



NSSE 2023

Multi-Year Report

University of Central Missouri

About Your Multi-Year Report

For institutions participating in multiple NSSE administrations since 2013, the year of the last survey update, this report presents year-to-year results for Engagement Indicators (EIs), High-Impact Practices (HIPs), and key academic challenge items to illustrate patterns of change or stability. It also provides details such as numbers of respondents, standard deviations, and standard errors so that statistical tests can be calculated.

For more information and recommendations for analyzing NSSE data over time, view our webinar entitled *Recommendations for Using Multiple Years of NSSE Data*: <http://go.iu.edu/2R1r>

This report contains three main parts: (a) a page that provides a quick reference to important information about each year's administration, (b) multi-year figures, and (c) detailed statistics. Key terms and features are illustrated below.

Report sections

Administration Summaries (p. 3)	A summary of respondent counts, response rates, sampling errors, and administration details for each participation year.
Engagement Results by Theme (pp. 4-7)	Results for ten EIs and selected individual survey items are displayed, organized under four broad themes. The Academic Challenge theme is represented by four EIs as well as several individual items. The three remaining engagement themes (Learning with Peers, Experiences with Faculty, and Campus Environment) are each represented by two EIs.
High-Impact Practices (pp. 8-9)	Results for six HIPs are displayed. First-year student results indicate students who participated in service-learning, a learning community, and research with faculty, and who <i>planned to do</i> an internship or field experience, study abroad, and a culminating senior experience. Senior results indicate students who participated in all six.
Detailed Statistics (pp. 10-13)	Displays detailed information for results including counts, standard errors, and confidence intervals (CIs) for each measure.

Interpreting year-to-year results

When examining year-to-year results, you may wonder whether observed differences signify meaningful change and whether a trend is indicated. Figures display CIs around each score showing the range of values that is estimated to contain the population score 95% of the time. Upper and lower CI bounds are also reported in the Detailed Statistics section.

For further investigation

The Report Builder, updated with current data in the fall, allows for multi-year analysis of Engagement Indicators and individual items (including HIPs). It also affords the analysis of results by subpopulation. The Report Builder can be accessed via the NSSE Institution Interface.

The precision of an institution's population estimates can vary between administrations. An important early step in conducting a multi-year analysis is to review data quality. The values in the tables below were drawn from your *Administration Summary* reports.

Response Details by Participation Year

Year	First-year students					Seniors				
	Response rate ^a	Sampling error ^b	Total respondents ^c	Full completions	Partial completions	Response rate ^a	Sampling error ^b	Total respondents ^c	Full completions	Partial completions
2013	26%	+/- 4.1%	435	363	72	28%	+/- 3.6%	543	483	60
2014										
2015										
2016										
2017	8%	+/- 8.1%	136	89	47	9%	+/- 6.0%	242	172	70
2018										
2019										
2020	18%	+/- 5.1%	306	203	103	16%	+/- 4.4%	421	303	118
2021										
2022										
2023	11%	+/- 7.7%	146	97	49	16%	+/- 5.2%	294	239	55

Administration Details by Participation Year

Year	Recruitment method	Sample type	Incentives offered	Additional question sets	Report Sample identified ^d	BCSSE	FSSE
2013	Email	Census	Yes	Civic Engagement	No	No	No
2014							
2015							
2016							
2017	Email	Census	No	Civic Engagement	No	No	No
2018							
2019							
2020	Email	Census	Yes	FY Experiences / Sr Transitions, Inclusiv & Cult Div	No	No	No
2021							
2022							
2023	Email	Census	Yes	Academic Advising, Inclusiv. & Cultural Div.	No	No	No

Note: All of your institution's participation years since 2013 (the first year of the updated NSSE) are reported. Years in which your institution did not participate are blank.

a. Response rates (number of respondents divided by sample size) are adjusted for ineligibility, nondeliverable addresses, and students who were unavailable during the survey administration.

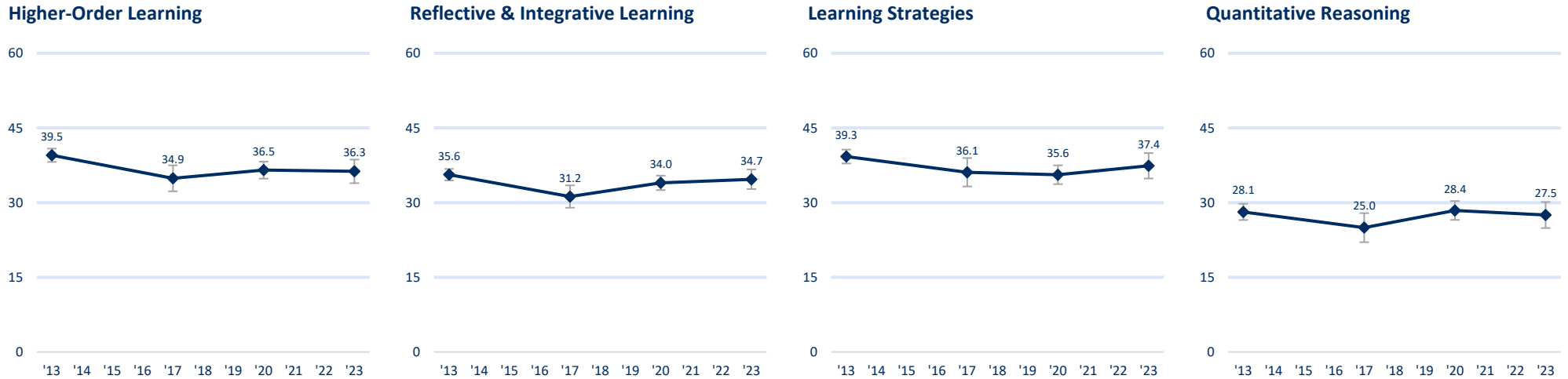
b. Sampling error gauges the precision of results based on a sample survey. It is an estimate (at the 95% confidence level) of how much results for your respondents could differ from those of the entire population of students at your institution. While data with larger sampling errors (such as +/-10%) need not be dismissed out of hand, such results should be interpreted more conservatively.

c. Count used to calculate response rates and sampling errors for each *Administration Summary* report. Includes all census-administered and randomly sampled students, regardless of "Report Sample" designation.

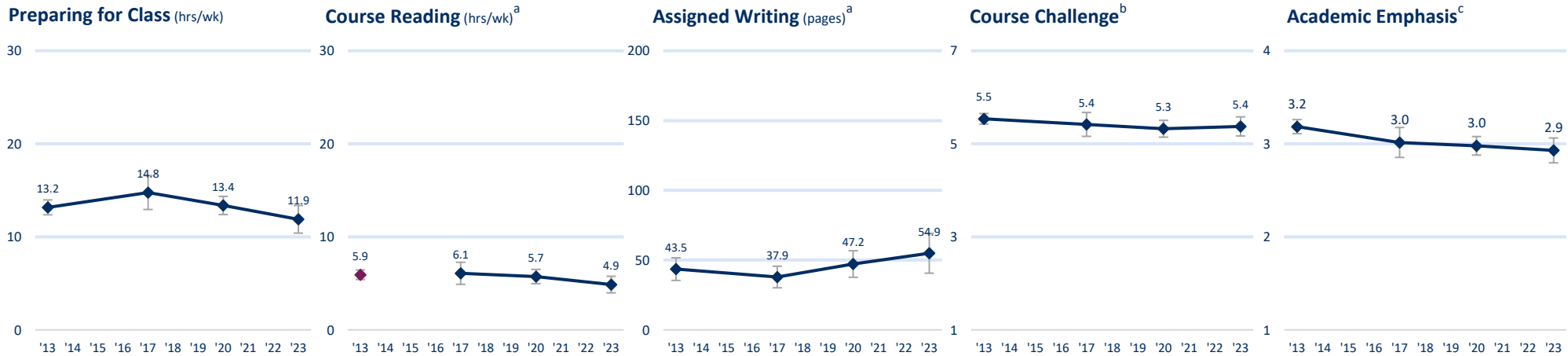
d. Starting in 2017, institutions had the option to flag a subset of students for exclusion from reports. Refer to your *Administration Summary* reports.

Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See the end of this report for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Academic Challenge: First-year students



Academic Challenge (additional items): First-year students



a. Values for Course Reading and Assigned Writing are estimates calculated from two or more survey questions. The Course Reading item changed in 2014; comparability between 2013 and later years is limited.

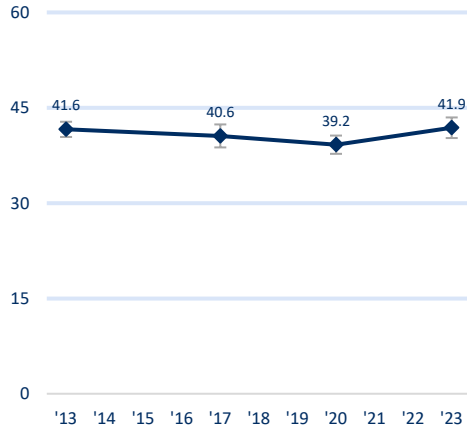
b. Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").

c. How much students said the institution emphasizes spending significant time studying and on academic work (1 = "Very little," 2 = "Some," 3 = "Quite a bit," and 4 = "Very much").

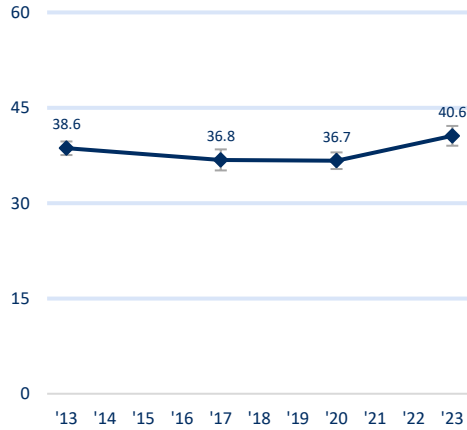
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Academic Challenge: Seniors

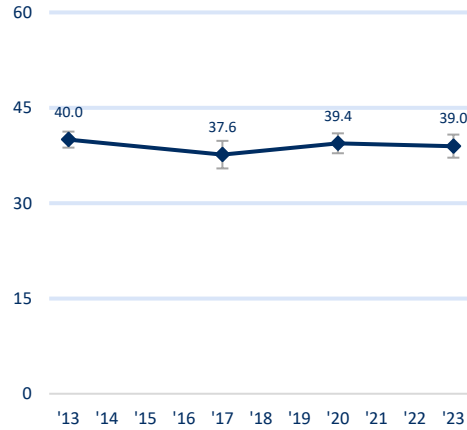
Higher-Order Learning



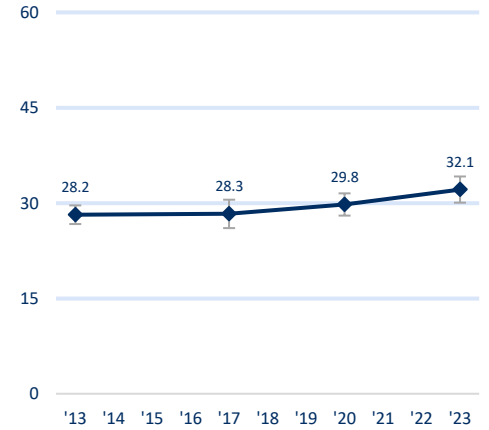
Reflective & Integrative Learning



Learning Strategies

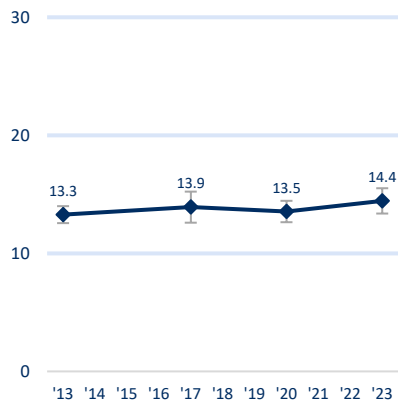


Quantitative Reasoning

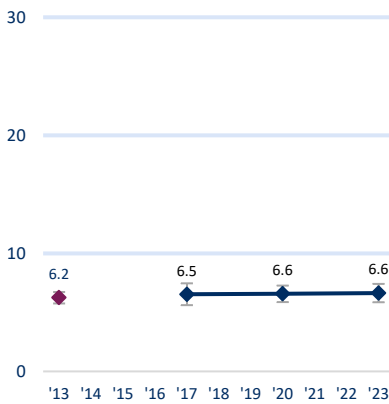


Academic Challenge (additional items): Seniors

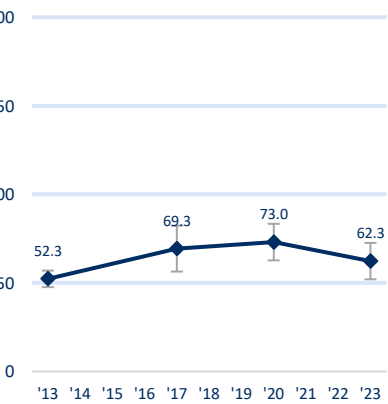
Preparing for Class (hrs/wk)



Course Reading (hrs/wk)^a



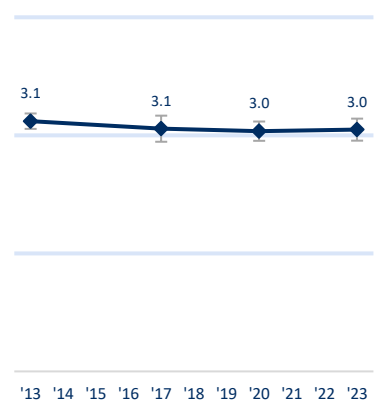
Assigned Writing (pages)^a



Course Challenge^b



Academic Emphasis^c



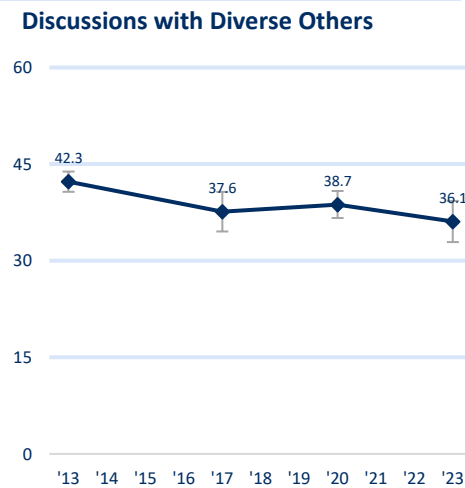
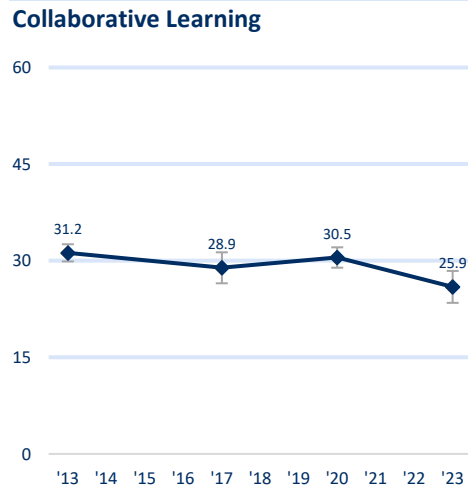
a. Values for Course Reading and Assigned Writing are estimates calculated from two or more survey questions. The Course Reading item changed in 2014; comparability between 2013 and later years is limited.

b. Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").

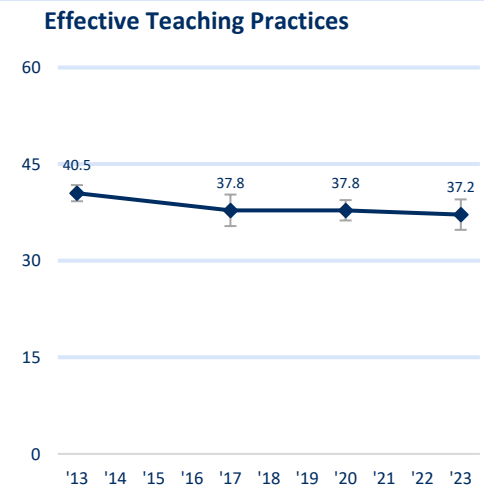
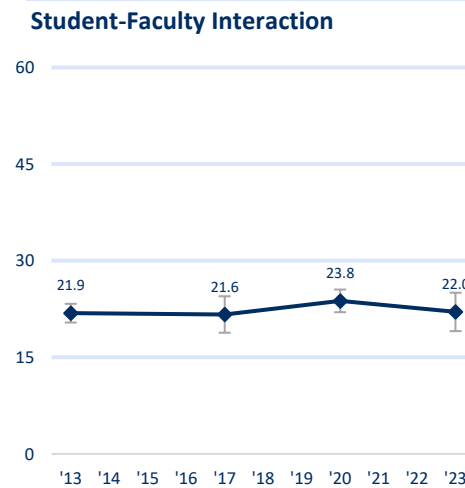
c. How much students said the institution emphasizes spending significant time studying and on academic work (1 = "Very little," 2 = "Some," 3 = "Quite a bit," and 4 = "Very much").

Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

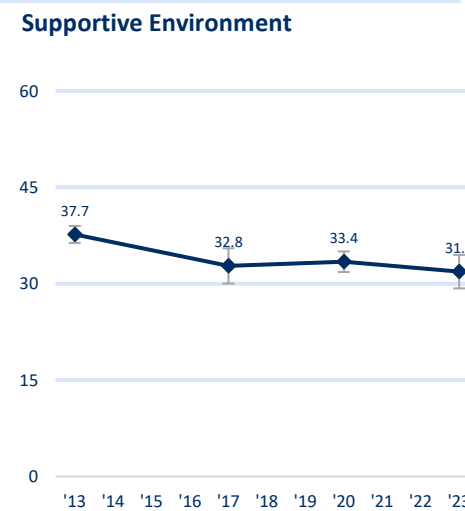
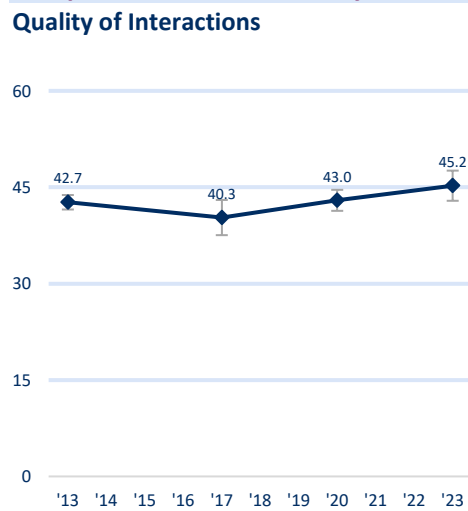
Learning with Peers: First-year students



Experiences with Faculty: First-year students



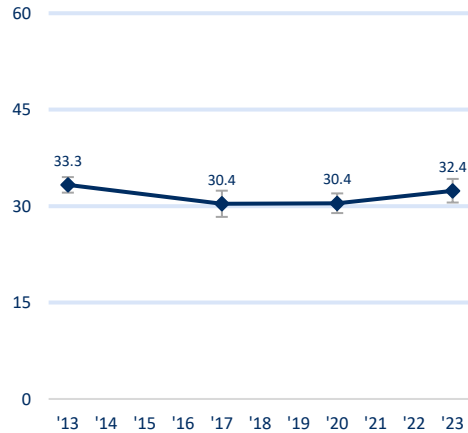
Campus Environment: First-year students



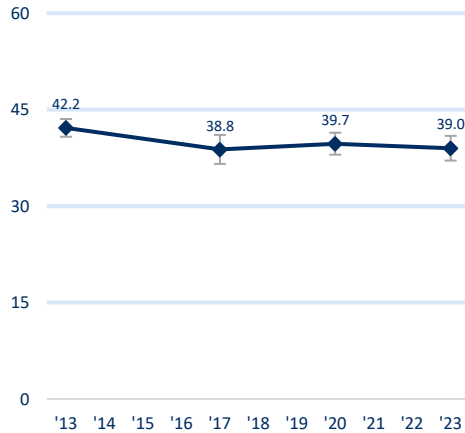
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Learning with Peers: Seniors

Collaborative Learning

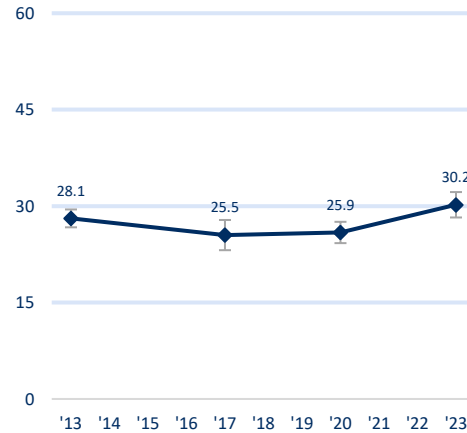


Discussions with Diverse Others

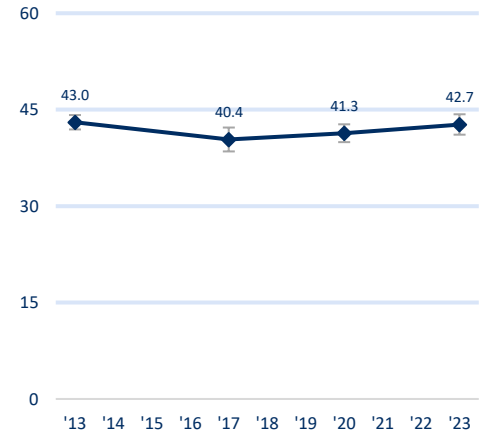


Experiences with Faculty: Seniors

Student-Faculty Interaction

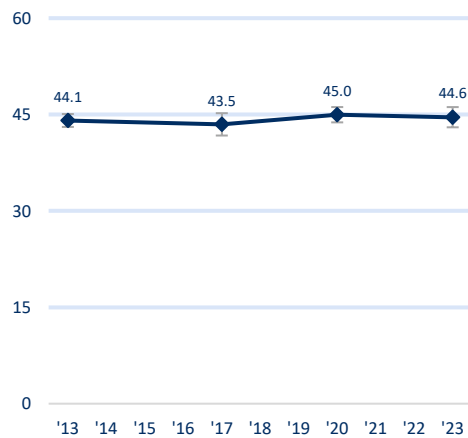


Effective Teaching Practices

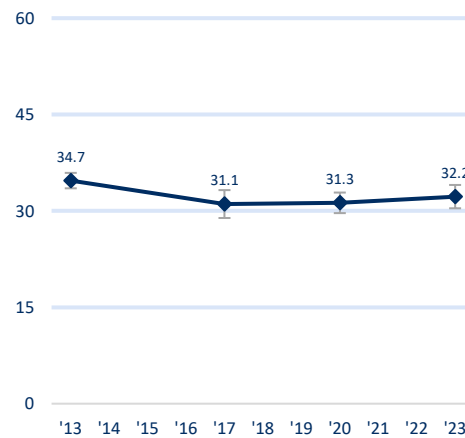


Campus Environment: Seniors

Quality of Interactions



Supportive Environment

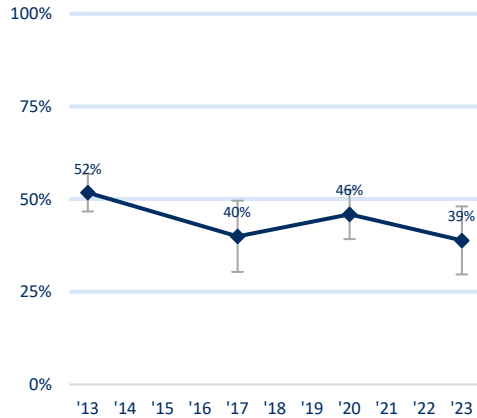


Due to their positive associations with student learning and retention, certain undergraduate opportunities are designated "high-impact." The figures below display first-year students' participation, or intent to participate, in High-Impact Practices (HIPs) by year. See page 13 for detailed statistics. For more information, refer to your *High-Impact Practices* report.

High-Impact Practices: First-year students

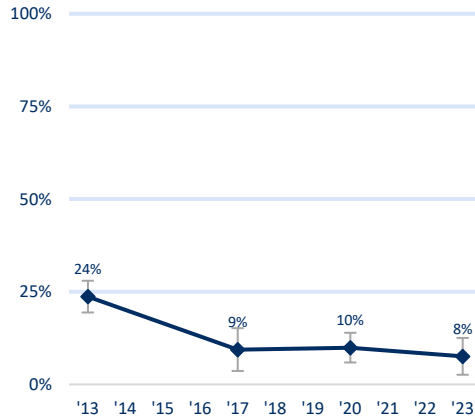
Service-Learning

(Some, most, or all courses)



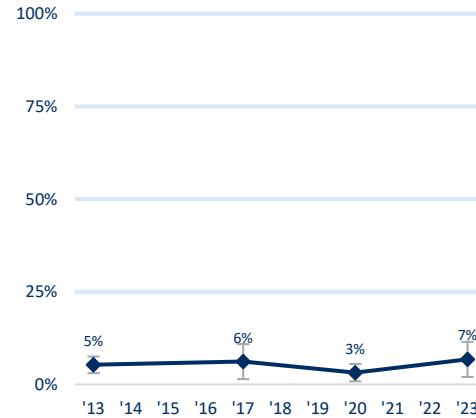
Learning Community

(Done or in progress)



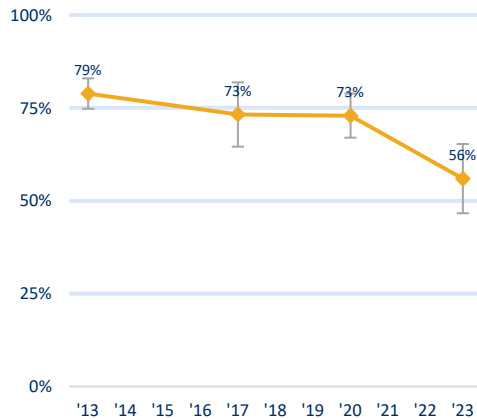
Research with Faculty

(Done or in progress)



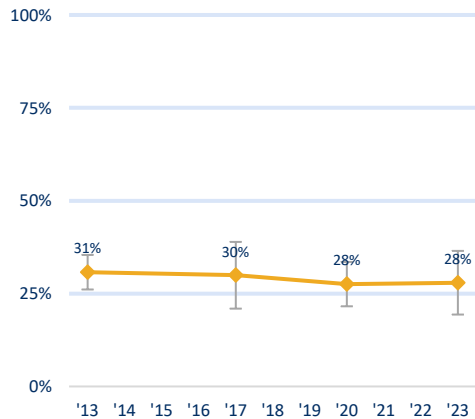
Internship/Field Experience

(Plan to do)



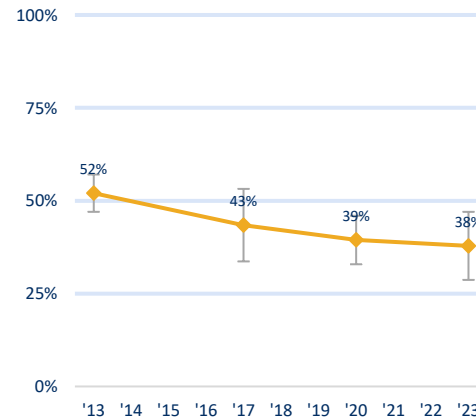
Study Abroad

(Plan to do)



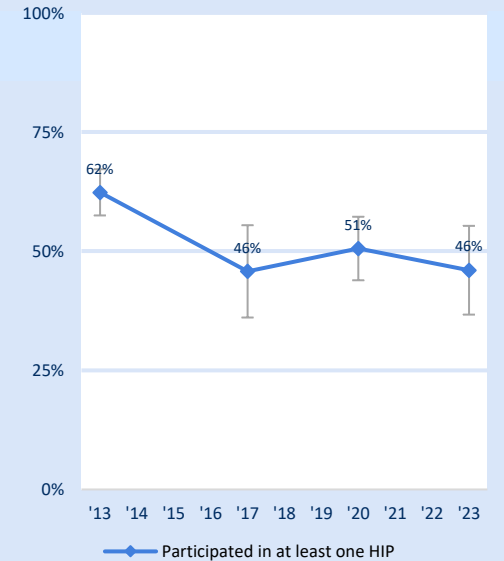
Culminating Senior Experience

(Plan to do)



Overall first-year HIP participation

The figure below displays the percentages of first-year students who participated in at least one high-impact practice. The figure is limited to participation in service-learning, a learning community, and research with faculty.

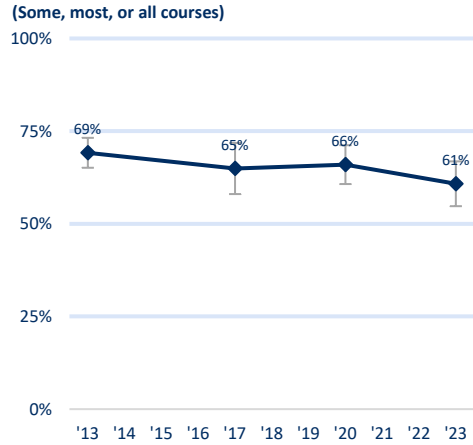


NSSE founding director George Kuh recommends that institutions aspire for all students to participate in at least two HIPs over the course of their undergraduate experience—one during the first year and one in the context of their major.

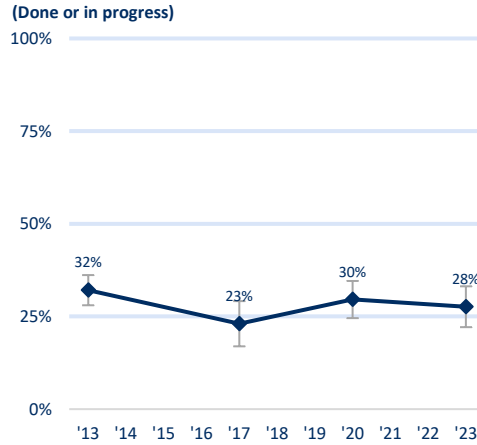
Due to their positive associations with student learning and retention, certain undergraduate opportunities are designated "high-impact." Participation in High-Impact Practices (HIPs) by year is displayed in the figures below. See page 13 for detailed statistics. For more information, refer to your *High-Impact Practices* report.

High-Impact Practices: Seniors

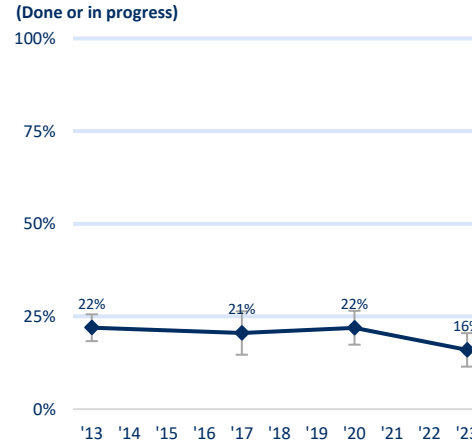
Service-Learning (Some, most, or all courses)



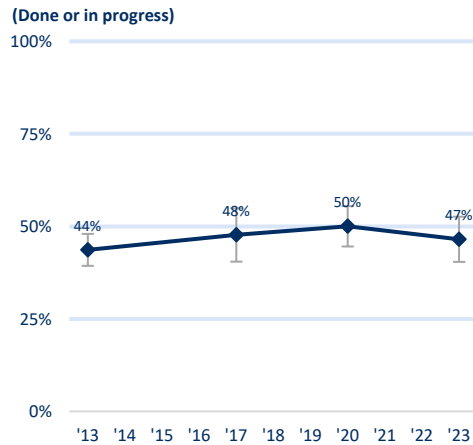
Learning Community (Done or in progress)



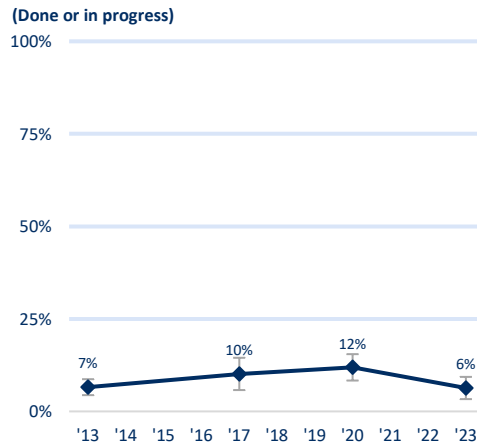
Research with Faculty (Done or in progress)



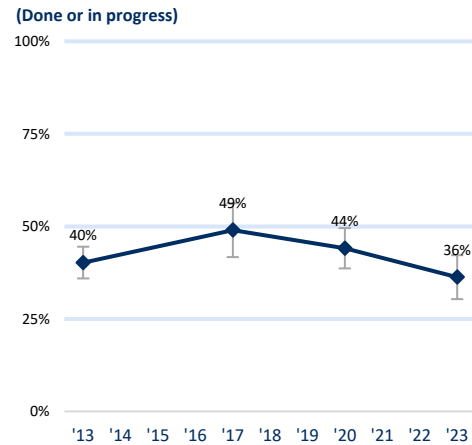
Internship/Field Experience (Done or in progress)



Study Abroad (Done or in progress)

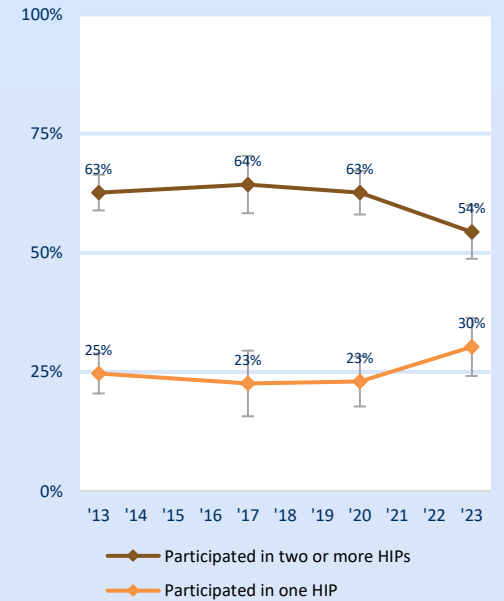


Culminating Senior Experience (Done or in progress)



Overall senior HIP participation

The figure below displays the percentages of seniors who participated in one, and two or more, high-impact practices. The figure includes all six HIPs.



NSSE founding director George Kuh recommends that institutions 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 2023 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Challenge Items

University of Central Missouri

		First-year students										Seniors											
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23
<i>Academic Challenge</i>																							
Higher-Order Learning	Mean	39.5			34.9				36.5			36.3	41.6				40.6			39.2		41.9	
	n	397			118				234			123	509				219			356		260	
	SD	13.6			14.4				13.4			13.4	13.8				13.6			13.8		13.3	
	SE	.68			1.33				.87			1.21	.61				.92			.73		.83	
	CI up bnd	40.8			37.5				38.2			38.6	42.8				42.4			40.6		43.5	
	CI low bnd	38.2			32.3				34.8			33.9	40.4				38.8			37.7		40.2	
Reflective & Integrative Learning	Mean	35.6			31.2				34.0			34.7	38.6				36.8			36.7		40.6	
	n	407			123				261			133	525				225			381		276	
	SD	11.8			12.7				11.9			11.6	12.5				12.7			13.0		13.2	
	SE	.59			1.15				.74			1.01	.55				.84			.67		.79	
	CI up bnd	36.8			33.5				35.4			36.7	39.7				38.4			38.0		42.1	
	CI low bnd	34.5			29.0				32.5			32.7	37.6				35.1			35.4		39.0	
Learning Strategies	Mean	39.3			36.1				35.6			37.4	40.0				37.6			39.4		39.0	
	n	379			100				216			110	495				187			329		257	
	SD	13.9			14.6				14.2			13.7	14.3				15.1			14.5		14.9	
	SE	.71			1.46				.97			1.30	.64				1.11			.80		.93	
	CI up bnd	40.6			39.0				37.5			39.9	41.2				39.8			41.0		40.8	
	CI low bnd	37.9			33.2				33.7			34.8	38.7				35.5			37.8		37.1	
Quantitative Reasoning	Mean	28.1			25.0				28.4			27.5	28.2				28.3			29.8		32.1	
	n	403			114				222			114	521				214			335		261	
	SD	16.7			15.9				14.4			14.3	17.1				16.7			16.3		17.0	
	SE	.83			1.49				.97			1.34	.75				1.14			.89		1.05	
	CI up bnd	29.8			27.9				30.3			30.1	29.6				30.5			31.5		34.2	
	CI low bnd	26.5			22.0				26.5			24.9	26.7				26.1			28.0		30.1	
<i>Academic Challenge (additional items)</i>																							
Preparing for Class (hours/week)	Mean	13.2			14.8				13.4			11.9	13.3				13.9			13.5		14.4	
	n	362			90				211			108	490				174			313		249	
	SD	7.7			8.8				7.3			7.9	8.1				8.9			8.2		8.6	
	SE	.41			.93				.50			.76	.37				.67			.46		.55	
	CI up bnd	14.0			16.6				14.4			13.4	14.0				15.2			14.5		15.5	
	CI low bnd	12.4			12.9				12.4			10.4	12.6				12.6			12.6		13.4	
Course Reading Est. hrs per wk calculated from two items. Item wording changed in 2014; comparability with '13 is limited.	Mean	5.9			6.1				5.7			4.9	6.2				6.5			6.6		6.6	
	n	361			89				210			108	487				174			313		248	
	SD	5.0			5.7				5.7			4.7	5.5				6.2			6.3		6.2	
	SE	.26			.60				.39			.45	.25				.47			.36		.40	
	CI up bnd	6.4			7.3				6.5			5.8	6.7				7.5			7.3		7.4	
	CI low bnd	5.4			4.9				5.0			4.0	5.8				5.6			5.9		5.9	

Notes: n = Number of respondents; SD = Standard deviation; SE = Standard error of the mean; upper and lower bounds represent the 95% confidence interval (mean +/- 1.96 * SE).

		First-year students										Seniors											
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23
<i>Academic Challenge (additional items, continued)</i>																							
Assigned Writing	<i>Mean</i>	43.5			37.9				47.2			54.9	52.3				69.3			73.0		62.3	
Estimated number of pages calculated from three survey questions.	<i>n</i>	347			101				220			110	468				188			336		261	
	<i>SD</i>	77.2			39.6				72.0			76.3	51.5				90.6			96.5		84.9	
	<i>SE</i>	4.14			3.94				4.85			7.28	2.38				6.61			5.27		5.25	
	<i>CI up bnd</i>	51.7			45.6				56.7			69.2	56.9				82.3			83.4		72.6	
	<i>CI low bnd</i>	35.4			30.2				37.7			40.6	47.6				56.4			62.7		52.0	
Course Challenge	<i>Mean</i>	5.5			5.4				5.3			5.4	5.7				5.6			5.6		5.5	
Extent to which courses challenged students to do best work (1="Not at all" to 7="Very much").	<i>n</i>	379			102				216			111	507				185			327		257	
	<i>SD</i>	1.1			1.3				1.4			1.1	1.1				1.4			1.3		1.3	
	<i>SE</i>	.06			.13				.09			.10	.05				.10			.07		.08	
	<i>CI up bnd</i>	5.7			5.7				5.5			5.6	5.8				5.8			5.8		5.7	
	<i>CI low bnd</i>	5.4			5.2				5.1			5.2	5.6				5.4			5.5		5.3	
Academic Emphasis	<i>Mean</i>	3.2			3.0				3.0			2.9	3.1				3.1			3.0		3.0	
Perceived inst'l emphasis on spending significant time studying and on academic work (1 = "Very little" to 4 = "Very much").	<i>n</i>	365			92				213			109	491				178			316		252	
	<i>SD</i>	0.7			0.8				0.7			0.7	0.7				0.8			0.7		0.8	
	<i>SE</i>	.04			.08				.05			.07	.03				.06			.04		.05	
	<i>CI up bnd</i>	3.3			3.2				3.1			3.1	3.2				3.2			3.1		3.1	
	<i>CI low bnd</i>	3.1			2.9				2.9			2.8	3.1				2.9			3.0		3.0	
<i>Learning with Peers</i>																							
Collaborative Learning	<i>Mean</i>	31.2			28.9				30.5			25.9	33.3				30.4			30.4		32.4	
	<i>n</i>	419			128				293			139	528				232			408		287	
	<i>SD</i>	13.9			13.9				13.8			14.9	14.2				15.8			15.8		15.9	
	<i>SE</i>	.68			1.23				.81			1.26	.62				1.04			.78		.94	
	<i>CI up bnd</i>	32.6			31.3				32.1			28.4	34.5				32.4			32.0		34.2	
	<i>CI low bnd</i>	29.9			26.5				28.9			23.5	32.1				28.3			28.9		30.6	
Discussions with Diverse Others	<i>Mean</i>	42.3			37.6				38.7			36.1	42.2				38.8			39.7		39.0	
	<i>n</i>	382			102				218			112	505				190			332		260	
	<i>SD</i>	15.7			15.9				15.8			17.3	15.9				15.9			15.9		15.8	
	<i>SE</i>	.80			1.57				1.07			1.63	.71				1.15			.87		.98	
	<i>CI up bnd</i>	43.8			40.7				40.8			39.3	43.5				41.1			41.4		40.9	
	<i>CI low bnd</i>	40.7			34.5				36.6			32.9	40.8				36.6			38.0		37.1	

Notes: n = Number of respondents; SD = Standard deviation; SE = Standard error of the mean; upper and lower bounds represent the 95% confidence interval (mean +/- 1.96 * SE).

NSSE 2023 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Challenge Items

University of Central Missouri

		First-year students										Seniors											
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23
<i>Experiences with Faculty</i>																							
Student-Faculty Interaction	<i>Mean</i>	21.9			21.6				23.8			22.0	28.1				25.5		25.9			30.2	
	<i>n</i>	402			122				246			127	519				221		370			270	
	<i>SD</i>	14.9			15.9				14.1			17.2	16.2				17.8		16.3			16.6	
	<i>SE</i>	.74			1.45				.90			1.52	.71				1.20		.85			1.01	
	<i>CI up bnd</i>	23.3			24.5				25.5			25.0	29.5				27.8		27.6			32.2	
	<i>CI low bnd</i>	20.4			18.8				22.0			19.1	26.7				23.1		24.2			28.2	
Effective Teaching Practices	<i>Mean</i>	40.5			37.8				37.8			37.2	43.0				40.4		41.3			42.7	
	<i>n</i>	406			116				231			122	525				214		347			268	
	<i>SD</i>	12.9			13.5				12.3			13.3	13.1				13.9		13.2			13.2	
	<i>SE</i>	.64			1.25				.81			1.21	.57				.95		.71			.81	
	<i>CI up bnd</i>	41.7			40.3				39.4			39.5	44.2				42.2		42.7			44.3	
	<i>CI low bnd</i>	39.2			35.4				36.3			34.8	41.9				38.5		39.9			41.1	
<i>Campus Environment</i>																							
Quality of Interactions	<i>Mean</i>	42.7			40.3				43.0			45.2	44.1				43.5		45.0			44.6	
	<i>n</i>	375			95				205			86	488				168		287			226	
	<i>SD</i>	11.1			13.6				11.9			11.1	11.3				11.5		10.3			12.1	
	<i>SE</i>	.57			1.40				.83			1.20	.51				.89		.61			.80	
	<i>CI up bnd</i>	43.8			43.0				44.6			47.6	45.1				45.2		46.2			46.2	
	<i>CI low bnd</i>	41.5			37.5				41.3			42.9	43.1				41.7		43.8			43.0	
Supportive Environment	<i>Mean</i>	37.7			32.8				33.4			31.9	34.7				31.1		31.3			32.2	
	<i>n</i>	363			90				213			109	487				176		314			250	
	<i>SD</i>	12.8			13.3				11.9			13.9	13.5				14.7		14.5			14.6	
	<i>SE</i>	.67			1.40				.82			1.33	.61				1.11		.82			.93	
	<i>CI up bnd</i>	39.0			35.5				35.0			34.5	35.9				33.2		32.9			34.0	
	<i>CI low bnd</i>	36.4			30.0				31.8			29.3	33.5				28.9		29.7			30.4	

Notes: n = Number of respondents; SD = Standard deviation; SE = Standard error of the mean; upper and lower bounds represent the 95% confidence interval (mean +/- 1.96 * SE).

		First-year students										Seniors											
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23
Service-Learning^a	%	52			40	46			39	69	65	66	61										
	n	375			101	216			109	504	185	315	252										
	SE	2.6			4.9	3.4			4.7	2.1	3.5	2.7	3.1										
	CI up bnd	57			50	53			48	73	72	71	67										
	CI low bnd	47			30	39			30	65	58	61	55										
Learning Community^a	%	24			9	10			8	32	23	30	28										
	n	380			99	216			110	505	184	320	254										
	SE	2.2			2.9	2.0			2.5	2.1	3.1	2.6	2.8										
	CI up bnd	28			15	14			13	36	29	35	33										
	CI low bnd	19			4	6			3	28	17	25	22										
Research with Faculty^a	%	5			6	3			7	22	21	22	16										
	n	380			101	216			109	505	184	316	254										
	SE	1.1			2.4	1.2			2.4	1.8	3.0	2.3	2.3										
	CI up bnd	8			11	6			12	26	26	27	21										
	CI low bnd	3			1	1			2	18	15	17	11										
Internship or Field Experience^b	%	79			73	73			56	44	48	50	47										
	n	383			102	216			110	508	185	323	257										
	SE	2.1			4.4	3.0			4.8	2.2	3.7	2.8	3.1										
	(First-year results: Plan to do)	83			82	79			65	48	55	55	53										
	CI low bnd	75			65	67			47	39	40	45	40										
Study Abroad^b	%	31			30	28			28	7	10	12	6										
	n	380			101	216			106	507	185	318	253										
	SE	2.4			4.6	3.0			4.4	1.1	2.2	1.8	1.5										
	(First-year results: Plan to do)	35			39	34			36	9	14	15	9										
	CI low bnd	26			21	22			19	4	6	8	3										
Culminating Senior Experience^b	%	52			43	39			38	40	49	44	36										
	n	381			100	216			109	504	182	320	253										
	SE	2.6			5.0	3.3			4.7	2.2	3.7	2.8	3.0										
	(First-year results: Plan to do)	57			53	46			47	45	56	50	42										
	CI low bnd	47			34	33			29	36	42	39	30										
Overall HIP Participation^c																							
Participated in one HIP	%	46			37	43			40	25	23	23	30										
	n	383			102	216			110	508	186	325	257										
	SE	2.6			4.8	3.4			4.7	1.9	3.1	2.3	2.9										
	CI up bnd	51			46	49			49	28	29	28	36										
	CI low bnd	41			27	36			30	21	17	18	25										
Participated in two or more HIPs	%	16			9	8			6	63	64	63	54										
	n	383			102	216			110	508	186	325	257										
	SE	1.9			2.9	1.9			2.3	2.1	3.5	2.7	3.1										
	CI up bnd	20			15	12			11	67	71	68	60										
	CI low bnd	12			4	4			2	58	57	57	48										

Notes: n = Number of respondents; SE = Standard error of the proportion ($\sqrt{p(1-p)/(n-1)}$) where p is the proportion; upper and lower bounds represent the 95% confidence interval ($p \pm 1.96 * SE$).

a. Results are the percentage who had done the activity.

b. First-year results are the percentage who planned to do the activity; Senior results are the percentage who had done the activity.

c. First-year results are limited to participation in a Learning Community, Service-Learning, and Research with Faculty; senior results include all six HIPs.