NSSE

national survey of
student engagement

CUNY New York City College of Technology

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**

Key Terms and Features in this Report

Multi-year charts appear on pages 4 & 6

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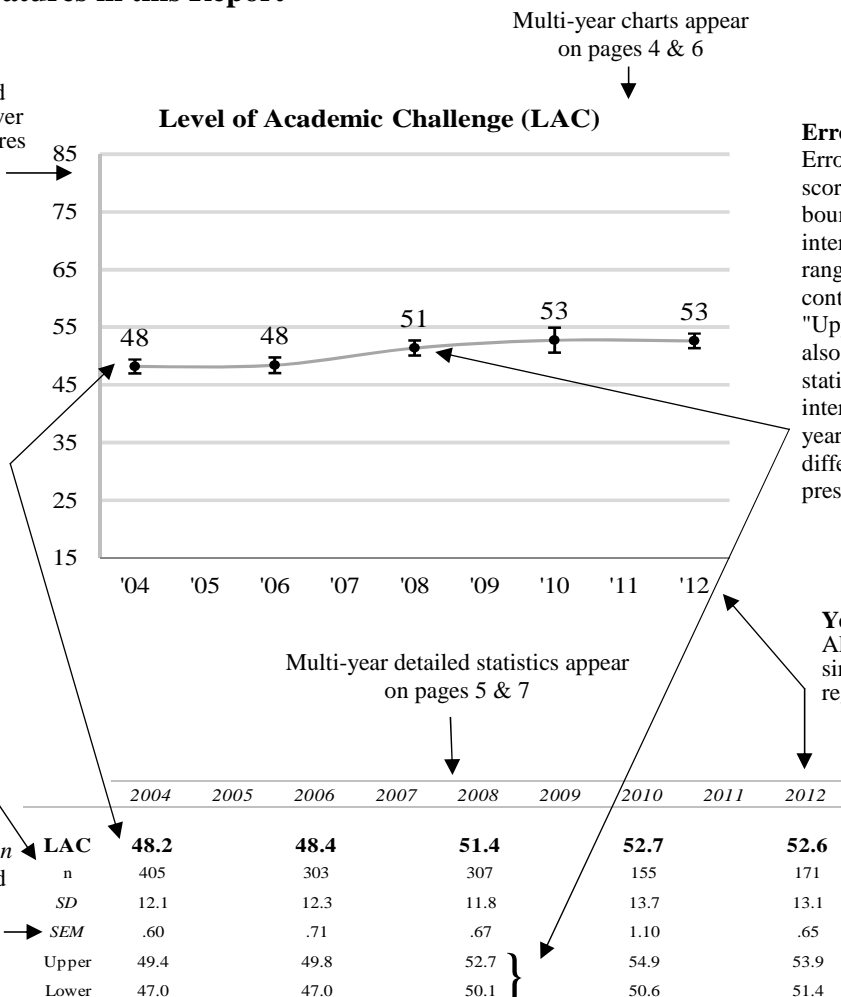
Benchmark Score
The benchmark score is the weighted average of the students' scores, using all census-adminstration and randomly sampled students from each year's data.

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

Error Bars/Confidence Intervals
Error bars around each benchmark score show the upper and lower bounds of the 95% confidence interval (mean +/- 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.

Level of Academic Challenge (LAC)

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

Multi-year detailed statistics appear on pages 5 & 7

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.

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

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

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[a]	Mode[b]	Response Rate[c]		Sampling Error[d]		Number of Respondents[e]	
		FY	SR	FY	SR	FY	SR
2004	Paper	30%	39%	6.7%	4.9%	192	264
2005							
2006							
2007	Paper	30%	30%	12.7%	14.5%	53	43
2008							
2009	Web+	10%	22%	18.3%	9.4%	26	85
2010							
2011							
2012	Web+	13%	22%	10.2%	5.4%	81	258

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

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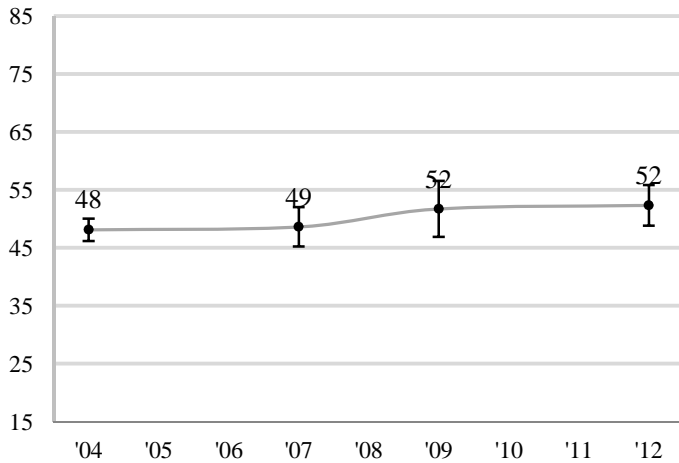
[c] Response rates (number of respondents divided by sample size) adjusted for ineligibility, nondeliverable addresses, and students who were unavailable during the survey administration.

[d] 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.
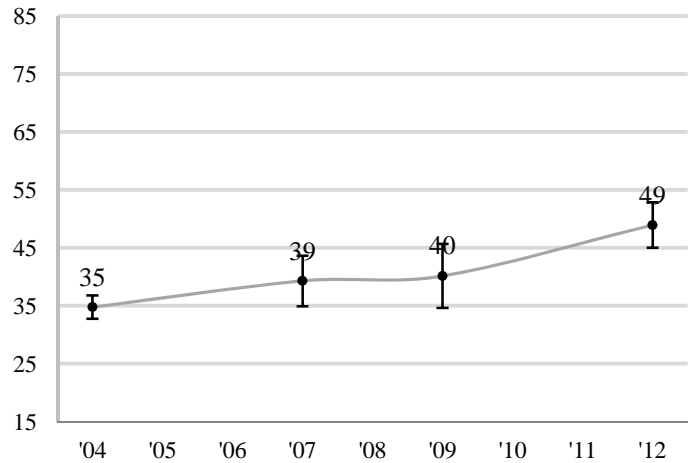
[e] This is the original count used to calculate response rates and sampling errors for each administration's *Respondent Characteristics* report. This number includes all census-administered and randomly sampled students. In 2004 and 2005 it may also include targeted oversamples. For this reason, the counts for 2004 and 2005 may not match those given in the detailed statistics on pages 5 and 7.
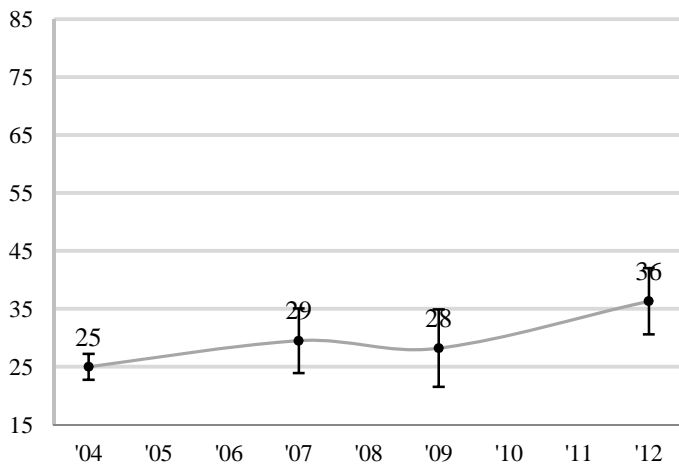
First-Year Students
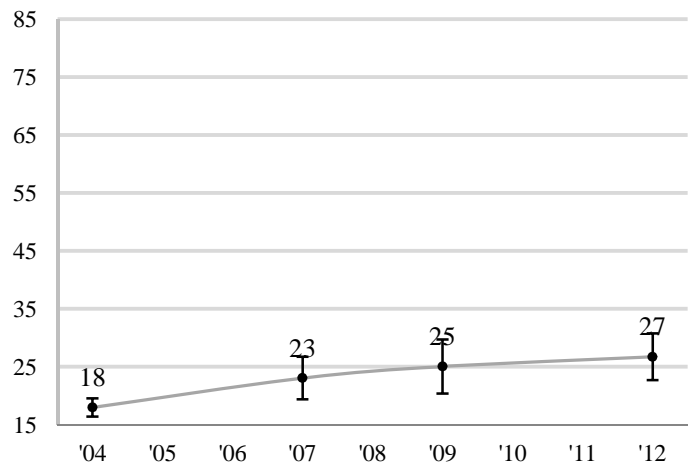
Level of Academic Challenge (LAC)

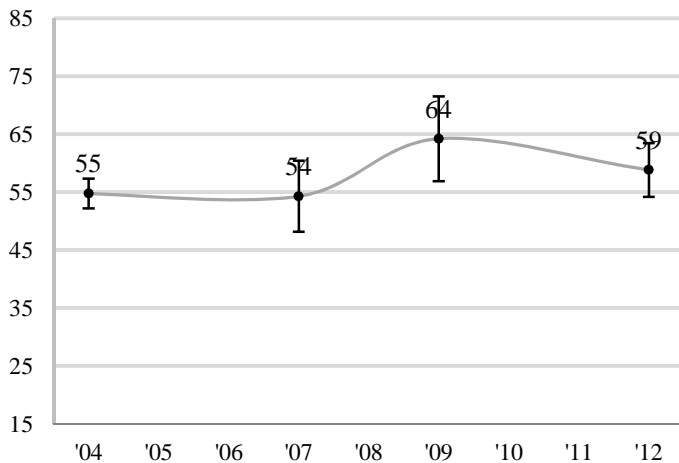### Active and Collaborative Learning (ACL)

Student-Faculty Interaction (SFI)

Enriching Educational Experiences (EEE)

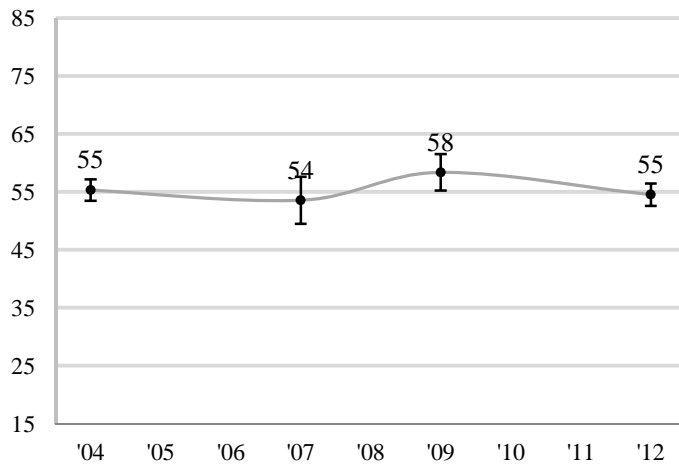
Supportive Campus Environment (SCE)

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**

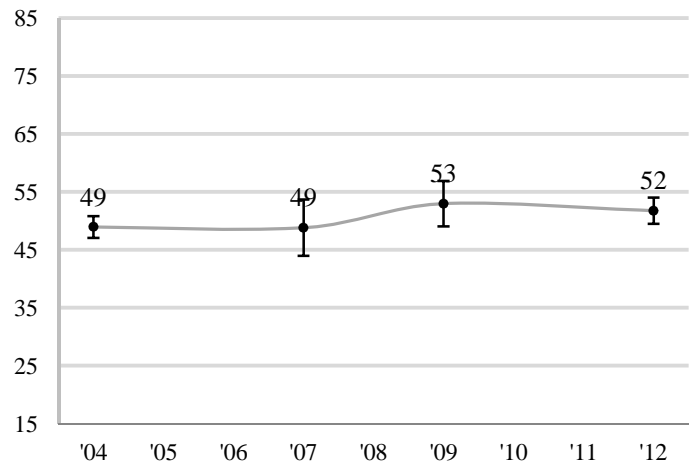|		2004	2005	2006	2007	2008	2009	2010	2011	2012
First-Year Students										
Level of Academic Challenge	**LAC**	**48.1**			**48.6**		**51.7**			**52.3**
	n	189			53		24			76
	SD	13.5			12.7		12.1			15.5
	SEM	.98			1.73		2.48			1.78
	Upper	50.0			52.0		56.6			55.8
	Lower	46.2			45.2		46.9			48.8
Active and Collaborative Learning	**ACL**	**34.7**			**39.3**		**40.1**			**48.9**
	n	190			53		26			79
	SD	14.2			16.2		14.4			17.8
	SEM	1.03			2.22		2.83			2.01
	Upper	36.8			43.6		45.7			52.9
	Lower	32.7			34.9		34.6			45.0
Student-Faculty Interaction	**SFI**	**25.0**			**29.5**		**28.2**			**36.3**
	n	189			53		25			77
	SD	15.5			20.7		17.0			25.5
	SEM	1.13			2.84		3.41			2.91
	Upper	27.2			35.0		34.9			42.0
	Lower	22.8			23.9		21.5			30.6
Enriching Educational Experiences	**EEE**	**18.0**			**23.0**		**25.0**			**26.7**
	n	189			53		24			73
	SD	11.1			13.8		11.6			17.5
	SEM	.80			1.88		2.37			2.06
	Upper	19.5			26.7		29.7			30.7
	Lower	16.4			19.3		20.4			22.7
Supportive Campus Environment	**SCE**	**54.8**			**54.3**		**64.2**			**58.8**
	n	189			53		23			70
	SD	18.0			22.9		17.8			19.9
	SEM	1.31			3.13		3.73			2.37
	Upper	57.3			60.4		71.5			63.5
	Lower	52.2			48.1		56.9			54.2

[a] n=number of respondents; SD =standard deviation; SEM =standard error of the mean; Upper/Lower=95% confidence interval limits
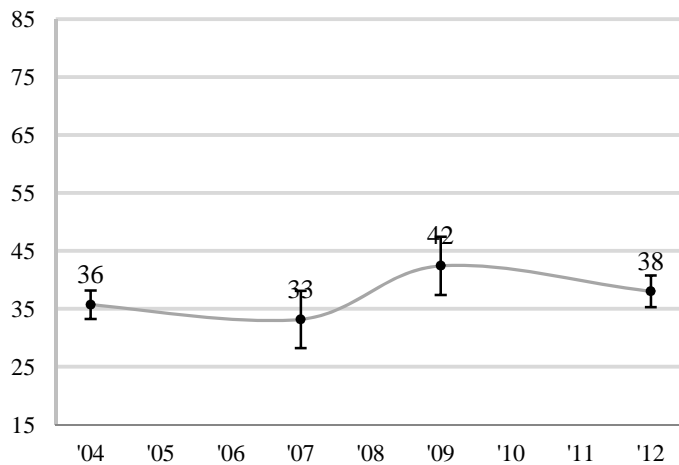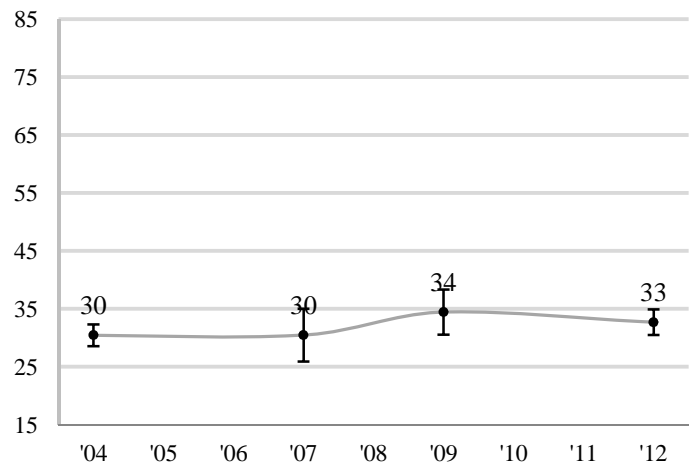
Seniors

Level of Academic Challenge (LAC)

Active and Collaborative Learning (ACL)
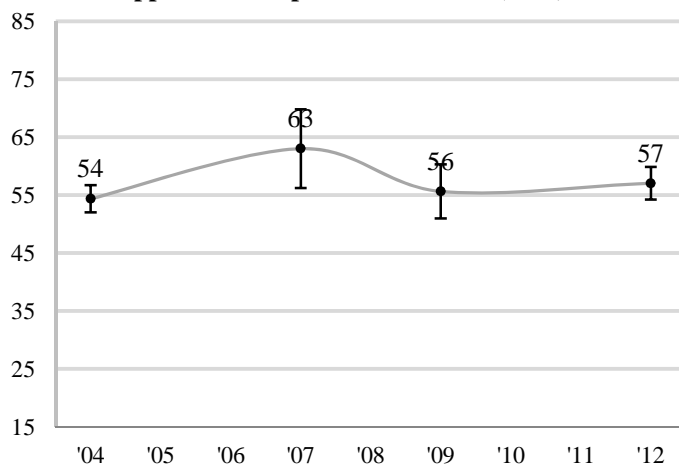

Student-Faculty Interaction (SFI)

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**

NSSE 2012 Multi-Year Benchmark Report
Detailed Statistics[a]

CUNY New York City College of Technology

						Seniors					
		2004	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Level of Academic Challenge	**LAC**	**55.3**			**53.6**		**58.4**			**54.5**
	n	256			43		82			235
	SD	15.1			13.6		14.5			15.2
	SEM	.94			2.07		1.60			.99
	Upper	57.2			57.6		61.5			56.5
	Lower	53.5			49.5		55.2			52.6
Active and Collaborative Learning	**ACL**	**49.0**			**48.8**		**53.0**			**51.8**
	n	259			43		85			257
	SD	15.4			16.3		18.4			18.6
	SEM	.96			2.49		2.00			1.16
	Upper	50.8			53.7		56.9			54.0
	Lower	47.1			43.9		49.0			49.5
Student-Faculty Interaction	**SFI**	**35.7**			**33.2**		**42.4**			**38.0**
	n	259			43		84			240
	SD	20.2			16.5		23.5			21.7
	SEM	1.26			2.52		2.56			1.40
	Upper	38.2			38.1		47.4			40.8
	Lower	33.3			28.2		37.4			35.3
Enriching Educational Experiences	**EEE**	**30.4**			**30.5**		**34.4**			**32.7**
	n	258			43		80			225
	SD	15.2			15.3		17.8			16.8
	SEM	.95			2.33		1.99			1.12
	Upper	32.3			35.0		38.3			34.9
	Lower	28.6			25.9		30.5			30.5
Supportive Campus Environment	**SCE**	**54.4**			**63.0**		**55.6**			**57.1**
	n	256			43		78			224
	SD	19.1			22.8		21.0			21.4
	SEM	1.20			3.47		2.39			1.43
	Upper	56.7			69.8		60.3			59.9
	Lower	52.0			56.2		51.0			54.2

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