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**NSSE 2017**  
**Multi-Year Report**  
North Carolina State University

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### 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, consult the *Multi-Year Data Analysis Guide* on the NSSE website.

[nsse.indiana.edu/pdf/MYDAG.pdf](https://nsse.indiana.edu/pdf/MYDAG.pdf)

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 a learning community, service-learning, 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—Institution Version, updated with current data in the fall, allows for multi-year analysis of Engagement Indicators and individual items. 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 <sup>a</sup>	Sampling error <sup>b</sup>	Total respondents <sup>c</sup>	Full completions	Partial completions	Response rate <sup>a</sup>	Sampling error <sup>b</sup>	Total respondents <sup>c</sup>	Full completions	Partial completions
2013										
2014	17%	+/- 3.3%	745	597	148	20%	+/- 3.1%	781	631	150
2015										
2016										
2017	16%	+/- 3.6%	625	399	226	17%	+/- 3.4%	675	478	197
2018										
2019										
2020										

#### Administration Details by Participation Year

Year	Recruitment method	Sample type	Incentives offered	Additional question sets	Report Sample identified <sup>d</sup>	BCSSE	FSSE
2013							
2014	Email	Census	No	Academic Advising, Writing Experiences	No	No	No
2015							
2016							
2017	Email	Census	No	Civic Engagement, Global Learning	No	No	No
2018							
2019							
2020							

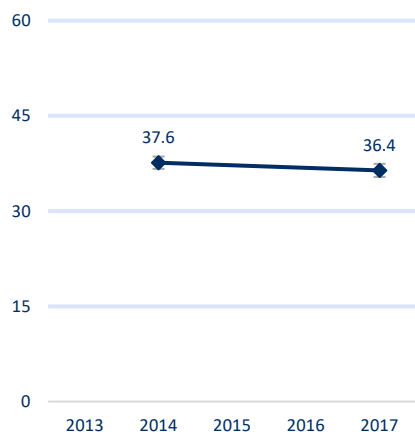
Note: All of your institution's participation years since 2013 (the first year of the updated NSSE) are reported. Years in which your institution did not participate are blank.

- 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).

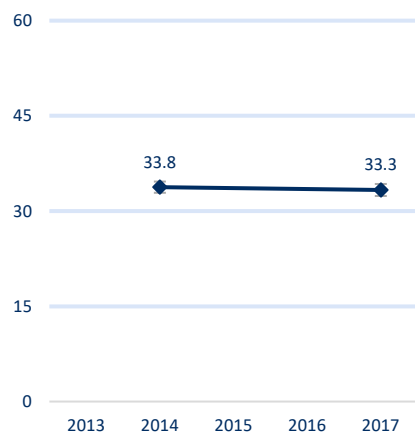
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each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

### Academic Challenge: First-year students

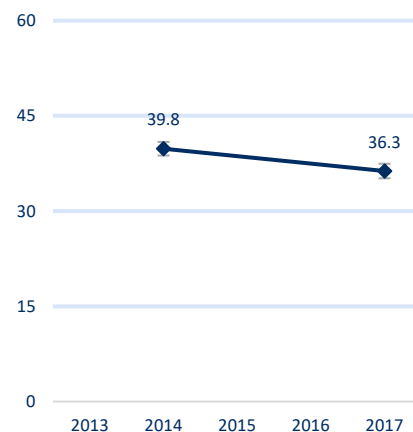
#### Higher-Order Learning



#### Reflective & Integrative Learning



#### Learning Strategies

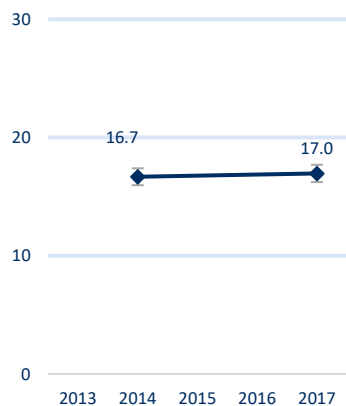


#### Quantitative Reasoning

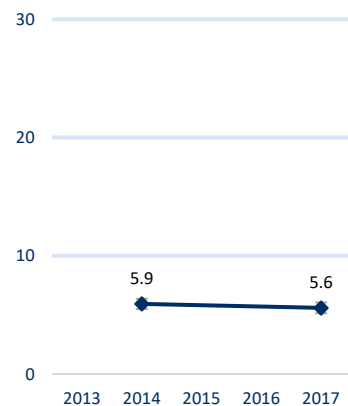


### Academic Challenge (additional items): First-year students

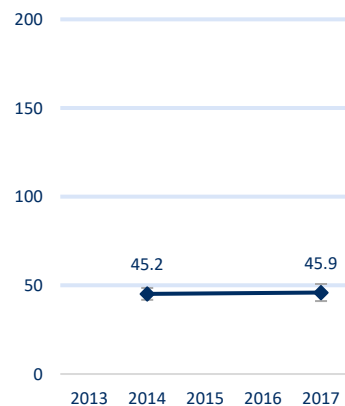
#### Preparing for Class (hrs/wk)



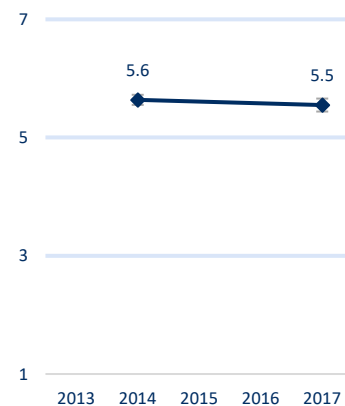
#### Course Reading (hrs/wk)<sup>a</sup>



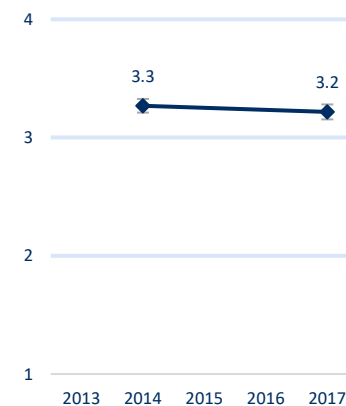
#### Assigned Writing (pages)<sup>a</sup>



#### Course Challenge<sup>b</sup>



#### Academic Emphasis<sup>c</sup>



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").

# NSSE 2017 Multi-Year Report

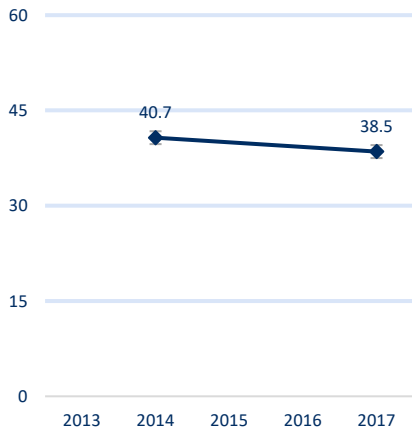
## Engagement Results by Theme

### North Carolina State University

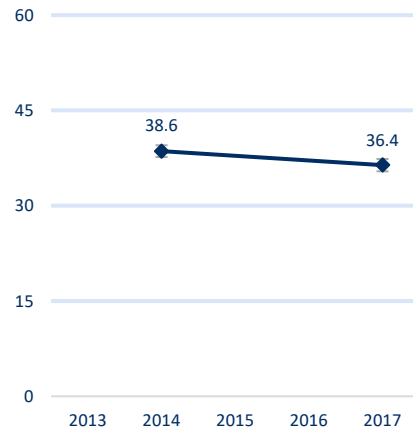
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. The Academic Challenge theme contains four EIs as well as several important individual items. See pages 10-12 for detailed statistics. For more information, including the items that make up each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

#### Academic Challenge: Seniors

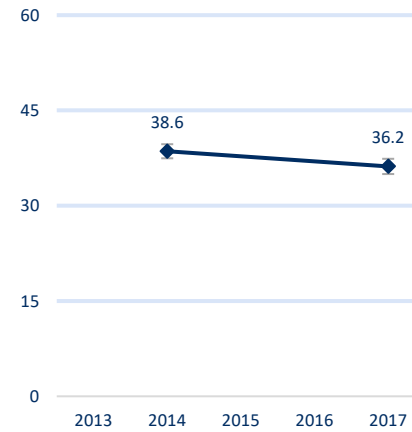
##### Higher-Order Learning



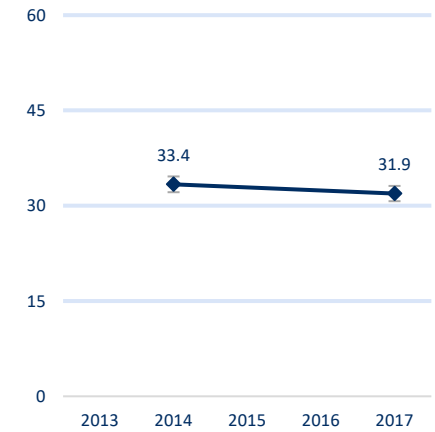
##### Reflective & Integrative Learning



##### Learning Strategies

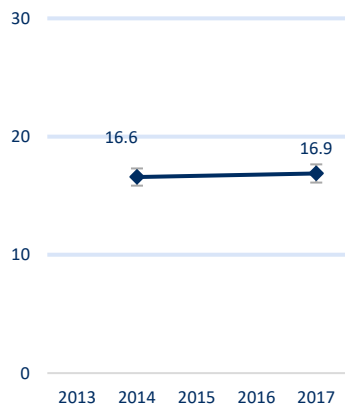


##### Quantitative Reasoning

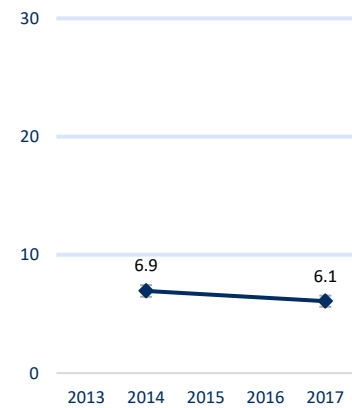


#### Academic Challenge (additional items): Seniors

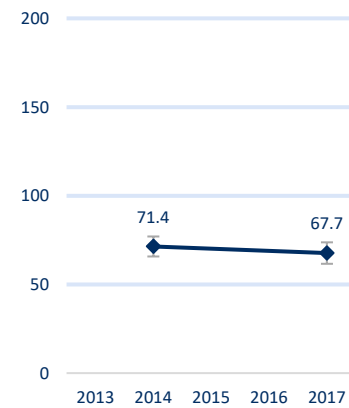
##### Preparing for Class (hrs/wk)



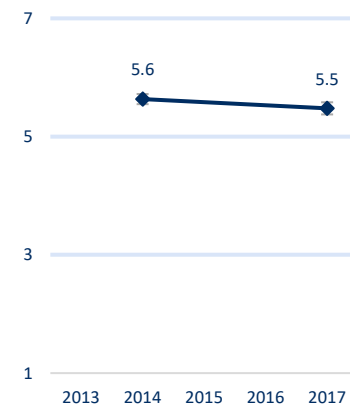
##### Course Reading (hrs/wk)<sup>a</sup>



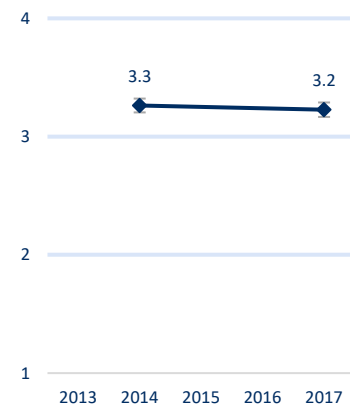
##### Assigned Writing (pages)<sup>a</sup>



##### Course Challenge<sup>b</sup>



##### Academic Emphasis<sup>c</sup>



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

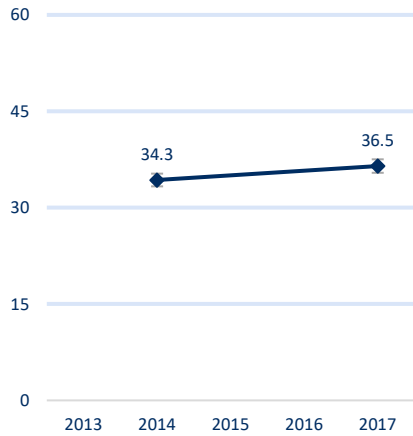
b. Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").

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").

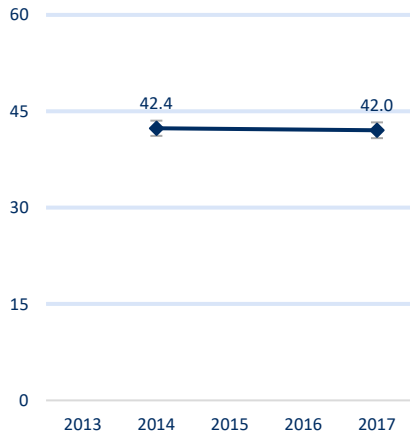
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

#### Learning with Peers: First-year students

##### Collaborative Learning

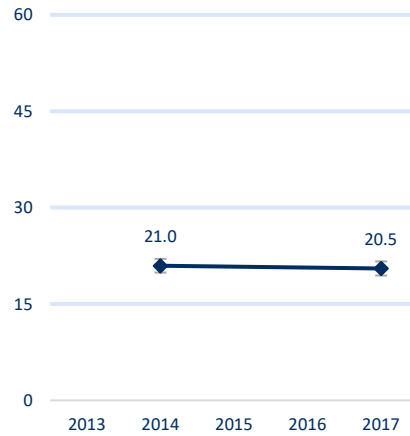


##### Discussions with Diverse Others



#### Experiences with Faculty: First-year students

##### Student-Faculty Interaction

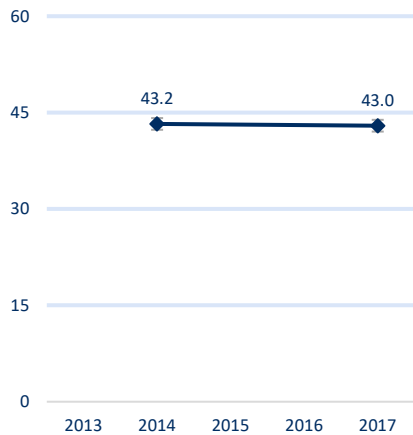


##### Effective Teaching Practices

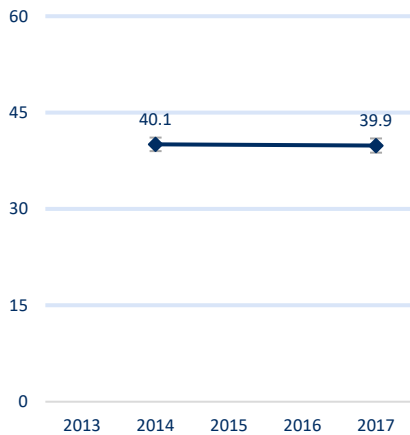


#### Campus Environment: First-year students

##### Quality of Interactions



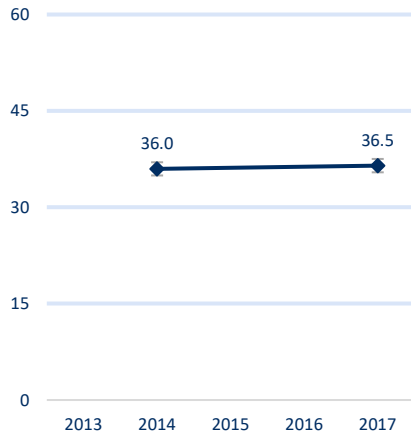
##### Supportive Environment



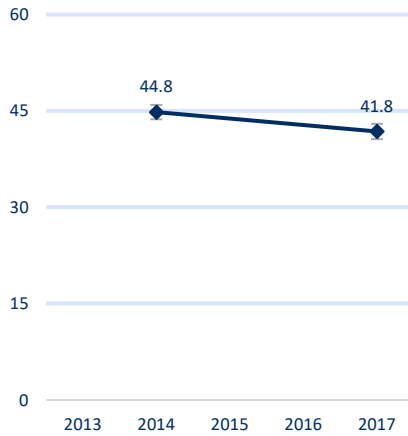
Engagement Indicators (EIs) represent the average student responses to a set of related survey questions. Each theme below is represented by two EIs. See pages 10-12 for detailed statistics. For more information, including the items that make up each EI, refer to your *Engagement Indicators* report.

#### Learning with Peers: Seniors

##### Collaborative Learning

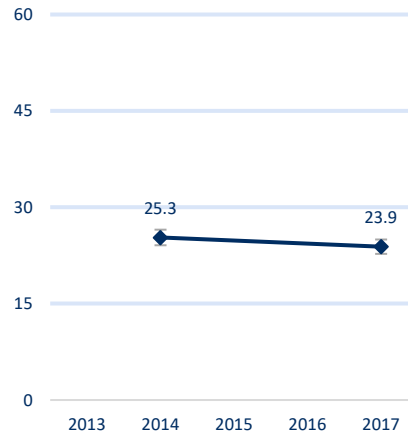


##### Discussions with Diverse Others

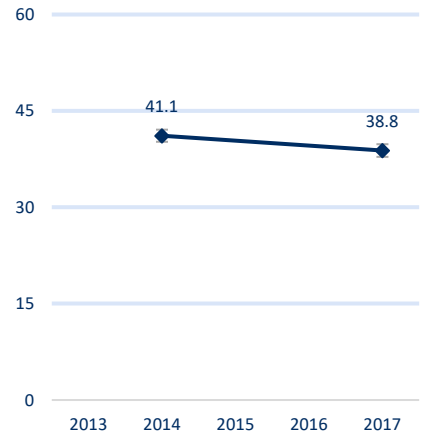


#### Experiences with Faculty: Seniors

##### Student-Faculty Interaction



##### Effective Teaching Practices

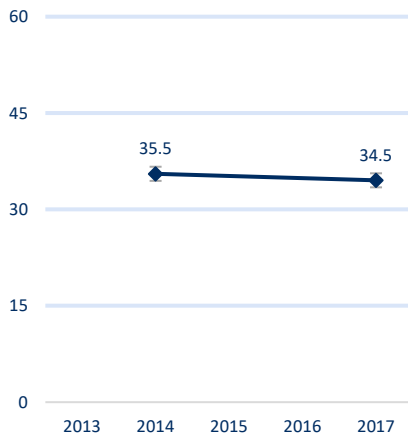


#### Campus Environment: Seniors

##### Quality of Interactions



##### Supportive Environment

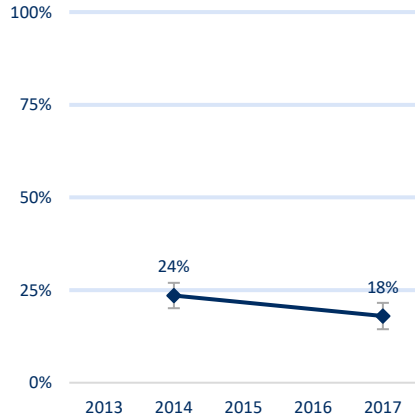


Due to their positive associations with student learning and retention, special undergraduate opportunities are designated "high-impact." The figures below display first-year students' participation, or intent to participate, in High-Impact Practices (HIPs) by year. See page 13 for detailed statistics.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

#### High-Impact Practices: First-year students

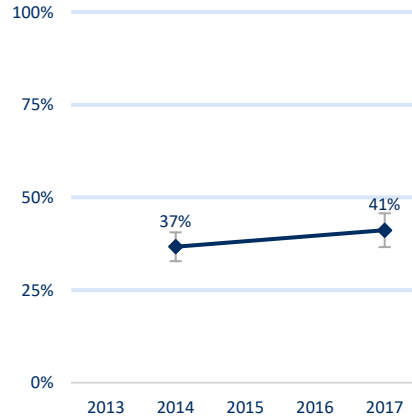
##### Learning Community

(Done or in progress)



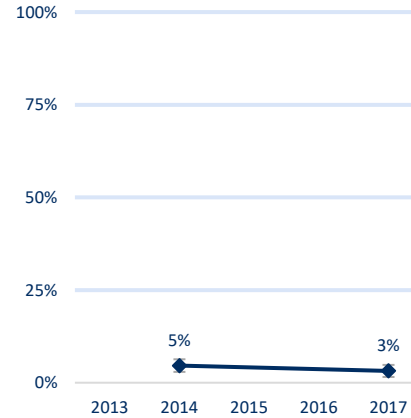
##### Service-Learning

(Some, most, or all courses)



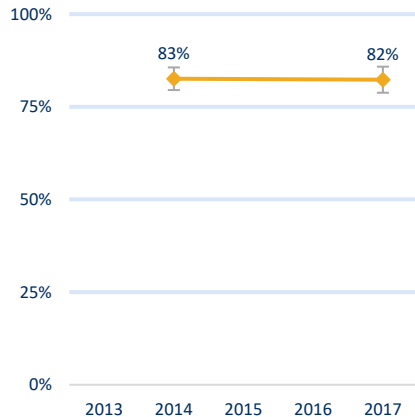
##### Research with Faculty

(Done or in progress)



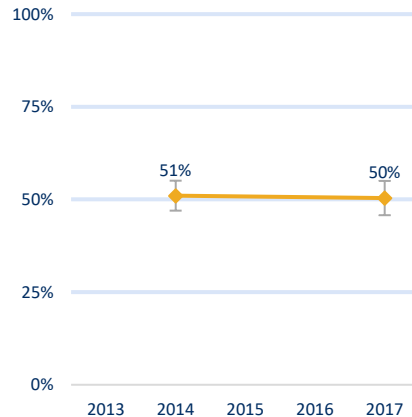
##### Internship/Field Experience

(Plan to do)



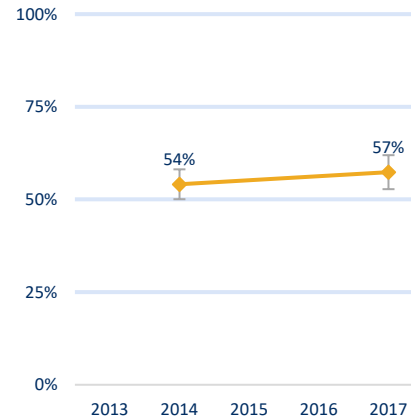
##### Study Abroad

(Plan to do)



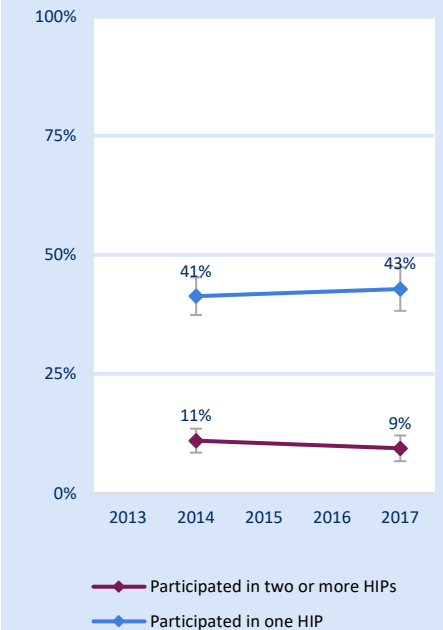
##### Culminating Senior Experience

(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.



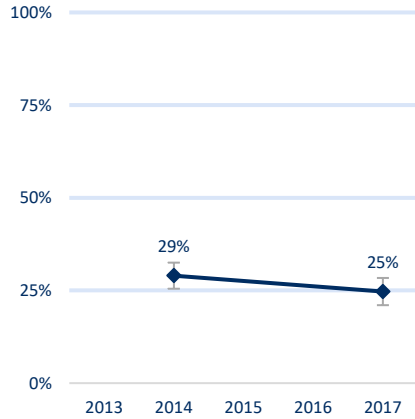


Due to their positive associations with student learning and retention, special undergraduate opportunities are designated "high-impact." Participation in High-Impact Practices (HIPs) by year is displayed in the figures below. See page 13 for detailed statistics. For more information, refer to your *High-Impact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

#### High-Impact Practices: Seniors

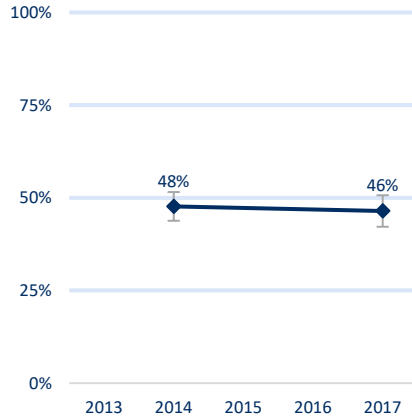
##### Learning Community

(Done or in progress)



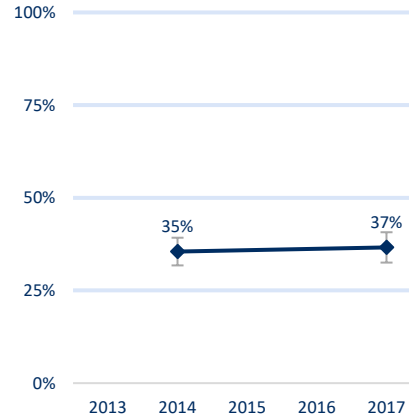
##### Service-Learning

(Some, most, or all courses)



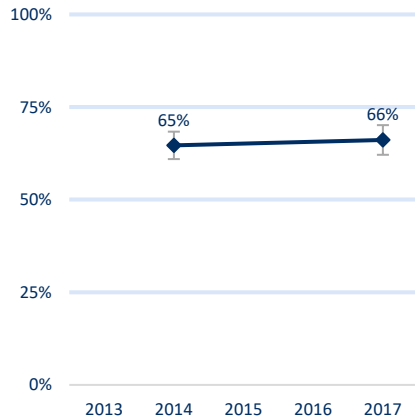
##### Research with Faculty

(Done or in progress)



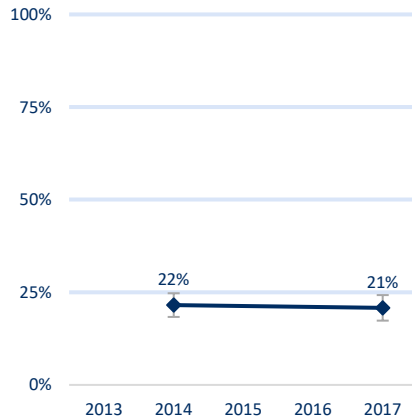
##### Internship/Field Experience

(Done or in progress)



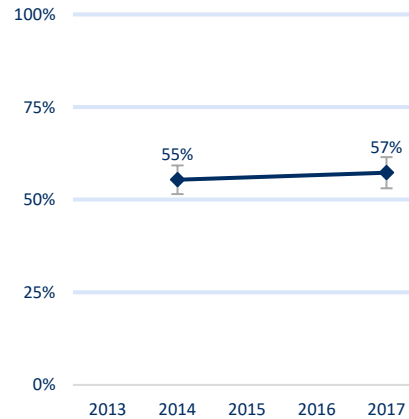
##### Study Abroad

(Done or in progress)



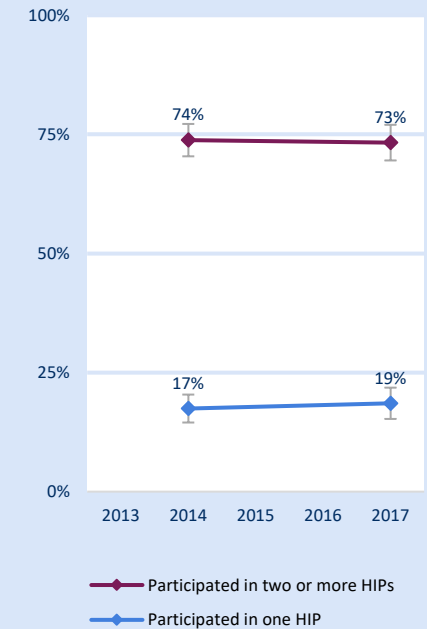
##### Culminating Senior Experience

(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 2017 Multi-Year Report

## Detailed Statistics: Engagement Indicators and Additional Items North Carolina State 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>																	
<b>Higher-Order Learning</b>	<i>Mean</i>		<b>37.6</b>			<b>36.4</b>					<b>40.7</b>			<b>38.5</b>			
	<i>n</i>		656			543					687			625			
	<i>SD</i>		12.6			12.2					13.5			13.0			
	<i>SE</i>		.49			.53					.52			.52			
	<i>CI upper bound</i>		38.6			37.4					41.7			39.5			
	<i>CI lower bound</i>		36.7			35.4					39.7			37.5			
<b>Reflective &amp; Integrative Learning</b>	<i>Mean</i>		<b>33.8</b>			<b>33.3</b>					<b>38.6</b>			<b>36.4</b>			
	<i>n</i>		674			570					726			641			
	<i>SD</i>		11.7			11.5					12.7			12.6			
	<i>SE</i>		.45			.48					.47			.50			
	<i>CI upper bound</i>		34.7			34.3					39.5			37.4			
	<i>CI lower bound</i>		32.9			32.4					37.7			35.4			
<b>Learning Strategies</b>	<i>Mean</i>		<b>39.8</b>			<b>36.3</b>					<b>38.6</b>			<b>36.2</b>			
	<i>n</i>		591			457					632			541			
	<i>SD</i>		13.3			12.5					14.2			14.2			
	<i>SE</i>		.55			.58					.57			.61			
	<i>CI upper bound</i>		40.9			37.5					39.7			37.4			
	<i>CI lower bound</i>		38.8			35.2					37.5			35.0			
<b>Quantitative Reasoning</b>	<i>Mean</i>		<b>29.2</b>			<b>28.2</b>					<b>33.4</b>			<b>31.9</b>			
	<i>n</i>		658			531					699			624			
	<i>SD</i>		14.6			13.5					16.7			15.3			
	<i>SE</i>		.57			.58					.63			.61			
	<i>CI upper bound</i>		30.3			29.4					34.6			33.1			
	<i>CI lower bound</i>		28.1			27.1					32.1			30.7			
<i>Academic Challenge (additional items)</i>																	
<b>Preparing for Class</b> (hours/week)	<i>Mean</i>		<b>16.7</b>			<b>17.0</b>					<b>16.6</b>			<b>16.9</b>			
	<i>n</i>		536			417					591			503			
	<i>SD</i>		8.4			7.6					9.0			8.8			
	<i>SE</i>		.36			.37					.37			.39			
	<i>CI upper bound</i>		17.4			17.7					17.3			17.7			
	<i>CI lower bound</i>		16.0			16.2					15.9			16.1			
<b>Course Reading</b> Estimated hours per week calculated from two survey questions.	<i>Mean</i>		<b>5.9</b>			<b>5.6</b>					<b>6.9</b>			<b>6.1</b>			
	<i>n</i>		531			414					581			501			
	<i>SD</i>		5.1			4.7					6.0			5.4			
	<i>SE</i>		.22			.23					.25			.24			
	<i>CI upper bound</i>		6.4			6.0					7.4			6.6			
	<i>CI lower bound</i>		5.5			5.1					6.5			5.6			

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

# NSSE 2017 Multi-Year Report

## Detailed Statistics: Engagement Indicators and Additional Items

### North Carolina State 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>																
<b>Assigned Writing</b>	<i>Mean</i>	<b>45.2</b>			<b>45.9</b>					<b>71.4</b>			<b>67.7</b>			
Estimated number of pages calculated from three survey questions.	<i>n</i>	557			463					599			537			
	<i>SD</i>	40.3			52.8					70.3			71.5			
	<i>SE</i>	1.71			2.46					2.88			3.09			
	<i>CI upper bound</i>	48.5			50.8					77.0			73.7			
	<i>CI lower bound</i>	41.8			41.1					65.8			61.6			
<b>Course Challenge</b>	<i>Mean</i>	<b>5.6</b>			<b>5.5</b>					<b>5.6</b>			<b>5.5</b>			
Extent to which courses challenged students to do their best work (1 = "Not at all" to 7 = "Very much").	<i>n</i>	594			455					639			539			
	<i>SD</i>	1.1			1.2					1.1			1.2			
	<i>SE</i>	.04			.06					.04			.05			
	<i>CI upper bound</i>	5.7			5.7					5.7			5.6			
	<i>CI lower bound</i>	5.6			5.4					5.5			5.4			
<b>Academic Emphasis</b>	<i>Mean</i>	<b>3.3</b>			<b>3.2</b>					<b>3.3</b>			<b>3.2</b>			
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>	543			422					595			515			
	<i>SD</i>	0.7			0.7					0.7			0.7			
	<i>SE</i>	.03			.03					.03			.03			
	<i>CI upper bound</i>	3.3			3.3					3.3			3.3			
	<i>CI lower bound</i>	3.2			3.2					3.2			3.2			
<i>Learning with Peers</i>																
<b>Collaborative Learning</b>	<i>Mean</i>	<b>34.3</b>			<b>36.5</b>					<b>36.0</b>			<b>36.5</b>			
	<i>n</i>	698			596					737			657			
	<i>SD</i>	13.3			13.1					14.2			13.6			
	<i>SE</i>	.51			.54					.52			.53			
	<i>CI upper bound</i>	35.3			37.5					37.0			37.5			
	<i>CI lower bound</i>	33.3			35.4					34.9			35.4			
<b>Discussions with Diverse Others</b>	<i>Mean</i>	<b>42.4</b>			<b>42.0</b>					<b>44.8</b>			<b>41.8</b>			
	<i>n</i>	591			459					639			543			
	<i>SD</i>	14.7			13.4					14.4			14.2			
	<i>SE</i>	.60			.63					.57			.61			
	<i>CI upper bound</i>	43.5			43.3					45.9			43.0			
	<i>CI lower bound</i>	41.2			40.8					43.7			40.6			

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

# NSSE 2017 Multi-Year Report

## Detailed Statistics: Engagement Indicators and Additional Items North Carolina State 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>																	
<b>Student-Faculty Interaction</b>	<i>Mean</i>		<b>21.0</b>			<b>20.5</b>					<b>25.3</b>			<b>23.9</b>			
	<i>n</i>		664			550					709			634			
	<i>SD</i>		14.0			13.1					16.5			14.4			
	<i>SE</i>		.54			.56					.62			.57			
	<i>CI upper bound</i>		22.0			21.6					26.5			25.0			
	<i>CI lower bound</i>		19.9			19.4					24.1			22.7			
<hr/>																	
<b>Effective Teaching Practices</b>	<i>Mean</i>		<b>40.0</b>			<b>38.2</b>					<b>41.1</b>			<b>38.8</b>			
	<i>n</i>		658			540					705			626			
	<i>SD</i>		12.2			11.5					12.8			12.6			
	<i>SE</i>		.48			.49					.48			.50			
	<i>CI upper bound</i>		40.9			39.2					42.1			39.8			
	<i>CI lower bound</i>		39.0			37.2					40.2			37.8			
<hr/>																	
<i>Campus Environment</i>																	
<b>Quality of Interactions</b>	<i>Mean</i>		<b>43.2</b>			<b>43.0</b>					<b>43.2</b>			<b>43.1</b>			
	<i>n</i>		562			427					616			511			
	<i>SD</i>		11.0			9.6					11.1			10.7			
	<i>SE</i>		.46			.47					.45			.47			
	<i>CI upper bound</i>		44.1			43.9					44.1			44.1			
	<i>CI lower bound</i>		42.3			42.0					42.3			42.2			
<hr/>																	
<b>Supportive Environment</b>	<i>Mean</i>		<b>40.1</b>			<b>39.9</b>					<b>35.5</b>			<b>34.5</b>			
	<i>n</i>		534			415					591			511			
	<i>SD</i>		12.4			11.5					13.7			12.6			
	<i>SE</i>		.54			.56					.56			.56			
	<i>CI upper bound</i>		41.1			41.0					36.6			35.6			
	<i>CI lower bound</i>		39.0			38.8					34.4			33.4			

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								
		2013	2014	2015	2016	2017	2018	2019	2020	2013	2014	2015	2016	2017	2018	2019
<b>Learning Community<sup>a</sup></b>	%		<b>24</b>			<b>18</b>				<b>29</b>			<b>25</b>			
	<i>n</i>		591			450				640			531			
	<i>SE</i>		1.7			1.8				1.8			1.9			
	<i>CI upper bound (%)</i>		27			22				33			28			
	<i>CI lower bound (%)</i>		20			14				25			21			
<b>Service-Learning<sup>a</sup></b>	%		<b>37</b>			<b>41</b>				<b>48</b>			<b>46</b>			
	<i>n</i>		589			448				639			530			
	<i>SE</i>		2.0			2.3				2.0			2.2			
	<i>CI upper bound (%)</i>		41			46				52			51			
	<i>CI lower bound (%)</i>		33			37				44			42			
<b>Research with Faculty<sup>a</sup></b>	%		<b>5</b>			<b>3</b>				<b>35</b>			<b>37</b>			
	<i>n</i>		587			448				632			533			
	<i>SE</i>		0.9			0.8				1.9			2.1			
	<i>CI upper bound (%)</i>		6			5				39			41			
	<i>CI lower bound (%)</i>		3			2				32			33			
<b>Internship or Field Experience</b> (First-year results: Plan to do)	%		<b>83</b>			<b>82</b>				<b>65</b>			<b>66</b>			
	<i>n</i>		593			452				642			538			
	<i>SE</i>		1.6			1.8				1.9			2.0			
	<i>CI upper bound (%)</i>		86			86				68			70			
	<i>CI lower bound (%)</i>		80			79				61			62			
<b>Study Abroad</b> (First-year results: Plan to do)	%		<b>51</b>			<b>50</b>				<b>22</b>			<b>21</b>			
	<i>n</i>		589			451				637			533			
	<i>SE</i>		2.1			2.4				1.6			1.8			
	<i>CI upper bound (%)</i>		55			55				25			24			
	<i>CI lower bound (%)</i>		47			46				18			17			
<b>Culminating Senior Experience</b> (First-year results: Plan to do)	%		<b>54</b>			<b>57</b>				<b>55</b>			<b>57</b>			
	<i>n</i>		588			448				636			532			
	<i>SE</i>		2.1			2.3				2.0			2.1			
	<i>CI upper bound (%)</i>		58			62				59			61			
	<i>CI lower bound (%)</i>		50			53				52			53			
<b>Overall HIP Participation<sup>b</sup></b>																
<b>Participated in one HIP</b>	%		<b>41</b>			<b>43</b>				<b>17</b>			<b>19</b>			
	<i>n</i>		595			451				644			539			
	<i>SE</i>		2.0			2.3				1.5			1.7			
	<i>CI upper bound (%)</i>		45			47				20			22			
	<i>CI lower bound (%)</i>		37			38				15			15			
<b>Participated in two or more HIPs</b>	%		<b>11</b>			<b>9</b>				<b>74</b>			<b>73</b>			
	<i>n</i>		595			451				644			539			
	<i>SE</i>		1.3			1.4				1.7			1.9			
	<i>CI upper bound (%)</i>		14			12				77			77			
	<i>CI lower bound (%)</i>		8			7				70			70			

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