



NSSE 2021

Multi-Year Report

Northern Michigan University

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 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	22%	+/- 5.4%	256	202	54	28%	+/- 4.7%	312	275	37
2014										
2015										
2016										
2017	24%	+/- 5.3%	256	176	80	28%	+/- 3.7%	505	394	111
2018	29%	+/- 4.7%	314	228	86	30%	+/- 3.6%	534	418	116
2019										
2020										
2021	46%	+/- 3.8%	371	253	118	40%	+/- 3.4%	501	372	129

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	Yes	FY Experiences / Sr Transitions, Inclusiv & Cult Div	No	No	No
2018	Email	Census	Yes	Academic Advising, Inclusiv & Cult Div	No	No	No
2019							
2020							
2021	Email	Census	Yes	FY Experiences / Sr Transitions, Inclusiv & Cult Div	No	Yes	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 survey item percentages 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.

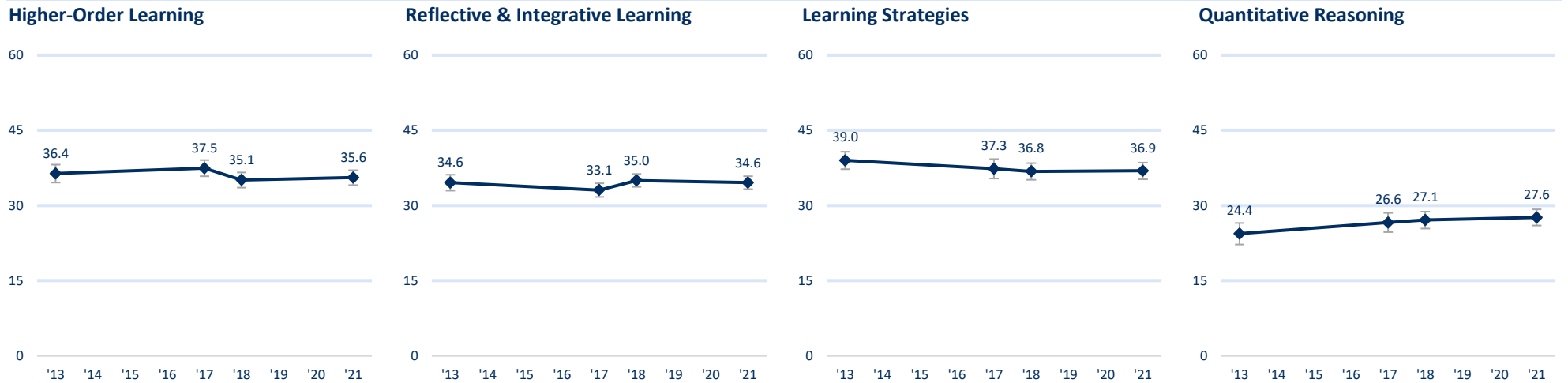
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Engagement Results by Theme

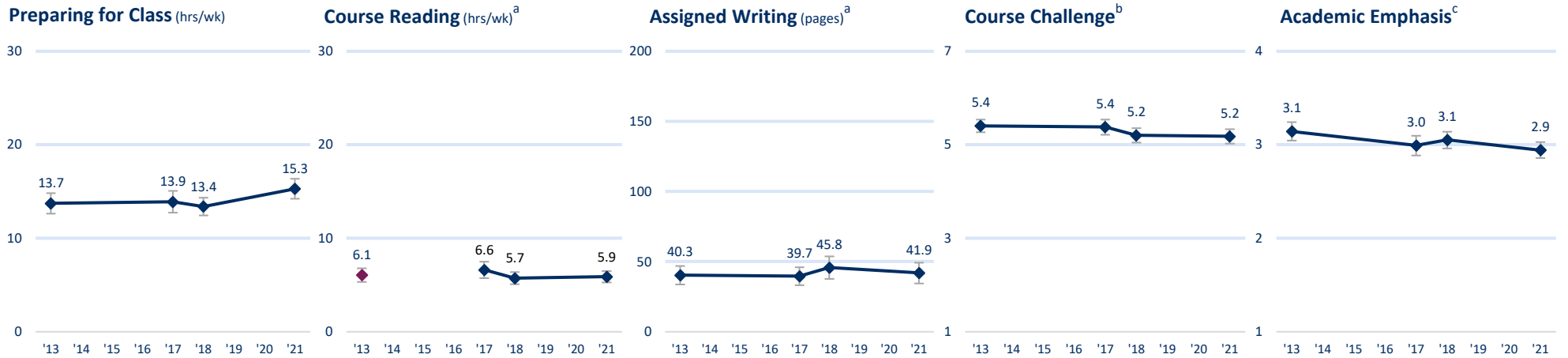
Northern Michigan University

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: First-year students



Academic Challenge (additional items): First-year students



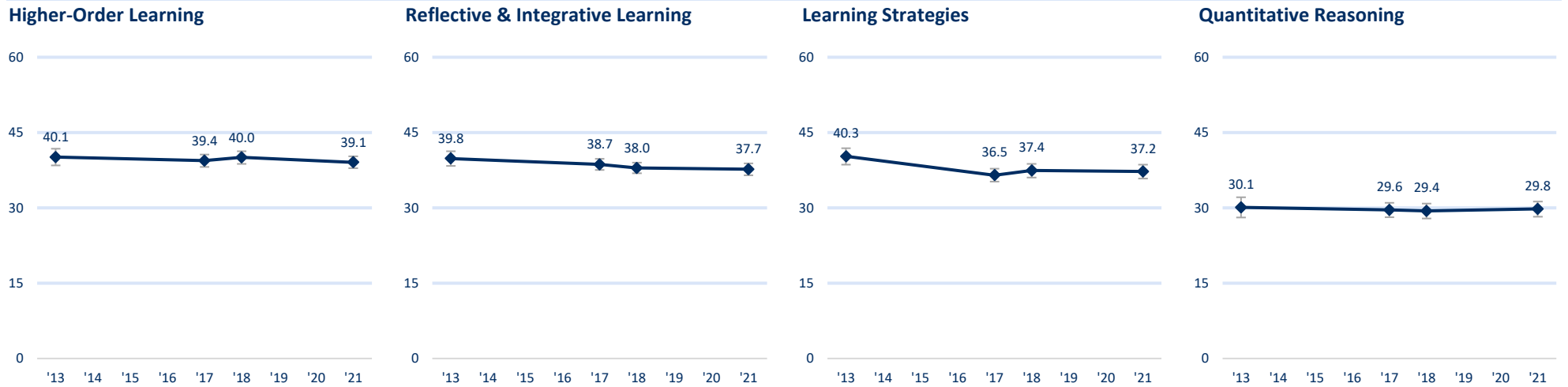
a. Values for Course Reading and Assigned Writing are estimates calculated from two or more survey questions. The Course Reading item changed in 2014; comparability between 2013 and later years is limited.

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

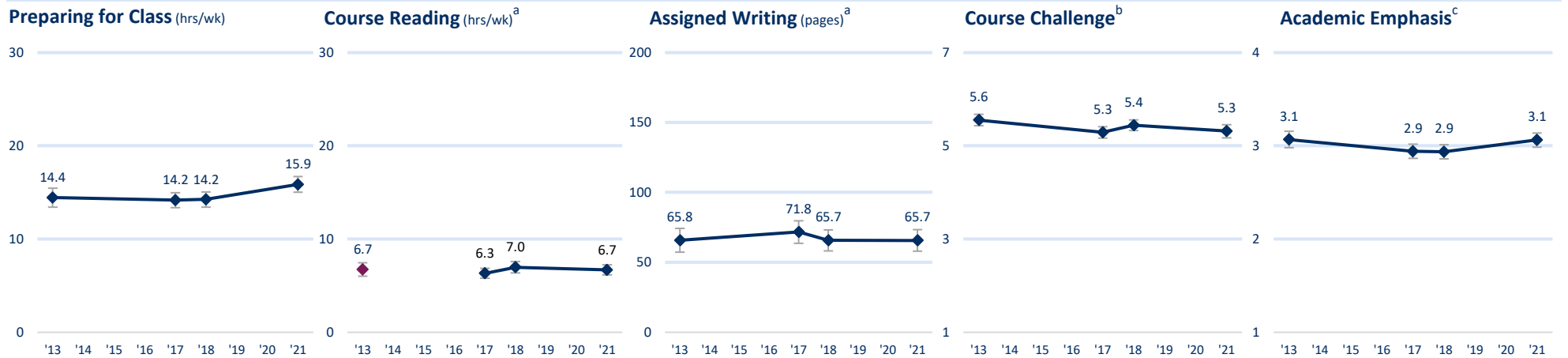
c. How much students said the institution emphasizes spending significant time studying and on academic work (1 = "Very little," 2 = "Some," 3 = "Quite a bit," and 4 = "Very much").

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Academic Challenge: Seniors



Academic Challenge (additional items): Seniors



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.

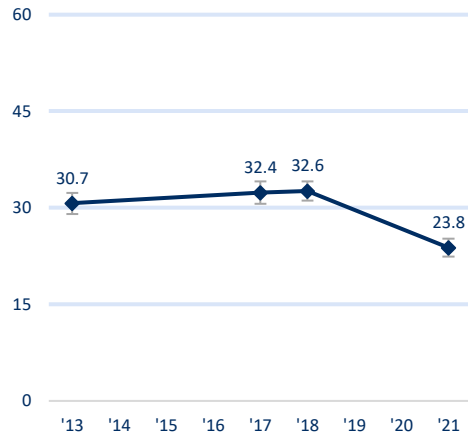
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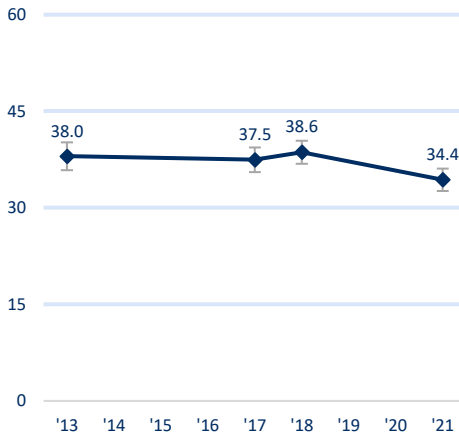
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Learning with Peers: First-year students

Collaborative Learning

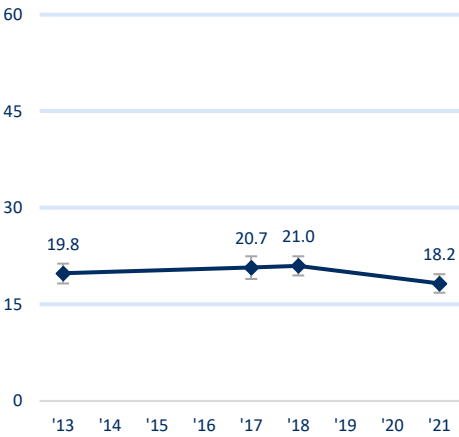


Discussions with Diverse Others

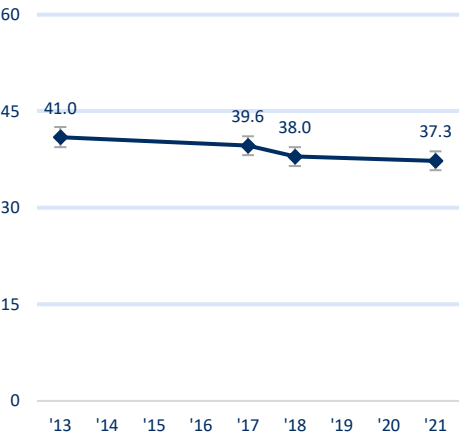


Experiences with Faculty: First-year students

Student-Faculty Interaction

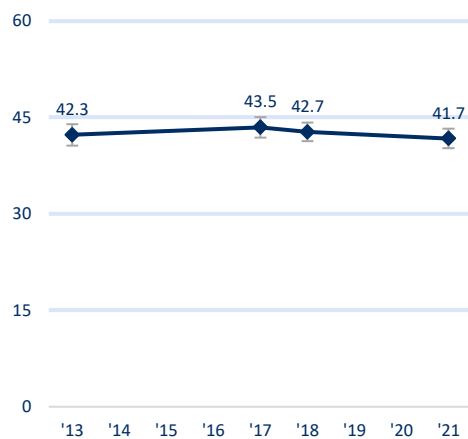


Effective Teaching Practices

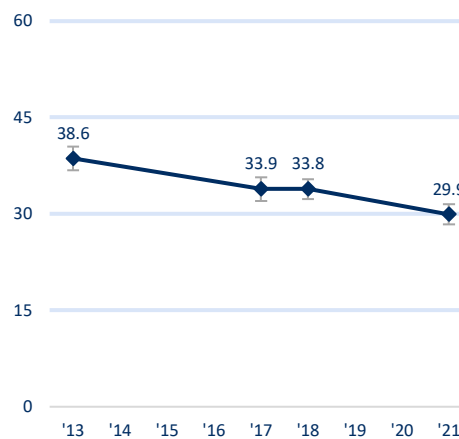


Campus Environment: First-year students

Quality of Interactions



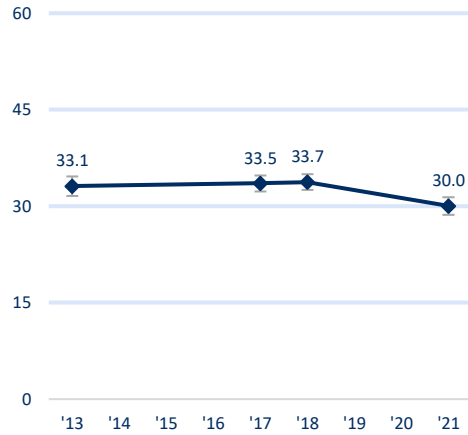
Supportive Environment



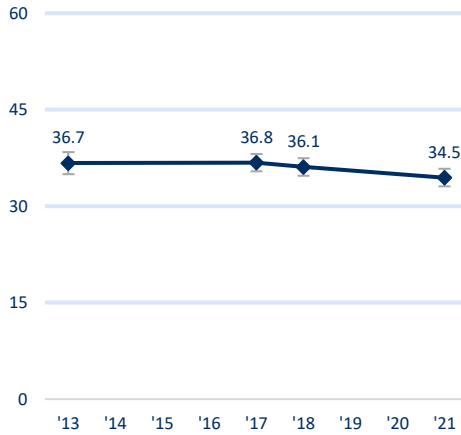
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Learning with Peers: Seniors

Collaborative Learning

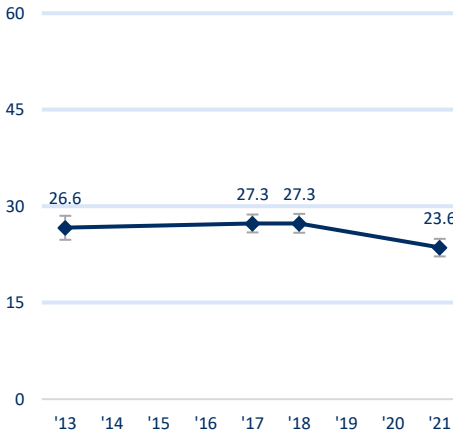


Discussions with Diverse Others

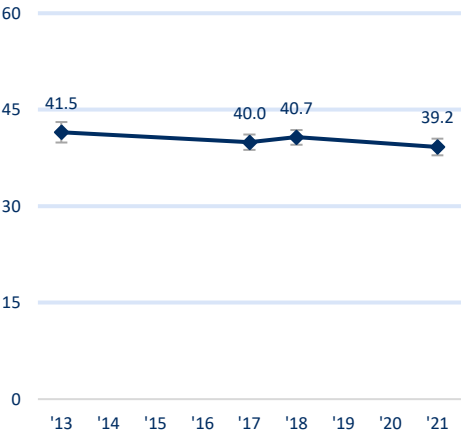


Experiences with Faculty: Seniors

Student-Faculty Interaction

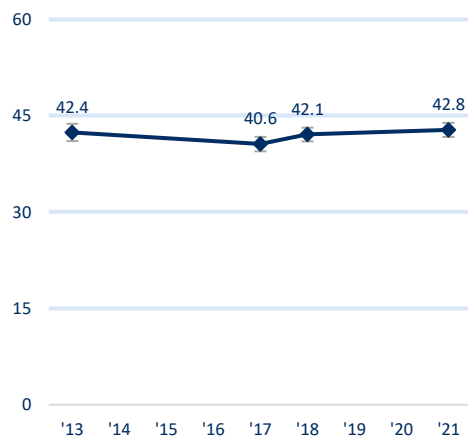


Effective Teaching Practices

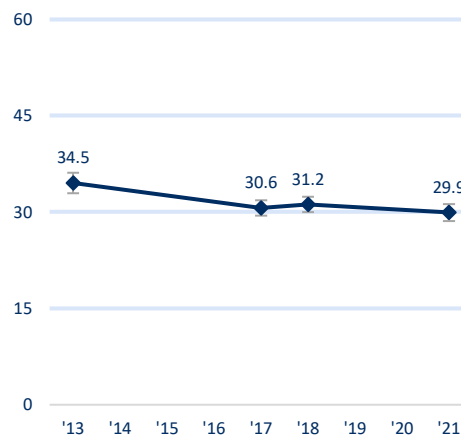


Campus Environment: Seniors

Quality of Interactions



Supportive Environment

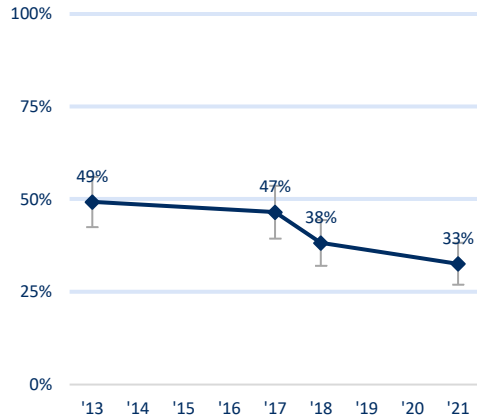


Due to their positive associations with student learning and retention, special undergraduate opportunities are designated "high-impact." The figures below display first-year students' participation, or intent to participate, in High-Impact Practices (HIPs) by year. See page 13 for detailed statistics.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

High-Impact Practices: First-year students

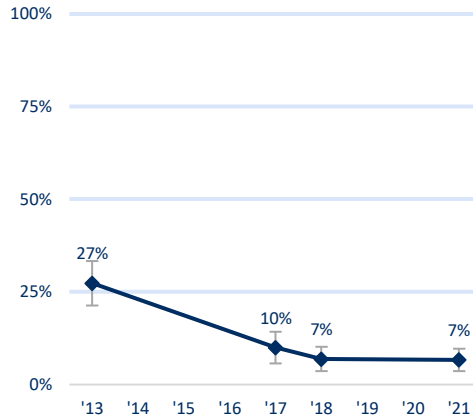
Service-Learning

(Some, most, or all courses)



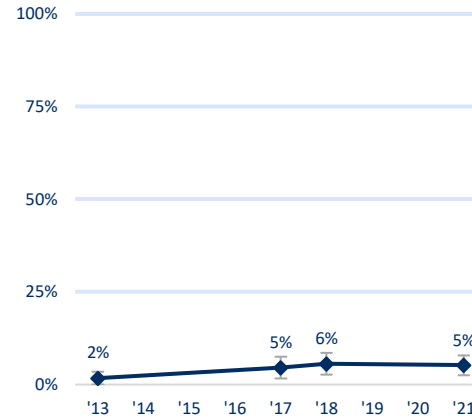
Learning Community

(Done or in progress)



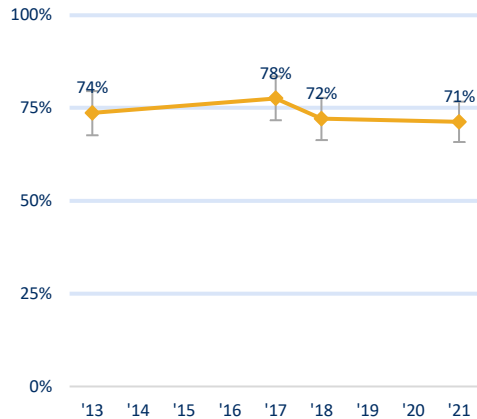
Research with Faculty

(Done or in progress)



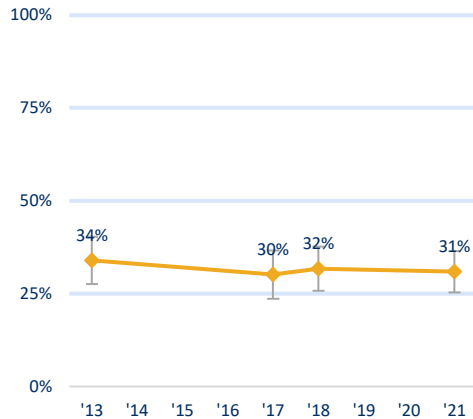
Internship/Field Experience

(Plan to do)



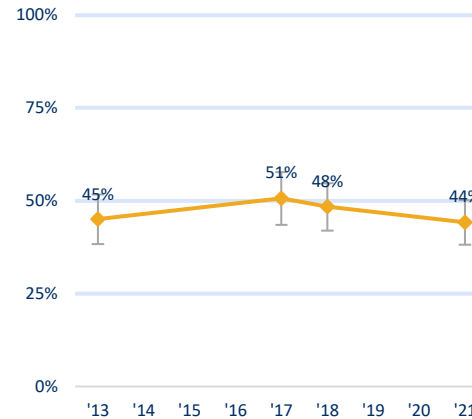
Study Abroad

(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.

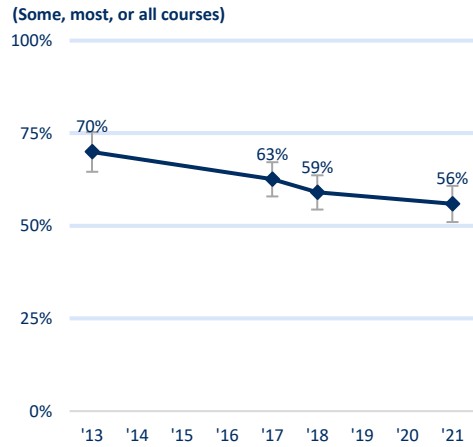


NSSE founding director George Kuh recommends that institutions aspire for all students to participate in at least two HIPs over the course of their undergraduate experience—one during the first year and one in the context of their major.

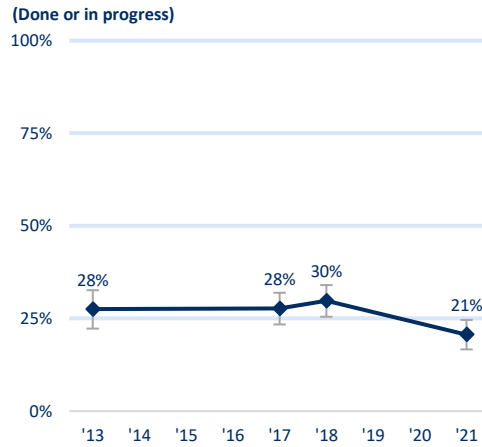
Due to their positive associations with student learning and retention, special undergraduate opportunities are designated "high-impact." Participation in High-Impact Practices (HIPs) by year is displayed in the figures below. See page 13 for detailed statistics. For more information, refer to your *High-Impact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

High-Impact Practices: Seniors

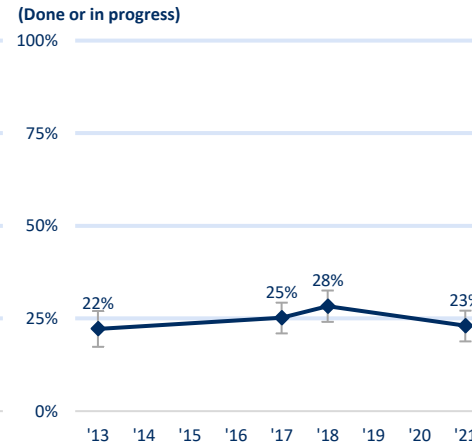
Service-Learning (Some, most, or all courses)



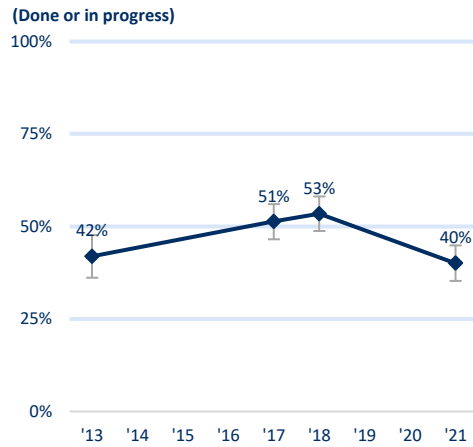
Learning Community (Done or in progress)



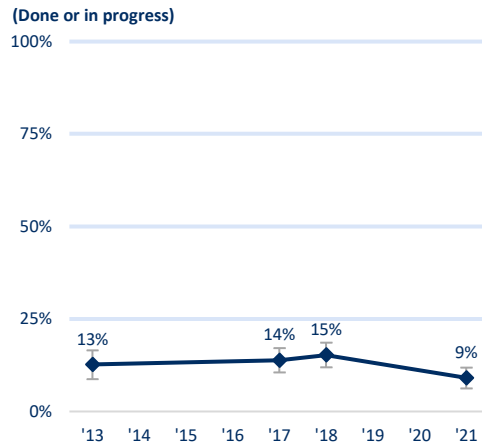
Research with Faculty (Done or in progress)



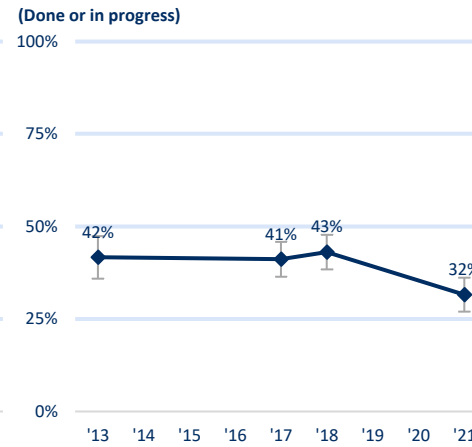
Internship/Field Experience (Done or in progress)



Study Abroad (Done or in progress)

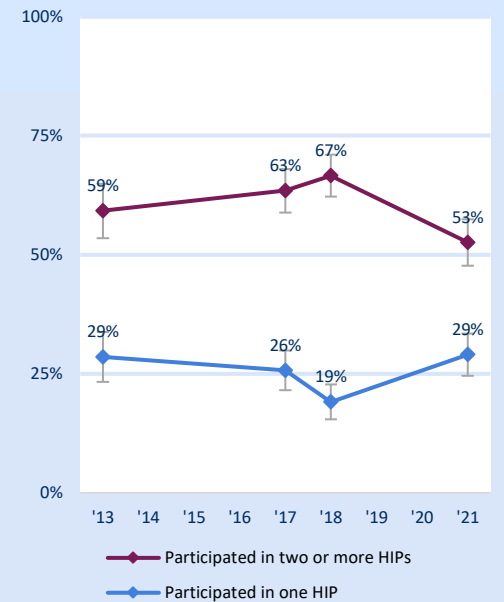


Culminating Senior Experience (Done or in progress)



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.

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Detailed Statistics: Engagement Indicators and Additional Items

Northern Michigan University

		First-year students								Seniors									
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'13	'14	'15	'16	'17	'18	'19	'20	'21
<i>Academic Challenge</i>																			
Higher-Order Learning	Mean	36.4				37.5	35.1			35.6	40.1				39.4	40.0			39.1
	n	233				227	262			306	286				474	463			429
	SD	13.9				12.5	12.3			13.4	14.3				13.7	13.6			12.5
	SE	.91				.83	.76			.77	.84				.63	.63			.60
	CI upper bound	38.2				39.1	36.6			37.1	41.8				40.6	41.3			40.3
	CI lower bound	34.6				35.8	33.6			34.1	38.5				38.2	38.8			37.9
Reflective & Integrative Learning	Mean	34.6				33.1	35.0			34.6	39.8				38.7	38.0			37.7
	n	238				240	282			331	297				485	492			457
	SD	12.5				10.8	10.8			11.9	12.8				12.2	12.2			12.9
	SE	.81				.70	.65			.65	.75				.55	.55			.60
	CI upper bound	36.2				34.5	36.3			35.8	41.3				39.8	39.0			38.9
	CI lower bound	33.0				31.7	33.8			33.3	38.4				37.6	36.9			36.5
Learning Strategies	Mean	39.0				37.3	36.8			36.9	40.3				36.5	37.4			37.2
	n	214				194	238			269	283				427	445			401
	SD	13.0				13.9	13.2			13.8	13.9				13.6	14.5			14.3
	SE	.89				1.00	.85			.84	.83				.66	.69			.72
	CI upper bound	40.7				39.3	38.5			38.6	41.9				37.8	38.8			38.6
	CI lower bound	37.3				35.4	35.1			35.3	38.6				35.2	36.1			35.8
Quantitative Reasoning	Mean	24.4				26.6	27.1			27.6	30.1				29.6	29.4			29.8
	n	234				222	253			281	293				469	450			412
	SD	16.7				14.6	13.7			13.7	17.6				15.8	16.0			15.7
	SE	1.09				.98	.86			.82	1.03				.73	.76			.77
	CI upper bound	26.5				28.5	28.8			29.2	32.1				31.0	30.9			31.3
	CI lower bound	22.2				24.7	25.4			26.0	28.1				28.2	27.9			28.2
<i>Academic Challenge (additional items)</i>																			
Preparing for Class (hours/week)	Mean	13.7				13.9	13.4			15.3	14.4				14.2	14.2			15.9
	n	202				178	231			259	277				399	432			390
	SD	8.0				7.9	7.3			8.8	8.5				8.1	8.6			8.5
	SE	.56				.59	.48			.55	.51				.41	.41			.43
	CI upper bound	14.8				15.1	14.3			16.4	15.5				15.0	15.0			16.7
	CI lower bound	12.6				12.7	12.5			14.2	13.4				13.4	13.4			15.0
Course Reading Est. hrs per wk calculated from two items. Item wording changed in 2014; comparability with '13 is limited.	Mean	6.1				6.6	5.7			5.9	6.7				6.3	7.0			6.7
	n	201				177	228			259	276				398	428			384
	SD	5.3				6.0	5.0			5.0	6.1				5.4	6.4			5.4
	SE	.37				.45	.33			.31	.37				.27	.31			.27
	CI upper bound	6.8				7.5	6.4			6.5	7.5				6.9	7.6			7.2
	CI lower bound	5.3				5.7	5.1			5.3	6.0				5.8	6.4			6.2

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).

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Detailed Statistics: Engagement Indicators and Additional Items

Northern Michigan University

		First-year students								Seniors									
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'13	'14	'15	'16	'17	'18	'19	'20	'21
<i>Academic Challenge (additional items, continued)</i>																			
Assigned Writing	<i>Mean</i>	40.3				39.7	45.8			41.9	65.8				71.8	65.7			65.7
Estimated number of pages calculated from three survey questions.	<i>n</i>	194				194	253			276	265				431	448			409
	<i>SD</i>	46.8				45.4	65.2			62.6	70.3				85.2	81.7			79.1
	<i>SE</i>	3.36				3.26	4.10			3.77	4.32				4.10	3.86			3.91
	<i>CI upper bound</i>	46.9				46.0	53.9			49.3	74.3				79.8	73.3			73.3
	<i>CI lower bound</i>	33.7				33.3	37.8			34.5	57.3				63.7	58.1			58.0
Course Challenge	<i>Mean</i>	5.4				5.4	5.2			5.2	5.6				5.3	5.4			5.3
Extent to which courses challenged students to do best work (1="Not at all" to 7="Very much").	<i>n</i>	216				194	241			267	285				427	440			402
	<i>SD</i>	1.0				1.1	1.2			1.3	1.1				1.3	1.2			1.5
	<i>SE</i>	.07				.08	.08			.08	.06				.06	.06			.07
	<i>CI upper bound</i>	5.5				5.5	5.4			5.3	5.7				5.4	5.6			5.5
	<i>CI lower bound</i>	5.3				5.2	5.0			5.0	5.4				5.2	5.3			5.2
Academic Emphasis	<i>Mean</i>	3.1				3.0	3.1			2.9	3.1				2.9	2.9			3.1
Perceived institutional emphasis on spending significant time studying and on academic work (1 =	<i>n</i>	202				177	235			265	277				406	437			397
	<i>SD</i>	0.7				0.7	0.7			0.7	0.8				0.8	0.8			0.8
	<i>SE</i>	.05				.05	.05			.04	.05				.04	.04			.04
	<i>CI upper bound</i>	3.2				3.1	3.1			3.0	3.2				3.0	3.0			3.1
	<i>CI lower bound</i>	3.0				2.9	3.0			2.9	3.0				2.9	2.9			3.0
<i>Learning with Peers</i>																			
Collaborative Learning	<i>Mean</i>	30.7				32.4	32.6			23.8	33.1				33.5	33.7			30.0
	<i>n</i>	245				249	299			357	300				495	518			488
	<i>SD</i>	13.1				14.0	13.1			13.5	13.5				14.3	14.2			15.6
	<i>SE</i>	.84				.88	.76			.71	.78				.64	.63			.71
	<i>CI upper bound</i>	32.3				34.1	34.1			25.2	34.7				34.8	35.0			31.4
	<i>CI lower bound</i>	29.0				30.6	31.1			22.4	31.6				32.3	32.5			28.7
Discussions with Diverse Others	<i>Mean</i>	38.0				37.5	38.6			34.4	36.7				36.8	36.1			34.5
	<i>n</i>	217				193	248			277	286				430	449			403
	<i>SD</i>	16.3				13.6	14.3			14.6	14.8				14.2	14.8			14.1
	<i>SE</i>	1.11				.98	.91			.88	.88				.69	.70			.70
	<i>CI upper bound</i>	40.2				39.4	40.4			36.1	38.4				38.1	37.5			35.8
	<i>CI lower bound</i>	35.8				35.5	36.9			32.6	35.0				35.5	34.7			33.1

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).

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Detailed Statistics: Engagement Indicators and Additional Items

Northern Michigan University

		First-year students								Seniors									
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'13	'14	'15	'16	'17	'18	'19	'20	'21
<i>Experiences with Faculty</i>																			
Student-Faculty Interaction	<i>Mean</i>	19.8				20.7	21.0			18.2	26.6			27.3	27.3			23.6	
	<i>n</i>	235				232	266			316	293			480	482			440	
	<i>SD</i>	12.0				13.7	12.4			13.1	16.4			15.7	16.5			14.7	
	<i>SE</i>	.79				.90	.76			.74	.96			.72	.75			.70	
	<i>CI upper bound</i>	21.3				22.5	22.5			19.7	28.5			28.7	28.8			25.0	
<i>CI lower bound</i>	18.3				19.0	19.5			16.8	24.8			25.9	25.9			22.2		
<hr/>																			
Effective Teaching Practices	<i>Mean</i>	41.0				39.6	38.0			37.3	41.5			40.0	40.7			39.2	
	<i>n</i>	233				227	261			301	292			477	466			430	
	<i>SD</i>	12.1				11.4	11.9			13.0	13.8			13.2	12.6			13.7	
	<i>SE</i>	.79				.76	.74			.75	.81			.61	.58			.66	
	<i>CI upper bound</i>	42.5				41.1	39.4			38.8	43.1			41.1	41.9			40.5	
<i>CI lower bound</i>	39.4				38.2	36.5			35.8	39.9			38.8	39.6			37.9		
<hr/>																			
<i>Campus Environment</i>																			
Quality of Interactions	<i>Mean</i>	42.3				43.5	42.7			41.7	42.4			40.6	42.1			42.8	
	<i>n</i>	202				181	230			242	278			415	427			381	
	<i>SD</i>	12.1				10.9	11.3			12.1	11.3			11.8	11.2			10.8	
	<i>SE</i>	.85				.81	.74			.78	.68			.58	.54			.56	
	<i>CI upper bound</i>	43.9				45.1	44.2			43.2	43.7			41.7	43.1			43.9	
<i>CI lower bound</i>	40.6				41.9	41.3			40.2	41.1			39.4	41.0			41.7		
<hr/>																			
Supportive Environment	<i>Mean</i>	38.6				33.9	33.8			29.9	34.5			30.6	31.2			29.9	
	<i>n</i>	201				177	234			261	276			397	433			389	
	<i>SD</i>	13.3				12.5	11.9			13.0	13.5			12.2	12.7			13.4	
	<i>SE</i>	.94				.94	.78			.81	.81			.61	.61			.68	
	<i>CI upper bound</i>	40.4				35.7	35.4			31.5	36.1			31.8	32.4			31.3	
<i>CI lower bound</i>	36.8				32.0	32.3			28.4	32.9			29.4	30.0			28.6		

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	'13	'14	'15	'16	'17	'18	'19	'20	'21	
Service-Learning^a	%	49				47	38			33	70				63	59			56	
	n	210				190	240			264	282				423	436			400	
	SE	3.5				3.6	3.1			2.9	2.7				2.4	2.4			2.5	
	CI upper bound (%)	56				54	44			38	75				67	64			61	
	CI lower bound (%)	42				39	32			27	65				58	54			51	
Learning Community^a	%	27				10	7			7	28				28	30			21	
	n	213				192	237			267	285				425	439			402	
	SE	3.1				2.2	1.7			1.5	2.6				2.2	2.2			2.0	
	CI upper bound (%)	33				14	10			10	33				32	34			25	
	CI lower bound (%)	21				6	4			4	22				23	26			17	
Research with Faculty^a	%	2				5	6			5	22				25	28			23	
	n	211				192	238			266	284				426	439			402	
	SE	0.9				1.5	1.5			1.4	2.5				2.1	2.2			2.1	
	CI upper bound (%)	3				8	9			8	27				29	33			27	
	CI lower bound (%)	0				2	3			3	17				21	24			19	
Internship or Field Experience^b	%	74				78	72			71	42				51	53			40	
	n	213				192	240			268	285				425	438			404	
	SE	3.0				3.0	2.9			2.8	2.9				2.4	2.4			2.4	
	(First-year results: Plan to do)	CI upper bound (%)	80				83	78			77	48				56	58			45
	CI lower bound (%)	68				72	66			66	36				47	49			35	
Study Abroad^b	%	34				30	32			31	13				14	15			9	
	n	213				192	238			267	283				425	439			403	
	SE	3.3				3.3	3.0			2.8	2.0				1.7	1.7			1.4	
	(First-year results: Plan to do)	CI upper bound (%)	40				37	38			36	17				17	19			12
	CI lower bound (%)	28				24	26			25	9				11	12			6	
Culminating Senior Experience^b	%	45				51	48			44	42				41	43			32	
	n	213				191	239			266	283				422	438			400	
	SE	3.4				3.6	3.2			3.0	2.9				2.4	2.4			2.3	
	(First-year results: Plan to do)	CI upper bound (%)	52				58	55			50	47				46	48			36
	CI lower bound (%)	38				44	42			38	36				36	38			27	
Overall HIP Participation^c																				
Participated in one HIP	%	42				45	42			33	29				26	19			29	
	n	214				192	240			267	286				428	441			404	
	SE	3.4				3.6	3.2			2.9	2.7				2.1	1.9			2.3	
	CI upper bound (%)	49				52	48			39	34				30	23			34	
	CI lower bound (%)	35				38	35			28	23				22	15			25	
Participated in two or more HIPs	%	17				7	4			5	59				63	67			53	
	n	214				192	240			267	286				428	441			404	
	SE	2.6				1.9	1.3			1.3	2.9				2.3	2.2			2.5	
	CI upper bound (%)	22				11	7			8	65				68	71			57	
	CI lower bound (%)	12				4	2			2	54				59	62			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.