (n=231)	5,001 – 10,000 (n=70)	10,001 – 20,000 (n=52)	20,001 or over (n =29)	All (n =442)
Advisement/ registration	81.4%	84.9%	87.1%	96.2%	93.1%	86.6%
On-campus pre- term activities	69.5%	77.9%	88.6%	86.5%	93.1%	80.5%
On-campus imme- diately preceding term	84.8%	91.8%	81.4%	82.7%	86.2%	87.8%

# **Required Participation in Pre-Term Orientation**

The survey asked which first-year and transfer students are required to participate in at least one form of pre-term orientation over and above registering for courses. As can be seen from Table 7, all first-time students are more likely to be required to attend a pre-term orientation than transfer students, and all full-time students are more likely to be required to attend orientation than their part-time counterparts.

## Forms of Pre-Term Orientation

In comparing public to private institutions, private institutions (93.4%) were significantly more likely to require all full-time first-time students to participate in pre-term orientation than public institutions (81.6%). There was a similar trend for more private institutions (63.1%) to require all full-time transfer students to attend orientation than public institutions (51.3%).

Table 7. Students Required to Participate in Orientation (n=442)						
	Full-time First-time	Part-time First-time	Full-time Transfer	Part-time Transfer		
All	88.5%	55.7%	58.3%	37.7%		
Some	4.7%	21.1%	23.1%	28.7%		
None	6.8%	23.2%	18.7%	33.6%		

The comparison of required participation by enrollment of institutions found significant differences only for fulltime first-time students. As Table 8 shows, institutions with 1,000 or fewer students were most likely to require all full-time first-time students to attend orientation, while institutions with enrollments in the 5,001 to 10,000 range were the least likely to require all full-time first-time students to attend orientation; this pattern was the same for both private and public institutions.

Table 8. Pre-term Orientation Required for Full-time First-time Students by Institutional Enrollment							
	1,000 or under (n=58)	1,001 - 5,000 (n=221)	5,001 - 10,000 (n=69)	10,001 - 20,000 (n=49)	20,001 or over (n=29)	All (n=426)	
All	98.3%	91.4%	73.9%	83.7%	82.8%	88.0%	
Some	0.0%	2.7%	13.0%	6.1%	6.9%	4.7%	
None	1.7%	5.4%	11.6%	10.2%	10.3%	6.8%	
Don't know	0.0%	0.5%	1.4%	0.0%	0.0%	0.5%	

#### **Characteristics of Pre-Term Orientation Programs**

The survey asked respondents to check all items that applied to their institutions' orientation from a list of possible characteristics and to add descriptions as appropriate. The most common characteristics selected were inclusion of advisement/registration (92%), activities for families (88%), and activities led by upper-level students (79%), (see Figure 7). Three of the listed characteristics related to fees to cover the costs of participation in orientation; nearly half (47%) of the 428 respondents indicated that students who attend pay no additional orientation fees for attending. Several of the open-ended comments provided additional information about orientation fees being included in other categories such as activity fees or registration deposits.

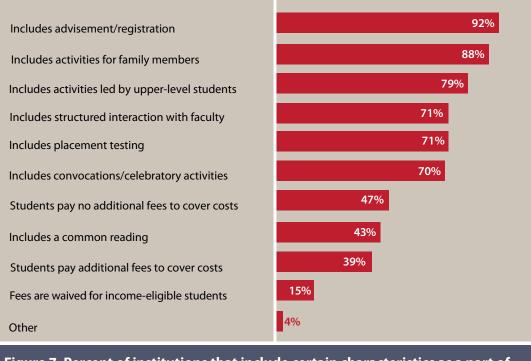


Figure 7. Percent of institutions that include certain characteristics as a part of pre-term orientation

#### **Length of Orientation Activities**

The survey asked the most commonly experienced combined length of orientation activities whether on campus or online. The most common length of orientation for the institutions responding to this question was two to three days. There were significant differences in the length of orientation between public and private institutions; private institutions were more likely to have orientation that is longer than three days, and public institutions were more likely to have or less (see Table 9).

Table 9. Typical Length of Pre-term Orientation at Public and Private Institutions						
	Private (n=256)	Public (n=170)	Overall (n=428)			
Less than 4 hours	0.8%	5.3%	2.6%			
4 to 8 hours	10.2%	27.1%	16.8%			
2 to 3 days	46.1%	45.3%	45.8%			
More than 3 days	43.0%	21.8%	34.6%			

There were significant differences in orientation length by enrollment. While institutions of all sizes were most likely to have orientation in the two- to three-day range, at institutions with enrollments over 5,000, orientation was more likely to last one day or less (see Table 10). This trend was the same for private and public institutions. However, for institutions with enrollments between 1,001 and 5,000, public institutions were more likely to have an orientation lasting one day or less (36.2%) than private institutions (9.7%).

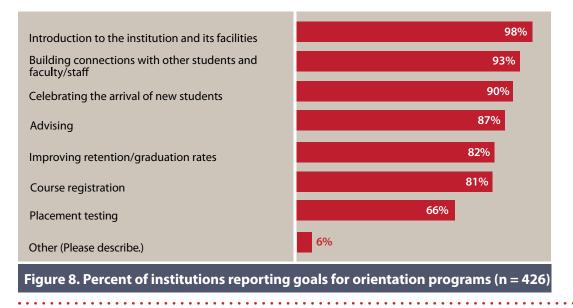
Table 10. Typical Length of Pre-term Orientation by Institutional Enrollment						
	1,000 or under (n=58)	1,001 - 5,000 (n=223)	5,001 - 10,000 (n=67)	10,001 - 20,000 (n=50)	20,001 or over (n=29)	All (n=427)
Less than 4 hours	0.0%	2.7%	3.0%	4.0%	3.4%	2.6%
4 to 8 hours	12.1%	12.6%	20.9%	28.0%	31.0%	16.9%
2 to 3 days	44.8%	44.4%	44.8%	56.0%	41.4%	45.7%
More than 3 days	43.1%	39.9%	31.3%	12.0%	24.1%	34.7%

#### **Primary Mode of Orientation**

The institutions were asked to indicate whether their primary mode of orientation was on campus, online, or other. Almost all (99.3%) of the 424 institutions responding to this item indicated that the primary mode of orientation is on campus. None of the institutions indicated their primary mode was online. The three institutions that indicated "other" provided descriptions of their primary mode. One combined online pre-registration with on-campus orientation. The second combined on-campus orientation with a campground experience and a volunteer service component. The third institution used written materials.

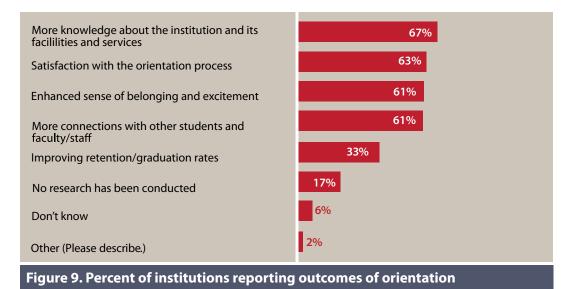
#### **Goals of Orientation Programs**

The survey asked respondents to check all of the goals that apply to the orientation programs at their institution. A total of 426 respondents answered this item. The goal of providing an introduction to the institution and its facilities was almost universal. Building connections, celebrating the arrival of new students, and advising were also predominant goals (see Figure 8). There were 25 comments added as elaborations on the "other" response. Four of the comments related to connections with the institution, community, or bonding. There were three comments each related to an academic experience and faculty or collegiate expectations. Additional goals mentioned related to connecting to parents, introduction to campus technology, residence living, health issues, service learning, civic engagement, diversity, and cultural competence.



The respondents were asked, "As determined by qualitative or quantitative research, do(es) the orientation program(s) at your institution correlate with any of the following outcomes." Respondents were allowed to check all of the listed outcomes listed including "other," or to check "no research has been conducted" or "don't know." A total of 425 individuals responded to this question. The outcome with the greatest support parallels the most common goal; that is, 67% indicated that the orientation program(s) increased knowledge about the institution's facilities and services (see Figure 9). The absence of research on the outcomes of orientation was reported by 17% of the respondents; another 6% reported that they "don't know" about research on outcomes.

The comments associated with the "other" category reflected some of the other goals for orientation mentioned in the previous question. These areas were academic preparedness/success, service learning outcomes, and reduction in alcohol abuse in the first weeks of the semester. One comment related to the timing of orientation: "We have research that shows that students who attend orientation programs earlier in the cycle—March, May, June – have a higher persistence rate. Those who participate in new student orientation in August usually have a hard time paying for school and do not fare as well academically."



## Perceived Cost-Effectiveness of Orientation

Respondents were asked to express their opinion of the level of cost-effectiveness for their institution's approach to orientation, considering both the costs and educational benefits. Overall, 45% of the institutions rated the cost-effectiveness of orientation as high, 39% rated it as medium, and 5% as low. Eleven percent indicated that they did not know the cost-effectiveness of orientation. There were no significant differences in perceptions of cost-effectiveness of orientation by institutional control. However, there were differences in the perception of cost-effectiveness by size; larger institutions tended to perceive orientation as more cost-effective than smaller institutions (see Table 11).

Table 11. Perceived Cost-Effectiveness of Orientation							
	1,000 or under (n=58)	1,001 - 5,000 (n=222)	5,001 - 10,000 (n=68)	10,001 - 20,000 (n=48)	20,001 or over (n=28)	All (n=424)	
High	32.8%	42.8%	47.1%	58.3%	53.6%	44.6%	
Medium	41.4%	40.5%	36.8%	31.2%	42.9%	39.2%	
Low	12.1%	6.3%	0.0%	2.1%	0.0%	5.2%	
Don't Know	13.8%	10.4%	16.2%	8.3%	3.6%	11.1%	

# **Academic/Transition Seminars**

Special seminars designed to assist students in the academic and/or social transitions of institutional life have existed for many years. The earliest senior seminars/capstone courses date back to the 18th century, and first-year (freshman) seminars first appeared in the late 1800s. These courses that focus on the beginning and end of the academic experience have been joined by others: transition seminars for students transferring into a new institution, sophomore seminars, and even seminars at the 3rd year (junior) level.

The University of South Carolina's National Resource Center for The First-Year Experience and Students in Transition (NRC) is the recognized authority on academic/transition seminars. Since 1988, the NRC has conducted national surveys of first-year seminars on a three-year recurring cycle. In addition, the NRC has undertaken occasional surveys of senior and sophomore seminars. This survey of undergraduate student success initiatives includes academic/transition seminars as one of seven student success interventions at four-year institutions and adds to information collected by the NRC.

#### **Comparing Seminars at All Undergraduate Levels**

The first question in this section was, "Does your institution, any academic department, or other unit offer one or more seminars for undergraduate students at any academic level (first-year, sophomore, junior, senior, or transfer) that address transition topics or academic themes?"

Tables 12 and 13 provide a comparison of the percentages of institutions by enrollment and by public/private control that currently offer seminars at any level. A slightly higher percentage of public institutions offers seminars than private institutions, and percentages increase with institutional enrollment.

Table 12. Any Seminar by Institutional Enrollment (n = 430)						
	1,000 or under (n=58)	1,001 - 5,000 (n =223)	5,001 - 10,000 (n=69)	10,001 - 20,000 (n=51)	20,001 or over (n=29)	All (n=430)
Yes	82.8%	84.8%	91.3%	92.2%	96.6%	87.2%
No	17.2%	13.0%	8.7%	7.8%	3.4%	11.6%
Don't know	0.0%	2.2%	0.0%	0.0%	0.0%	1.2%

# Table 13. Any Seminar by Public/Private Control (n = 430)

	Public (n=171)	Private (n =262)	All (n=433)
Yes	89.5%	85.5%	87.1%
No	9.4%	13.4%	11.8%
Don't know	1.2%	1.1%	1.1%

As Table 14 and 15 indicate, whether comparing institutions by enrollment or control, the most common type of seminar is the first-year seminar. A slightly greater percentage of private respondents reported first-year seminars, but the difference is not significant. Similarly, senior seminars/capstone courses are quite common at both public and private colleges and universities. Over one-quarter of private institutions and slightly under one-quarter of public institutions also offer transition seminars for transfer students.

Sophomore and junior level seminars are relatively uncommon at both public and private institutions. A slightly larger percentage of private institutions than public institutions offers special seminars in both the second and third year.

Table 14. Seminars at All Levels by Institutional Enrollment						
	1,000 or under (n=47)	1,001 - 5,000 (n =187)	5,001 - 10,000 (n=63)	10,001 - 20,000 (n=45)	20,001 or over (n=27)	All (n=369)
First-year	95.7%	96.3%	95.2%	95.6%	100.0%	96.2%
Transfer	21.3%	27.8%	23.8%	26.7%	17.9%	25.4%
Sophomore	10.6%	13.0%	12.7%	17.8%	14.3%	13.4%
Junior	10.6%	17.4%	11.1%	15.6%	20.0%	13.4%
Senior	93.8%	93.4%	90.3%	93.3%	96.2%	93.1%

Table 15. Seminars at All Levels by Control						
	Public (n=145)	Private (n=212)	All (n=357)			
First-year	95.4%	97.3%	96.5%			
Transfer	21.7%	27.9%	25.3%			
Sophomore	11.8%	14.4%	13.3%			
Junior	14.1%	16.7%	15.6%			
Senior	91.3%	93.5%	92.6%			

## **All Seminars: Levels of Student Participation**

As Table 16 indicates, seminars at smaller institutions (under 5,000 students) enroll a larger percentage of students than seminars at larger institutions (over 5,000 students). With only a few exceptions, as institutional enrollment increases, mean participation rates decrease in all seminars. There is a high correlation between institutional enrollment and public/private control (private institutions tend to be smaller; public institutions, larger); therefore, it follows that private institutions are more likely to enroll a greater percentage of students in seminars at all levels.

Table 16. Mean Percentage of Students Participating in Seminars by Institutional Enrollment						
	1,000 or under	1,001 - 5,000	5,001 - 10,000	10,001 - 20,000	20,001 or over	All
First-year (n=314)	96.3%	87.4%	67.0%	67.0%	45.3%	79.7%
Transfer (n=74)	82.1%	62.7%	43.3%	39.4%	7.7%	55.9%
Sophomore (n=42)	73.2%	47.0%	20.0%	19.9%	8.0%	37.3%
Junior (n=46)	82.0%	51.7%	29.5%	38.5%	45.0%	49.1%
Senior (n=279)	79.9%	80.0%	63.6%	56.9%	62.0%	73.4%

# First-Year Seminars

As measured by overall numbers and levels of student participation, first-year seminars are the most commonly offered type of transition course and were the subject of several additional lines of questioning.

## **First-Year Seminar Sections for Subpopulations**

Survey respondents were asked to respond to the following question: "Does your institution offer special sections of a first-year seminar for any of the following student sub-populations?" Figure 10 shows aggregate data comparing the frequencies of unique sections of first-year seminars across all institutions, both public and private.

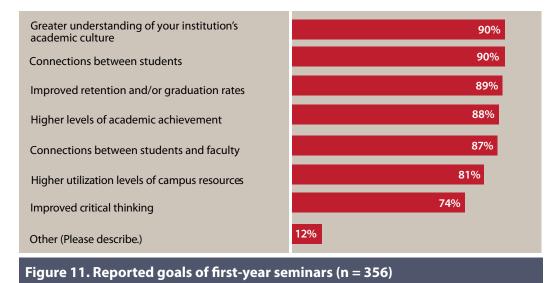
Honors students	43%
Students in specific majors (other than STEM majors)	33%
Underprepared students	30%
STEM (Science, Technology, Engineering, Math) students	20%
Low SES or first-generation students (as a part of larger federal or state EOP or institutional programs to serve these students)	17%
Other (Please describe.)	10%
Adult students	8%

Figure 10. First-year seminars for subpopulations (n = 355)

Responses in the "other" category included "international students," "undeclared students," "males," "on-line students," "English as a second language' students," and "students in leadership program."

## **First-Year Seminar Goals**

First-year seminars have generally been designed to enhance the social and/or the academic integration of firstyear college students. Stated goals, therefore, support these primary purposes. But the primary catalyst for the implementation of many of these courses is their frequently reported correlation with improved rates of student retention. Survey respondents were asked, "Which, if any, of the following goals are first-year seminars at your institution designed to address?" Response percentages are provided in Figure 11.



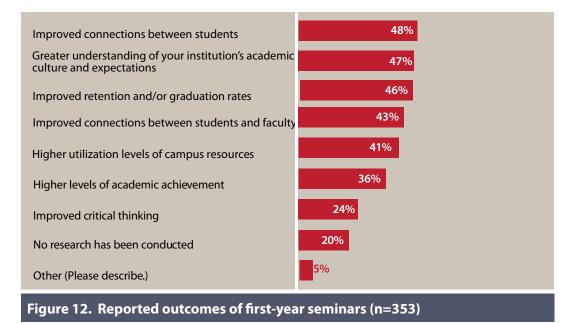
Respondents listed a number of "other" institution-specific first-year seminar goals. These include, but are not limited to, the following:

- Introduction to the region and city
- Understanding of service and cross-cultural commitments
- · Improved writing and oral presentation skills
- · Leadership, teamwork, open-ended problem solving
- Diversity issues
- Enhanced understanding of the liberal arts and of the college's mission and vision
- Experiential learning
- · Values clarification, e.g., alcohol and drug use, sexual behavior
- Introduction to undergraduate research process
- Introduction to core curriculum

#### **First-Year Seminar Outcomes**

First-year seminars are frequently the subject of research to verify that they achieve their desired outcomes. Survey participants were asked the following question: "As determined by qualitative or quantitative research, does participation in the first-year seminar at your institution correlate with the following outcomes: improved retention and/or graduation rates, higher levels of academic achievement, improved critical thinking, greater understanding of your institution's academic culture and expectations, higher utilization levels of campus resources, improved connections between students, improved connections between students and faculty?"

Figure 12 provides response data. A number of "other" responses indicated that research is just beginning and findings are unclear or "not ready to be reported." Fewer than half of the responding institutions realize outcomes in support of their specific goals.



#### **First-Year Seminar Perceived Cost-Effectiveness**

A final question in each section asked respondents to weigh costs and educational benefits of the particular initiative and to indicate their opinions about cost-effectiveness. Table 17 provides data on this question with respect to the first-year seminar.

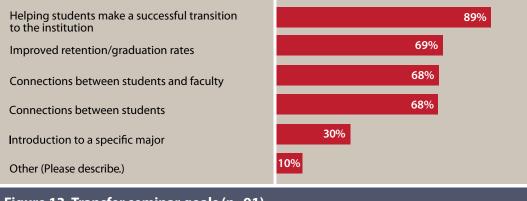
Table 17. Perceived Cost-Effectiveness of First-Year Seminars by Institutional Enrollment (n = 350)							
	1,000 or under (n=45)	1,001 - 5,000 (n=178)	5,001 - 10,000 (n=60)	10,001 - 20,000 (n=41)	20,001 or over (n=26)	All (n=350)	
High	28.9%	52.2%	40.0%	61.0%	73.1%	49.7%	
Medium	51.1%	30.3%	46.7%	24.4%	26.9%	34.9%	
Low	6.7%	6.7%	5.0%	2.4%	0.0%	5.4%	
Don't Know	13.3%	10.7%	8.3%	12.2%	0.0%	10.0%	

# Transfer Seminars .....

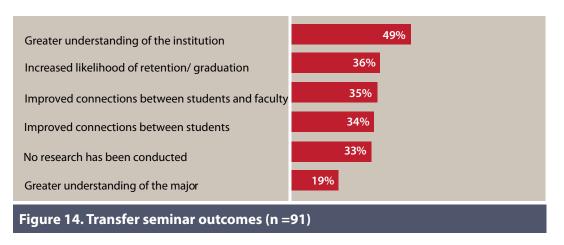
As indicated in Tables 14 and 15, about one-quarter of survey respondents indicated that their institution offers a seminar for incoming transfer students.

## **Transfer Seminar Goals and Outcomes**

Transfer seminar goals and outcomes are similar to those of first-year seminars. Figures 13 and 14 present goals and outcomes reported by respondents. "Other" reported goals included "understanding of campus technology, service, and cross-cultural commitments," "oral and written argumentation/scholarly inquiry," and "understanding new expectations."



# Figure 13. Transfer seminar goals (n=91)



#### **Transfer Seminar Perceived Cost-Effectiveness**

The 90 respondents from institutions reporting transfer seminars have a generally positive perception of the costeffectiveness of this intervention. Over 70% of respondents indicated that in their opinion the transfer seminar was either highly (33%) or moderately (38%) cost-effective. Only 18% rated the cost-effectiveness of transfer seminars as low; 18% indicated they did not know the level of cost-effectiveness.

# Sophomore and Junior Seminars .....

Anecdotal evidence has been building over several years to indicate the existence of special seminars at the sophomore and junior levels, and in 2005, the National Resource Center for The First-Year Experience and Students in Transition conducted a national survey of "sophomore initiatives." The 2005 survey included some information about sophomore seminars in addition to information about other sophomore programs.

This 2010 survey also included questions about the existence of sophomore, as well as junior, seminars and the rates of student participation. As indicated in Tables14 and 15, the percentages of such seminars continue to be small. When comparing public and private institutions, a slightly greater percentage of private institutions offers both sophomore and junior seminars than do public institutions. Table 16 provides information on the mean rate of student participation by institutional enrollment. As is true for all seminars, the highest rates of participation are in institutions under 5,000 students.

A general survey item asked respondents to "describe these seminars, their administrative homes, and their outcomes." Tables 18 and 19 offer a representative sample of respondents' open-ended comments about sophomore and junior seminars.

#### Table 18. Sophomore Seminars (Open-ended responses)

Part of the general education program. 200-level courses that continue student learning outcomes that began in the first year. The 200-level courses offer more in-depth understanding of "self and society" and purpose in life and intensive use of their critical thinking abilities.

Some departments have created sophomore seminars in the major to focus their students on the academic outcomes in that particular major and to introduce the students to methodology in the discipline. They are generally judged to be successful, although there is no quantitative data.

A sophomore seminar on multiculturalism in the U.S. is required as part of the gen ed program. All students take this course, but sometimes not in the sophomore year

The sophomore seminar is one of 4 academically-themed seminars required of all students. The course focuses on American issues, must be interdisciplinary, and a formal assessment system evaluates student achievement in the areas of writing, research, and critical thinking.

Courses are offered and required of residents in sophomore residential colleges. This year, about 80% of the sophomore class is participating.

Sophomore seminars are conducted from the dean of students' office, and they continue to focus on transitions, especially those that relate to major and experiential learning. We are working to improve our sophomore programming to include more members of the class. Outcomes are pending.

We offer interdisciplinary seminars for students in our honors program. These courses are also cross-listed with departmental offerings. We have yet to assess their outcomes.

Writing intensive courses and introduction to the methodology in the field are normally taken by sophomores in English, history, media and communications studies, anthropology and sociology.

Our version of a "sophomore seminar" is the Engaged Citizen element of our general education curriculum. Students must have at least 30 credit hours to enroll, so at times juniors or seniors are also in these courses. They are focused on learning outcomes targeted at engaging with societal issues, democratic principles, or service learning orientated courses that work with these topics.

The sophomore seminar is designed for freshman on probation or who are in danger of dropping out after the first year for academic reasons.

The Center for Academic Resources & Enrichment Services (CARES) offers Project C.S.I., a career oriented program for sophomores and juniors that focuses on providing opportunities for students to gain first-hand knowledge and experience in their career interest areas.

Sophomore seminars are open only to sophomores in the honors program to introduce them to faculty engaged in research and to encourage investigation of interest areas for thesis projects.

The sophomore seminar is a discipline-based class that focuses on information literacy in the student's major field.

Offered by the College of Business, the sophomore professional development course/forum focuses on examining the components of career choice. The focus is on career and personal awareness, professional dress, and academic excellence as they relate to career choice and career mobility.

#### Table 19. Junior Seminars (Open-ended responses)

The junior seminar is coordinated through the Center for Engaged Learning. It is taught through the disciplinary lens of the professor but has a set of common learning outcomes relative to women, leadership, and social change.

Some majors, particularly in the sciences, require junior seminars to develop research and methodology in the major. They generally lay the groundwork for the senior capstone project. We also offer a junior-level interdisciplinary honors seminar, an interdisciplinary seminar on vocation that is generally taken at the junior level, and some other elective opportunities.

Most of these courses are designed as extensive writing courses to meet the CSU Graduation Writing Assessment Requirement.

Every junior has the opportunity to participate in "juniors abroad" to raise global awareness and understanding of a particular country and/or culture (and to increase cross-cultural competence and engagement). Classes meet during the spring semester and then go for a 3 week cross-cultural learning experience in May (to locations all over the world).

We have a junior year experiential learning requirement as part of general education. Students must complete an approved internship, study abroad program, service learning course, or independent research. All of these initiatives have seminars connected with them.

The junior seminar is actually a capstone for the general education core requirements and is an interdisciplinary, problem-based learning course dealing with a contemporary world issue. Students take a major part of the responsibility for their learning, and the course integrates the development of written and oral communication skills with critical thinking skills and with the content.

Junior seminars are offered within the honors program and address specific academic topics outside of the major.

By junior year, students are entering majors offering seminars based on academic content. Many majors also have service learning course options, which are most often offered as seminars. Finally, any honors student begins working on the senior thesis in the junior year through honors seminars.

The junior seminar is an elective seminar on civic engagement. Students are from all majors.

UNIV 3001 is a general education capstone course that can be taken in either the sophomore or junior year, though some students find ways to postpone taking it until they are seniors. The course includes writing, communication assessment, and resume building.

Junior seminars are housed within the College of Arts and Sciences to increase critical thinking and prepare students for senior research.

Many of our undergraduate programs with stellar researcher-educator leadership in several different colleges require junior year seminars, e.g., Gaines Fellowship in the Humanities, engineering, accounting, economics, chemistry, to name a few.

STEM departments have junior seminars designed to prepare students to enter graduate/professional school. Students give presentations based on readings from the primary literature and prepare resumes.

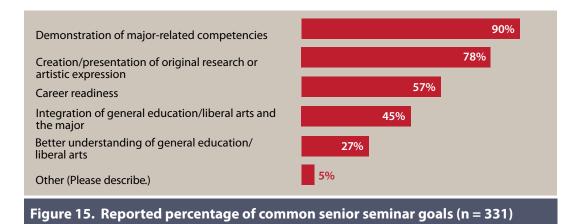
These comments offer a wide-ranging view of existing sophomore and junior seminars and are a starting point for future work to develop a valid course typology.

# Senior Seminars .....

As indicated in Tables 14 and 15, of the institutions offering seminars at any level, around 93% offer them in the senior year. There are no significant differences in percentages of senior seminars by institutional enrollment or control. However, as indicated in Table 16, mean student participation is significantly higher in institutions with fewer than 5,000 students, which are more likely to be private.

#### **Senior Seminar Goals and Outcomes**

Institutions reported common senior seminar goals as displayed in Figure 15. These goals indicate that the senior seminar is most often linked to proficiency in the major or the integration of general education and the major. "Other" goals included "integration of faith and learning" and "preparation for the senior project."



The gap between stated goals and measured outcomes is noteworthy. For instance, Figure 15 indicates that 90% of respondents indicate that "demonstration of major-related competencies" is a goal of the senior seminar, but in Figure 16, only 51% indicate that this particular goal has been documented through research.

Demonstration of major-related competencies	51%
Demonstration of career readiness	30% 24%
No research has been conducted	24%
Understanding of the connection between general education/liberal arts and the major	20%
Better understanding of general education/ liberal arts	12%
Figure 16. Reported percentage of commo	on senior seminar outcomes (n = 332)

## Senior Seminar Perceived Cost-Effectiveness

As indicated in Table 20, 75% of respondents perceive the cost-effectiveness of the senior seminar to be "high" or "medium." However, as is the case for other seminars, these perceptions are often not based on research demonstrating that seminars actually achieve their stated goals.

Table 20. Perceived Cost-Effectiveness of Senior Seminar (n = 335)				
High	39%			
Medium	36%			
Low	4%			
Don't know 20%				

# Learning Communities

Learning communities are defined in this survey as "curricular structures in which small cohorts of students - typically 15 to 25 - are co-enrolled in two or more courses generally from different disciplines with or without a common residential environment." Learning communities are one of the most well-known curricular interventions that support not only learning, but also retention.

#### Learning Communities at All Levels

The initial question in this section of the survey asked whether the responding institution offers learning communities for undergraduate students at any academic level (first-year, sophomore, junior, senior, or transfer). Tables 21 and 22 provide responses to this question by institutional size and public/private control. As is evident from these percentages, learning communities are far more likely to be offered as institutional size increases and therefore in public institutions.

Table 21. Ar	Table 21. Any Learning Community by Institutional Enrollment							
	1,000 or under (n=57)	1,001 - 5,000 (n=218	5,001 - 10,000 (n=66)	10,001 - 20,000 (n=51)	20,001 or over (n=27)	All (n=419)		
Yes	24.6%	52.3%	68.2%	78.4%	88.9%	56.6%		
No	75.4%	46.3%	31.8%	21.6%	11.1%	42.7%		
Don't Know	0.0%	1.4%	0.0%	0.0%	0.0%	0.7%		

Table 22. Any Learning Community by Institutional Control (n = 421)						
Public (n=168) Private (n=253) All (n=421)						
Yes	73.8%	45.1%	56.5%			
No	25%	54.6%	42.8%			
Don't Know	1.2%	0.4%	0.7%			

As Table 23 indicates, learning communities are far more likely to be offered in the first year than at any other level and the difference is highly significant. Institutions with fewer than 1,000 students are significantly less likely to offer first-year learning communities than institutions enrolling more than 1,000 students.

Table 23. Learning Communities at All Levels by Institutional Enrollment							
	1,000 or under (n=14)	1,001 - 5,000 (n =114)	5,001 - 10,000 (n=44)	10,001 - 20,000 (n=39)	20,001 or over (n=24)	All (n=235)	
First-year	71.4%	90.4%	90.9%	94.9%	95.8%	90.6%	
Transfer	0.0%	3.5%	4.5%	5.1%	12.5%	4.7%	
Sophomore	21.4%	19.3%	15.9%	10.5%	34.8%	18.9%	
Junior	14.3%	7.1%	9.1%	5.1%	8.7%	7.7%	
Senior	7.1%	7.1%	9.1%	5.1%	9.1%	7.4%	

Although first-year learning communities are more common at larger institutions, the mean percentage of students participating in learning communities is highest in institutions with no more than 1,000 students (Table 24).

Table 24. Mean Percentage of Students Participating in Learning Communities at All Levels by Institutional Enrollment							
	1,000 or under (n=14)	1,001 - 5,000 (n =114)	5,001 - 10,000 (n=44)	10,001 - 20,000 (n=39)	20,001 or over (n=24)	All (n=235)	
First-year	46.7%	32.9%	33.6%	29.0%	31.9%	33.0%	
Transfer	0.0%	51.2%	9.5%	7.5%	3.7%	22.7%	
Sophomore	77.0%	20.1%	11.5%	8.3%	4.3%	19.8%	
Junior	69.5%	26.9%	12.5%	10.0%	10.0%	25.4%	
Senior	100%	27.1%	31.7%	1.0%	5.0%	30.2%	

# First-Year Learning Communities .....

#### **Characteristics of First-Year Learning Communities**

Respondents were asked to select common characteristics of first-year learning communities. Figure 17 provides results across all institutions with first-year learning communities.

Students are co-enrolled in two or more courses, and faculty work closely to link course content	60%
One of the courses is a first-year seminar	58%
Learning communities are connected to residential living	56%
Courses in a learning community are linked by common intellectual theme	52%
Student affairs professionals are involved in the delivery of out-of-class experiences	48%
Students are co-enrolled in two or more courses, but faculty have limited interaction	34%
Other (Please describe.)	<mark>6%</mark>
Figure 17. Characteristics of first-year lea	rning communities (n =213)

In the "other" category, respondents mentioned "an embedded librarian," learning community takes place in Ireland each fall," and "linked with summer bridge."

# Sophomore, Junior, Senior, and Transfer Learning Communities .....

While approximately 19% of respondents with learning communities offer them to sophomores, learning communities are rarely offered beyond the sophomore year or to transfers (see Table 23).

The approximately 44 sophomore learning communities identified by this survey reported characteristics as presented in Figure 18.

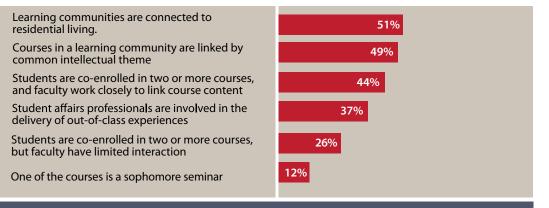


Figure 18. Characteristics of sophomore learning communities (n = 44)

## Transfer learning communities were described by eight institutions. Selected comments include the following:

"Transfer learning communities are linked courses across or within departments/majors. The University College and Title III program work together with departments. The goal is to help new transfer students connect and engage with other students and faculty early in their experience at the university."

"We've begun a pilot transfer learning community for transfer students seeking entrance to a controlled major (business). The community is located in the Center for Advising and Student Achievement, which reports jointly to Academic and Student Affairs."

"The transfer learning community is for STEM students in a TRIO program. All students come from community colleges."

"The transfer learning community is designed for engineering students transferring in from community colleges with specific cohorts taking classes together under the guidance of the university professors in specific fields before and after transfer."

# Junior learning communities were described by 13 institutions. Selected comments include the following:

"The Honors Program creates learning communities for honors students in junior level courses."

"We have a single learning community, entrepreneurship, which is housed in a new building funded by a major foundation. The College has a minor in entrepreneurship."

"This university requires that students take three Integrated Learning Community Courses based on the general themes "What does it mean to be human?", "What is truth?" and "What is the common good?" Transfer students are required to take one of the latter two courses. These are integrated by faculty from two disciplines into a focus on a major issue or perspective. Outcomes relate to the theme questions, to the ways in which students participate in the course, and in their knowledge of the content, values, and perspectives that the course conveys."

"Juniors have the opportunity to continue to participate in the residential-based learning communities."

#### Senior learning communities were described by 13 institutions. Selected comments are as follows:

"Seniors participate in the GreenBelt Learning Community. They live in eco-cottages with theme of sustainability. Housing is in charge with involvement of Environmental and Sustainability staff and faculty."

"Seniors have the opportunity to continue to participate in a residential-based learning community."

"The senior learning community focuses on the integration of liberal arts and the major and Christian perspective."

"The Honors Learning Community is open to students in all four years."

#### Learning Communities for Special Subpopulations

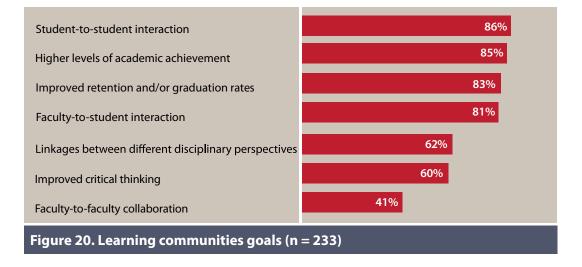
In addition to investigating learning communities at different levels (first through senior year and transfer), the survey also included other questions about learning communities in general. Respondents were asked whether their institution offers learning communities for specific student subpopulations. Figure 19 provides responses.

Honors students	51%
Developmental/remedial students	28%
STEM Students	24%
No learning communities for subpopulations	23%
Other (Please describe.)	19%
ESL students	8%
Figure 19. Learning communities for subr	opulations (n=230)

In Figure 19, responses in the "other" category included the following: "single mothers," "females," "first-generation college students," "Appalachian students," and "students interested in an interdisciplinary approach to the core curriculum."

#### **Learning Communities Goals and Outcomes**

Survey respondents considered a list of potential goals and identified those that were applicable to their learning community (Figure 20). Respondents were then asked whether "as determined by qualitative or quantitative research," learning community participation could be correlated with outcomes as presented in Figure 21. These figures represent the difficulty of turning ambitious goals into actual outcomes, either because the outcomes were not achieved or the learning community was not evaluated.



Improved retention and/or graduation rates	47%
Higher levels of student-to-student interaction	41%
Higher levels of academic achievement	36%
Higher levels of faculty-to-student interaction	36%
No research has been conducted	27%
Greater understanding of disciplinary linkages	21%
Higher levels of faculty-to-faculty collaboration	18%
Improved critical thinking	17%
Figure 21. Learning communities outcom	es (n = 233)

## Perceived Cost-Effectiveness of Learning Communities

A final question in each section asked respondents to weigh costs and educational benefits of the particular initiative and to indicate their opinions about cost-effectiveness. Tables 25 provides data on this question with respect to all learning communities.

Table 25. Perceived Cost-Effectiveness of Learning Communities at All Levels by Institutional Enrollment							
	1,000 or under (n=14)	1,001 - 5,000 (n=113)	5,001 - 10,000 (n=42)	10,001 - 20,000 (n=37)	20,001 or over (n=23)	All (n=229)	
High	21.4%	43.4%	38.1%	37.8%	56.5%	41.5%	
Medium	28.6%	29.2%	26.2%	37.8%	34.8%	30.6%	
Low	14.3%	9.7%	16.7%	5.4%	0.0%	9.6%	
Don't Know	35.7%	17.7%	19.0%	18.9%	8.7%	18.3%	

While there were clear differences in perception of cost-effectiveness of learning communities by institutional enrollment, these differences are not significant.

# Early Warning/Academic Alert Systems

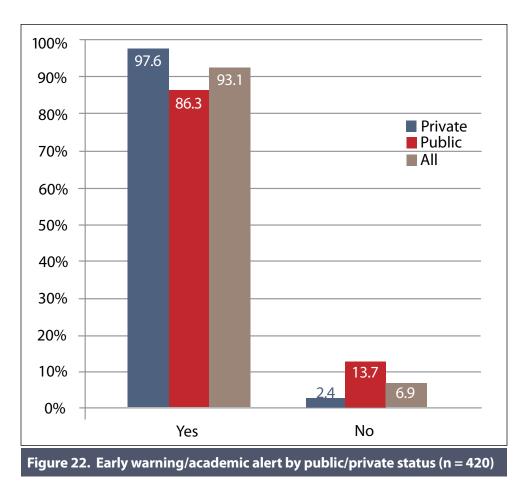
Early warning or academic alert systems monitor student academic performance. These systems often, but not always, include direct outreach to students in academic or other types of difficulty that may interfere with academic success. Early warning/academic alert systems take on many different forms across and even within institutions. Some rely heavily on technology, others on direct human observation and actions, and still others on a combination of human and technological monitoring and intervention. In addition, as the findings reveal, early warning/ academic alert support may also vary within an institution across student classification levels (class standing) and by student subpopulations.

The following section addresses the findings associated with 17 questions about early warning/ academic alert systems – including questions about both the prevalence of the support effort across all undergraduate levels as well as within specific undergraduate student levels. The results give a good sense of both the breadth and depth of the state of early warning/academic alert systems across four-year postsecondary institutions.

#### Early Warning/Academic Alert Systems at All Undergraduate Levels

The first question in this survey section asked whether or not the institution monitored and/or responded to academic progress of undergraduate students at any academic level (first-year, sophomore, junior, senior, or transfer) through an early warning or academic alert system. Table 26 shows the responses to this question by enrollment. The data in this table reveal that institutions with an undergraduate enrollment of 5,000 or fewer students are more likely to provide some form of early warning/academic alert system for their undergraduates than larger institutions, and the differences are statistically significant. As indicated in Figure 22, the enrollment-related differences in early warning/academic alert systems directly correlate with public or private status; with private institutions reporting that they offer early warning for some students at higher level than their public institution counterparts.

Table 26. Early Warning/Academic Alert by Institutional Enrollment							
	1,000 or under (n=57)	1,001 - 5,000 (n=218)	5,001 - 10,000 (n=67)	10,001 - 20,000 (n=51)	20,001 or over (n=27)	All (n=414)	
Yes	94.7%	96.8%	88.1%	88.2%	85.2%	93.3%	
No	5.3%	3.2%	11.9%	11.8%	14.8%	6.7%	



## Early Warning/Academic Alert Systems for First-Year Students

Table 27 shows that institutions with an enrollment of 5,000 students or fewer report being more likely to have an early warning/academic alert system for all first-year students than institutions with enrollments of 5,001 or more. In contrast, larger institutions by enrollment are more likely to offer an early warning/academic alert system for some (but not all) students – with institutions enrolling 10,001 to 20,000 students being the most likely to offer this form of support.

Table 27. Early Warning/Academic Alert for All or Some First-Year Students by Institutional Enrollment						
	1,000 or under (n=54)	1,001 - 5,000 (n=210)	5,001 - 10,000 (n=58)	10,001 - 20,000 (n=45)	20,001 or over (n=23)	All (n=390)
All	90.7%	90.5%	74.1%	57.8%	69.0%	35.4%
Some	9.3%	9.5%	25.9%	42.2%	30.4%	27.2%

After reporting their level of use of early warning/academic alert systems for all or some first-year students, survey respondents were asked which types of first-year students were monitored through an early alert system at their respective institutions. Survey respondents were allowed to select the options that applied to their specific institution (see Figure 23).

Student athletes	59%
Students in remedial/developmental courses	52%
Students admitted with provisional status	41%
Students in educational opportunity programs (eg., TRIO)	36%
Other (Please describe.)	33%
Students enrolled in gateway courses	23%
Selected scholarship students	15%
STEM Students	6%
International students	5%
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Figure 23. Types of first-year students monitored by early warning/academic alert systems (n = 181)

# Early Warning/Academic Alert Systems for Transfer Students

Institutions were next asked which transfer students were monitored during their first year after transfer through an early warning system. As shown by the data in Table 28, institutions with an enrollment of 1,000 students or lower report being most likely to have an early warning/academic alert system for all transfer students during their first year at the institution. The likelihood of an institution offering an early warning/academic alert system for all transfer students during their first year decreases as the enrollment size of the institution increases – with institutions over 20,000 students being the least likely to provide early warning/academic alert systems for all transfers during their first year.

Table 28. Early Warning/Academic Alert for All or Some Transfer Students							
	1,000 or under (n=53)	1,001 - 5,000 (n=209)	5,001 - 10,000 (n=58)	10,001 - 20,000 (n=45)	20,001 or over (n=23)	All (n=388)	
All	71.7%	63.2%	43.1%	37.8%	30.4%	56.4%	
Some	18.9%	18.2%	27.6%	22.2%	39.1%	21.4%	
None	9.4%	12.0%	29.3%	26.7%	30.4%	17.0%	
Don't Know	0.0%	6.7%	0.0%	13.3%	0.0%	5.2%	

Survey respondents were next asked about the types of transfer students monitored through an early alert system at their respective institutions. Figure 24 shows that institutions were most likely to use an early warning/ academic alert system for transfer students on academic probation, student athletes who are transfers, and transfer students in educational opportunity / TRIO programs. Mirroring the pattern with first-year students, institutions were least likely to use an early warning/academic intervention system with international transfer students and transfer students majoring in a STEM field. "Other" responses included "students with first-year standing," "dual enrollment students," and "students enrolled in specified challenging courses."

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Students on academic probation	60%
Student athletes	<b>49%</b>
Students in educational opportunity programs (e.g., TRIO	27%
Other (Please describe.)	25%
Selected scholarship students	20%
International students	16%
STEM Students	<mark>6%</mark>

Figure 24. Types of transfer students monitored by early warning/academic alert systems (n = 83)

# Early Warning/Academic Alert Systems for Sophomores

When asked, "Which, if any, sophomore students at your institution are monitored through early an warning/academic alert system?" survey responses showed that institutions with an overall undergraduate enrollment of 1,000 or fewer students were most likely to offer an early warning/academic alert system for all sophomores. In contrast, the larger institutions by enrollment were least likely to offer an early alert system for their sophomores (see Table 29).

Table 29. Early Warning/Academic Alert for All or Some Sophomores by Institutional Enrollment						
	1,000 or under (n=54)	1,001 - 5,000 (n=208)	5,001 - 10,000 (n=59)	10,001 - 20,000 (n=45)	20,001 or over (n=22)	All (n=388)
All	74.1%	64.4%	45.8%	37.8%	22.7%	57.5%
Some	16.7%	22.6%	28.8%	42.2%	54.5%	26.8%
None	5.6%	11.1%	20.3%	13.3%	18.2%	12.4%
Don't Know	3.7%	1.9%	5.1%	6.7%	4.5%	3.4%

As with first-year and transfer students, institutions were most likely to use an early warning/academic alert system for sophomores on academic probation, student athletes who are sophomores, and sophomores in educational opportunity / TRIO programs. Also comparable to the pattern with first-year and transfer students, institutions were least likely to use an early warning/academic alert system with sophomore international students and sophomore students majoring in a STEM discipline. Responses in the "other" category included "students who have elected a coaching service" and "students in selected majors" (see Figure 25).

Students on academic probation	75%
Student athletes	57%
Students in educational opportunity programs (e.g., TRIO)	31%
Other (Please describe.)	21%
Selected scholarship students	16%
Students in gateway courses	13%
International students	11%
STEM Students	<mark>6%</mark>

# Figure 25. Types of sophomore students monitored by early warning/academic alert systems (n = 105)

# Early Warning/Academic Alert Systems for Junior-Level Students

As reflected in Table 30 and Figure 26, over half of institutions reported having an early warning system that monitored all junior-level students. Another 24% of the responding institutions indicated that at least some juniors were monitored by an early warning/academic alert system – resulting in slightly more than 77% of institutions monitoring all or some juniors with an early warning system. Of the remaining institutions, 17.8% reporting offering no early warning system for juniors, and slightly more than 5% of respondents reported not knowing whether the institution provides early warning support for juniors. The smallest institutions (enrollment at or lower than 1,000 students) were most likely to provide this form of support for all juniors, while the largest institutions (enrollment of 20,001 or more students) were least likely to do so.

Table 30. Early Warning/Academic Alert for All or Some Juniors by Institutional Enrollment							
	1,000 or under (n=53)	1,001 - 5,000 (n=208)	5,001 - 10,000 (n=59)	10,001 - 20,000 (n=45)	20,001 or over (n=23)	All (n=388)	
All	73.6%	59.6%	40.7%	33.3%	17.4%	53.1%	
Some	15.1%	22.1%	25.4%	33.3%	39.1%	24.0%	
None	5.7%	14.9%	27.1%	22.2%	39.1%	17.8%	
Don't Know	5.7%	3.4%	6.8%	11.1%	4.3%	5.2%	

As with their first-year, transfer, and sophomore populations, institutions reported that junior student athletes, and juniors who were on academic probation and/or in TRIO / educational opportunity programs were most likely to be monitored with an early warning system. Juniors in the STEM fields and junior-level international students were least likely to be monitored by an early warning system (see Figure 26). "Other" responses included "students electing a coaching service" and "any student enrolled in a lower-division class."

Students on academic probation	81%
Student athletes	62%
Students in educational opportunity programs (e.g., TRIO	30%
Selected scholarship students	19%
Other (Please describe.)	18%
STEM Students	10%
International Students	10%

Figure 26. Types of junior-level students monitored by early warning/academic alert systems (n=94)

# Early Warning/Academic Alert Systems for Senior-Level Students

Nearly 54% of the institutions that responded to the question "Which, if any, senior students at your institution are monitored through an early warning/academic alert system?" indicated that all seniors were supported by such a system or tool. In addition, 22.3% of the institutions responding to this question shared that some of their students were supported by an early warning system, adding up to a total of 76.1% of all institutions responding that they offered early warning support to some or all students. Slightly more than 19% of the institutions reported offering no early warning system to their students, and 4.7% of the respondents did not know whether their institution offered this form of support to seniors (see Table 31 and Figure 27).

Table 31. Early Warning/Academic Alert for All or Some Seniors by Institutional Enrollment							
	1,000 or under (n=53)	1,001 - 5,000 (n=208)	5,001 - 10,000 (n=58)	10,001 - 20,000 (n=44)	20,001 or over (n=22)	All (n=385)	
All	75.5%	60.1%	41.4%	34.1%	13.6%	53.8%	
Some	15.1%	20.7%	22.4%	29.5%	40.9%	22.3%	
None	7.5%	15.9%	29.3%	25.0%	40.9%	19.2%	
Don't Know	1.9%	3.4%	6.9%	11.4%	4.5%	4.7%	

Institutions reported that they were most likely to monitor seniors who were athletes, on academic probation, and/or in a TRIO/educational opportunity program (see Figure 27). Responses in the "other" category mirrored those at previous academic levels.

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Students on academic probation	77%
Student athletes	59%
Students in educational opportunity programs (e.g., TRIO)	31%
Selected scholarship students	20%
Other (Please describe.)	16%
International Students	13%
STEM Students	<mark>8%</mark>

Figure 27. Types of senior-level students monitored by early warning/academic alert systems (n=86)

#### **Characteristics of Early Warning / Academic Alert Systems**

When asked to indicate the characteristics the described their institution's early warning/academic alert system, 91% of all survey respondents shared that their systems enabled them to contact students by phone, letter, or other electronic means. Eighty-five percent of the survey respondents indicated that the messages conveyed to the students share information about opportunities for assistance. Seventy percent of the respondents indicated that the monitoring was ongoing throughout the term, meaning that it did not only occur at one point such as at midterm. These and other responses about early warning/academic alert systems are shared in detail in Figure 28.

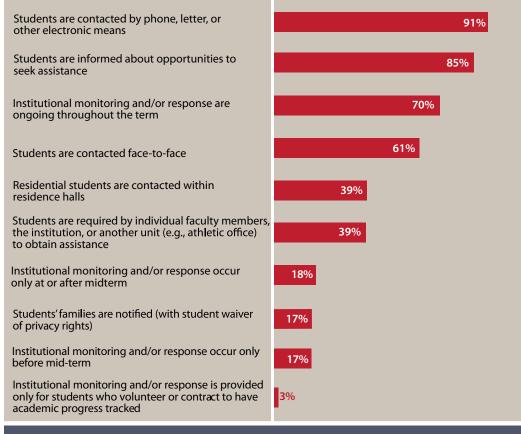


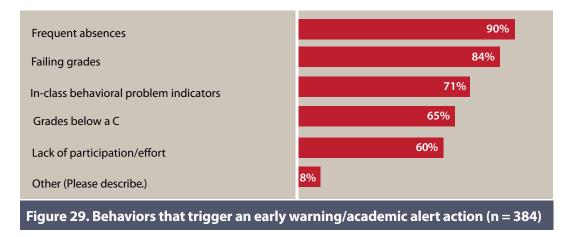
Figure 28. Characteristics of early warning/academic alert systems (n = 385)

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#### Behaviors that Trigger Early Warning/Academic Alert Action

Survey respondents reported frequent absences, failing grades, classroom behavior issues, grades below a C, and lack of effort/participation as being the top five behaviors that trigger an early warning/academic alert action at their institution. These and other behavior triggers are shown in Figure 29 below. Responses in the "other" category included "out-of-class behavioral problems," "poor performance in their student-work position," and "talk of transferring or being cut from an athletic team."



#### Institutional Employees Who Participate in Early Warning

Faculty/instructors followed by academic advisors, academic support personnel, athletic department staff, and residence hall staff were the top five designations indicated when survey respondents were asked to identify the employees at their institutions who participated in some aspect of early warning/academic alert systems. A detailed breakout of the employee classifications associated with involvement in early warning/academic alert systems is provided in Figure 30. "Other" responses included "vice presidents," "director of safety," and "any member of the community."

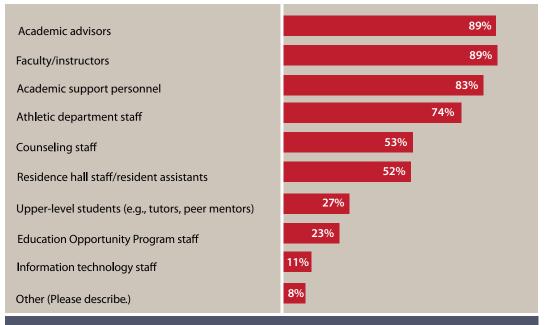
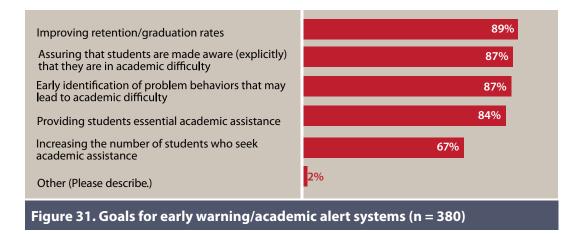


Figure 30. Designations of employee involvement in early warning/academic alert systems (n=384)

#### Goals and Outcomes of Early Warning/Academic Alert Systems

Improving retention and graduation rates was the top goal for early warning/academic alert systems as reported by the survey respondents. This was closely followed by early identification of problem behaviors that may lead to academic difficulty and assuring that students are made aware (explicitly) that they are in academic difficulty (see Figure 31). Responses in the "other" category included "graceful exit if needed" and "applauding good work."



When asked, "As determined by qualitative or quantitative research, does the early alert system at your institution correlate with any of the following outcomes?" only 40% of all respondents reporting finding improved retention and/or graduation rates that correlated with their early warning/academic alert efforts. This is interesting for two reasons: 1) in the previous question nearly 90% of all respondents reported that "improving retention/graduation rates" was a goal of their institution's early warning effort, and thus fewer than half could report realizing this goal; and, 2) at 40%, this was the highest reported outcome, and thus other reported verifiable outcomes for early warning were either not examined or they were not occurring at all. (See Figure 32 for the summary of outcomes associated with early warning/academic alert systems as determined by qualitative or quantitative research.) "Other" responses included "identified mental health issues" and "fewer students on probation."

More students seek academic help from appropriate campus resources	46%
Improved retention/graduation rates	40%
Overall improvement in students' grade point averages	36%
No research has been conducted	28%
Improvement in problem behaviors	24%
Other (Please describe.)	<mark>4%</mark>

Figure 32. Outcomes of early warning/academic alert systems (n = 381)

#### Perceived Cost-Effectiveness of Early Warning/Academic Alert Systems

The final question in this survey section asked the respondents, "In your opinion, considering both cost and educational benefits, what is the level of cost-effectiveness for the early warning/academic alert system at your institution?" Slightly less than 44% of all respondents to this question indicated that they believed their early warning/academic alert system had high cost-effectiveness. Another 33.9% reported medium cost-effectiveness, and 10.8% reported low cost-effectiveness. The remaining 11.5% did not know the level of cost-effectiveness associated with their early warning/academic alert system. There was no consistent trend across institutional size (see Table 32).

Table 32. Perceived Cost-Effectiveness for Early Warning/Academic Alert by Institutional Enrollment							
	1,000 or under (n=53)	1,001 - 5,000 (n=206)	5,001 - 10,000 (n=58)	10,001 - 20,000 (n=41)	20,001 or over (n=23)	All (n=381)	
High	35.8%	47.6%	39.7%	46.3%	34.8%	43.8%	
Medium	39.6%	33.5%	32.8%	19.5%	52.2%	33.9%	
Low	17.0%	10.2%	8.6%	14.6%	0.0%	10.8%	
Don't Know	7.5%	8.7%	19.0%	19.5%	13.0%	11.5%	

# Service Learning

For the purpose of this survey, service learning was defined as "the integration of required, non-compensated service work and reflection into credit-bearing courses."

# Service Learning by Public/Private Control and Enrollment

The initial question asked respondents whether any credit-bearing courses at their institution include service learning. Of the 413 responses to this item, 344 (83.3%) indicated that the institution offered courses that include service learning. Public institutions were slightly more likely to include service learning in their curriculum (86.3%) than private institutions (81.2%). Small institutions under 1,000 students were least likely to offer service learning (75.4%); while institutions in the 10,001-20,000 enrollment range were most likely to offer service learning (97.9%) (see Table 33).

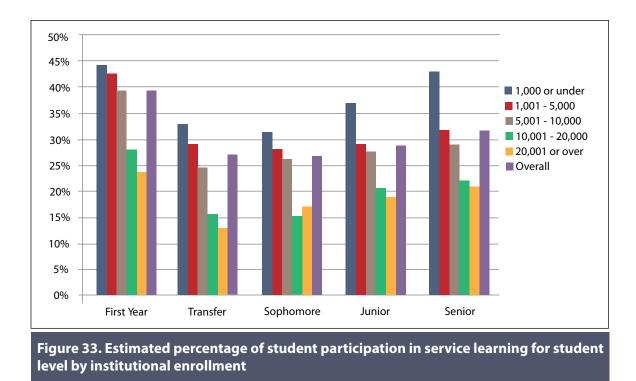
Table 33. Service Learning by Institutional Enrollment							
	1,000 or under (n=57)	1,001 - 5,000 (n=212)	5,001 - 10,000 (n=66)	10,001 - 20,000 (n=48)	20,001 or over (n=26)	All (n=409)	
Yes	75.4%	82.1%	81.8%	97.9%	84.6%	83.3%	
Know	21.1%	15.1%	13.6%	0.0%	7.7%	13.4%	
Don't Know	3.5%	2.8%	4.5%	2.1%	7.7%	3.3%	

#### Service Learning Participation by Student Level

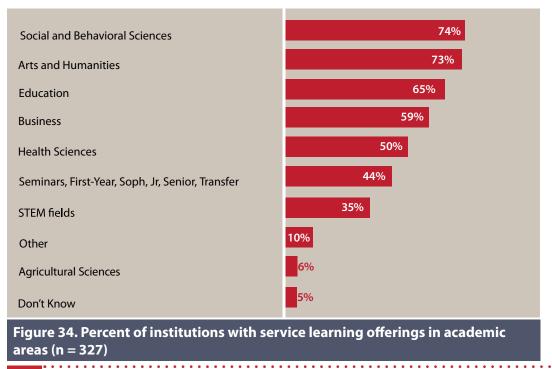
Respondents whose institutions offer service learning were asked to estimate the percentage of students at different levels (first through senior year and transfer) that participates in service learning. For all institutions first-year students (39.5%) were more likely to participate in service learning than other students. While public institutions were more likely to indicate that they offered service learning, private institutions that offer service learning estimated higher participation levels for students at all levels (see Table 34).

Table 34. Estimated Percentage of Student Participation in Service Learning by Student Level for Public and Private Institutions (n = 409)						
	Private Public All Respondents					
First-year	45.3%	28.8%	39.5%			
Transfer	32.9%	17.8%	27.2%			
Sophomore	30.0%	20.5%	26.9%			
Junior	31.1%	25.2%	29.0%			
Senior	33.6%	28.4%	31.6%			

As shown in Figure 33, the estimates for percentage of student participation were higher for each level at smaller institutions than for the largest institutions. The differences were significant for estimates of senior participation and approached significance for juniors and first-year students.

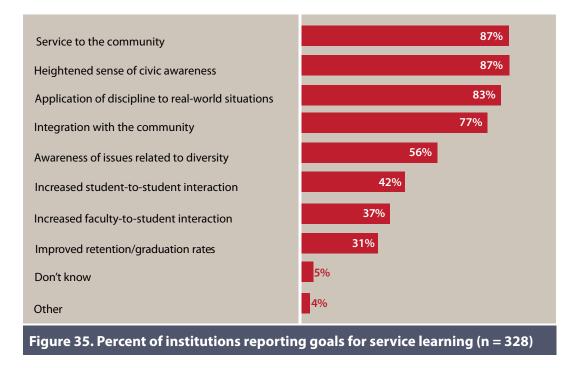


The survey provided a list of academic areas, and respondents were asked to check those in which service learning is offered. Service learning was most likely to be offered in the social and behavioral sciences (74%), arts and humanities (73%), and education (65%). Figure 34 shows the percent of respondents reporting service learning in each academic area listed. If "other" was checked, respondents were asked to describe the areas. A wide array of disciplines was mentioned, but most were mentioned only once; areas that were mentioned multiple times were athletics (3), honors (3), first-year seminar/success (3), hospitality (2), leadership (2), communications (2), and theology (2). Two institutions indicated that all disciplines included service learning.



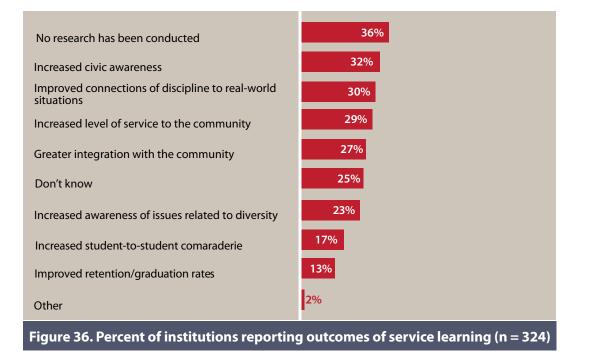
#### **Service Learning Goals**

The survey asked respondents to check all of the goals that service learning is designed to address at their institution. The goals most commonly addressed through service learning were service to the community (87%), heightened sense of civic awareness (87%), application of discipline to real-world issues (83%), and integration with the community (77%). Figure 35 shows the percent of institutions that checked each goal listed. The most commonly mentioned "other" goals included institutional mission and religious principles. Additionally, social justice, social responsibility, leadership skills, critical thinking skills, awareness of global issues of sustainability, and career exploration were mentioned as goals for service learning.



# **Service Learning Outcomes**

Respondents were asked whether, as determined by qualitative or quantitative research, participation in service learning correlated with any of the listed outcomes. Over half of the respondents indicated that either no research has been conducted (36%) or that they "don't know" (25%). The top outcomes for which correlations had been determined match the top goals for service learning with increased civic awareness (32%), improved ability to see connections of discipline to real-world situations (30%), and increased level of service to the community (29%) (see Figure 36).



# Perceived Cost-Effectiveness of Service Learning

Respondents were asked their perceptions of the level of cost-effectiveness for service learning, considering both the costs and educational benefits. Overall 36% of the institutions rated the cost-effectiveness of service learning as high, 34% rated it as medium, and 10% as low. A substantial percent (20%) indicated that they did not know the cost-effectiveness of service learning. The ratings for cost-effectiveness of service learning were very similar for public and private institutions. There were greater differences in the estimates of cost-effectiveness of service learning as more cost-effective than mid-range or smaller institutions (see Table 35).

Table 35. Perceived Cost-Effectiveness of Service Learning by Institutional Enrollment							
	1,000 or under (n=40)	1,001 - 5,000 (n=168)	5,001 - 10,000 (n=51)	10,001 - 20,000 (n=42)	20,001 or over (n=21)	All (n=322)	
High	40.0%	34.5%	27.5%	35.7%	61.9%	36.0%	
Medium	30.0%	33.9%	37.3%	33.3%	33.3%	33.9%	
Low	12.5%	11.3%	11.8%	7.1%	0.0%	10.2%	
Don't Know	17.5%	20.2%	23.5%	23.8%	4.8%	19.9%	

# Undergraduate Research

The entry question to this section of the survey asked if the institution (including any academic department) offers undergraduate students at any academic level the opportunity to conduct collaborative research and/or scholarship with faculty members.

# Undergraduate Research by Public/Private Control and Enrollment

Of the 404 institutions that responded to this item 368 (91.2%) indicated that they offered undergraduate research opportunities. Opportunities for undergraduate research were equally likely to be offered by public (91.2%) and private (91.0%) institutions. There was a significant trend for smaller institutions to be less likely to offer undergraduate research opportunities (see Table 36).

Table 36. Undergraduate Research Opportunities by Institutional Enrollment							
	1,000 or under (n=56)	1,001 - 5,000 (n=206)	5,001 - 10,000 (n=64)	10,001 - 20,000 (n=48)	20,001 or over (n=26)	All (n=400)	
Yes	82.1%	90.3%	95.3%	97.9%	96.2%	91.2%	
Know	16.1%	6.3%	0.0%	2.1%	3.8%	6.0%	
Don't Know	1.8%	3.4%	4.7%	0.0%	0.0%	2.8%	

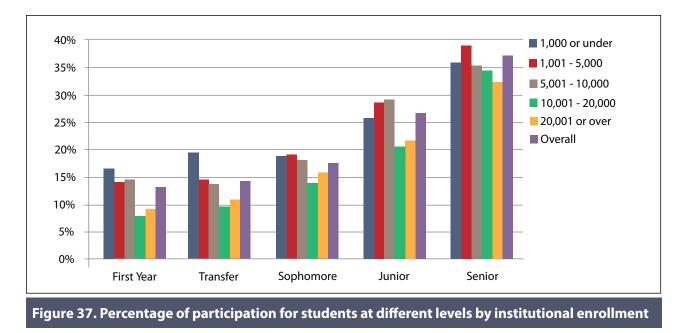
# **Undergraduate Research Participation by Student Level**

Institutions that indicated a presence of undergraduate research opportunities were asked to provide an estimate of the percentage of students at different levels who participate in undergraduate research. The estimates suggest that students who are in their first year at the institution either as first-year (13.4%) or transfer students (14.5%) have limited participation in research. Participation in undergraduate research was reported to increase with the students' academic level from sophomore (18.4%) to junior (27.3%) to senior (37.3%).

As shown in Table 37, for each student level the percentage of students estimated to participate in undergraduate research was higher at private than at public institutions.

Table 37. Percentage of Participation by Student Level for Public and Private Institutions						
	Private	Public	All Respondents			
First Year	15.1%	10.9%	13.4%			
Transfer	16.3%	12.1%	14.5%			
Sophomore	18.9%	17.9%	18.4%			
Junior	28.6%	25.5%	27.3%			
Senior	39.6%	34.0%	37.3%			

As shown in Figure 37, there were slight variations in estimates of participation in undergraduate research for institutions of different levels of enrollment. While smaller institutions were less likely to report offering undergraduate research, those offering this opportunity reported higher participation rates than larger institutions across all student levels. However, none of the differences across institutional size for different student levels were significant.



# Academic Areas for Undergraduate Research

The survey provided a list of possible academic areas, and respondents were asked to check all of the areas in which their institutions offered undergraduate research opportunities. The institutions were most likely to have undergraduate research opportunities in the social and behavioral sciences (83.0%), followed by STEM fields (80.2%), and arts and humanities (74.4%). Figure 38 shows the percent of respondents reporting undergraduate research in each academic area listed. When "other" was checked, respondents were asked to describe the areas; the most commonly mentioned areas were education (6), honors (3), and "all disciplines" (3). Other areas that were mentioned included ethnic studies, hospitality management, aviation, and cross-discipline research. One institution mentioned that all freshmen were involved in team research projects as a part of the freshman seminar.

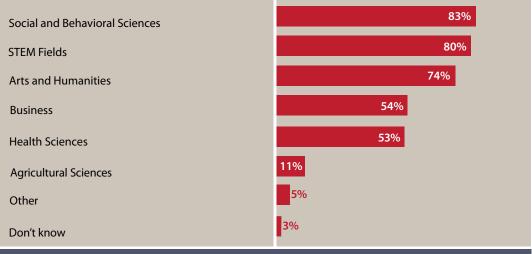
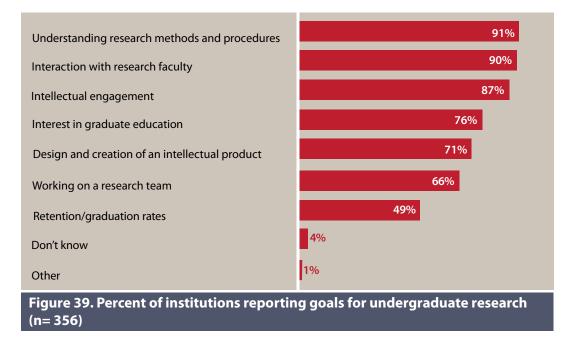


Figure 38. Percent of institutions with undergraduate research opportunities in academic areas (n=359)

#### **Undergraduate Research Goals**

The survey asked respondents to check all of the goals that undergraduate research is designed to address at their institution. As shown in Figure 39, undergraduate research is seen as serving a number of goals, most commonly understanding research methods (91.3%), interaction with faculty (90.2%), and intellectual engagement (86.5%). Enriching student experiences and academic competiveness were mentioned as "other" goals.



#### **Undergraduate Research Outcomes**

The next question asked whether, as determined by qualitative or quantitative research, participation in undergraduate research correlated with any of the following outcomes. Respondents were allowed to check as many as applicable and to designate "others"; no respondents added additional outcomes. The four outcomes identified by the highest percentage of institutional respondents paralleled the four goals indicated by the highest percentage of institutional respondents indicated that they had research supporting the outcomes for the goals than indicated having the related goal (see Figure 40).



#### Perceived Cost-Effectiveness of Undergraduate Research

Respondents were asked to express their opinion of the level of cost-effectiveness for undergraduate research, considering both the costs and educational benefits. Nearly half of the respondents (49%) evaluated the cost-effectiveness of undergraduate research as high. Cost-effectiveness of undergraduate research was rated as medium by 27% and low by 6%. A substantial percentage of the respondents (18%) indicated they didn't know the cost-effectiveness of undergraduate research at their institution. The estimations of cost-effectiveness were similar for public and private institutions. There was a tendency for larger institutions to perceive undergraduate research as more cost-effective (see Table 38).

Table 38. Perceived Cost-Effectiveness of Undergraduate Research by institutional Enrollment (n = 355)						
	1,000 or under (n=44)	1,001 - 5,000 (n=182)	5,001 - 10,000 (n=58)	10,001 - 20,000 (n=43)	20,001 or over (n=25)	All (n=352)
High	40.0%	34.5%	27.5%	35.7%	61.9%	36.0%
Medium	30.0%	33.9%	37.3%	33.3%	33.3%	33.9%
Low	12.5%	11.3%	11.8%	7.1%	0.0%	10.2%
Don't Know	17.5%	20.2%	23.5%	23.8%	4.8%	19.9%

# Conclusion

The national survey, "Enhancing Student Success and Retention throughout Undergraduate Education" was designed to provide a broad picture of the types of student success initiatives that are currently being offered by U. S. four-year institutions across the undergraduate years. Findings were not surprising in that most of these efforts (with the exception of undergraduate research) tend to cluster in the first year. In fact, two of the seven areas of focus (summer bridge programs and pre-term orientation) are uniquely designed for first-year students. Following is a brief summary of survey findings within the seven areas of focus.

#### **Areas of Focus**

**Summer Bridge Programs.** Summer bridge programs were defined as "academic programs offered for students during the summer before the first year of college." Such programs are generally designed to offer students additional academic and/or social support before they begin the first term of the first year. Forty-four percent of the respondents indicated their institution offers summer bridge programs. Nearly half of the institutions that offer summer bridge programs require participation by at least some students; provisionally admitted students were the most likely to be required to participate in summer bridge programs.

**Pre-term Orientation.** Pre-term orientation was defined as including pre-term advisement/registration programs and additional activities during a preceding term or immediately prior to the beginning of the term. All responding institutions offered some form of orientation. The most common forms of pre-term orientation were on-campus activities immediately preceding the beginning of the term (e.g., welcome week) (88%) and pre-term advisement/registration programs (86%). Online orientation was offered by fewer than 20% of respondents.

Academic/Transition Seminars. Special seminars designed to assist students in the academic and/or social transitions of institutional life have existed for many years. The majority of institutions (87%) offer special seminars at some academic level. Most of these institutions indicated they offered special seminars at the first-year (96%) and senior (93%) levels; relatively few institutions indicated they offered sophomore (13%), junior (13%), or transfer (25%) seminars.

**Learning Communities.** Learning communities are defined as "curricular structures in which small cohorts of students - typically 15 to 25 - are co-enrolled in two or more courses generally from different disciplines with or without a common residential environment." Learning communities are offered in 56% of the responding institution, but they are more likely to be offered by larger than smaller institutions. Learning communities are far more likely to be offered in the first year than at any other academic level.

**Early Warning/Academic Alert Systems.** These are systems that monitor student academic performance and often, but not always, include direct outreach to students in academic or other types of difficulty that may interfere with academic success. Early warning systems are offered by 93% of the institutions, but are more common in institutions with 5,000 students or fewer than in institutions with more than 5,000 students. Early warning systems are used for all levels of students, but more so for first-year students than any other level.

**Service Learning.** Service learning was defined as "the integration of required, non-compensated service work and reflection into credit-bearing courses." Eighty-three percent of the respondents indicated their institution offered some courses that include service learning. While service learning is most common in the first year (39.5%), it is offered for transfer, sophomore, junior, and senior students by over one-quarter of all institutions. Institutions in the 10,001-20,000 enrollment range were most likely to offer service learning (97.9%).

**Undergraduate Research.** The survey asked if the institution (including any academic department) offers undergraduate students at any academic level the opportunity to conduct collaborative research and/or scholarship with faculty members; 91% of the responding institutions indicated that they offered undergraduate research opportunities. Estimated participation of students by academic level showed a gradual increase from a low of 13% in the first year to 37% for seniors.

# **Comparison of Cross-Cutting Questions**

In each of the seven areas of the survey, respondents were asked to identify goals, as well as outcomes "as determined by quantitative or qualitative research." While most interventions were the subject of evaluation of multiple desired outcomes that relate to student success, service learning and undergraduate research were least likely to be evaluated in terms of outcomes.

Another common question was perceived cost-effectiveness. The interventions perceived by the largest percentage of respondents to be "highly" cost-effective were learning communities (44.6%), and orientation (44.6%). The interventions judged to be "least cost-effective" were transfer seminars (18%) and early warning/ academic alert systems (10.8%). Interventions generating the largest percentages of "don't know" responses to the question of cost-effectiveness were service learning and undergraduate research, each at approximately 20%.

#### Limitations

The most obvious limitations of this research were the following:

- Restriction to four-year institutions only. Recognizing this limitation, the Gardner Institute will survey two-year colleges in the fall of 2012.
- Identifying the most knowledgeable respondent. This survey was forwarded electronically to chief academic officers (CAOs) who may or may not be the individuals with the most knowledge about the initiatives in question. While some CAOs undoubtedly forwarded the survey to others more directly responsible for certain initiatives, we have no way of knowing whether the individual with the most knowledge actually provided the responses.
- Response rate. While a 38.4% response rate might be considered respectable for an online survey, it is certainly not ideal.

# For more information

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