



NSSE 2016
High-Impact Practices
Iowa State University

About Your High-Impact Practices Report

Due to their positive associations with student learning and retention, certain undergraduate opportunities are designated "high-impact." High-Impact Practices (HIPs) share several traits: They demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and students, encourage collaboration with diverse others, and provide frequent and substantive feedback. As a result, participation in these practices can be life-changing (Kuh, 2008). NSSE founding director George Kuh recommends that institutions should aspire for all students to participate in at least two HIPs over the course of their undergraduate experience—one during the first year and one in the context of their major (NSSE, 2007).

NSSE asks students about their participation in the six HIPs shown in the box at right. This report provides information on the first three for first-year students and all six for seniors. Unlike most questions on the NSSE survey, the HIP questions are not limited to the current school year. Thus, seniors' responses include participation from prior years.

High-Impact Practices in NSSE

- Learning community or some other formal program where groups of students take two or more classes together
- Courses that included a community-based project (service-learning)
- Work with a faculty member on a research project
- Internship, co-op, field experience, student teaching, or clinical placement
- Study abroad
- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

Report Sections

Participation Comparisons (p. 3)

Displays HIP participation for your first-year and senior students compared with that of students at your comparison group institutions. Two views present insights into your students' HIP participation:

Overall HIP Participation

Displays the percentage of first-year and senior students who participated in one HIP and in two or more HIPs, relative to those at your comparison group institutions.

Statistical Comparisons

Comparisons of participation in each HIP and overall for your first-year and senior students relative to those at comparison group institutions, with tests of significance and effect sizes (see below).

Response Detail (pp. 5-7)

Provides complete response frequencies for the relevant HIP questions for your first-year and senior students and those at your comparison group institutions.

Participation by Student Characteristics (p. 8)

Displays your students' participation in each HIP by selected student characteristics.

Interpreting Comparisons

The "Statistical Comparisons" section on page 3 reports both statistical significance and effect size. Effect size indicates the practical importance of an observed difference. NSSE research has found that interpretations vary by HIP: For service-learning, internships, study abroad, and culminating senior experiences, an effect size of about .2 may be considered small, .5 medium, and .8 large. For learning community and research with faculty, an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015).

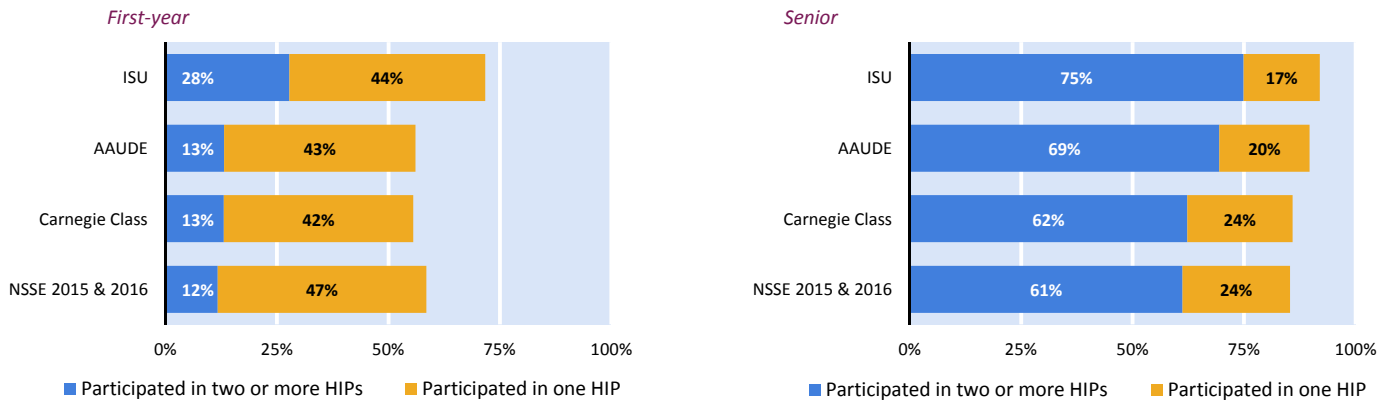
HIP participation varies more among students within an institution than it does between institutions, like many experiences and outcomes in higher education. As a result, focusing attention on overall participation rates amounts to examining the tip of the iceberg. It's equally important to understand how student engagement (including HIP participation) varies *within* your institution. The table on page 8 provides an initial look at how HIP participation varies by selected student characteristics. The Report Builder—Institution Version and your *Major Field Report* (both to be released in the fall) offer further perspectives on internal variation and can help you investigate your students' HIP participation in depth.

Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
National Survey of Student Engagement (2007). *Experiences that matter: Enhancing student learning and success—Annual Report 2007*. Bloomington, IN: Indiana University Center for Postsecondary Research.

Rocconi, L., & Gonyea, R. M. (2015, May). *Contextualizing student engagement effect sizes: An empirical analysis*. Paper presented at the Association for Institutional Research Annual Forum, Denver, CO.

Overall HIP Participation

The figures below display the percentage of students who participated in High-Impact Practices. Both figures include participation in a learning community, service-learning, and research with faculty. The Senior figure also includes participation in an internship or field experience, study abroad, and culminating senior experience. The first segment in each bar shows the percentage of students who participated in at least two HIPs, and the full bar (both colors) represents the percentage who participated in at least one.



Statistical Comparisons

The table below compares the percentage of your students who participated in a High-Impact Practice, including the percentage who participated overall (at least one, two or more), with those at institutions in your comparison groups.

	ISU	AAUDE	Effect size ^a	Carnegie Class	Effect size ^a	NSSE 2015 & 2016	Effect size ^a
<i>First-year</i>	%	%		%		%	
11c. Learning Community	44	20 ***	.52	19 ***	.55	15 ***	.66
12. Service-Learning	51	44 **	.13	46 *	.09	52	-.04
11e. Research with Faculty	11	8 *	.10	6 ***	.16	5 ***	.20
Participated in at least one	72	56 ***	.33	56 ***	.34	59 ***	.28
Participated in two or more	28	13 ***	.37	13 ***	.37	12 ***	.41
<i>Senior</i>	%	%		%		%	
11c. Learning Community	40	27 ***	.28	24 ***	.35	24 ***	.35
12. Service-Learning	52	52	-.01	52	-.01	61 ***	-.19
11e. Research with Faculty	34	30 *	.09	27 ***	.16	24 ***	.23
11a. Internship or Field Exp.	69	62 ***	.15	54 ***	.31	50 ***	.39
11d. Study Abroad	22	24	-.03	17 ***	.12	14 ***	.22
11f. Culminating Senior Exp.	49	50	-.01	45 **	.09	46 *	.06
Participated in at least one	92	90 *	.08	86 ***	.19	85 ***	.21
Participated in two or more	75	69 ***	.12	62 ***	.27	61 ***	.30

Note. Percentage of students who responded "Done or in progress" except for service-learning which is the percentage who responded that at least "Some" courses included a community-based project.

a. Cohen's *h*: The standardized difference between two proportions. Effect size indicates the practical importance of an observed difference. NSSE research finds for service-learning, internships, study abroad, and culminating senior experiences, an effect size of about .2 may be considered small, .5 medium, and .8 large.

For learning community and research with faculty, an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015).

p* < .05, *p* < .01, ****p* < .001 (z-test comparing participation rates).

Note. All results weighted by institution-reported sex and enrollment status (and by institution size for comparison groups).

Rocconi, L., & Gonyea, R. M. (2015, May). *Contextualizing student engagement effect sizes: An empirical analysis*. Paper presented at the Association for Institutional Research Annual Forum, Denver, CO.

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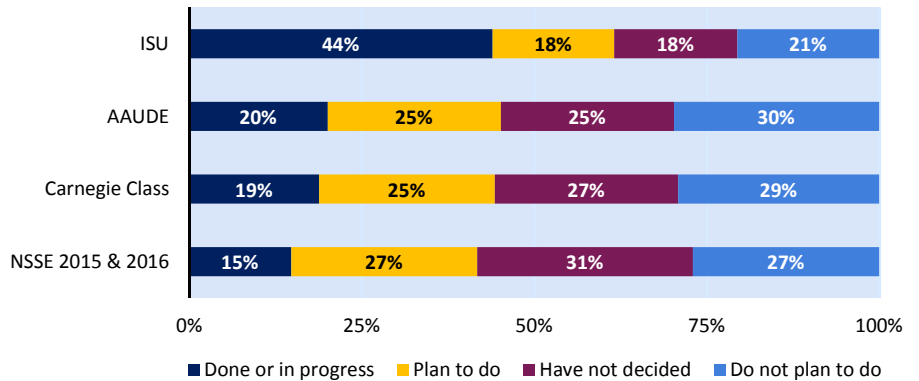
First-year Students

The figures below display further details about each High-Impact Practice for your first-year students and those of your comparison groups.

Learning Community

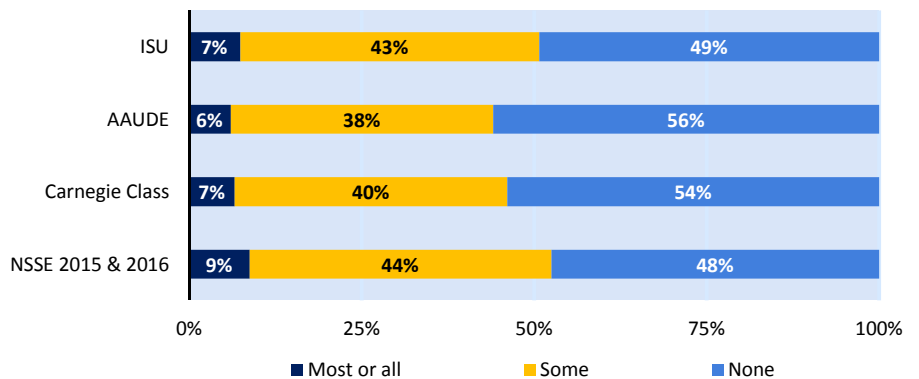
Which of the following have you done or do you plan to do before you graduate?

Participate in a learning community or some other formal program where groups of students take two or more classes together.



Service-Learning

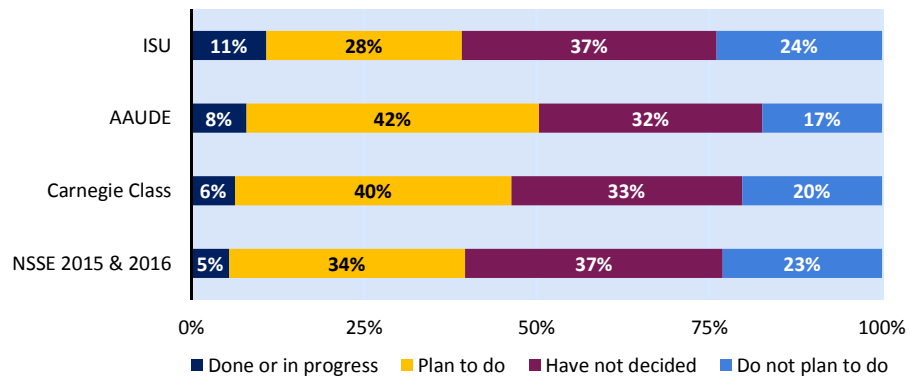
About how many of your courses at this institution have included a community-based project (service-learning)?



Research with a Faculty Member

Which of the following have you done or do you plan to do before you graduate?

Work with a faculty member on a research project.



Note: Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).

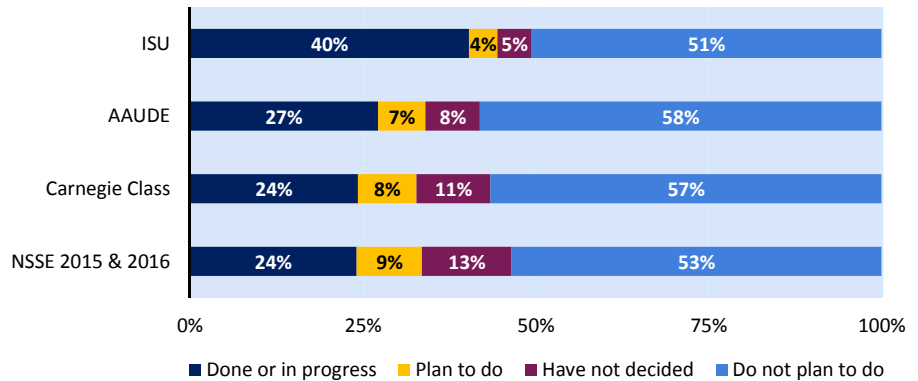
Seniors

The figures below display further details about each High-Impact Practice for your seniors and those of your comparison groups.

Learning Community

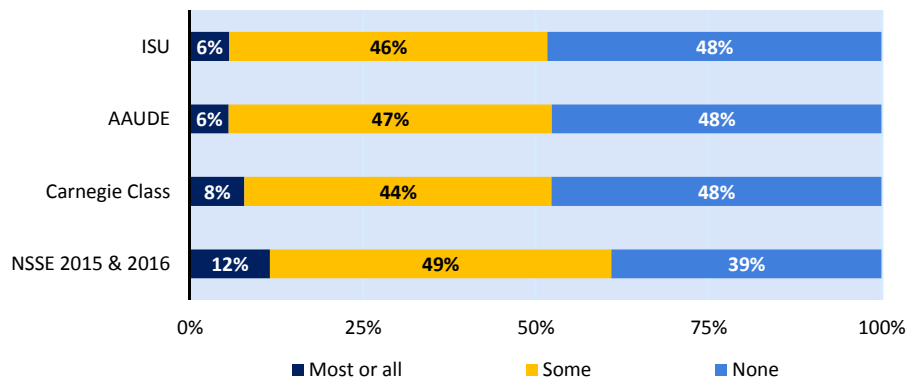
Which of the following have you done or do you plan to do before you graduate?

Participate in a learning community or some other formal program where groups of students take two or more classes together.



Service-Learning

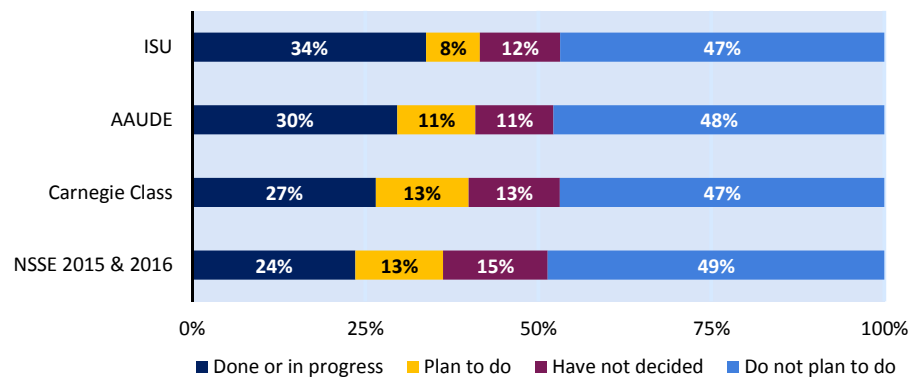
About how many of your courses at this institution have included a community-based project (service-learning)?



Research with a Faculty Member

Which of the following have you done or do you plan to do before you graduate?

Work with a faculty member on a research project.



Note: Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).

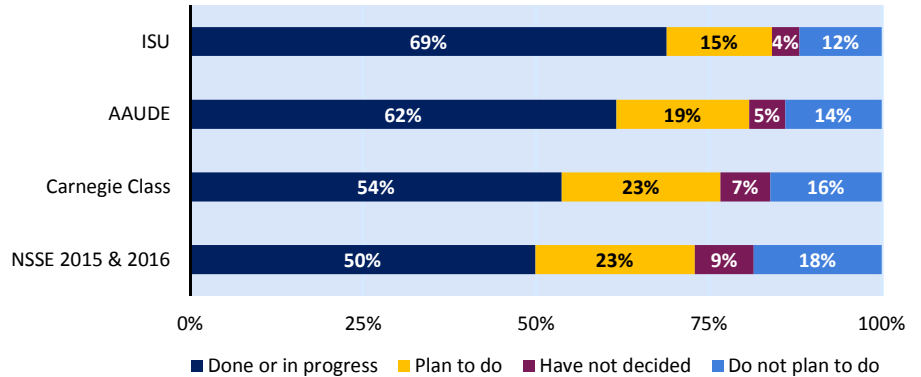
Seniors (continued)

The figures below display further details about each High-Impact Practice for your seniors and those of your comparison groups.

Internship or Field Experience

Which of the following have you done or do you plan to do before you graduate?

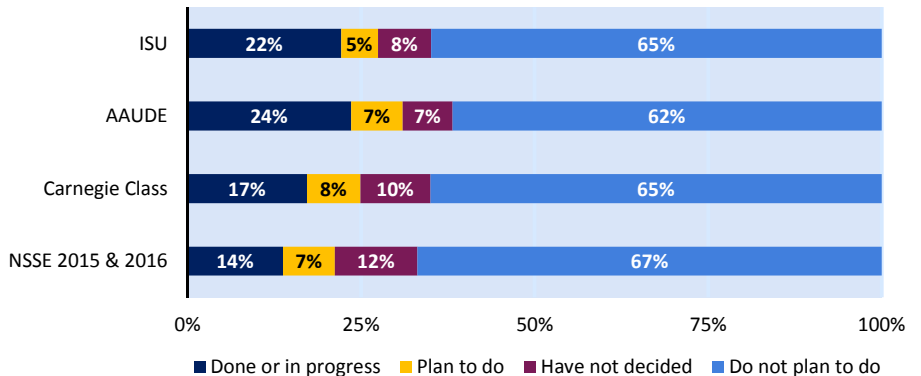
Participate in an internship, co-op, field experience, student teaching, or clinical placement.



Study Abroad

Which of the following have you done or do you plan to do before you graduate?

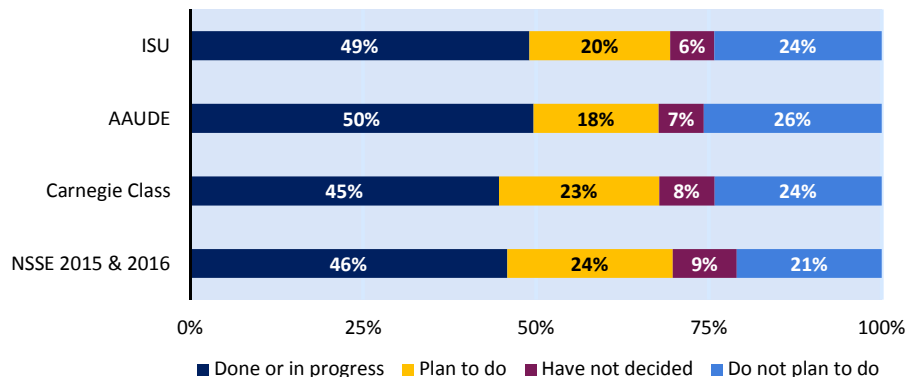
Participate in a study abroad program.



Culminating Senior Experience

Which of the following have you done or do you plan to do before you graduate?

Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.).



Note: Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).

NSSE 2016 High-Impact Practices

Participation by Student Characteristics

Iowa State University

Participation in High-Impact Practices by Student Characteristics

The table below displays the percentage of your students who participated in each HIP by selected student characteristics. Examining participation rates for different groups offers insight into how engagement varies within your student population.

	First-year			Senior					
	Learning Community	Service-Learning	Research with Faculty	Learning Community	Service-Learning	Research with Faculty	Internship or Field Experience	Study Abroad	Culminating Senior Experience
Sex^a	%	%	%	%	%	%	%	%	%
Female	46	54	13	41	54	36	70	31	47
Male	43	48	9	40	50	32	68	15	51
Race/ethnicity or international^a									
American Indian or Alaska Native	—	—	—	—	—	—	—	—	—
Asian	33	71	10	30	79	60	50	20	35
Black or African American	60	65	20	50	80	26	55	20	42
Hispanic or Latino	40	55	13	33	65	28	58	23	38
Native Hawaiian/Other Pac. Islander	—	—	—	—	—	—	—	—	—
White	47	47	11	43	49	35	73	24	51
Other	—	—	—	—	—	—	—	—	—
Foreign or nonresident alien	20	76	9	16	68	19	33	14	38
Two or more races/ethnicities	40	60	27	42	63	38	54	29	46
Age									
Traditional (FY < 21, Seniors < 25):	45	50	11	45	54	36	73	26	51
Nontraditional (FY 21+, Seniors 25+)	36	67	17	18	37	24	47	8	32
First-generation^b									
Not first-generation	47	48	12	44	49	38	71	26	51
First-generation	41	54	9	36	58	28	66	19	43
Enrollment status^a									
Not full-time	33	42	0	35	47	22	65	18	41
Full-time	45	52	12	41	52	35	69	24	49
Residence									
Living off campus	35	62	11	39	51	32	68	22	47
Living on campus	48	47	12	54	54	49	76	31	55
Major category^c									
Arts & humanities	19	39	13	28	54	20	49	37	57
Biological sciences, agriculture, natural res.	60	44	11	48	54	51	79	34	40
Physical sciences, math, computer science	48	55	26	32	29	45	55	16	18
Social sciences	30	65	11	23	36	43	61	16	30
Business	25	50	3	31	60	14	73	23	52
Communications, media, public relations	33	52	14	39	58	29	66	29	66
Education	55	68	8	37	63	14	69	19	59
Engineering	64	47	12	54	39	39	76	16	60
Health professions	32	54	17	41	63	44	57	21	31
Social service professions	30	20	10	20	80	20	80	30	20
Undecided/undeclared	14	64	7	—	—	—	—	—	—
Overall	44	51	11	40	52	34	69	22	49

Notes: Percentage of students who responded "Done or in progress" except for service-learning which is the percentage who responded that at least "Some" courses included a community-based project. Percentages are not reported (—) for row categories containing fewer than 10 students. Results are unweighted, except for overall percentages which are weighted by sex and enrollment status.

a. Institution-reported variable.

b. Neither parent holds a bachelor's degree.

c. These are NSSE's default related-major categories, based on first major if more than one was reported. Institution-customized major categories will be included on the *Major Field Report*, to be released in the fall. Excludes majors categorized as "all other."