



NSSE 2018
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 number of respondents, standard deviation, and standard error so that statistical tests can be calculated.

For more information and recommendations for analyzing NSSE data over time, view our webinar entitled the *Recommendations for Using Multiple Years of NSSE Data*: nsse.indiana.edu/html/webinars.cfm

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 planned to do 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										

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							

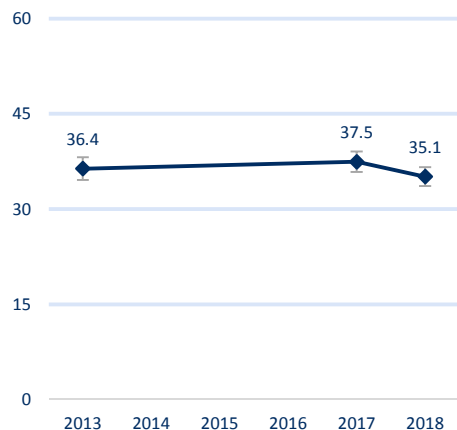
Note: All of your institution's participation years since 2013 (the first year of the updated NSSE) are reported. Years in which your institution did not participate are blank.

- 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* report(s).

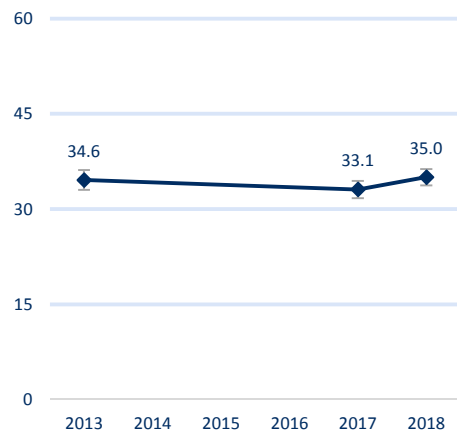
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each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

Academic Challenge: First-year students

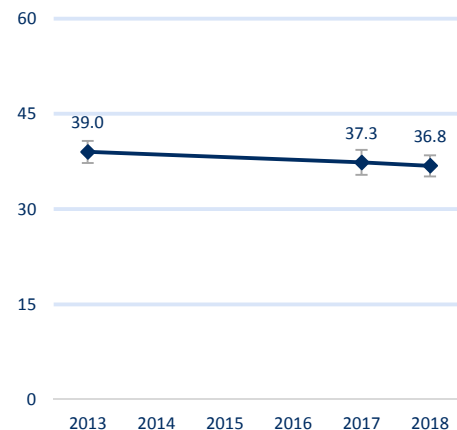
Higher-Order Learning



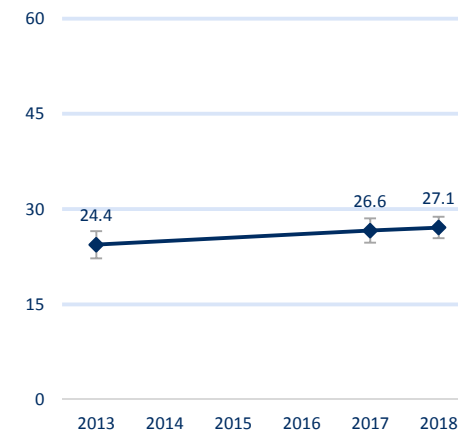
Reflective & Integrative Learning



Learning Strategies

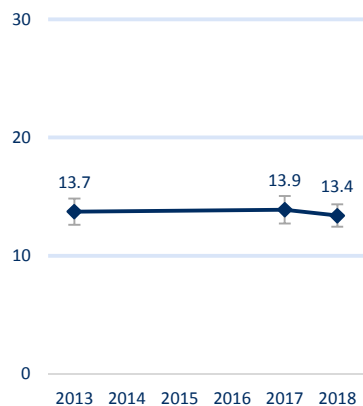


Quantitative Reasoning

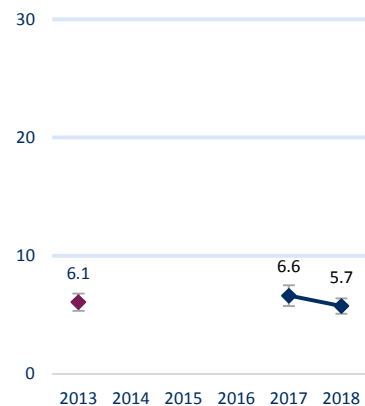


Academic Challenge (additional items): First-year students

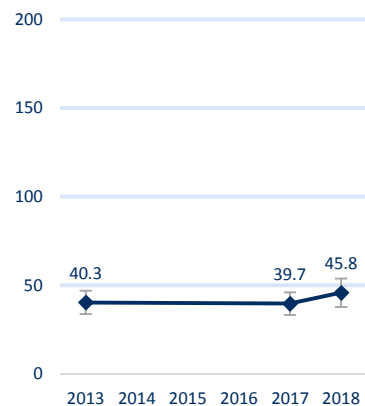
Preparing for Class (hrs/wk)



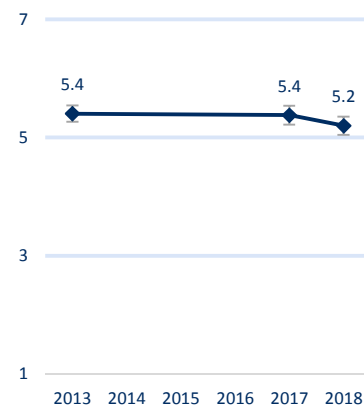
Course Reading (hrs/wk)^a



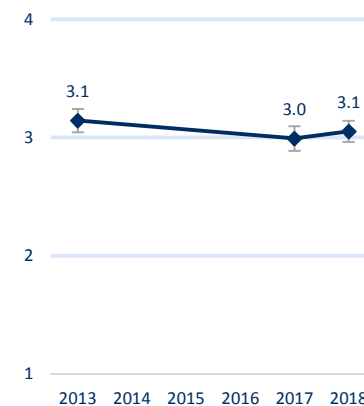
Assigned Writing (pages)^a



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").

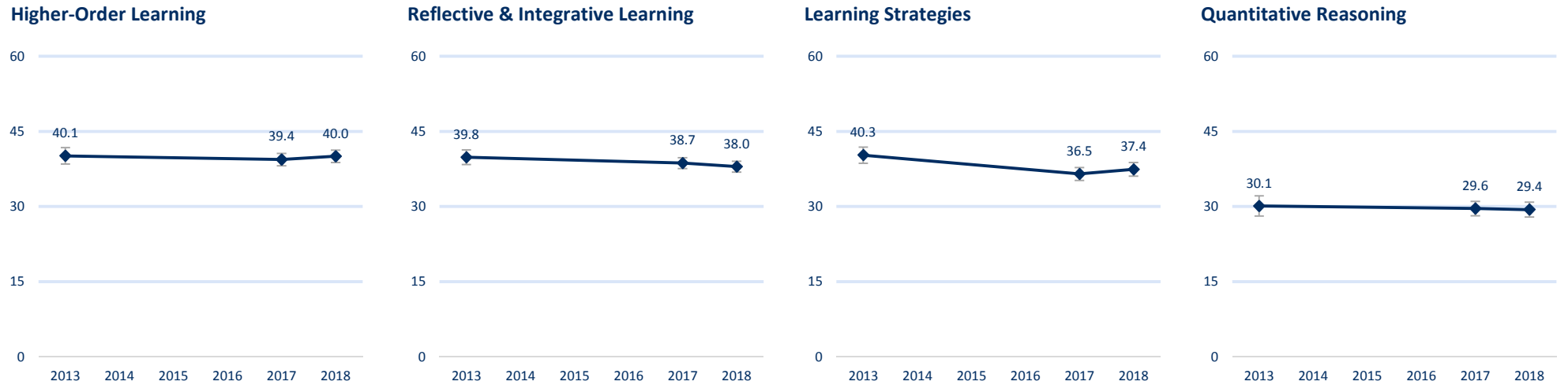
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Engagement Results by Theme

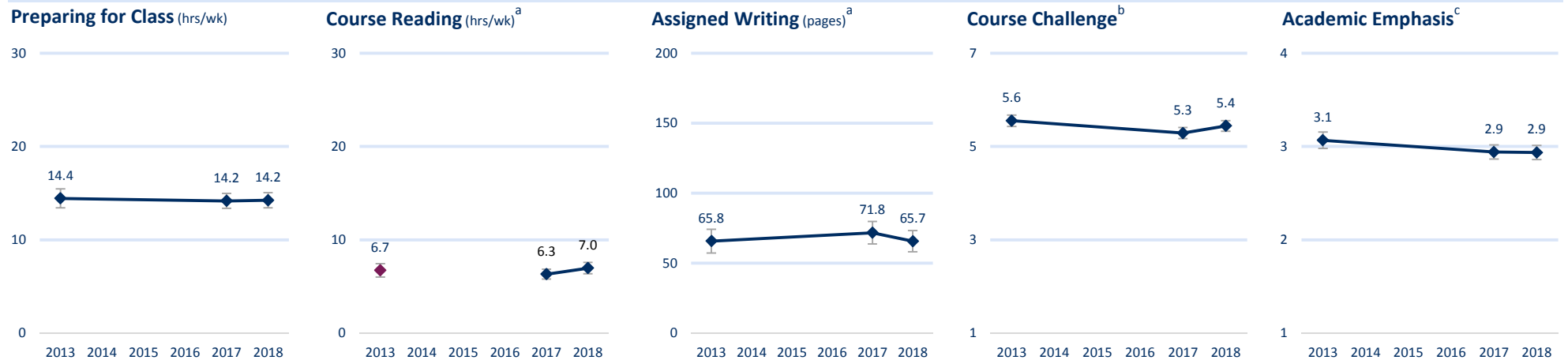
Northern Michigan University

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: 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.

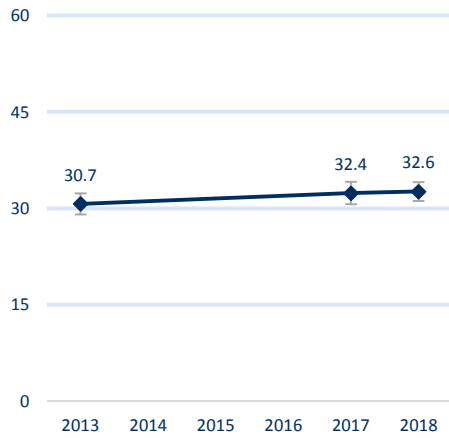
b. Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").

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").

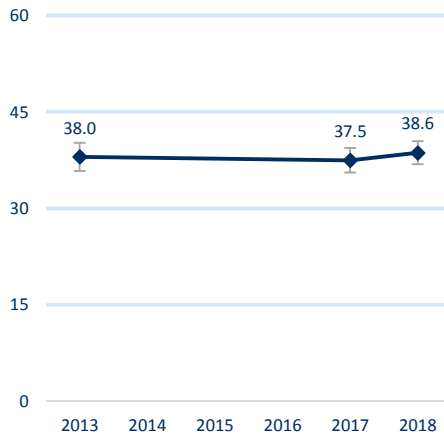
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Learning with Peers: First-year students

Collaborative Learning

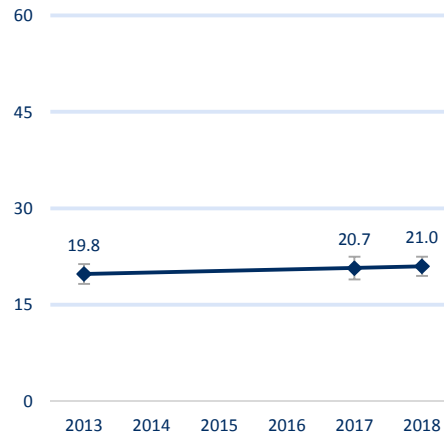


Discussions with Diverse Others

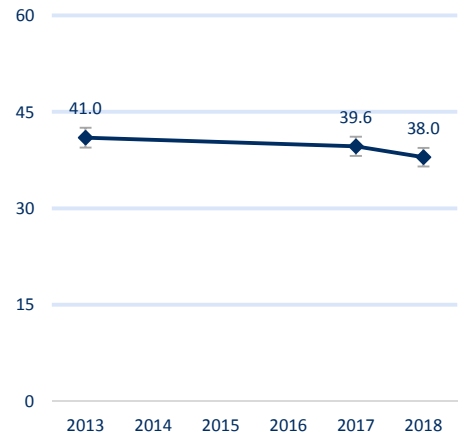


Experiences with Faculty: First-year students

Student-Faculty Interaction

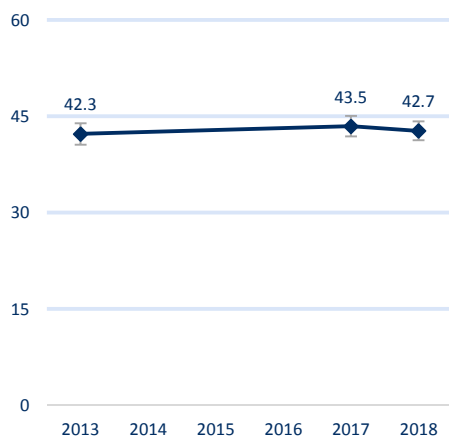


Effective Teaching Practices

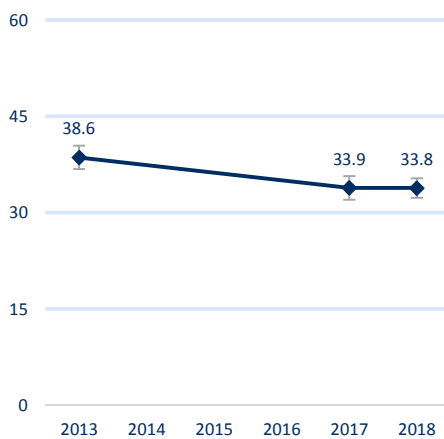


Campus Environment: First-year students

Quality of Interactions



Supportive Environment



NSSE 2018 Multi-Year Report

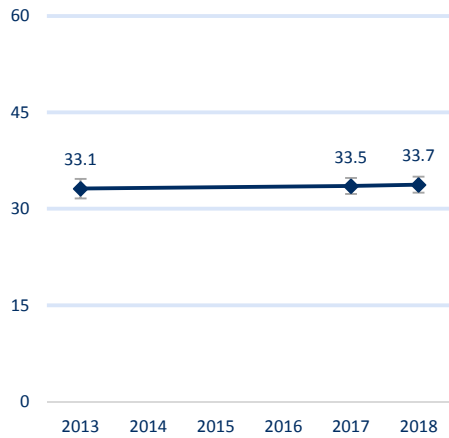
Engagement Results by Theme

Northern Michigan University

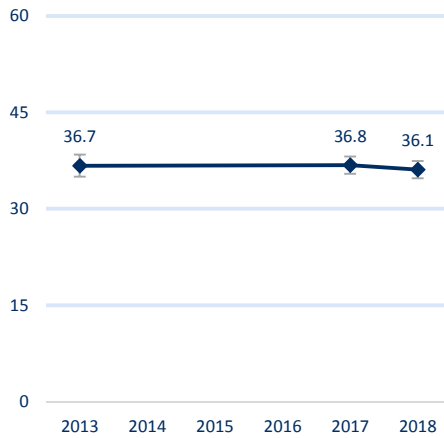
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Learning with Peers: Seniors

Collaborative Learning

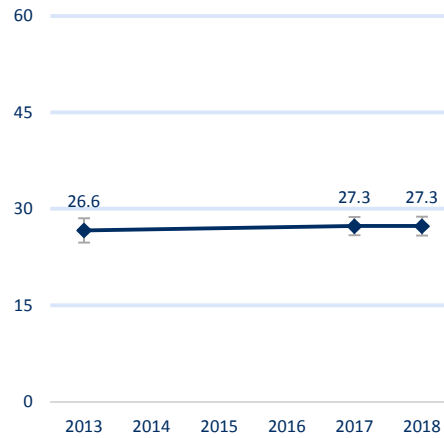


Discussions with Diverse Others

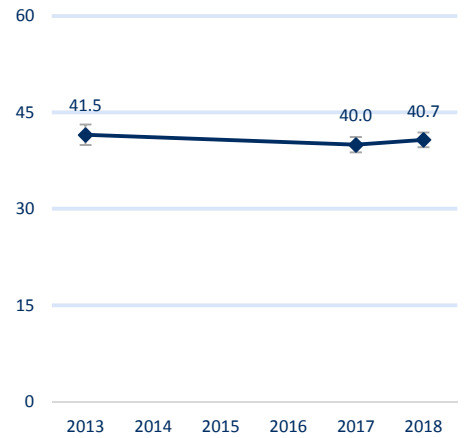


Experiences with Faculty: Seniors

Student-Faculty Interaction

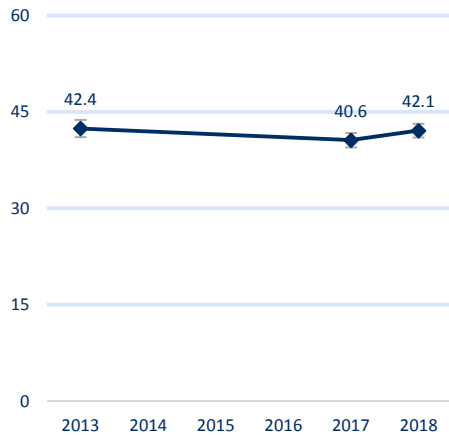


Effective Teaching Practices

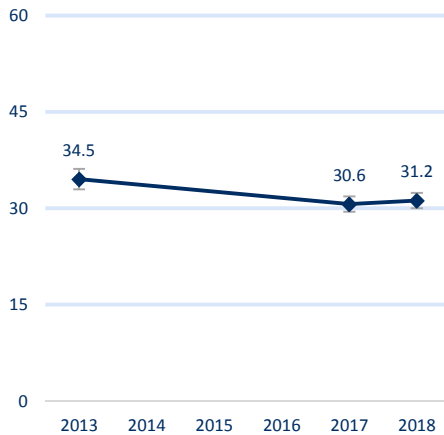


Campus Environment: Seniors

Quality of Interactions



Supportive Environment

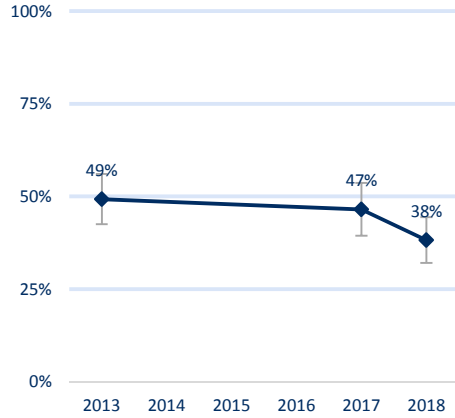


Due to their positive associations with student learning and retention, special undergraduate opportunities are designated "high-impact." The figures below display first-year students' participation, or intent to participate, in High-Impact Practices (HIPs) by year. See page 13 for detailed statistics.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

High-Impact Practices: First-year students

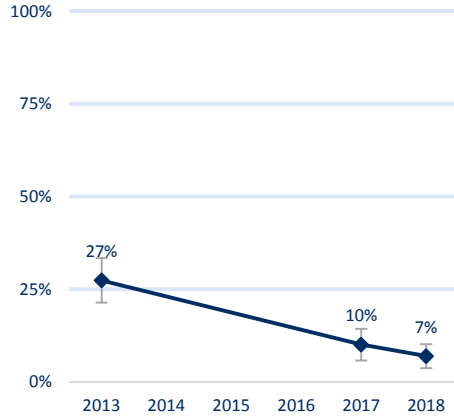
Service-Learning

(Some, most, or all courses)



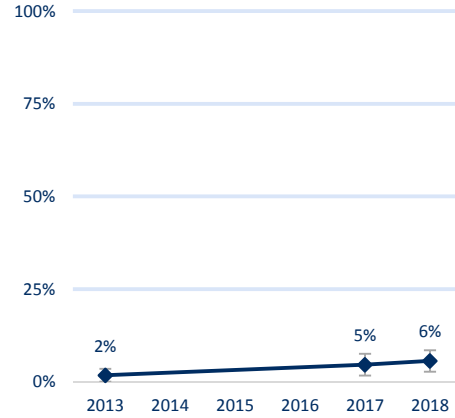
Learning Community

(Done or in progress)



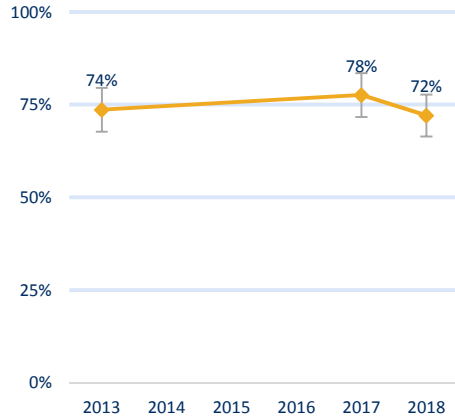
Research with Faculty

(Done or in progress)



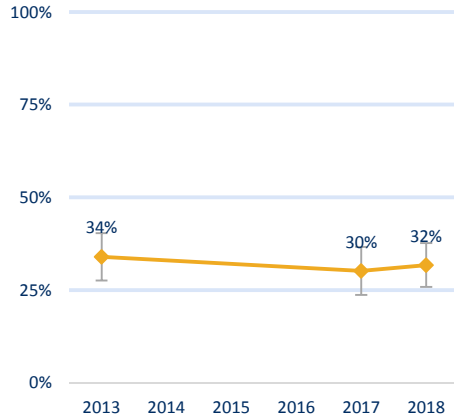
Internship/Field Experience

(Plan to do)



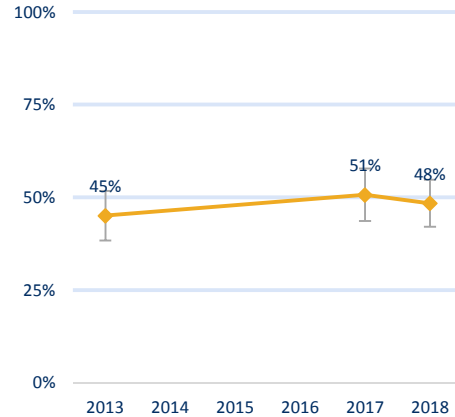
Study Abroad

(Plan to do)



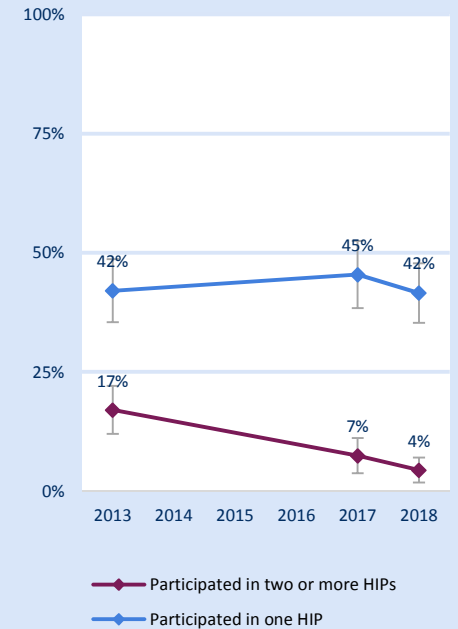
Culminating Senior Experience

(Plan to do)



Overall first-year HIP participation

The figure below displays the percentages of first-year students who participated in one, and two or more, HIPs. The figure is limited to participation in a learning community, service-learning, and research with faculty.

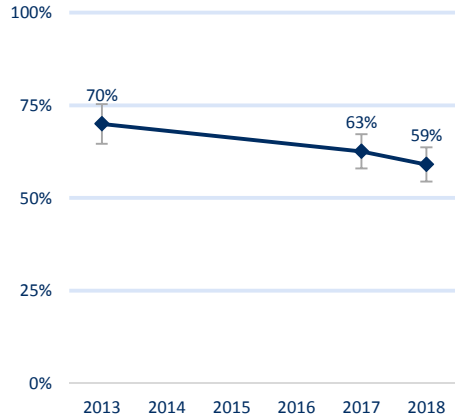


Due to their positive associations with student learning and retention, special undergraduate opportunities are designated "high-impact." Participation in High-Impact Practices (HIPs) by year is displayed in the figures below. See page 13 for detailed statistics. For more information, refer to your *High-Impact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

High-Impact Practices: Seniors

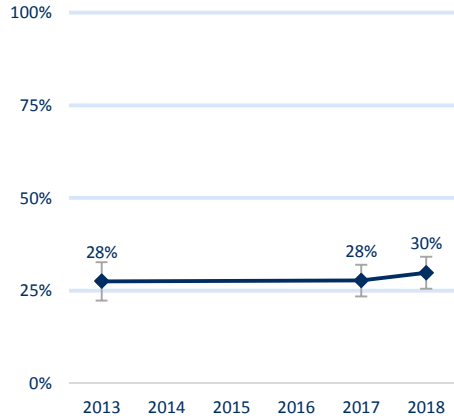
Service-Learning

(Some, most, or all courses)



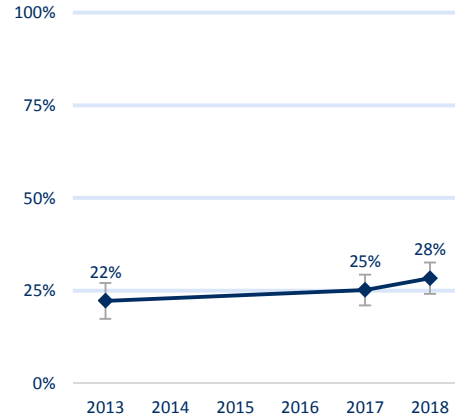
Learning Community

(Done or in progress)



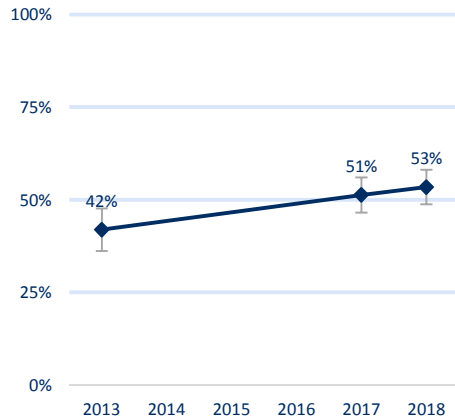
Research with Faculty

(Done or in progress)



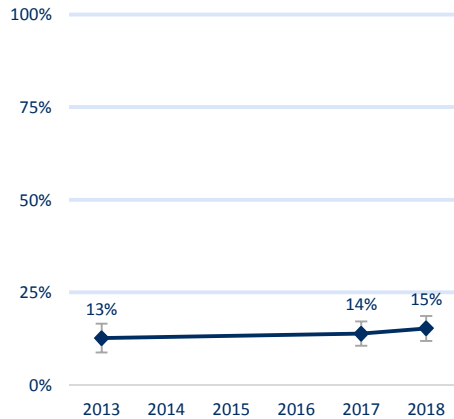
Internship/Field Experience

(Done or in progress)



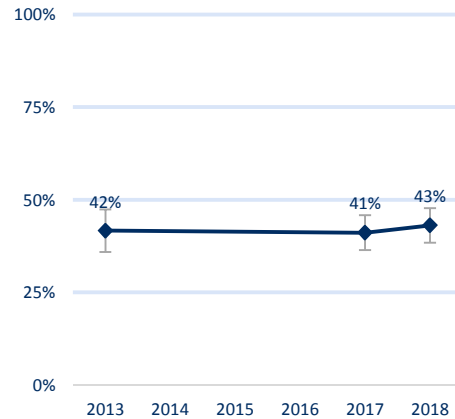
Study Abroad

(Done or in progress)



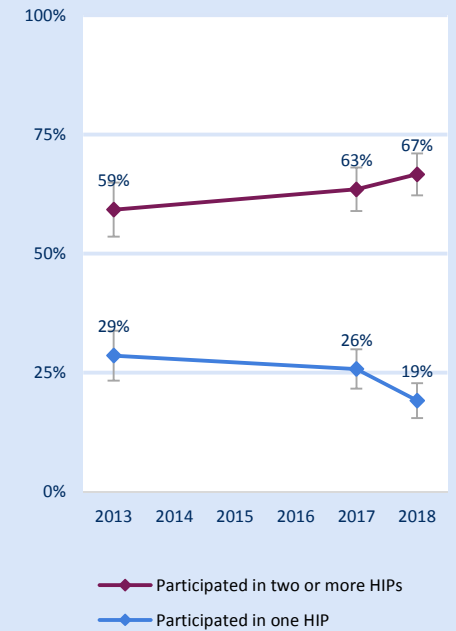
Culminating Senior Experience

(Done or in progress)



Overall senior HIP participation

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



NSSE 2018 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Items

Northern Michigan University

		First-year students							Seniors								
		2013	2014	2015	2016	2017	2018	2019	2020	2013	2014	2015	2016	2017	2018	2019	2020
<i>Academic Challenge</i>																	
Higher-Order Learning	<i>Mean</i>	36.4				37.5	35.1			40.1				39.4	40.0		
	<i>n</i>	233				227	262			286				474	463		
	<i>SD</i>	13.9				12.5	12.3			14.3				13.7	13.6		
	<i>SE</i>	.91				.83	.76			.84				.63	.63		
	<i>CI upper bound</i>	38.2				39.1	36.6			41.8				40.6	41.3		
	<i>CI lower bound</i>	34.6				35.8	33.6			38.5				38.2	38.8		
Reflective & Integrative Learning	<i>Mean</i>	34.6				33.1	35.0			39.8				38.7	38.0		
	<i>n</i>	238				240	282			297				485	492		
	<i>SD</i>	12.5				10.8	10.8			12.8				12.2	12.2		
	<i>SE</i>	.81				.70	.65			.75				.55	.55		
	<i>CI upper bound</i>	36.2				34.5	36.3			41.3				39.8	39.0		
	<i>CI lower bound</i>	33.0				31.7	33.8			38.4				37.6	36.9		
Learning Strategies	<i>Mean</i>	39.0				37.3	36.8			40.3				36.5	37.4		
	<i>n</i>	214				194	238			283				427	445		
	<i>SD</i>	13.0				13.9	13.2			13.9				13.6	14.5		
	<i>SE</i>	.89				1.00	.85			.83				.66	.69		
	<i>CI upper bound</i>	40.7				39.3	38.5			41.9				37.8	38.8		
	<i>CI lower bound</i>	37.3				35.4	35.1			38.6				35.2	36.1		
Quantitative Reasoning	<i>Mean</i>	24.4				26.6	27.1			30.1				29.6	29.4		
	<i>n</i>	234				222	253			293				469	450		
	<i>SD</i>	16.7				14.6	13.7			17.6				15.8	16.0		
	<i>SE</i>	1.09				.98	.86			1.03				.73	.76		
	<i>CI upper bound</i>	26.5				28.5	28.8			32.1				31.0	30.9		
	<i>CI lower bound</i>	22.2				24.7	25.4			28.1				28.2	27.9		
<i>Academic Challenge (additional items)</i>																	
Preparing for Class (hours/week)	<i>Mean</i>	13.7				13.9	13.4			14.4				14.2	14.2		
	<i>n</i>	202				178	231			277				399	432		
	<i>SD</i>	8.0				7.9	7.3			8.5				8.1	8.6		
	<i>SE</i>	.56				.59	.48			.51				.41	.41		
	<i>CI upper bound</i>	14.8				15.1	14.3			15.5				15.0	15.0		
	<i>CI lower bound</i>	12.6				12.7	12.5			13.4				13.4	13.4		
Course Reading Estimated hours per week calculated from two survey questions. Item wording changed in 2014; comparability between 2013 and later years is limited.	<i>Mean</i>	6.1				6.6	5.7			6.7				6.3	7.0		
	<i>n</i>	201				177	228			276				398	428		
	<i>SD</i>	5.3				6.0	5.0			6.1				5.4	6.4		
	<i>SE</i>	.37				.45	.33			.37				.27	.31		
	<i>CI upper bound</i>	6.8				7.5	6.4			7.5				6.9	7.6		
	<i>CI lower bound</i>	5.3				5.7	5.1			6.0				5.8	6.4		

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).

NSSE 2018 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Items

Northern Michigan University

		First-year students							Seniors								
		2013	2014	2015	2016	2017	2018	2019	2020	2013	2014	2015	2016	2017	2018	2019	2020
<i>Academic Challenge (additional items, continued)</i>																	
Assigned Writing	<i>Mean</i>	40.3				39.7	45.8			65.8				71.8	65.7		
Estimated number of pages calculated from three survey questions.	<i>n</i>	194				194	253			265				431	448		
	<i>SD</i>	46.8				45.4	65.2			70.3				85.2	81.7		
	<i>SE</i>	3.36				3.26	4.10			4.32				4.10	3.86		
	<i>CI upper bound</i>	46.9				46.0	53.9			74.3				79.8	73.3		
	<i>CI lower bound</i>	33.7				33.3	37.8			57.3				63.7	58.1		
Course Challenge	<i>Mean</i>	5.4				5.4	5.2			5.6				5.3	5.4		
Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").	<i>n</i>	216				194	241			285				427	440		
	<i>SD</i>	1.0				1.1	1.2			1.1				1.3	1.2		
	<i>SE</i>	.07				.08	.08			.06				.06	.06		
	<i>CI upper bound</i>	5.5				5.5	5.4			5.7				5.4	5.6		
	<i>CI lower bound</i>	5.3				5.2	5.0			5.4				5.2	5.3		
Academic Emphasis	<i>Mean</i>	3.1				3.0	3.1			3.1				2.9	2.9		
Perceived institutional emphasis on spending significant time studying and on academic work (1 = "Very little," 2 = "Some," 3 = "Quite a bit," and 4 = "Very much").	<i>n</i>	202				177	235			277				406	437		
	<i>SD</i>	0.7				0.7	0.7			0.8				0.8	0.8		
	<i>SE</i>	.05				.05	.05			.05				.04	.04		
	<i>CI upper bound</i>	3.2				3.1	3.1			3.2				3.0	3.0		
	<i>CI lower bound</i>	3.0				2.9	3.0			3.0				2.9	2.9		
<i>Learning with Peers</i>																	
Collaborative Learning	<i>Mean</i>	30.7				32.4	32.6			33.1				33.5	33.7		
	<i>n</i>	245				249	299			300				495	518		
	<i>SD</i>	13.1				14.0	13.1			13.5				14.3	14.2		
	<i>SE</i>	.84				.88	.76			.78				.64	.63		
	<i>CI upper bound</i>	32.3				34.1	34.1			34.7				34.8	35.0		
	<i>CI lower bound</i>	29.0				30.6	31.1			31.6				32.3	32.5		
Discussions with Diverse Others	<i>Mean</i>	38.0				37.5	38.6			36.7				36.8	36.1		
	<i>n</i>	217				193	248			286				430	449		
	<i>SD</i>	16.3				13.6	14.3			14.8				14.2	14.8		
	<i>SE</i>	1.11				.98	.91			.88				.69	.70		
	<i>CI upper bound</i>	40.2				39.4	40.4			38.4				38.1	37.5		
	<i>CI lower bound</i>	35.8				35.5	36.9			35.0				35.5	34.7		

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 2018 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Items

Northern Michigan University

		First-year students							Seniors								
		2013	2014	2015	2016	2017	2018	2019	2020	2013	2014	2015	2016	2017	2018	2019	2020
<i>Experiences with Faculty</i>																	
Student-Faculty Interaction	<i>Mean</i>	19.8				20.7	21.0			26.6				27.3	27.3		
	<i>n</i>	235				232	266			293				480	482		
	<i>SD</i>	12.0				13.7	12.4			16.4				15.7	16.5		
	<i>SE</i>	.79				.90	.76			.96				.72	.75		
	<i>CI upper bound</i>	21.3				22.5	22.5			28.5				28.7	28.8		
	<i>CI lower bound</i>	18.3				19.0	19.5			24.8				25.9	25.9		
Effective Teaching Practices	<i>Mean</i>	41.0				39.6	38.0			41.5				40.0	40.7		
	<i>n</i>	233				227	261			292				477	466		
	<i>SD</i>	12.1				11.4	11.9			13.8				13.2	12.6		
	<i>SE</i>	.79				.76	.74			.81				.61	.58		
	<i>CI upper bound</i>	42.5				41.1	39.4			43.1				41.1	41.9		
	<i>CI lower bound</i>	39.4				38.2	36.5			39.9				38.8	39.6		
<i>Campus Environment</i>																	
Quality of Interactions	<i>Mean</i>	42.3				43.5	42.7			42.4				40.6	42.1		
	<i>n</i>	202				181	230			278				415	427		
	<i>SD</i>	12.1				10.9	11.3			11.3				11.8	11.2		
	<i>SE</i>	.85				.81	.74			.68				.58	.54		
	<i>CI upper bound</i>	43.9				45.1	44.2			43.7				41.7	43.1		
	<i>CI lower bound</i>	40.6				41.9	41.3			41.1				39.4	41.0		
Supportive Environment	<i>Mean</i>	38.6				33.9	33.8			34.5				30.6	31.2		
	<i>n</i>	201				177	234			276				397	433		
	<i>SD</i>	13.3				12.5	11.9			13.5				12.2	12.7		
	<i>SE</i>	.94				.94	.78			.81				.61	.61		
	<i>CI upper bound</i>	40.4				35.7	35.4			36.1				31.8	32.4		
	<i>CI lower bound</i>	36.8				32.0	32.3			32.9				29.4	30.0		

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							
		2013	2014	2015	2016	2017	2018	2019	2020	2013	2014	2015	2016	2017	2018	2019	2020
Service-Learning^a	%	49				47	38			70				63	59		
	<i>n</i>	210				190	240			282				423	436		
	<i>SE</i>	3.5				3.6	3.1			2.7				2.4	2.4		
	<i>CI upper bound (%)</i>	56				54	44			75				67	64		
	<i>CI lower bound (%)</i>	42				39	32			65				58	54		
Learning Community^a	%	27				10	7			28				28	30		
	<i>n</i>	213				192	237			285				425	439		
	<i>SE</i>	3.1				2.2	1.7			2.6				2.2	2.2		
	<i>CI upper bound (%)</i>	33				14	10			33				32	34		
	<i>CI lower bound (%)</i>	21				6	4			22				23	26		
Research with Faculty^a	%	2				5	6			22				25	28		
	<i>n</i>	211				192	238			284				426	439		
	<i>SE</i>	0.9				1.5	1.5			2.5				2.1	2.2		
	<i>CI upper bound (%)</i>	3				8	9			27				29	33		
	<i>CI lower bound (%)</i>	0				2	3			17				21	24		
Internship or Field Experience^b	%	74				78	72			42				51	53		
	<i>n</i>	213				192	240			285				425	438		
	<i>SE</i>	3.0				3.0	2.9			2.9				2.4	2.4		
	(First-year results: Plan to do) <i>CI upper bound (%)</i>	80				83	78			48				56	58		
	<i>CI lower bound (%)</i>	68				72	66			36				47	49		
Study Abroad^b	%	34				30	32			13				14	15		
	<i>n</i>	213				192	238			283				425	439		
	<i>SE</i>	3.3				3.3	3.0			2.0				1.7	1.7		
	(First-year results: Plan to do) <i>CI upper bound (%)</i>	40				37	38			17				17	19		
	<i>CI lower bound (%)</i>	28				24	26			9				11	12		
Culminating Senior Experience^b	%	45				51	48			42				41	43		
	<i>n</i>	213				191	239			283				422	438		
	<i>SE</i>	3.4				3.6	3.2			2.9				2.4	2.4		
	(First-year results: Plan to do) <i>CI upper bound (%)</i>	52				58	55			47				46	48		
	<i>CI lower bound (%)</i>	38				44	42			36				36	38		
Overall HIP Participation^c																	
Participated in one HIP	%	42				45	42			29				26	19		
	<i>n</i>	214				192	240			286				428	441		
	<i>SE</i>	3.4				3.6	3.2			2.7				2.1	1.9		
	<i>CI upper bound (%)</i>	49				52	48			34				30	23		
	<i>CI lower bound (%)</i>	35				38	35			23				22	15		
Participated in two or more HIPs	%	17				7	4			59				63	67		
	<i>n</i>	214				192	240			286				428	441		
	<i>SE</i>	2.6				1.9	1.3			2.9				2.3	2.2		
	<i>CI upper bound (%)</i>	22				11	7			65				68	71		
	<i>CI lower bound (%)</i>	12				4	2			54				59	62		

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.