

# University of South Carolina Aiken

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**Multi-Year Benchmark Report**  
August 2012

## Interpreting the Multi-Year Benchmark Report

For institutions that have participated in multiple NSSE administrations, this *Multi-Year Benchmark Report* presents comparable benchmark scores by year so that patterns of change or stability are discernible. It also provides statistics such as *number of respondents*, *standard deviation*, and *standard error* so that shorthand mean comparison tests can be calculated.

Questions that might be answered with this report include, “How stable was the level of student-faculty interaction over the years?” or “Given the implementation of initiative X three years ago, did the level of active and collaborative learning increase?”

This report has three main parts: (a) a table of *data quality indicators* (p. 3), which provides a quick reference to important statistics for each year’s administration, (b) *multi-year charts*, and (c) *detailed statistics*. Key terms and features of (b) and (c) are illustrated below.

For more information and recommendations for analyzing past and present NSSE data for trends or stability, consult the *Multi-Year Data Analysis Guide*. [nsse.iub.edu/pdf/MYDAG.pdf](http://nsse.iub.edu/pdf/MYDAG.pdf)

### Key Terms and Features in this Report

#### Y-Axis

Benchmarks are computed on a 0 to 100 scale, however nearly all institutional scores are between the y-axis values of 15 and 85.

#### Benchmark Score

The benchmark score is the weighted average of the students' scores, using all census-administration and randomly sampled students from each year's data.

#### n

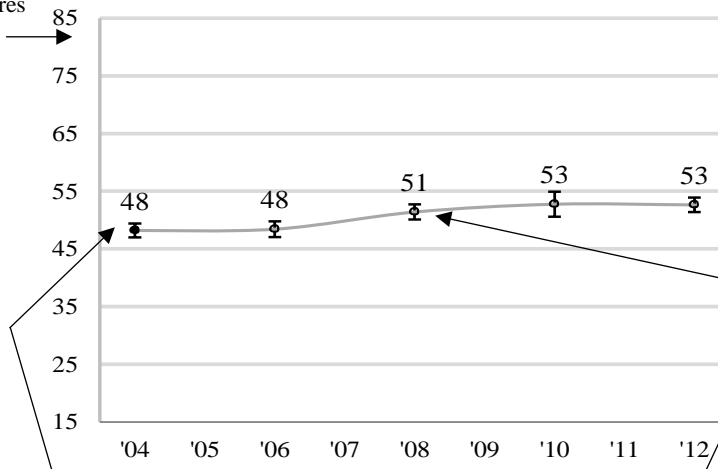
Number of respondents represented in the data weighted by gender and enrollment status.

#### SEM

*Standard error of the mean* is how much a score based on a sample may differ from the true population score. *SEM* is used to compute confidence intervals.

Multi-year charts appear on pages 4 & 6

Level of Academic Challenge (LAC)



#### Error Bars/Confidence Intervals

Error bars around each benchmark score show the upper and lower bounds of the 95% confidence interval (mean  $\pm$  1.96 \* *SEM*), a range of values 95% likely to contain the true population score. "Upper" and "Lower" limits are also reported in the detailed statistics tables. Where confidence intervals do not overlap between years, a statistically significant difference ( $p < .05$ ) is likely to be present.

#### Year

All NSSE administration years since 2004 are listed regardless of participation.

Multi-year detailed statistics appear on pages 5 & 7

	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>LAC</b>	48.2	48.4	48.4	51.4	51.4	52.7	52.7	52.6	52.6
n	405	303	303	307	307	155	155	171	171
SD	12.1	12.3	12.3	11.8	11.8	13.7	13.7	13.1	13.1
SEM	.60	.71	.71	.67	.67	1.10	1.10	.65	.65
Upper	49.4	49.8	49.8	52.7	52.7	54.9	54.9	53.9	53.9
Lower	47.0	47.0	47.0	50.1	50.1	50.6	50.6	51.4	51.4

#### SD

*Standard deviation*, the average amount by which students' scores differ from the mean.

An important early step in conducting a multi-year analysis is to review the quality of your data in each year for both first-year and senior respondents. The precision of an institution's population estimates can vary from one year to the next. The values in this table were drawn from the *Respondent Characteristics* reports from each NSSE administration.

**Data Quality Indicators for Each NSSE Participation Year**

Year <sup>a</sup>	Mode <sup>b</sup>	Response Rate <sup>c</sup>		Sampling Error <sup>d</sup>		Number of Respondents <sup>e</sup>	
		FY	SR	FY	SR	FY	SR
2004	Web+	32%	32%	6.8%	7.9%	150	106
2005							
2006	Web+	63%	54%	3.2%	4.1%	343	260
2007							
2008	Web+	48%	58%	4.1%	3.3%	299	377
2009							
2010	Web-only	46%	48%	4.3%	4.9%	280	211
2011							
2012	Web-only	43%	42%	4.8%	4.7%	243	254

<sup>a</sup> All NSSE administration years since 2004 are listed regardless of participation.

<sup>b</sup> Modes include *Paper* (students receive a paper survey and the option of completing a Web version), *Web-only* (students receive all correspondence by e-mail and complete the Web version), and *Web+* (students initially invited to participate via email; a subgroup of nonrespondents receive paper surveys).

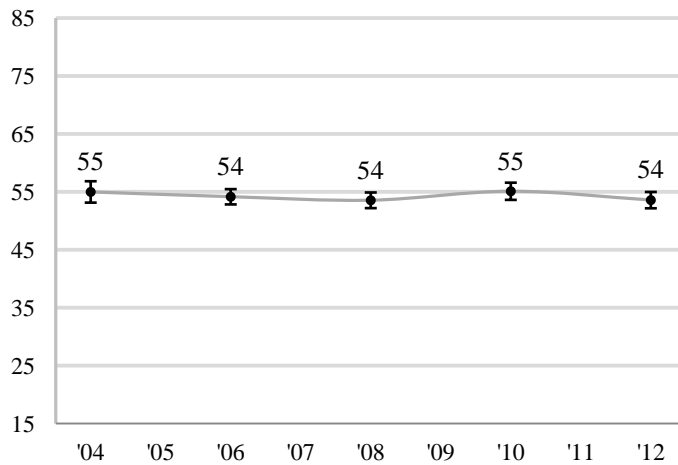
<sup>c</sup> Response rates (number of respondents divided by sample size) adjusted for ineligibility, nondeliverable addresses, and students who were unavailable during the survey administration.

<sup>d</sup> Sampling error gauges the precision of results based on a sample survey. It is an estimate of how much survey item percentages for your respondents could differ from those of the entire population of students at your institution. Data with larger sampling errors (such as +/-10%) need not be dismissed out of hand, but any results using them should be interpreted more conservatively.

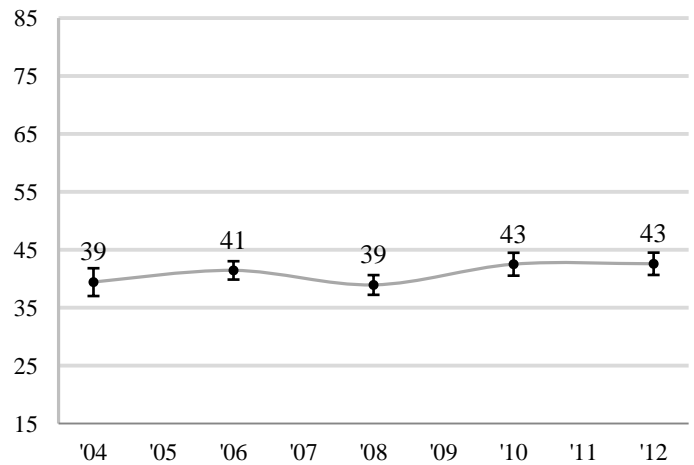
<sup>e</sup> This is the original count used to calculate response rates and sampling errors for each administration's *Respondent Characteristics* report. This number includes all census-administered and randomly sampled students. In 2004 and 2005 it may also include targeted oversamples. For this reason, the counts for 2004 and 2005 may not match those given in the detailed statistics on pages 5 and 7.

First-Year Students

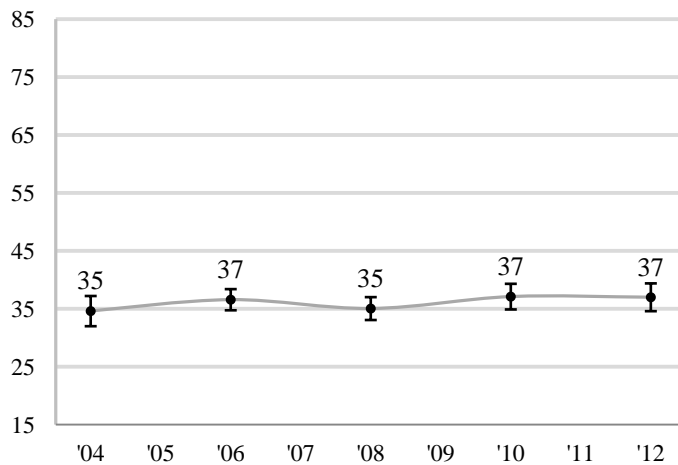
Level of Academic Challenge (LAC)



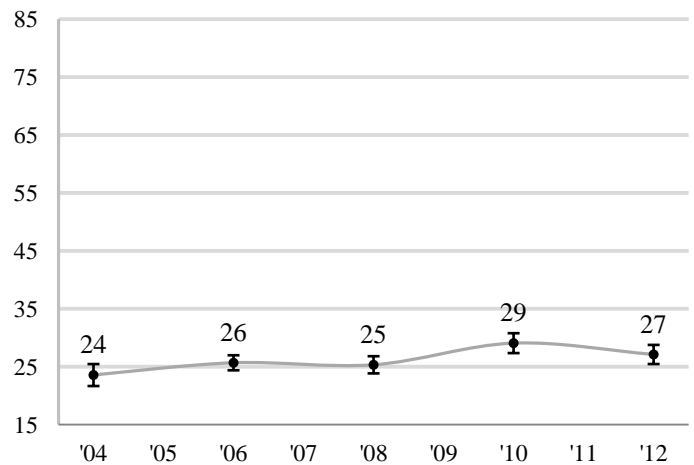
Active and Collaborative Learning (ACL)



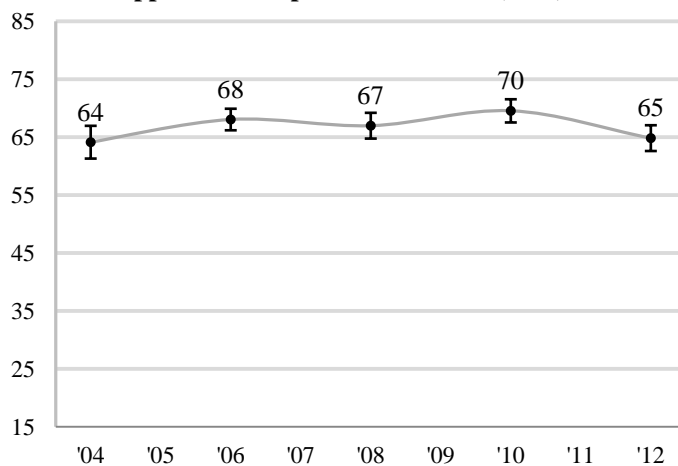
Student-Faculty Interaction (SFI)



Enriching Educational Experiences (EEE)



Supportive Campus Environment (SCE)



Notes:

- Benchmark scores are charted for all years of participation. See page 5 for detailed statistics.
- For more information and recommendations for analyzing multi-year NSSE data, consult the *Multi-Year Data Analysis Guide*. [nsse.iub.edu/pdf/MYDAG.pdf](http://nsse.iub.edu/pdf/MYDAG.pdf)

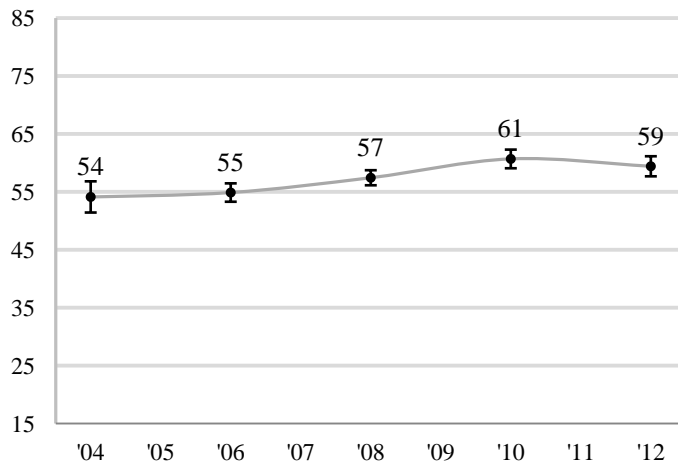
First-Year Students

		2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Level of Academic Challenge</b>	<b>LAC</b>	<b>55.0</b>		<b>54.2</b>		<b>53.6</b>		<b>55.1</b>		<b>53.6</b>
	n	142		330		281		275		233
	<i>SD</i>	11.2		12.2		11.6		12.6		11.0
	<i>SEM</i>	.94		.67		.69		.76		.72
	Upper	56.8		55.5		54.9		56.6		55.0
	Lower	53.2		52.8		52.2		53.6		52.2
<b>Active and Collaborative Learning</b>	<b>ACL</b>	<b>39.4</b>		<b>41.5</b>		<b>38.9</b>		<b>42.5</b>		<b>42.6</b>
	n	142		343		296		280		241
	<i>SD</i>	14.6		15.0		15.0		16.9		15.3
	<i>SEM</i>	1.22		.81		.87		1.01		.98
	Upper	41.8		43.0		40.6		44.5		44.5
	Lower	37.0		39.9		37.2		40.5		40.7
<b>Student-Faculty Interaction</b>	<b>SFI</b>	<b>34.6</b>		<b>36.6</b>		<b>35.0</b>		<b>37.1</b>		<b>37.0</b>
	n	142		331		288		276		233
	<i>SD</i>	15.9		17.0		17.1		18.8		18.7
	<i>SEM</i>	1.33		.93		1.01		1.13		1.22
	Upper	37.2		38.4		37.0		39.3		39.4
	Lower	32.0		34.7		33.1		34.9		34.6
<b>Enriching Educational Experiences</b>	<b>EEE</b>	<b>23.6</b>		<b>25.7</b>		<b>25.3</b>		<b>29.1</b>		<b>27.1</b>
	n	142		327		271		269		230
	<i>SD</i>	11.6		12.0		12.5		14.4		12.8
	<i>SEM</i>	.97		.66		.76		.88		.84
	Upper	25.5		27.0		26.8		30.8		28.8
	Lower	21.7		24.4		23.9		27.4		25.5
<b>Supportive Campus Environment</b>	<b>SCE</b>	<b>64.1</b>		<b>68.1</b>		<b>67.0</b>		<b>69.6</b>		<b>64.8</b>
	n	142		323		266		266		227
	<i>SD</i>	17.2		17.1		18.5		16.7		17.1
	<i>SEM</i>	1.44		.95		1.13		1.02		1.14
	Upper	67.0		69.9		69.2		71.6		67.1
	Lower	61.3		66.2		64.8		67.6		62.6

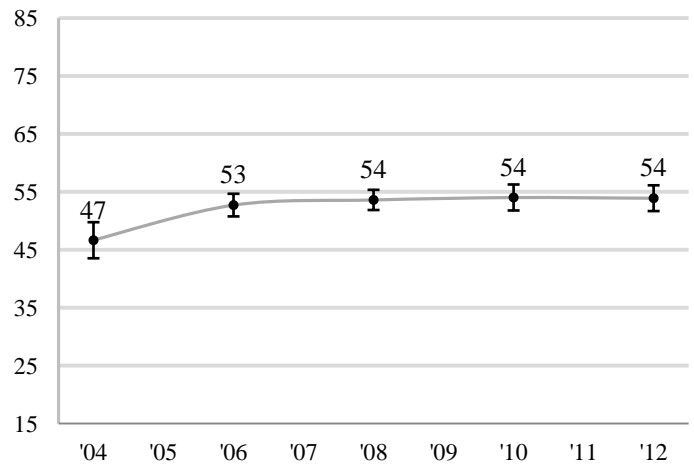
<sup>a</sup> n=number of respondents; *SD*=standard deviation; *SEM*=standard error of the mean; Upper/Lower=95% confidence interval limits

Seniors

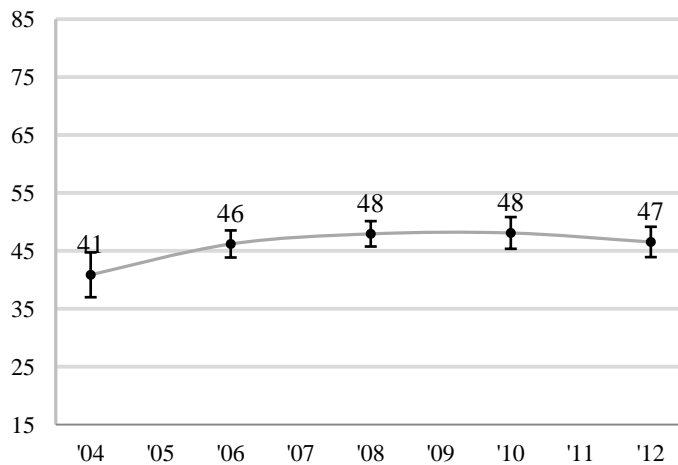
Level of Academic Challenge (LAC)



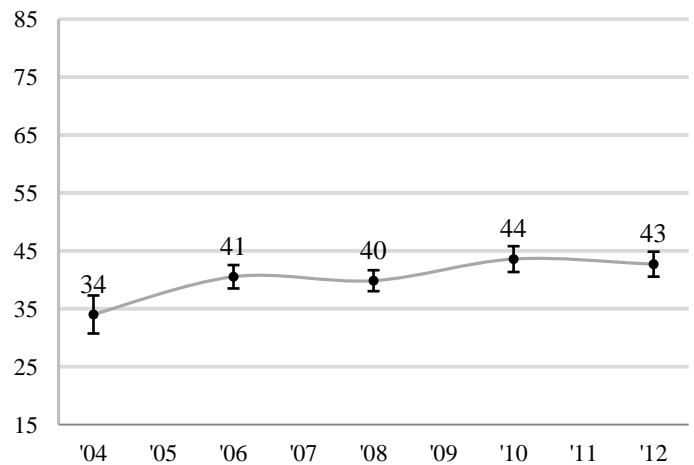
Active and Collaborative Learning (ACL)



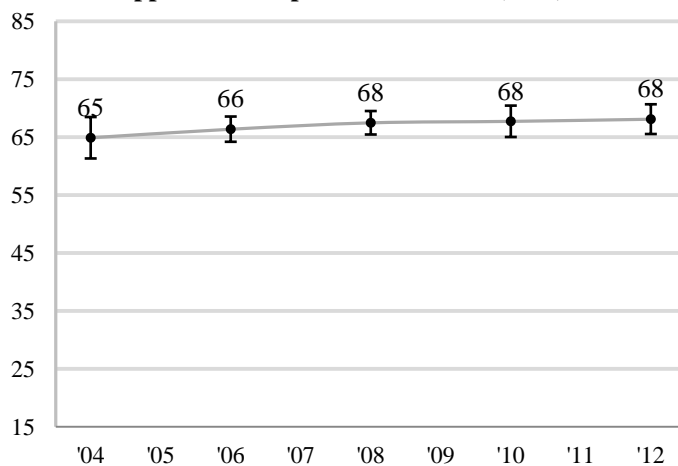
Student-Faculty Interaction (SFI)



Enriching Educational Experiences (EEE)



Supportive Campus Environment (SCE)



Notes:

- Benchmark scores are charted for all years of participation. See page 7 for detailed statistics.
- For more information and recommendations for analyzing multi-year NSSE data, consult the *Multi-Year Data Analysis Guide*. [nsse.iub.edu/pdf/MYDAG.pdf](http://nsse.iub.edu/pdf/MYDAG.pdf)

		Seniors								
		2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Level of Academic Challenge</b>	<b>LAC</b>	<b>54.1</b>		<b>54.9</b>		<b>57.4</b>		<b>60.7</b>		<b>59.4</b>
	n	106		257		360		205		246
	SD	14.1		13.0		12.6		11.8		13.9
	SEM	1.37		.81		.66		.82		.88
	Upper	56.8		56.5		58.7		62.3		61.2
	Lower	51.4		53.3		56.1		59.1		57.7
<b>Active and Collaborative Learning</b>	<b>ACL</b>	<b>46.7</b>		<b>52.7</b>		<b>53.6</b>		<b>54.0</b>		<b>53.9</b>
	n	106		260		374		210		253
	SD	16.4		16.1		17.2		16.6		18.1
	SEM	1.59		1.00		.89		1.14		1.14
	Upper	49.8		54.7		55.4		56.3		56.1
	Lower	43.5		50.8		51.9		51.8		51.7
<b>Student-Faculty Interaction</b>	<b>SFI</b>	<b>40.9</b>		<b>46.2</b>		<b>48.0</b>		<b>48.1</b>		<b>46.5</b>
	n	106		257		364		206		246
	SD	20.3		19.1		21.3		20.1		21.0
	SEM	1.97		1.19		1.12		1.40		1.34
	Upper	44.7		48.5		50.1		50.8		49.2
	Lower	37.0		43.9		45.8		45.4		43.9
<b>Enriching Educational Experiences</b>	<b>EEE</b>	<b>34.0</b>		<b>40.5</b>		<b>39.9</b>		<b>43.6</b>		<b>42.7</b>
	n	106		256		357		205		243
	SD	17.2		16.5		17.4		16.3		17.1
	SEM	1.67		1.03		.92		1.14		1.10
	Upper	37.3		42.6		41.7		45.8		44.9
	Lower	30.7		38.5		38.0		41.4		40.6
<b>Supportive Campus Environment</b>	<b>SCE</b>	<b>64.9</b>		<b>66.4</b>		<b>67.5</b>		<b>67.8</b>		<b>68.1</b>
	n	106		255		354		203		241
	SD	18.8		17.8		19.4		19.7		20.3
	SEM	1.83		1.11		1.03		1.38		1.31
	Upper	68.5		68.6		69.5		70.5		70.7
	Lower	61.3		64.2		65.5		65.0		65.6

<sup>a</sup> n=number of respondents; SD=standard deviation; SEM=standard error of the mean; Upper/Lower=95% confidence interval limits