



NSSE 2022

Multi-Year Report

Appalachian 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 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										
2014										
2015	14%	+/- 4.4%	424	327	97	16%	+/- 4.6%	388	287	101
2016										
2017										
2018	28%	+/- 2.4%	1,169	952	217	25%	+/- 2.5%	1,188	987	201
2019										
2020										
2021										
2022	23%	+/- 2.8%	961	681	280	24%	+/- 2.8%	947	755	192

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	No	Global Perspectives, Sustainability Education Consortium	No	No	No
2016							
2017							
2018	Email	Census	Yes	Academic Advising, Global Learning	No	No	No
2019							
2020							
2021							
2022	Email	Census	Yes	Online Learning, HIP Quality	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.

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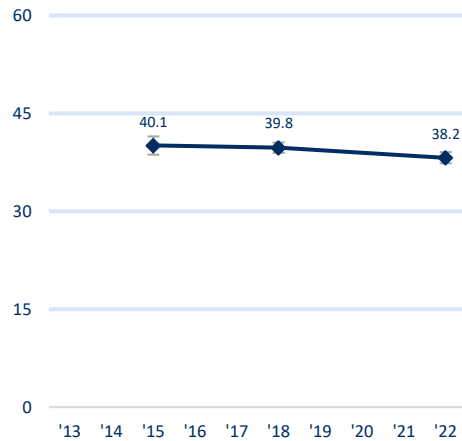
Engagement Results by Theme

Appalachian State University

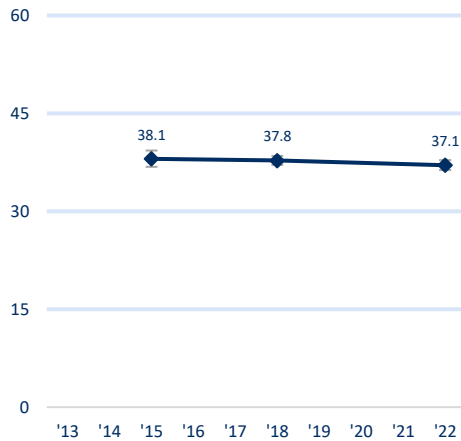
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each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

Academic Challenge: First-year students

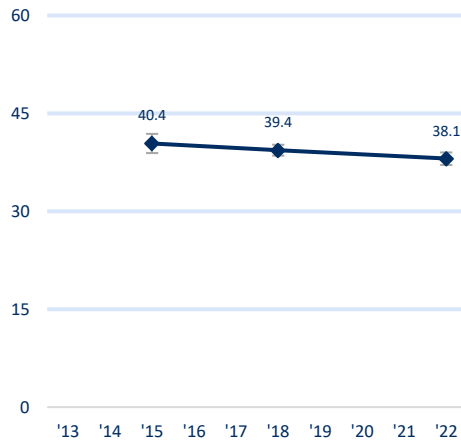
Higher-Order Learning



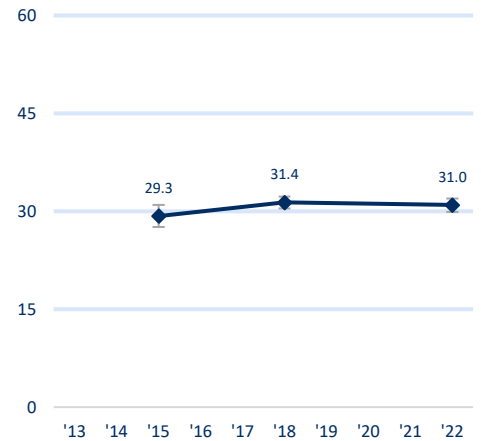
Reflective & Integrative Learning



Learning Strategies

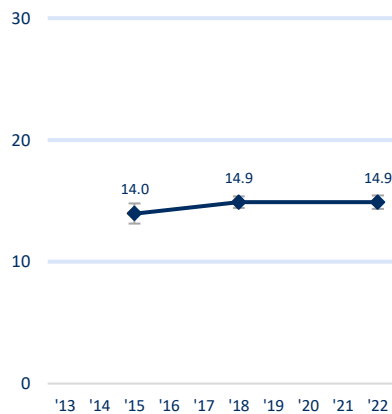


Quantitative Reasoning

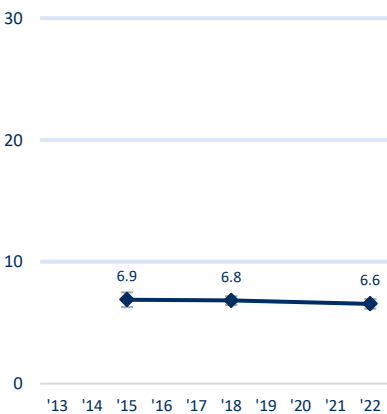


Academic Challenge (additional items): First-year students

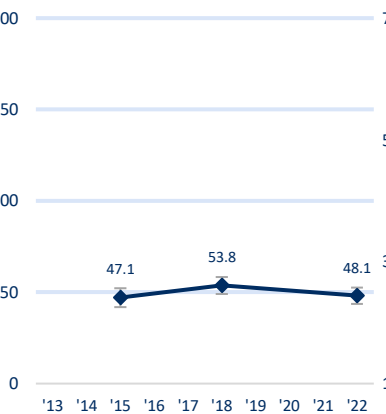
Preparing for Class (hrs/wk)



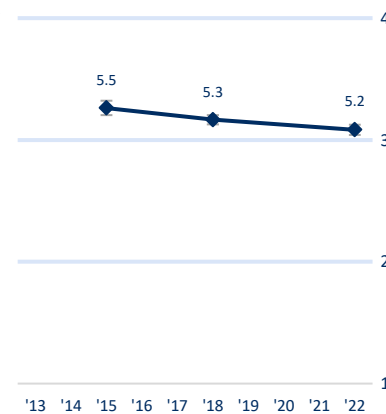
Course Reading (hrs/wk)^a



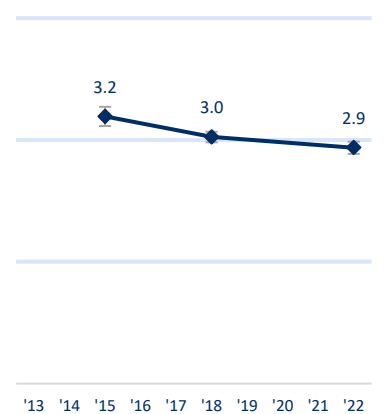
Assigned Writing (pages)^a



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").

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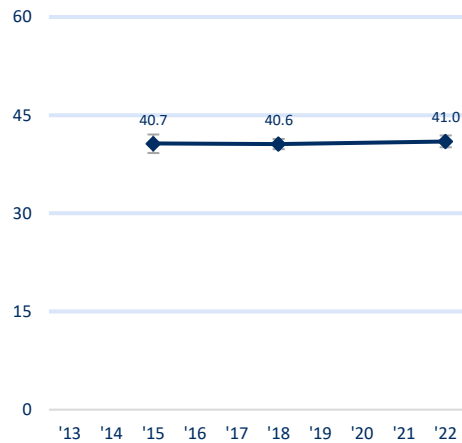
Engagement Results by Theme

Appalachian State University

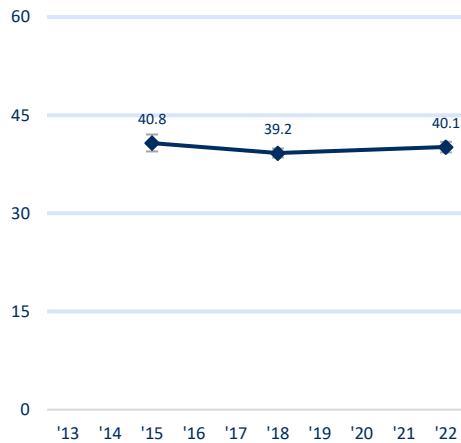
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each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

Academic Challenge: Seniors

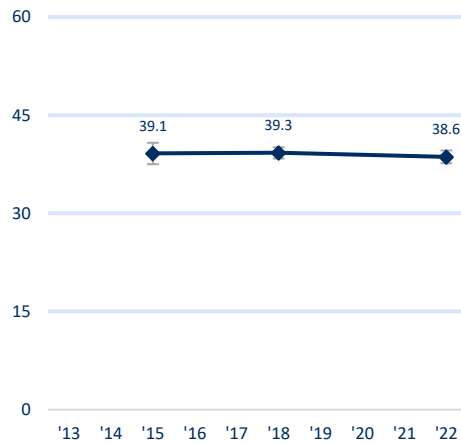
Higher-Order Learning



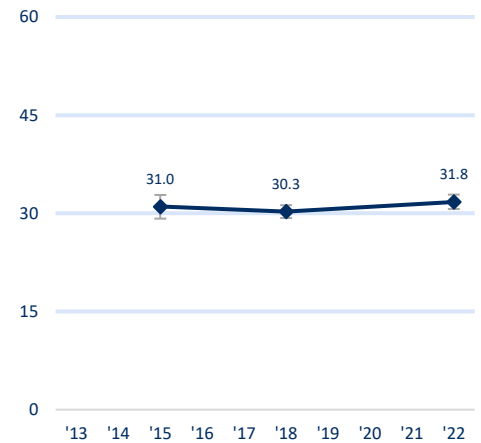
Reflective & Integrative Learning



Learning Strategies

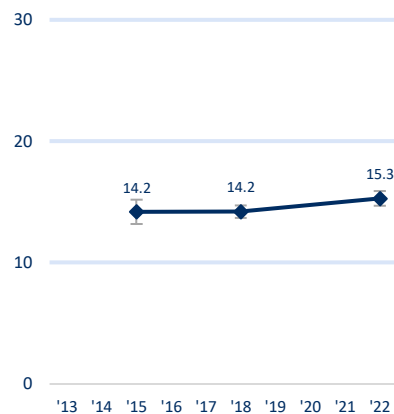


Quantitative Reasoning

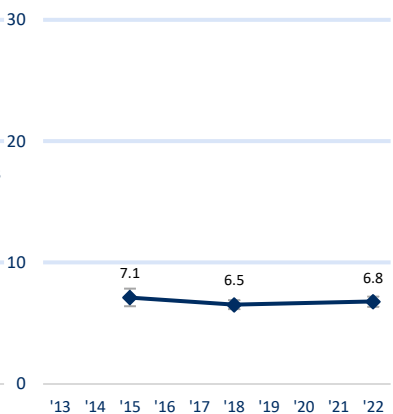


Academic Challenge (additional items): Seniors

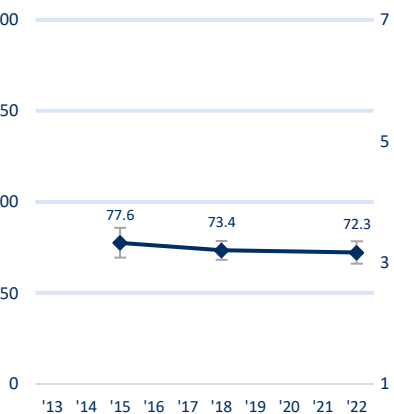
Preparing for Class (hrs/wk)



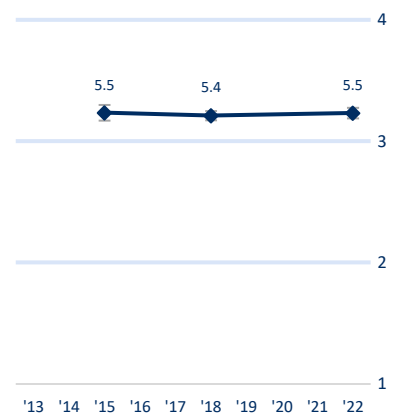
Course Reading (hrs/wk)^a



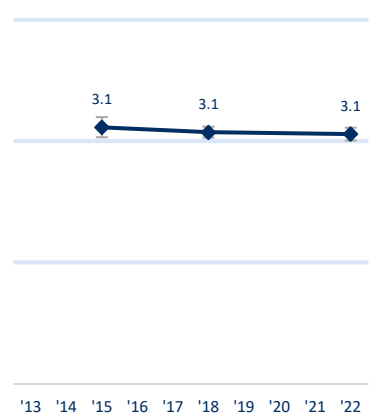
Assigned Writing (pages)^a



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").

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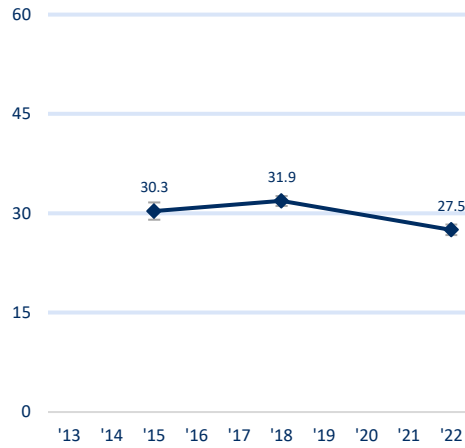
Engagement Results by Theme

Appalachian State University

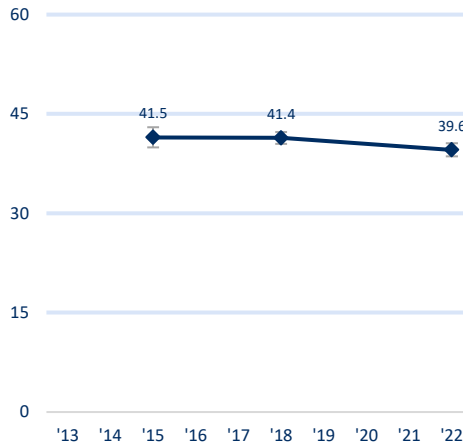
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

Learning with Peers: First-year students

Collaborative Learning

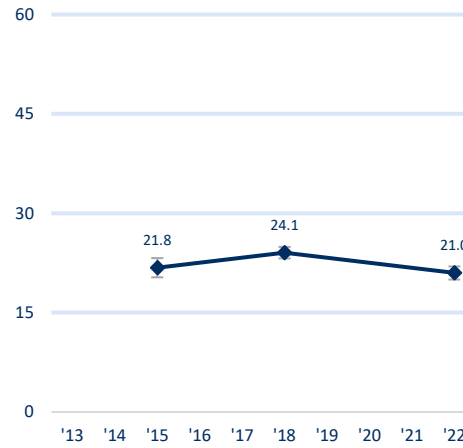


Discussions with Diverse Others

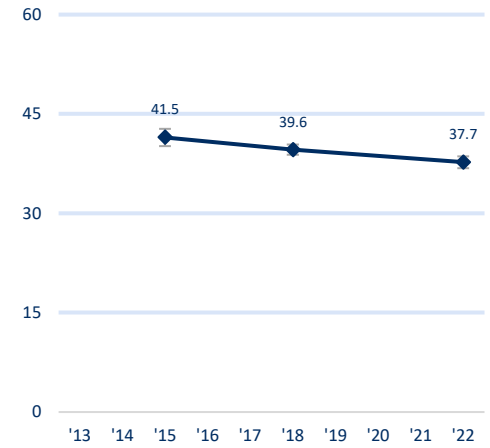


Experiences with Faculty: First-year students

Student-Faculty Interaction

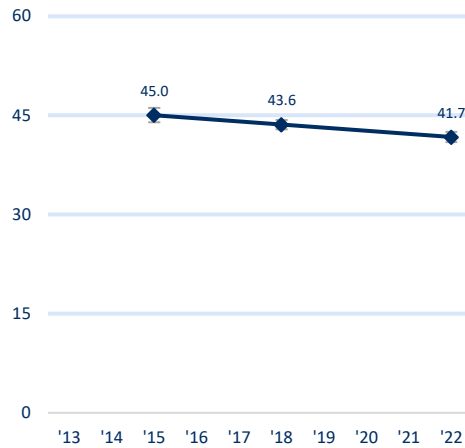


Effective Teaching Practices

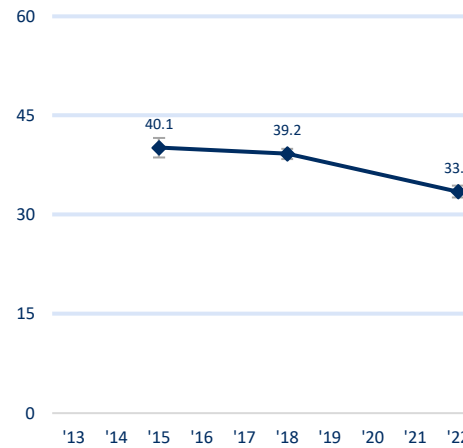


Campus Environment: First-year students

Quality of Interactions



Supportive Environment



NSSE 2022 Multi-Year Report

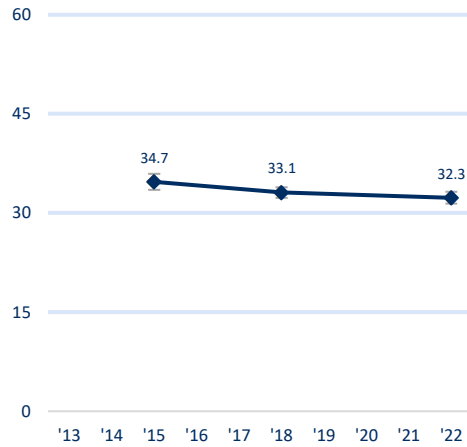
Engagement Results by Theme

Appalachian State University

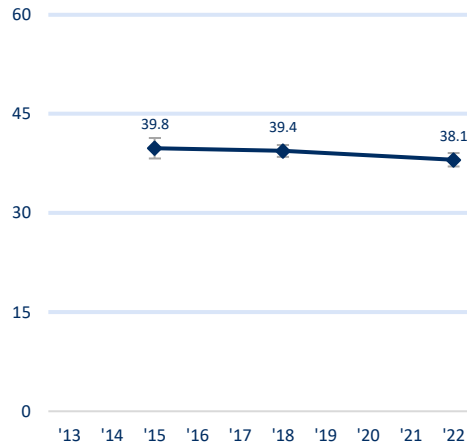
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Learning with Peers: Seniors

Collaborative Learning

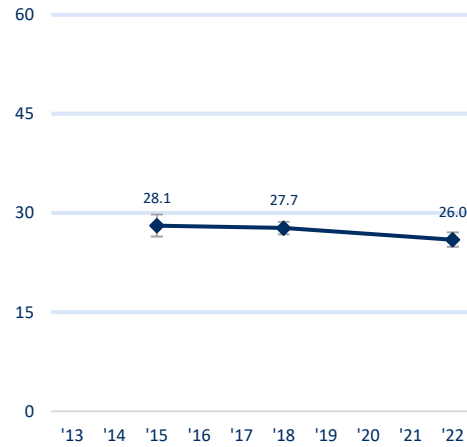


Discussions with Diverse Others

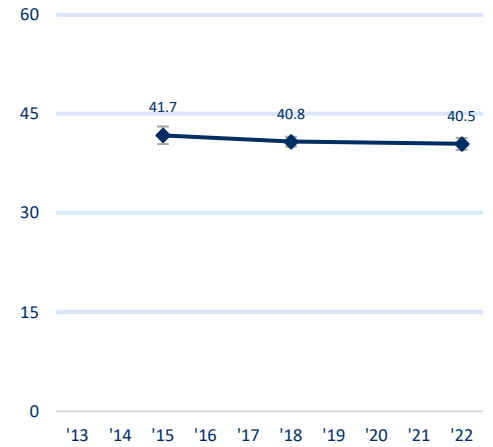


Experiences with Faculty: Seniors

Student-Faculty Interaction

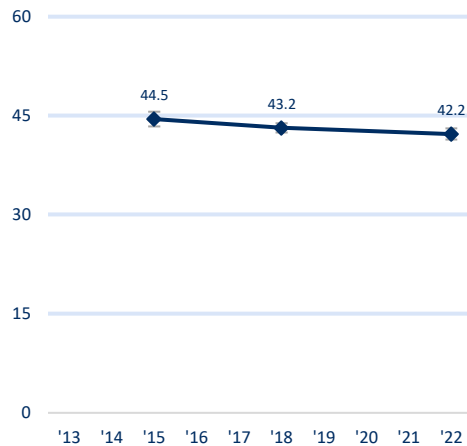


Effective Teaching Practices

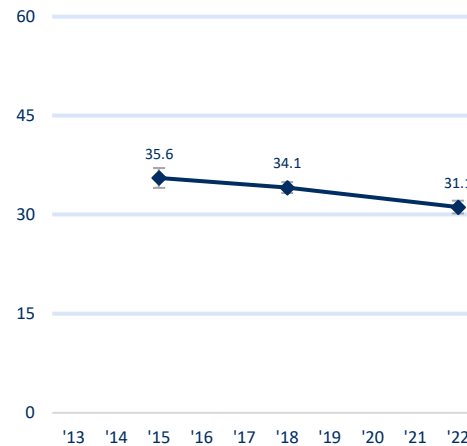


Campus Environment: Seniors

Quality of Interactions



Supportive Environment

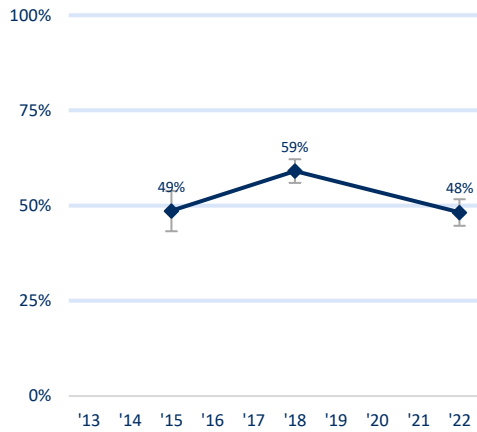


Due to their positive associations with student learning and retention, certain undergraduate opportunities are designated "high-impact." The figures below display first-year students' participation, or intent to participate, in High-Impact Practices (HIPs) by year. See page 13 for detailed statistics.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

High-Impact Practices: First-year students

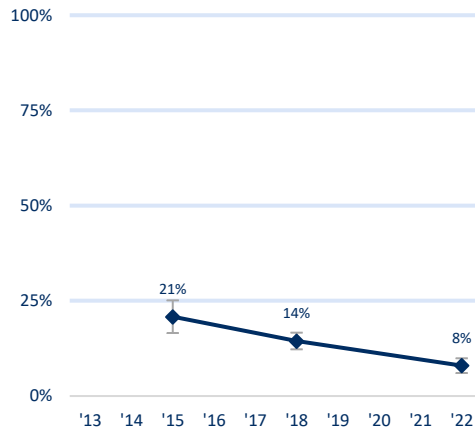
Service-Learning

(Some, most, or all courses)



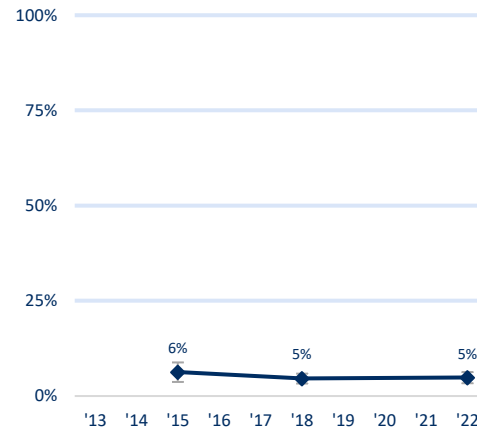
Learning Community

(Done or in progress)



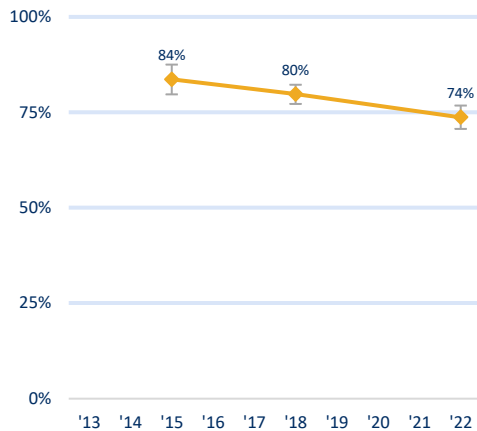
Research with Faculty

(Done or in progress)



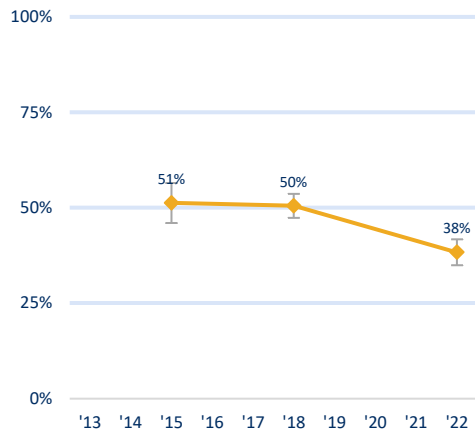
Internship/Field Experience

(Plan to do)



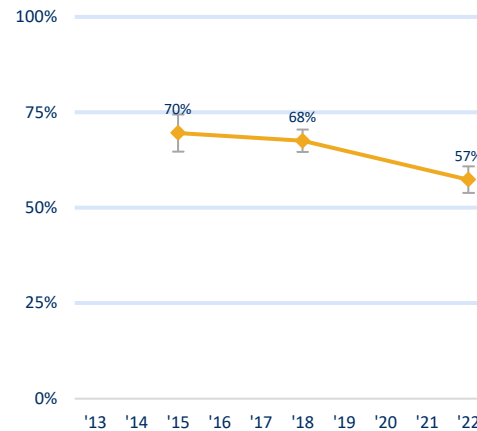
Study Abroad

(Plan to do)



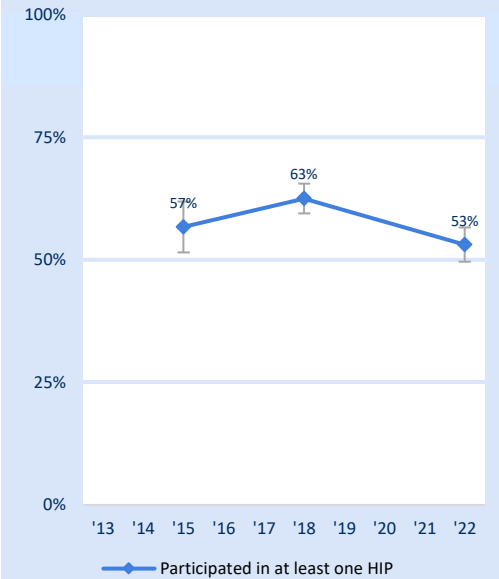
Culminating Senior Experience

(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.

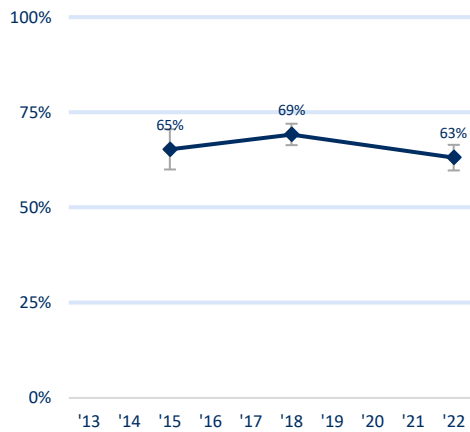


NSSE founding director George Kuh recommends that institutions aspire for all students to participate in at least two HIPs over the course of their undergraduate experience—one during the first year and one in the context of their major.

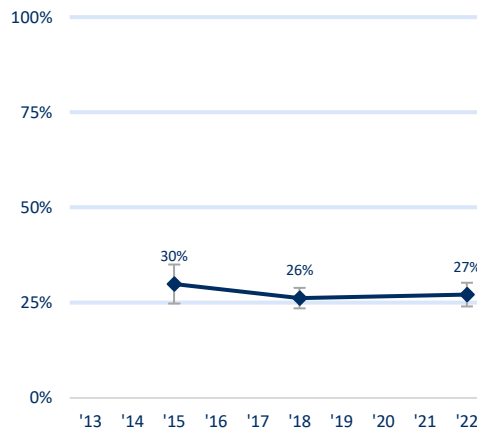
Due to their positive associations with student learning and retention, certain undergraduate opportunities are designated "high-impact." Participation in High-Impact Practices (HIPs) by year is displayed in the figures below. See page 13 for detailed statistics. For more information, refer to your *High-Impact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

High-Impact Practices: Seniors

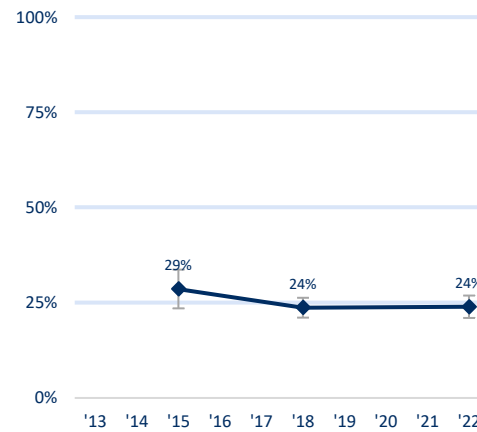
Service-Learning (Some, most, or all courses)



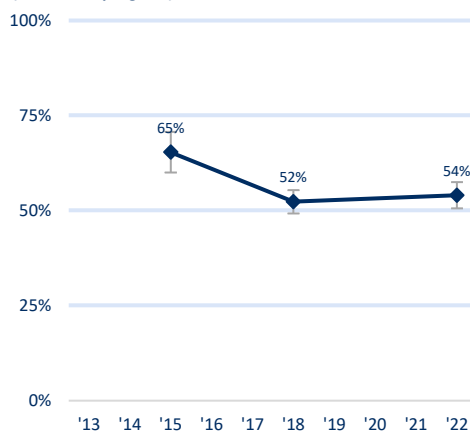
Learning Community (Done or in progress)



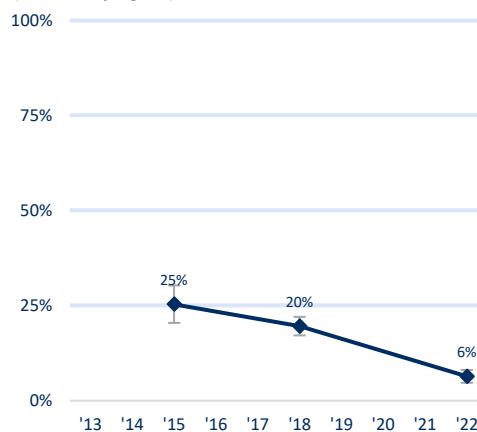
Research with Faculty (Done or in progress)



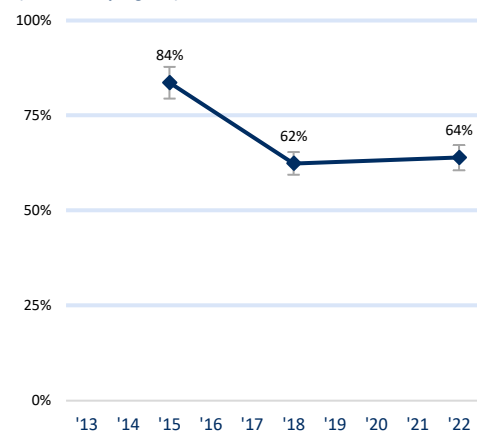
Internship/Field Experience (Done or in progress)



Study Abroad (Done or in progress)

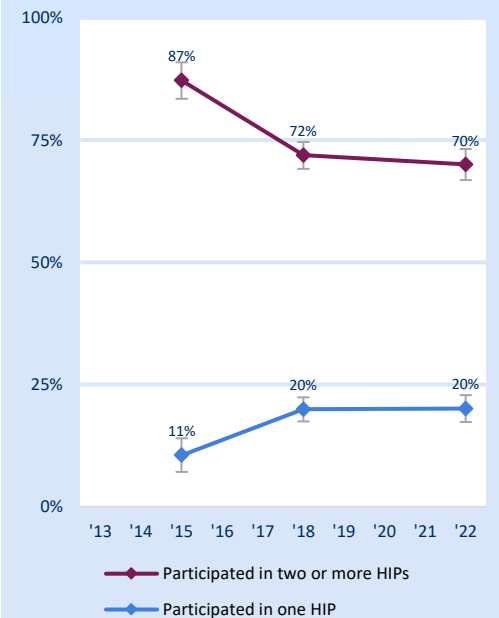


Culminating Senior Experience (Done or in progress)



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.

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Detailed Statistics: Engagement Indicators and Additional Items

Appalachian State University

		First-year students										Seniors									
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
<i>Academic Challenge</i>																					
Higher-Order Learning	<i>Mean</i>			40.1			39.8			38.2			40.7			40.6			41.0		
	<i>n</i>			354			1,017			832			325			1,056			836		
	<i>SD</i>			13.3			12.4			12.6			12.9			13.2			13.3		
	<i>SE</i>			.70			.39			.44			.72			.41			.46		
	<i>CI upper bound</i>			41.5			40.5			39.0			42.1			41.4			41.9		
	<i>CI lower bound</i>			38.7			39.0			37.3			39.2			39.8			40.1		
Reflective & Integrative Learning	<i>Mean</i>			38.1			37.8			37.1			40.8			39.2			40.1		
	<i>n</i>			375			1,086			885			338			1,112			883		
	<i>SD</i>			12.2			11.6			11.5			12.2			11.9			12.2		
	<i>SE</i>			.63			.35			.39			.66			.36			.41		
	<i>CI upper bound</i>			39.3			38.5			37.8			42.1			39.9			41.0		
	<i>CI lower bound</i>			36.8			37.1			36.3			39.5			38.5			39.3		
Learning Strategies	<i>Mean</i>			40.4			39.4			38.1			39.1			39.3			38.6		
	<i>n</i>			344			983			790			301			1,019			803		
	<i>SD</i>			13.8			13.3			13.5			14.5			13.9			14.3		
	<i>SE</i>			.74			.43			.48			.84			.44			.50		
	<i>CI upper bound</i>			41.8			40.2			39.0			40.8			40.1			39.6		
	<i>CI lower bound</i>			38.9			38.5			37.1			37.5			38.4			37.7		
Quantitative Reasoning	<i>Mean</i>			29.3			31.4			31.0			31.0			30.3			31.8		
	<i>n</i>			363			997			796			330			1,022			808		
	<i>SD</i>			16.5			14.7			14.8			16.7			16.1			16.0		
	<i>SE</i>			.86			.47			.53			.92			.50			.56		
	<i>CI upper bound</i>			31.0			32.3			32.0			32.8			31.3			32.9		
	<i>CI lower bound</i>			27.6			30.4			29.9			29.2			29.3			30.6		
<i>Academic Challenge (additional items)</i>																					
Preparing for Class (hours/week)	<i>Mean</i>			14.0			14.9			14.9			14.2			14.2			15.3		
	<i>n</i>			323			973			767			290			1,001			792		
	<i>SD</i>			7.6			7.6			7.7			8.7			8.4			8.7		
	<i>SE</i>			.42			.24			.28			.51			.27			.31		
	<i>CI upper bound</i>			14.8			15.4			15.4			15.2			14.7			15.9		
	<i>CI lower bound</i>			13.1			14.4			14.4			13.2			13.7			14.7		
Course Reading Est. hrs per week calculated from two items.	<i>Mean</i>			6.9			6.8			6.6			7.1			6.5			6.8		
	<i>n</i>			321			968			764			288			992			784		
	<i>SD</i>			5.6			5.5			5.5			6.3			5.9			6.0		
	<i>SE</i>			.31			.18			.20			.37			.19			.22		
	<i>CI upper bound</i>			7.5			7.2			6.9			7.9			6.9			7.2		
	<i>CI lower bound</i>			6.3			6.5			6.2			6.4			6.2			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).

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Detailed Statistics: Engagement Indicators and Additional Items

Appalachian State University

		First-year students										Seniors									
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
<i>Academic Challenge (additional items, continued)</i>																					
Assigned Writing	<i>Mean</i>			47.1			53.8				48.1				77.6				73.4		72.3
Estimated number of pages calculated from three survey questions.	<i>n</i>			321			998				797				294				1,025		805
	<i>SD</i>			46.9			74.0				63.7				71.0				84.2		89.8
	<i>SE</i>			2.61			2.34				2.26				4.14				2.63		3.16
	<i>CI upper bound</i>			52.2			58.4				52.5				85.7				78.5		78.5
	<i>CI lower bound</i>			42.0			49.2				43.7				69.5				68.2		66.1
Course Challenge	<i>Mean</i>			5.5			5.3				5.2				5.5				5.4		5.5
Extent to which courses challenged students to do best work (1="Not at all" to 7="Very much").	<i>n</i>			344			984				788				308				1,016		806
	<i>SD</i>			1.1			1.2				1.2				1.2				1.2		1.2
	<i>SE</i>			.06			.04				.04				.07				.04		.04
	<i>CI upper bound</i>			5.6			5.4				5.3				5.6				5.5		5.5
	<i>CI lower bound</i>			5.4			5.3				5.1				5.3				5.3		5.4
Academic Emphasis	<i>Mean</i>			3.2			3.0				2.9				3.1				3.1		3.1
Perceived inst'l emphasis on spending significant time studying and on academic work (1 = "Very little" to 4 = "Very much").	<i>n</i>			329			981				778				293				1,015		795
	<i>SD</i>			0.7			0.7				0.7				0.7				0.7		0.8
	<i>SE</i>			.04			.02				.03				.04				.02		.03
	<i>CI upper bound</i>			3.3			3.1				3.0				3.2				3.1		3.1
	<i>CI lower bound</i>			3.1			3.0				2.9				3.0				3.0		3.0
<i>Learning with Peers</i>																					
Collaborative Learning	<i>Mean</i>			30.3			31.9				27.5				34.7				33.1		32.3
	<i>n</i>			395			1,125				940				364				1,144		915
	<i>SD</i>			13.2			13.0				12.6				11.9				14.0		13.9
	<i>SE</i>			.66			.39				.41				.62				.41		.46
	<i>CI upper bound</i>			31.6			32.6				28.3				35.9				33.9		33.2
	<i>CI lower bound</i>			29.0			31.1				26.7				33.5				32.3		31.4
Discussions with Diverse Others	<i>Mean</i>			41.5			41.4				39.6				39.8				39.4		38.1
	<i>n</i>			343			991				799				309				1,020		800
	<i>SD</i>			14.2			14.4				14.4				13.8				14.6		14.7
	<i>SE</i>			.77			.46				.51				.78				.46		.52
	<i>CI upper bound</i>			43.0			42.3				40.6				41.3				40.3		39.1
	<i>CI lower bound</i>			40.0			40.5				38.6				38.3				38.5		37.0

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).

NSSE 2022 Multi-Year Report

Detailed Statistics: Engagement Indicators and Additional Items

Appalachian State University

		First-year students										Seniors									
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
<i>Experiences with Faculty</i>																					
Student-Faculty Interaction	<i>Mean</i>		21.8				24.1				21.0				28.1				27.7		26.0
	<i>n</i>		369				1,048				862				332				1,084		863
	<i>SD</i>		14.3				14.2				14.6				15.6				15.9		16.3
	<i>SE</i>		.74				.44				.50				.86				.48		.56
	<i>CI upper bound</i>		23.2				24.9				22.0				29.8				28.7		27.0
	<i>CI lower bound</i>		20.3				23.2				20.0				26.4				26.8		24.9
<hr/>																					
Effective Teaching Practices	<i>Mean</i>		41.5				39.6				37.7				41.7				40.8		40.5
	<i>n</i>		363				1,022				835				332				1,054		836
	<i>SD</i>		12.7				12.4				13.2				12.4				12.5		13.1
	<i>SE</i>		.66				.39				.46				.68				.38		.45
	<i>CI upper bound</i>		42.8				40.4				38.6				43.1				41.5		41.3
	<i>CI lower bound</i>		40.2				38.9				36.8				40.4				40.0		39.6
<hr/>																					
<i>Campus Environment</i>																					
Quality of Interactions	<i>Mean</i>		45.0				43.6				41.7				44.5				43.2		42.2
	<i>n</i>		338				973				760				302				957		749
	<i>SD</i>		10.2				11.1				10.9				9.9				11.1		11.8
	<i>SE</i>		.55				.35				.39				.57				.36		.43
	<i>CI upper bound</i>		46.1				44.3				42.5				45.6				43.9		43.1
	<i>CI lower bound</i>		44.0				42.9				41.0				43.4				42.5		41.4
<hr/>																					
Supportive Environment	<i>Mean</i>		40.1				39.2				33.5				35.6				34.1		31.1
	<i>n</i>		328				977				770				288				1,009		788
	<i>SD</i>		13.6				12.4				12.7				13.1				13.1		13.8
	<i>SE</i>		.75				.40				.46				.77				.41		.49
	<i>CI upper bound</i>		41.6				40.0				34.4				37.1				34.9		32.1
	<i>CI lower bound</i>		38.7				38.4				32.6				34.1				33.3		30.2

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).

		First-year students										Seniors									
		'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
Service-Learning^a	%			49			59			48			65			69				63	
	<i>n</i>			340			971			779			308			1,015					795
	<i>SE</i>			2.7			1.6			1.8			2.7			1.5					1.7
	<i>CI upper bound (%)</i>			54			62			52			71			72					66
	<i>CI lower bound (%)</i>			43			56			45			60			66					60
Learning Community^a	%			21			14			8			30			26				27	
	<i>n</i>			345			980			780			305			1,017					799
	<i>SE</i>			2.2			1.1			1.0			2.6			1.4					1.6
	<i>CI upper bound (%)</i>			25			17			10			35			29					30
	<i>CI lower bound (%)</i>			17			12			6			25			23					24
Research with Faculty^a	%			6			5			5			29			24				24	
	<i>n</i>			344			984			780			305			1,017					799
	<i>SE</i>			1.3			0.7			0.8			2.6			1.3					1.5
	<i>CI upper bound (%)</i>			9			6			6			34			26					27
	<i>CI lower bound (%)</i>			4			3			3			23			21					21
Internship or Field Experience^b (First-year results: Plan to do)	%			84			80			74			65			52				54	
	<i>n</i>			346			986			788			307			1,018					803
	<i>SE</i>			2.0			1.3			1.6			2.7			1.6					1.8
	<i>CI upper bound (%)</i>			88			82			77			71			55					57
	<i>CI lower bound (%)</i>			80			77			71			60			49					51
Study Abroad^b (First-year results: Plan to do)	%			51			50			38			25			20				6	
	<i>n</i>			346			982			785			304			1,016					802
	<i>SE</i>			2.7			1.6			1.7			2.5			1.2					0.9
	<i>CI upper bound (%)</i>			57			54			42			30			22					8
	<i>CI lower bound (%)</i>			46			47			35			20			17					5
Culminating Senior Experience^b (First-year results: Plan to do)	%			70			68			57			84			62				64	
	<i>n</i>			343			983			784			305			1,016					799
	<i>SE</i>			2.5			1.5			1.8			2.1			1.5					1.7
	<i>CI upper bound (%)</i>			74			70			61			88			65					67
	<i>CI lower bound (%)</i>			65			65			54			79			59					61
Overall HIP Participation^c																					
Participated in one HIP	%			41			49			46			11			20				20	
	<i>n</i>			346			987			785			310			1,022					803
	<i>SE</i>			2.6			1.6			1.8			1.7			1.3					1.4
	<i>CI upper bound (%)</i>			46			52			50			14			22					23
	<i>CI lower bound (%)</i>			36			46			43			7			17					17
Participated in two or more HIPs	%			16			13			7			87			72				70	
	<i>n</i>			346			987			785			310			1,022					803
	<i>SE</i>			2.0			1.1			0.9			1.9			1.4					1.6
	<i>CI upper bound (%)</i>			19			15			9			91			75					73
	<i>CI lower bound (%)</i>			12			11			5			83			69					67

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.