NSSE
national survey of
student engagement

NSSE 2016
High-Impact Practices

Tennessee Technological University

IPEDS: 221847

NSSE 2016 High-Impact Practices

About This Report

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.

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Participation Comparisons

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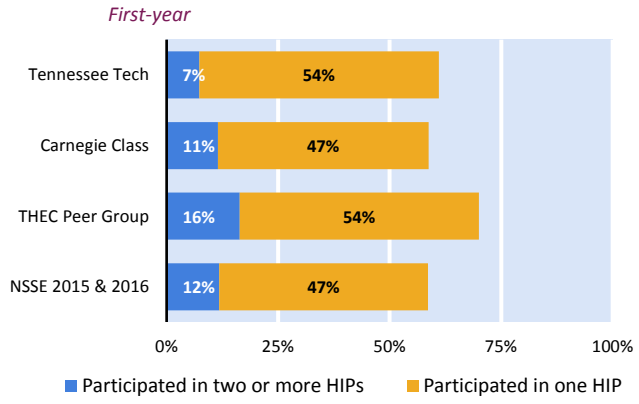
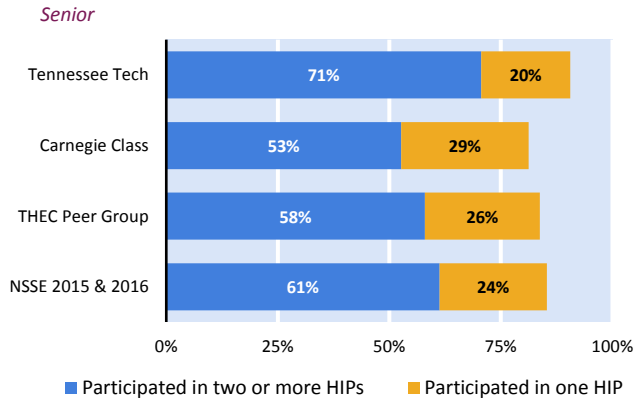
Overall HIP Participation

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.

	Tennessee Tech	Carnegie Class			THEC Peer Group			NSSE 2015 & 2016		
First-year	%	%		*Effect size* [a]	%		*Effect size* [a]	%		*Effect size* [a]
11c. **Learning Community**	8	14	**	-.20	17	***	-.28	15	**	-.22
12. **Service-Learning**	57	54		.07	65	*	-.16	52		.09
11e. **Research with Faculty**	5	5		.01	7		-.08	5		-.02
Participated in at least one	61	59		.05	70	**	-.19	59		.05
Participated in two or more	7	11	*	-.14	16	***	-.29	12	*	-.15
Senior										
11c. **Learning Community**	28	21	**	.15	24		.09	24		.08
12. **Service-Learning**	62	63		-.01	64		-.05	61		.02
11e. **Research with Faculty**	29	17	***	.29	21	**	.17	24	*	.11
11a. **Internship or Field Exp.**	57	42	***	.30	45	***	.25	50	**	.14
11d. **Study Abroad**	10	9		.04	8		.09	14	*	-.11
11f. **Culminating Senior Exp.**	54	38	***	.32	43	***	.20	46	**	.16
Participated in at least one	91	81	***	.27	84	***	.21	85	**	.16
Participated in two or more	71	53	***	.37	58	***	.26	61	***	.20

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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NSSE 2016 High-Impact Practices

Response Detail

Tennessee Technological University

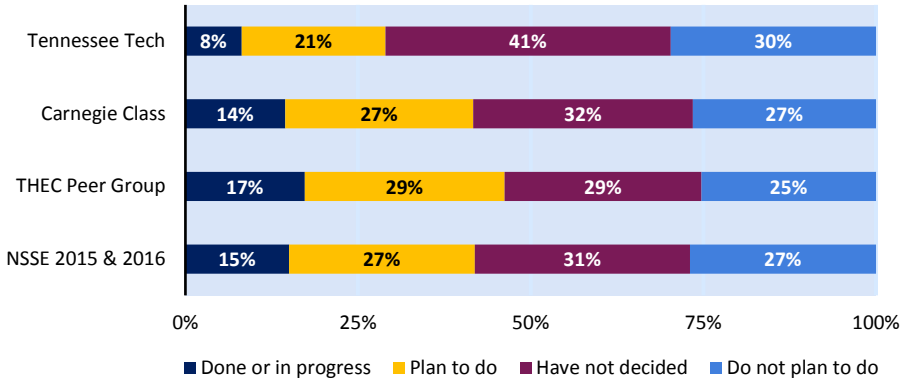
First-year Students

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

Learning Community

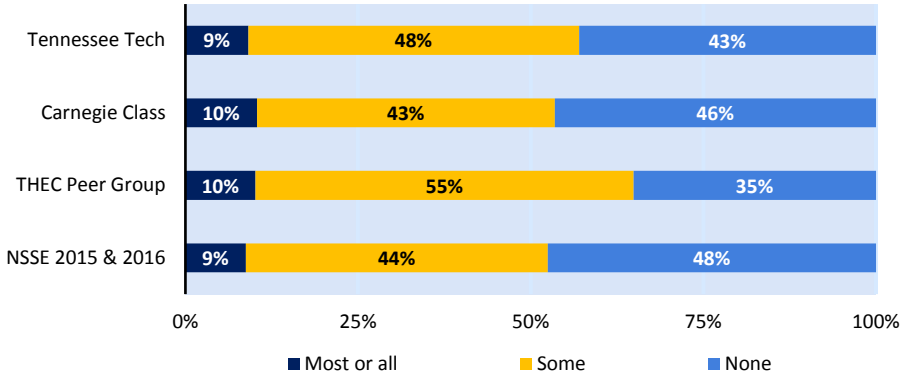
Which of the following have you done or do you plan to do before you graduate?

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



Service-Learning

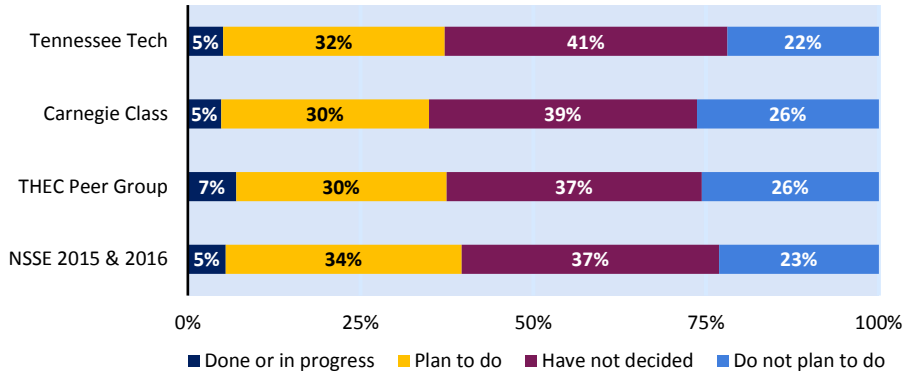
About how many of your courses at this institution have included a community-based project (service-learning)?



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).

NSSE 2016 High-Impact Practices

Response Detail

Tennessee Technological University

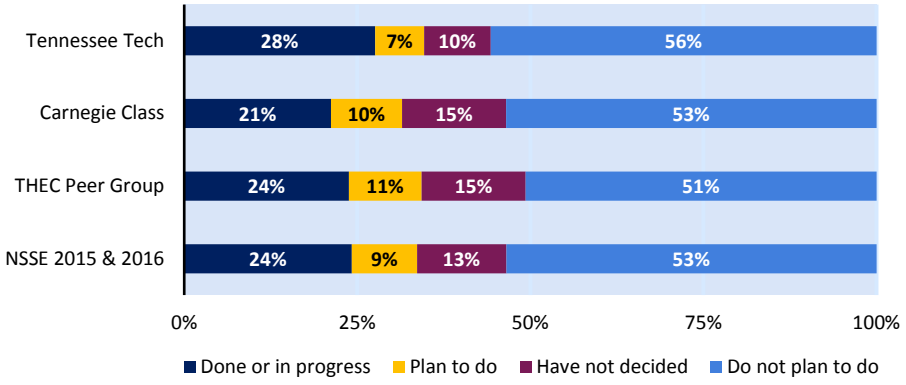
Seniors

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

Learning Community

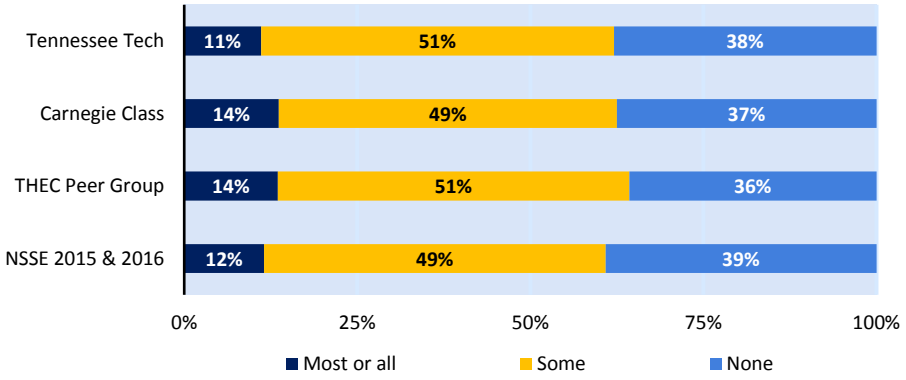
Which of the following have you done or do you plan to do before you graduate?

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



Service-Learning

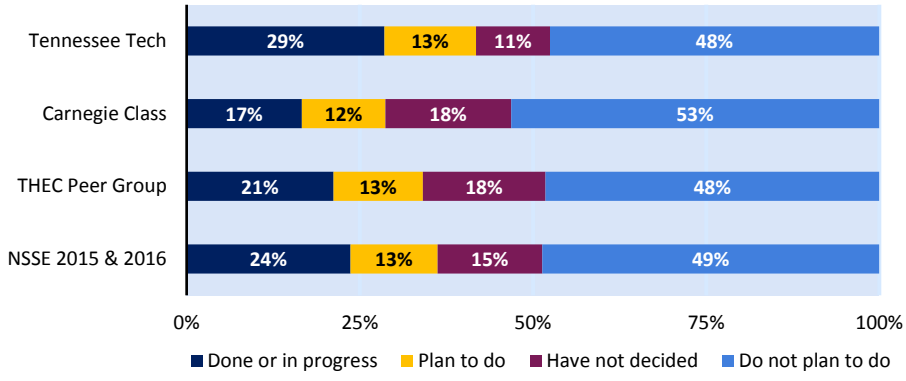
About how many of your courses at this institution have included a community-based project (service-learning)?



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).

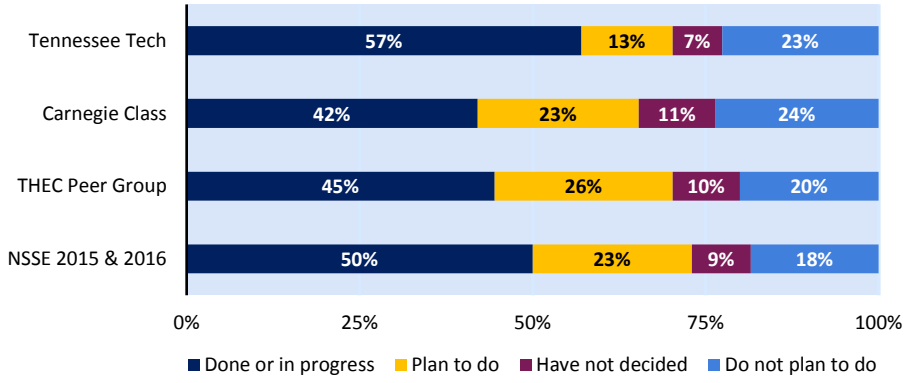
Seniors (continued)

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?

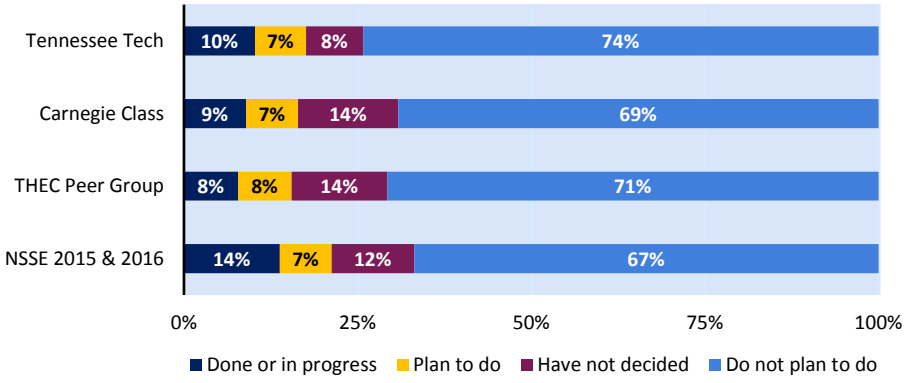
Participate in an internship, co-op, field experience, student teaching, or clinical placement.



Study Abroad

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

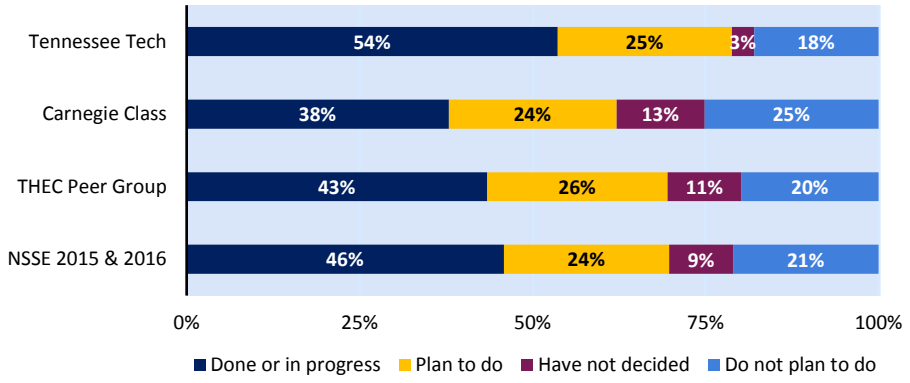
Participate in a study abroad program.



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).

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	9	61	5	32	67	25	59	10	52
Male	7	54	6	26	57	31	55	10	56
Race/ethnicity or international[a]									
American Indian or Alaska Native	—	—	—	—	—	—	—	—	—
Asian	—	—	—	18	82	27	64	18	64
Black or African American	20	50	0	—	—	—	—	—	—
Hispanic or Latino	—	—	—	—	—	—	—	—	—
Native Hawaiian/Other Pac. Islander	—	—	—	—	—	—	—	—	—
White	8	58	5	31	63	28	58	10	54
Other	—	—	—	—	—	—	—	—	—
Foreign or nonresident alien	—	—	—	—	—	—	—	—	—
Two or more races/ethnicities	17	57	4	—	—	—	—	—	—
Age									
Traditional (FY < 21, Seniors < 25):	8	58	4	31	66	30	63	10	53
Nontraditional (FY 21+, Seniors 25+)	9	36	9	25	53	18	41	6	55
First-generation[b]									
Not first-generation	9	54	5	31	64	27	66	14	55
First-generation	8	60	4	27	61	28	48	5	51
Enrollment status[a]									
Not full-time	—	—	—	11	59	25	49	7	47
Full-time	9	59	5	32	64	28	58	11	55
Residence									
Living off campus	6	60	4	30	64	27	57	10	54
Living on campus	11	55	5	18	51	33	64	5	46
Major category[c]									
Arts & humanities	8	25	8	20	50	60	40	20	80
Biological sciences, agriculture, natural res.	6	61	6	19	40	43	38	28	19
Physical sciences, math, computer science	0	52	0	19	54	46	54	12	46
Social sciences	6	71	6	16	80	40	56	4	60
Business	17	48	3	24	54	11	41	11	40
Communications, media, public relations	—	—	—	18	82	10	45	0	18
Education	12	88	0	43	70	22	90	4	64
Engineering	10	47	6	21	54	26	60	11	67
Health professions	10	67	4	44	92	28	64	8	49
Social service professions	—	—	—	—	—	—	—	—	—
Undecided/undeclared	—	—	—	—	—	—	—	—	—
Overall	8	57	5	28	62	29	57	10	54

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."