



NSSE 2021
Multi-Year Report
Fitchburg State 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										
2014										
2015	22%	+/- 5.7%	236	166	70	33%	+/- 4.7%	295	240	55
2016										
2017	22%	+/- 6.7%	164	121	43	25%	+/- 5.5%	238	185	53
2018										
2019	27%	+/- 6.4%	173	125	48	33%	+/- 5.4%	222	181	41
2020										
2021	35%	+/- 6.0%	198	132	66	36%	+/- 5.0%	237	169	68

Administration Details by Participation Year

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

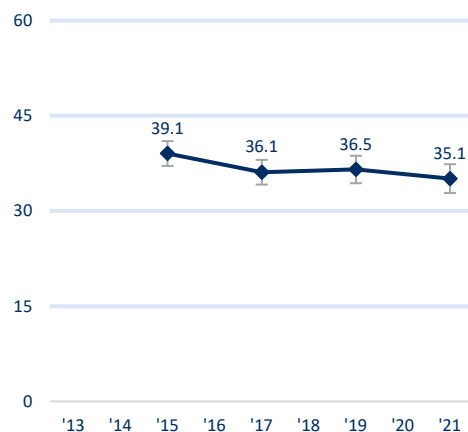
Note: All of your institution's participation years since 2013 (the first year of the updated NSSE) are reported. Years in which your institution did not participate are blank.

- 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 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.

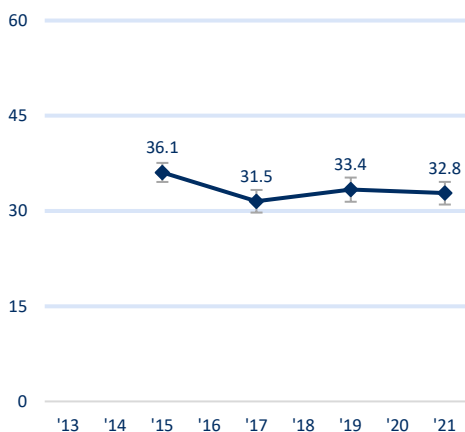
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each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

Academic Challenge: First-year students

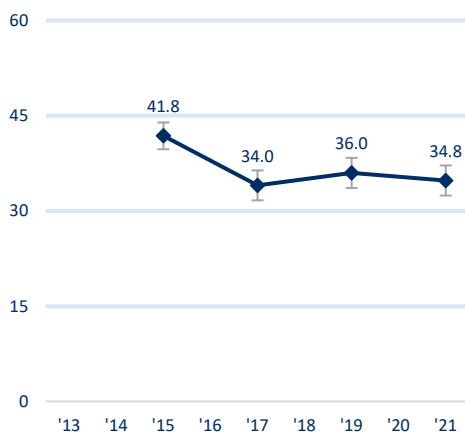
Higher-Order Learning



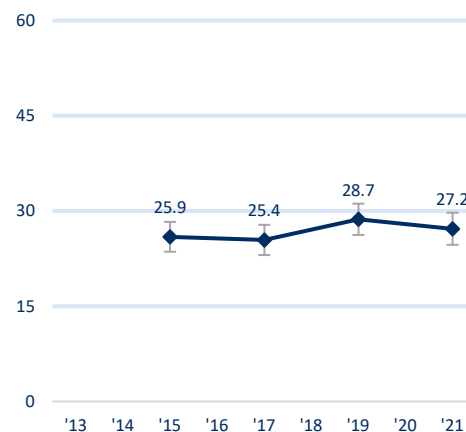
Reflective & Integrative Learning



Learning Strategies

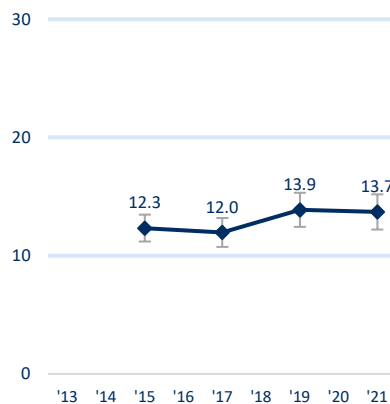


Quantitative Reasoning

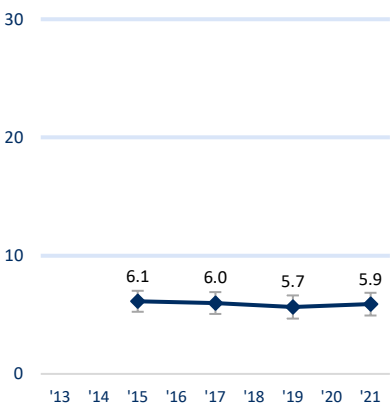


Academic Challenge (additional items): First-year students

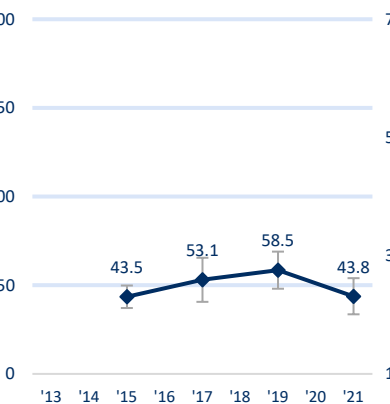
Preparing for Class (hrs/wk)



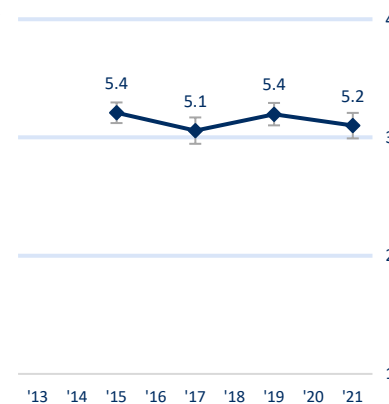
Course Reading (hrs/wk)^a



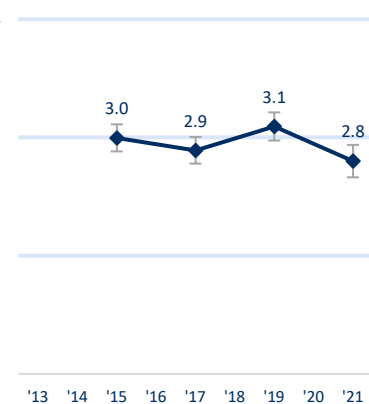
Assigned Writing (pages)^a



Course Challenge^b



Academic Emphasis^c



a. Values for Course Reading and Assigned Writing are estimates calculated from two or more survey questions.

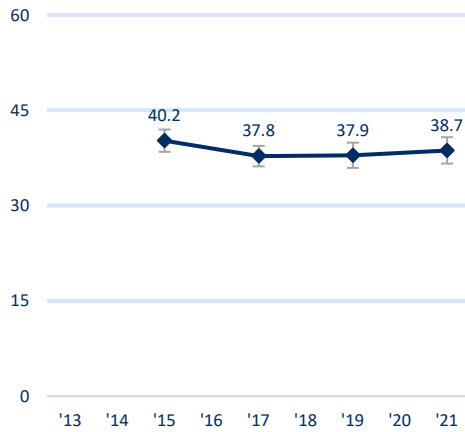
b. Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").

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").

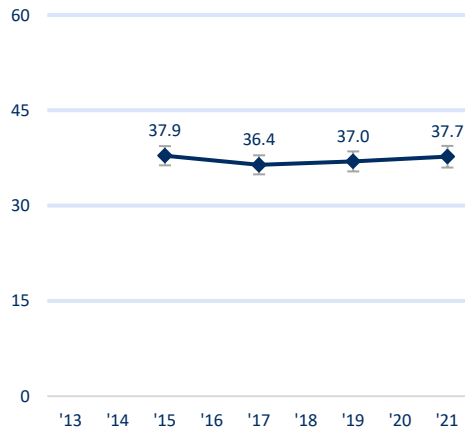
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each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

Academic Challenge: Seniors

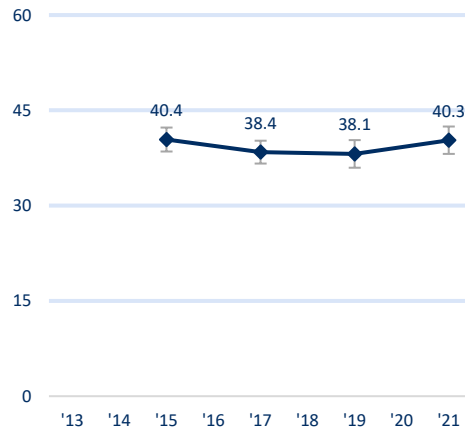
Higher-Order Learning



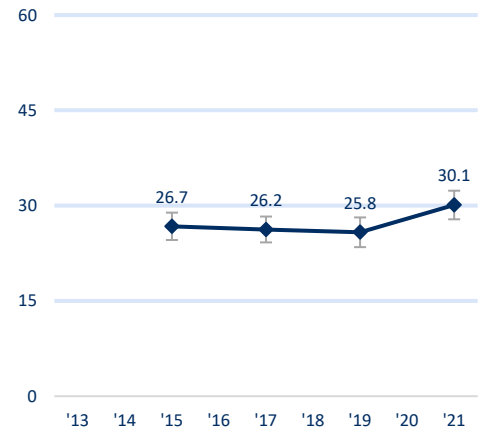
Reflective & Integrative Learning



Learning Strategies

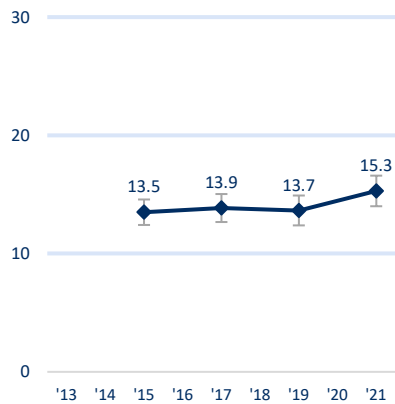


Quantitative Reasoning

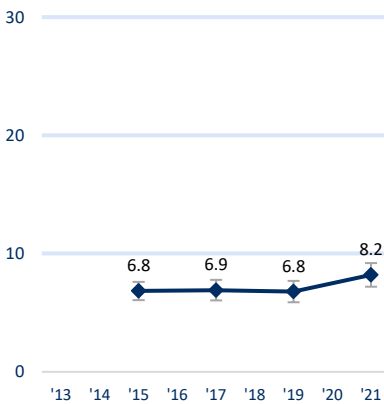


Academic Challenge (additional items): Seniors

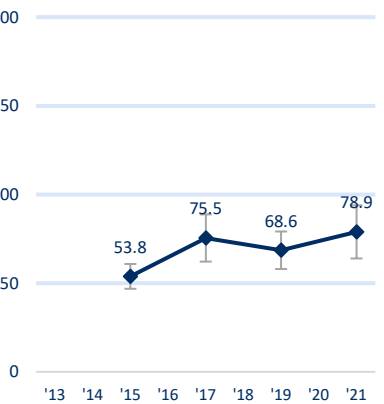
Preparing for Class (hrs/wk)



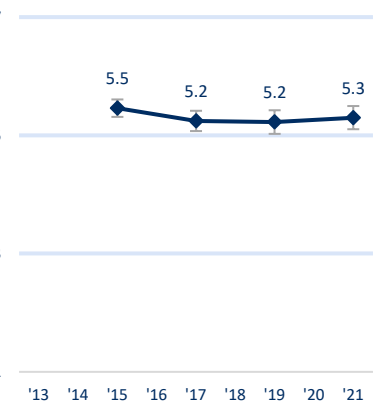
Course Reading (hrs/wk)^a



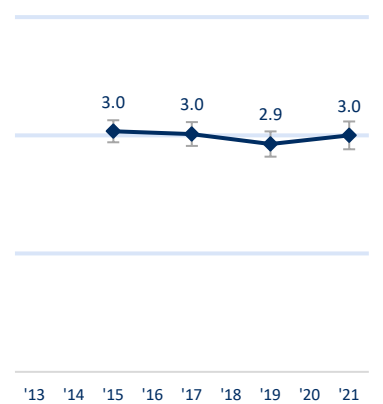
Assigned Writing (pages)^a



Course Challenge^b



Academic Emphasis^c



a. Values for Course Reading and Assigned Writing are estimates calculated from two or more survey questions.

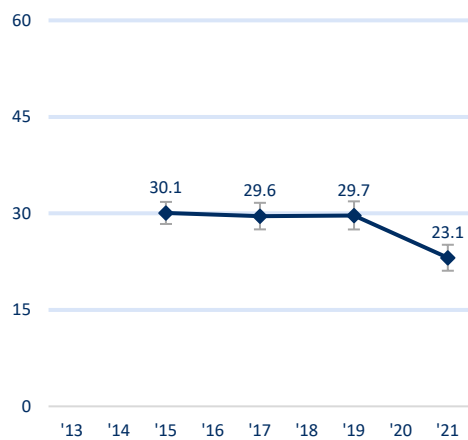
b. Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").

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").

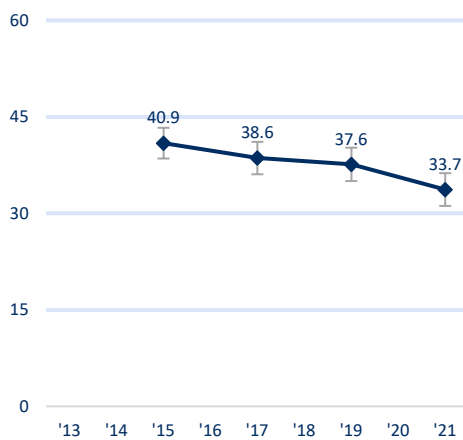
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Learning with Peers: First-year students

Collaborative Learning

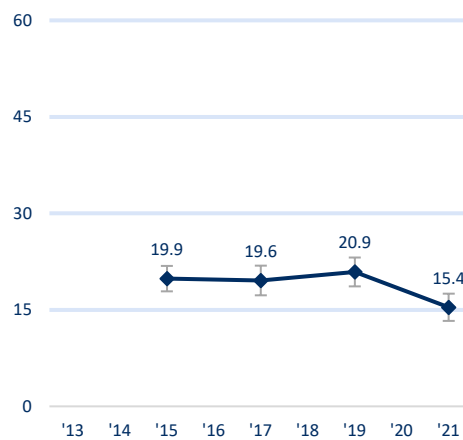


Discussions with Diverse Others

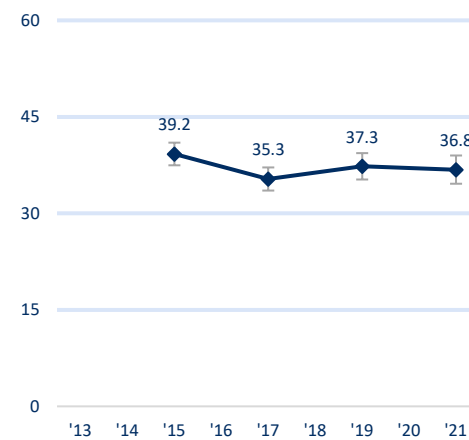


Experiences with Faculty: First-year students

Student-Faculty Interaction

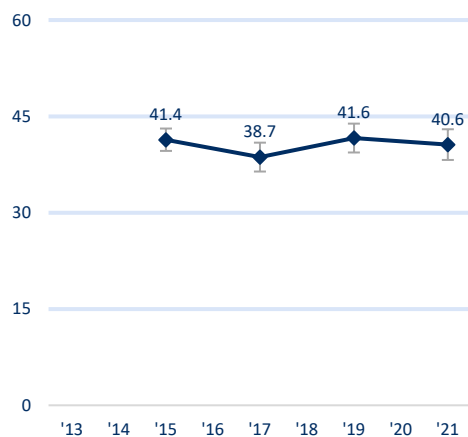


Effective Teaching Practices

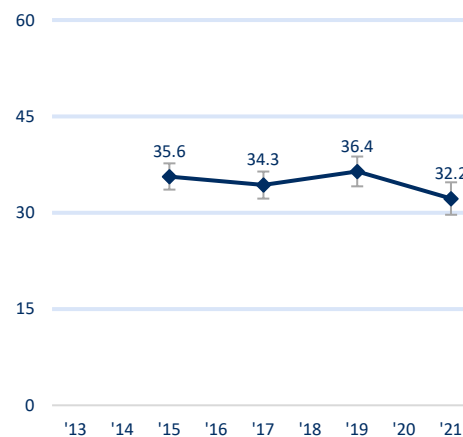


Campus Environment: First-year students

Quality of Interactions



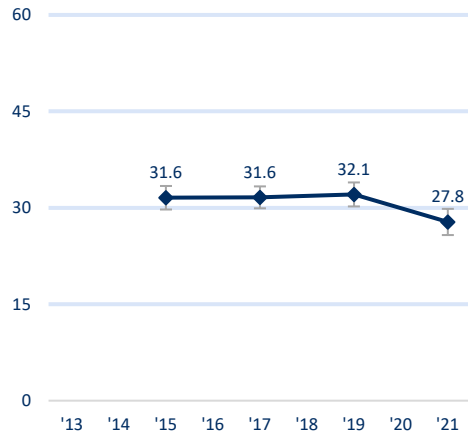
Supportive Environment



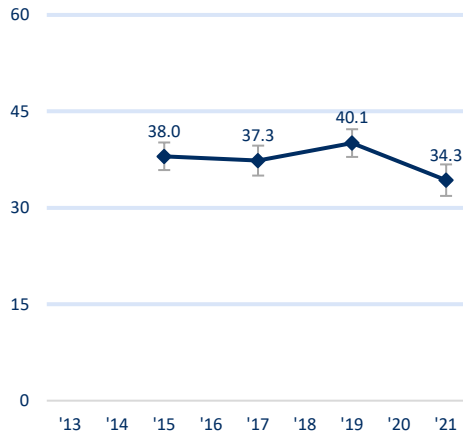
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Learning with Peers: Seniors

Collaborative Learning

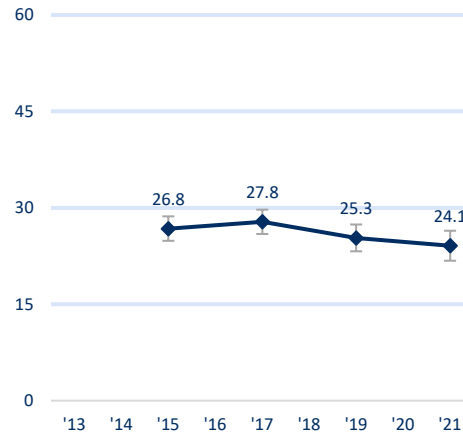


Discussions with Diverse Others

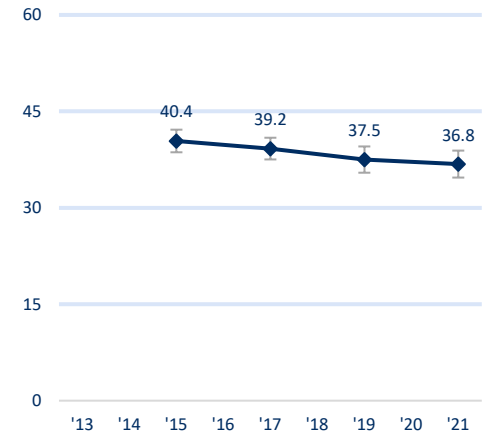


Experiences with Faculty: Seniors

Student-Faculty Interaction

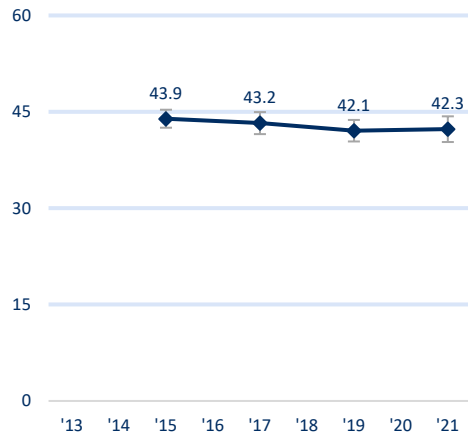


Effective Teaching Practices

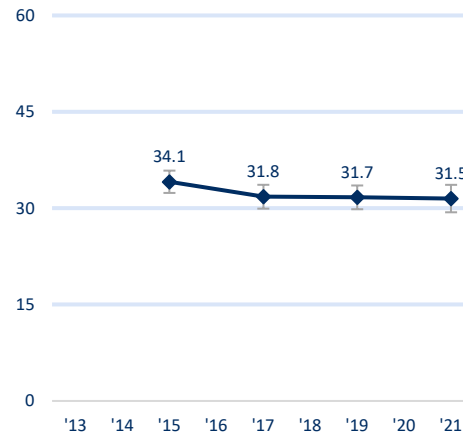


Campus Environment: Seniors

Quality of Interactions



Supportive Environment

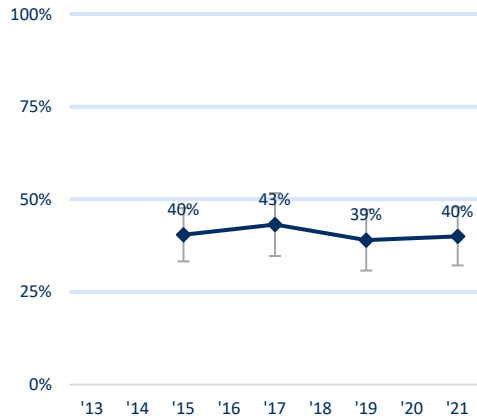


Due to their positive associations with student learning and retention, special undergraduate opportunities are designated "high-impact." The figures below display first-year students' participation, or intent to participate, in High-Impact Practices (HIPs) by year. See page 13 for detailed statistics.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

High-Impact Practices: First-year students

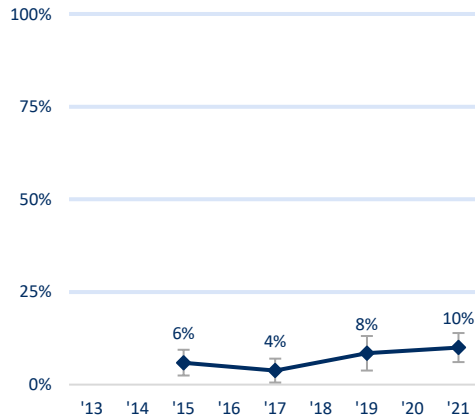
Service-Learning

(Some, most, or all courses)



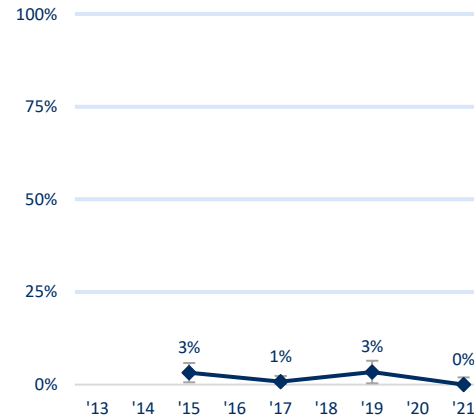
Learning Community

(Done or in progress)



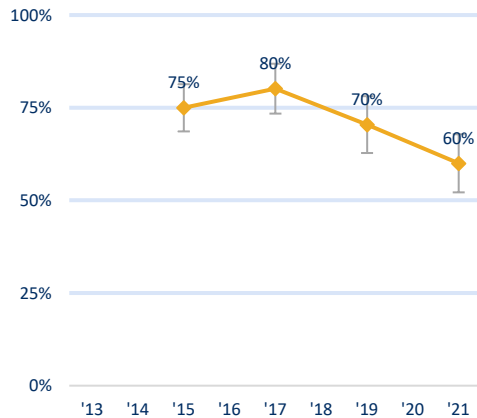
Research with Faculty

(Done or in progress)



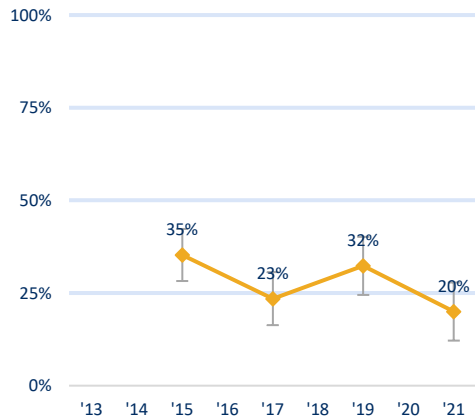
Internship/Field Experience

(Plan to do)



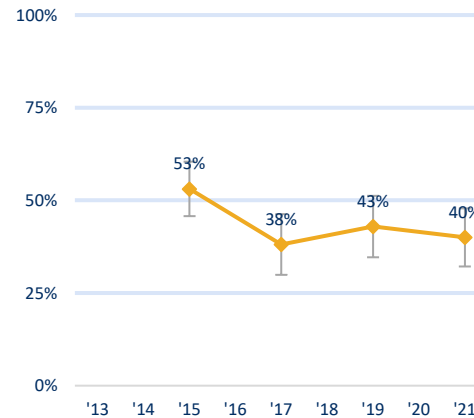
Study Abroad

(Plan to do)



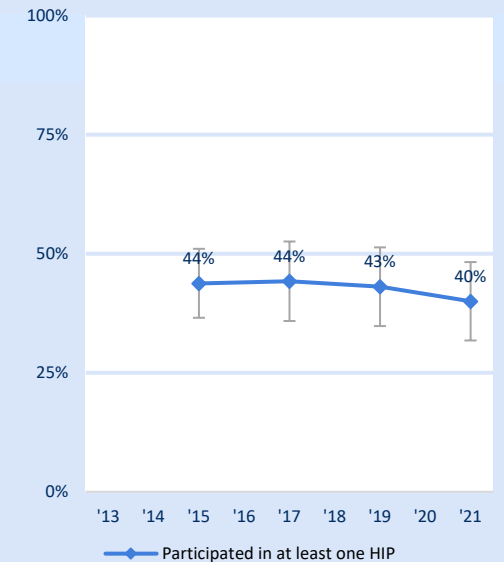
Culminating Senior Experience

(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.



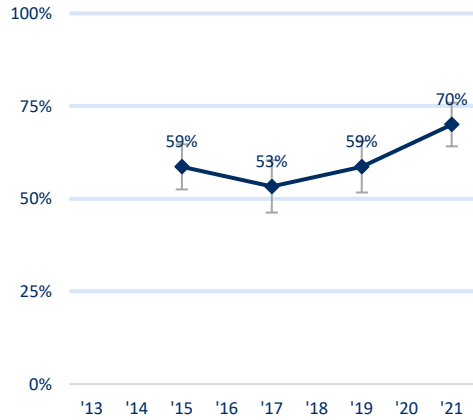
NSSE founding director George Kuh recommends that institutions aspire for all students to participate in at least two HIPs over the course of their undergraduate experience—one during the first year and one in the context of their major.

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

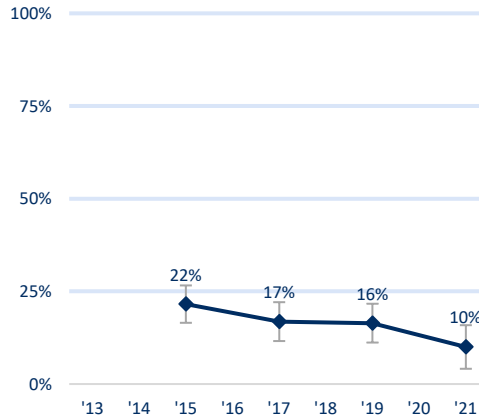
Service-Learning

(Some, most, or all courses)



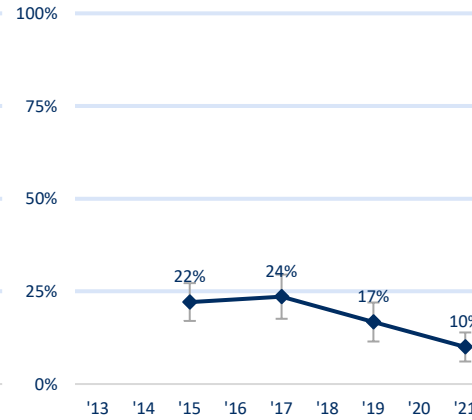
Learning Community

(Done or in progress)



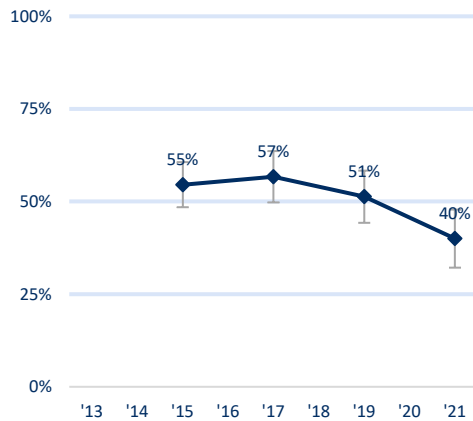
Research with Faculty

(Done or in progress)



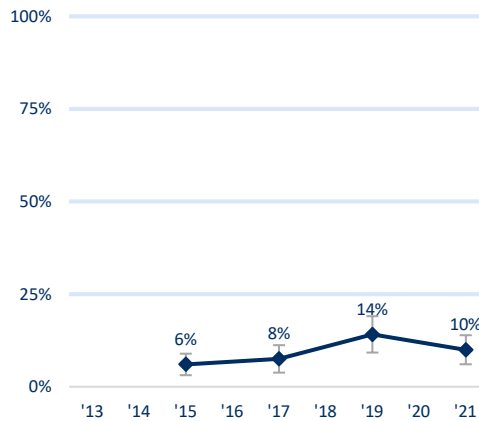
Internship/Field Experience

(Done or in progress)



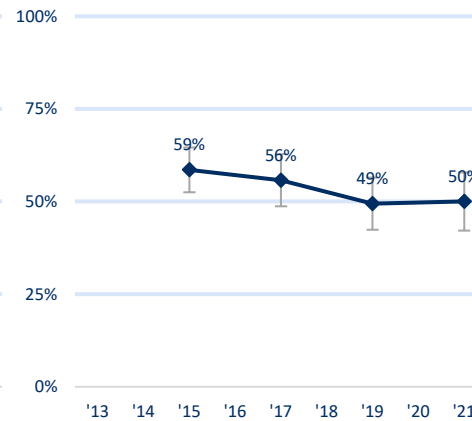
Study Abroad

(Done or in progress)



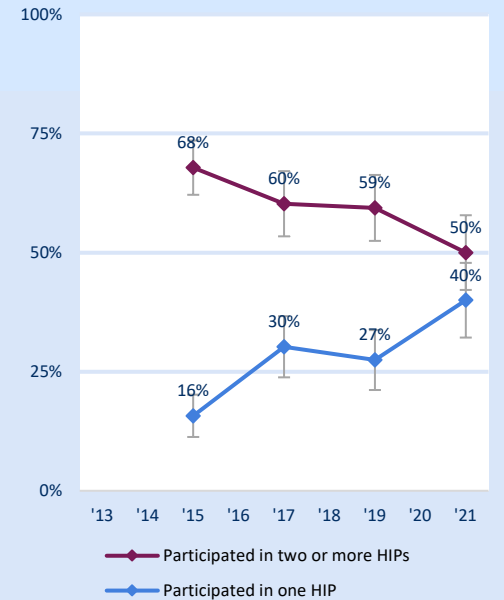
Culminating Senior Experience

(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.

NSSE 2021 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Items

Fitchburg State 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			39.1		36.1		36.5		35.1			40.2		37.8		37.9		38.7
	n			194		147		149		152			265		225		198		201
	SD			13.9		12.0		13.4		14.2			14.6		12.3		14.3		15.1
	SE			1.00		.99		1.10		1.16			.89		.82		1.01		1.06
	CI upper bound			41.0		38.1		38.7		37.4			42.0		39.4		39.9		40.8
	CI lower bound			37.1		34.2		34.4		32.8			38.5		36.2		35.9		36.6
Reflective & Integrative Learning	Mean			36.1		31.5		33.4		32.8			37.9		36.4		37.0		37.7
	n			208		154		160		175			281		228		211		215
	SD			11.1		11.3		12.3		12.0			12.9		11.6		11.7		12.7
	SE			.77		.91		.97		.91			.77		.77		.80		.87
	CI upper bound			37.6		33.3		35.3		34.6			39.4		37.9		38.5		39.4
	CI lower bound			34.6		29.7		31.5		31.0			36.3		34.9		35.4		36.0
Learning Strategies	Mean			41.8		34.0		36.0		34.8			40.4		38.4		38.1		40.3
	n			174		135		138		141			256		198		195		188
	SD			14.2		14.0		14.3		14.4			15.4		12.9		15.5		15.1
	SE			1.08		1.20		1.21		1.21			.96		.92		1.11		1.10
	CI upper bound			43.9		36.4		38.4		37.2			42.3		40.2		40.3		42.5
	CI lower bound			39.7		31.7		33.6		32.4			38.5		36.6		36.0		38.1
Quantitative Reasoning	Mean			25.9		25.4		28.7		27.2			26.7		26.2		25.8		30.1
	n			201		146		143		143			269		223		197		191
	SD			17.0		14.7		15.0		15.4			18.0		15.5		16.8		15.9
	SE			1.20		1.22		1.26		1.29			1.10		1.04		1.19		1.15
	CI upper bound			28.3		27.8		31.2		29.7			28.9		28.3		28.1		32.4
	CI lower bound			23.6		23.1		26.2		24.7			24.6		24.2		23.5		27.8
<i>Academic Challenge (additional items)</i>																			
Preparing for Class (hours/week)	Mean			12.3		12.0		13.9		13.7			13.5		13.9		13.7		15.3
	n			163		124		136		134			239		187		189		184
	SD			7.4		7.0		8.6		8.9			8.5		8.3		8.9		9.0
	SE			.58		.62		.74		.76			.55		.60		.64		.66
	CI upper bound			13.5		13.2		15.3		15.2			14.6		15.0		14.9		16.6
	CI lower bound			11.2		10.7		12.4		12.2			12.4		12.7		12.4		14.0
Course Reading Est. hrs per week calculated from two items.	Mean			6.1		6.0		5.7		5.9			6.8		6.9		6.8		8.2
	n			160		124		134		132			238		187		186		183
	SD			5.7		5.2		5.8		5.7			6.1		6.1		6.3		6.9
	SE			.45		.47		.50		.49			.39		.44		.46		.51
	CI upper bound			7.0		6.9		6.6		6.9			7.6		7.8		7.7		9.2
	CI lower bound			5.3		5.1		4.7		4.9			6.1		6.0		5.9		7.2

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).

NSSE 2021 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Items

Fitchburg State 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>			43.5		53.1		58.5		43.8			53.8		75.5		68.6		78.9
Estimated number of pages calculated from three survey questions.	<i>n</i>			160		137		143		144			234		197		194		186
	<i>SD</i>			41.0		74.1		63.7		62.3			54.6		95.4		75.3		104.2
	<i>SE</i>			3.24		6.34		5.34		5.20			3.57		6.80		5.40		7.64
	<i>CI upper bound</i>			49.8		65.5		69.0		54.0			60.8		88.8		79.1		93.9
	<i>CI lower bound</i>			37.2		40.6		48.0		33.6			46.8		62.2		58.0		63.9
Course Challenge	<i>Mean</i>			5.4		5.1		5.4		5.2			5.5		5.2		5.2		5.3
Extent to which courses challenged students to do best work (1="Not at all" to 7="Very much").	<i>n</i>			178		136		136		142			261		196		194		187
	<i>SD</i>			1.2		1.3		1.1		1.3			1.2		1.2		1.4		1.4
	<i>SE</i>			.09		.11		.10		.11			.08		.09		.10		.10
	<i>CI upper bound</i>			5.6		5.3		5.6		5.4			5.6		5.4		5.4		5.5
	<i>CI lower bound</i>			5.2		4.9		5.2		5.0			5.3		5.1		5.0		5.1
Academic Emphasis	<i>Mean</i>			3.0		2.9		3.1		2.8			3.0		3.0		2.9		3.0
Perceived institutional emphasis on spending significant time studying and on academic work (1 =	<i>n</i>			162		125		136		136			237		189		189		186
	<i>SD</i>			0.7		0.6		0.7		0.8			0.7		0.7		0.7		0.8
	<i>SE</i>			.06		.06		.06		.07			.05		.05		.05		.06
	<i>CI upper bound</i>			3.1		3.0		3.2		2.9			3.1		3.1		3.0		3.1
	<i>CI lower bound</i>			2.9		2.8		3.0		2.7			2.9		2.9		2.8		2.9
<i>Learning with Peers</i>																			
Collaborative Learning	<i>Mean</i>			30.1		29.6		29.7		23.1			31.6		31.6		32.1		27.8
	<i>n</i>			219		154		169		189			278		231		213		230
	<i>SD</i>			13.0		13.1		14.5		14.1			15.6		13.2		13.9		15.8
	<i>SE</i>			.88		1.05		1.11		1.03			.93		.87		.95		1.04
	<i>CI upper bound</i>			31.8		31.6		31.9		25.1			33.4		33.3		33.9		29.8
	<i>CI lower bound</i>			28.3		27.5		27.5		21.1			29.7		29.9		30.2		25.8
Discussions with Diverse Others	<i>Mean</i>			40.9		38.6		37.6		33.7			38.0		37.3		40.1		34.3
	<i>n</i>			178		137		144		141			257		197		196		187
	<i>SD</i>			16.3		15.0		15.9		15.4			17.5		16.7		15.4		17.1
	<i>SE</i>			1.22		1.29		1.32		1.30			1.09		1.19		1.10		1.25
	<i>CI upper bound</i>			43.3		41.1		40.2		36.2			40.2		39.7		42.2		36.8
	<i>CI lower bound</i>			38.5		36.1		35.0		31.2			35.9		35.0		37.9		31.9

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).

NSSE 2021 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Items

Fitchburg State 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>			19.9		19.6		20.9		15.4			26.8		27.8		25.3		24.1
	<i>n</i>			202		147		153		163			271		228		206		206
	<i>SD</i>			14.3		14.2		14.2		13.8			16.0		14.6		15.3		17.1
	<i>SE</i>			1.01		1.18		1.14		1.08			.97		.97		1.06		1.19
	<i>CI upper bound</i>			21.8		21.9		23.1		17.5			28.7		29.7		27.4		26.4
	<i>CI lower bound</i>			17.9		17.3		18.6		13.3			24.9		25.9		23.2		21.8
Effective Teaching Practices	<i>Mean</i>			39.2		35.3		37.3		36.8			40.4		39.2		37.5		36.8
	<i>n</i>			202		147		150		157			274		225		202		199
	<i>SD</i>			12.8		11.1		12.8		14.0			14.8		12.9		14.8		15.2
	<i>SE</i>			.90		.92		1.05		1.12			.90		.86		1.04		1.07
	<i>CI upper bound</i>			41.0		37.1		39.4		39.0			42.2		40.9		39.5		38.9
	<i>CI lower bound</i>			37.5		33.5		35.3		34.6			38.6		37.5		35.5		34.7
<i>Campus Environment</i>																			
Quality of Interactions	<i>Mean</i>			41.4		38.7		41.6		40.6			43.9		43.2		42.1		42.3
	<i>n</i>			172		132		134		128			251		190		181		170
	<i>SD</i>			11.7		13.2		13.3		13.9			11.3		12.0		11.5		13.3
	<i>SE</i>			.89		1.15		1.15		1.22			.71		.87		.85		1.02
	<i>CI upper bound</i>			43.1		40.9		43.9		43.0			45.3		45.0		43.7		44.3
	<i>CI lower bound</i>			39.6		36.4		39.4		38.2			42.5		41.5		40.4		40.3
Supportive Environment	<i>Mean</i>			35.6		34.3		36.4		32.2			34.1		31.8		31.7		31.5
	<i>n</i>			159		125		135		132			238		187		189		185
	<i>SD</i>			13.2		12.0		13.7		14.9			13.7		13.0		13.0		14.8
	<i>SE</i>			1.04		1.08		1.18		1.29			.89		.95		.94		1.09
	<i>CI upper bound</i>			37.7		36.4		38.7		34.7			35.8		33.6		33.5		33.6
	<i>CI lower bound</i>			33.6		32.2		34.1		29.7			32.4		29.9		29.8		29.4

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	'13	'14	'15	'16	'17	'18	'19	'20	'21	
Service-Learning^a	%			40		43		39		40			59		53		59		70	
	<i>n</i>			180		132		136		136			253		193		194		186	
	<i>SE</i>			3.7		4.3		4.2		4.0			3.1		3.6		3.5		3.0	
	<i>CI upper bound (%)</i>			48		52		47		48			65		60		66		76	
	<i>CI lower bound (%)</i>			33		35		31		32			52		46		52		64	
Learning Community^a	%			6		4		8		10			22		17		16		10	
	<i>n</i>			179		136		138		133			256		197		194		186	
	<i>SE</i>			1.8		1.6		2.4		2.0			2.6		2.7		2.7		3.0	
	<i>CI upper bound (%)</i>			9		7		13		14			27		22		22		16	
	<i>CI lower bound (%)</i>			2		1		4		6			17		12		11		4	
Research with Faculty^a	%			3		1		3		0			22		24		17		10	
	<i>n</i>			178		136		138		135			256		196		194		185	
	<i>SE</i>			1.3		0.8		1.5		1.0			2.6		3.0		2.7		2.0	
	<i>CI upper bound (%)</i>			6		2		6		2			27		30		22		14	
	<i>CI lower bound (%)</i>			1		0		0		0			17		18		11		6	
Internship or Field Experience^b	%			75		80		70		60			55		57		51		40	
	<i>n</i>			179		136		137		138			258		198		194		186	
	<i>SE</i>			3.2		3.4		3.9		4.0			3.1		3.5		3.6		4.0	
	(First-year results: Plan to do)	<i>CI upper bound (%)</i>			81		87		78		68			61		64		58		48
	<i>CI lower bound (%)</i>			69		73		63		52			48		50		44		32	
Study Abroad^b	%			35		23		32		20			6		8		14		10	
	<i>n</i>			179		136		138		135			259		196		194		186	
	<i>SE</i>			3.6		3.6		4.0		4.0			1.5		1.9		2.5		2.0	
	(First-year results: Plan to do)	<i>CI upper bound (%)</i>			42		31		40		28			9		11		19		14
	<i>CI lower bound (%)</i>			28		16		24		12			3		4		9		6	
Culminating Senior Experience^b	%			53		38		43		40			59		56		49		50	
	<i>n</i>			178		136		138		133			256		192		194		187	
	<i>SE</i>			3.8		4.2		4.2		4.0			3.1		3.6		3.6		4.0	
	(First-year results: Plan to do)	<i>CI upper bound (%)</i>			60		46		51		48			65		63		56		58
	<i>CI lower bound (%)</i>			46		30		35		32			53		49		42		42	
Overall HIP Participation^c																				
Participated in one HIP	%			39		42		36		40			16		30		27		40	
	<i>n</i>			180		136		138		136			259		198		194		187	
	<i>SE</i>			3.6		4.2		4.1		4.0			2.3		3.3		3.2		4.0	
	<i>CI upper bound (%)</i>			46		50		44		48			20		37		34		48	
	<i>CI lower bound (%)</i>			32		34		28		32			11		24		21		32	
Participated in two or more HIPs	%			5		2		7		0			68		60		59		50	
	<i>n</i>			180		136		138		136			259		198		194		187	
	<i>SE</i>			1.6		1.3		2.2		2.0			2.9		3.5		3.5		4.0	
	<i>CI upper bound (%)</i>			8		5		12		4			74		67		66		58	
	<i>CI lower bound (%)</i>			2		0		3		0			62		53		52		42	

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.