



# University of Guelph

---

## Benchmark Comparisons

August 2011

## Interpreting the Benchmark Comparisons Report

To focus discussions about the importance of student engagement and to guide institutional improvement efforts, NSSE created five Benchmarks of Effective Educational Practice: Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, Enriching Educational Experiences, and Supportive Campus Environment. This Benchmark Comparisons Report compares the performance of your institution with your selected comparison groups. In addition, it provides comparisons with two sets of highly engaging institutions, those with benchmarks in the top 50% and top 10% of all NSSE institutions.

Each benchmark is an index of responses to several NSSE questions. Because NSSE questions have different response sets, each question's response set was rescaled from zero to 100, and students' rescaled responses were then averaged. Thus a benchmark score of zero would mean that every student chose the lowest response option for every item, and 100 would mean every student chose the highest response to every item. Although benchmarks are reported on a 0-100 scale, they are not percentages.

Additional details regarding how benchmarks are created can be found on the NSSE Web site. [nsse.iub.edu/links/institutional\\_reporting](http://nsse.iub.edu/links/institutional_reporting)

### Class and Sample

Means are reported for first-year students and seniors. Institution-reported class levels are used. All randomly selected or census-administered students are included in these analyses. Students in targeted or locally administered oversamples are not included.

### Mean

The mean is the *weighted* arithmetic average of the student level benchmark scores.

### Benchmark Description & Survey Items

A description of the benchmark and the individual items used in its creation is provided.

### Box and Whiskers Key

A box and whiskers chart is a concise way to summarize the variation of student benchmark scores. This display compares the distribution of scores at your institution, in percentile terms, with that of your comparison groups. The ends of the whiskers show the 5th and 95th percentile scores, while the box is bounded by the 25th and 75th percentiles. The bar inside the box indicates the median score, and the dot shows the mean score.

### Statistical Significance

Benchmarks with mean differences that are larger than would be expected by chance alone are noted with one, two, or three asterisks, denoting one of three significance levels ( $p < .05$ ,  $p < .01$ , and  $p < .001$ ). The smaller the significance level, the smaller the likelihood that the difference is due to chance. Please note that statistical significance does not guarantee that the result is substantive or important. Large sample sizes (as with the NSSE project) tend to produce more statistically significant results even though the magnitude of mean differences may be inconsequential. Consult effect sizes to judge the practical meaning of the results.

### Effect Size<sup>a</sup>

Effect size indicates the practical significance of the mean difference. It is calculated by dividing the mean difference by the pooled standard deviation. In practice, an effect size of .2 is often considered small, .5 moderate, and .8 large. A positive sign indicates that your institution's mean was greater, thus showing an affirmative result for the institution. A negative sign indicates the institution lags behind the comparison group, suggesting that the student behavior or institutional practice represented by the item may warrant attention.

### Level of Academic Challenge (LAC)

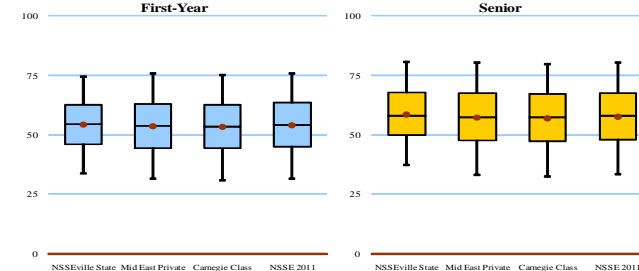
#### Mean Comparisons

NSSEville State University compared with:

Class	NSSEville State		Mid East Private		Carnegie Class		NSSE 2011	
	Mean <sup>a</sup>	Effect Size <sup>a</sup>	Mean <sup>a</sup>	Sig. <sup>b</sup>	Mean <sup>a</sup>	Sig. <sup>b</sup>	Mean <sup>a</sup>	Sig. <sup>b</sup>
First-Year	54.4		53.7	.05	53.3	*	54.1	.02
Senior	58.6		57.3	**	56.9	***	57.5	*.07

<sup>a</sup> Weighted by general enrollment status (and by institution size for comparison groups).  
<sup>b</sup> \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$  (2-tailed).  
<sup>c</sup> Mean difference divided by the pooled standard deviation.

#### Distributions of Student Benchmark Scores

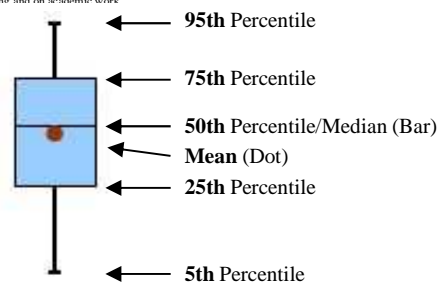


Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 30 and 31 for percentile values.

#### Level of Academic Challenge (LAC) Items

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.

- Hours spent preparing for class (studying, reading, writing, doing homework or lab work, etc. related to academic program)
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more, between 5 and 19 pages, and fewer than 5 pages
- Coursework emphasizes: Analysis of the basic elements of an idea, experience or theory
- Coursework emphasizes: Synthesis and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
- Coursework emphasizes: Making of judgments about the value of information, arguments, or methods
- Coursework emphasizes: Applying theories or concepts to practical problems or in new situations
- Working harder than you thought you could to meet an instructor's standards or expectations
- Campus environment emphasizes: Spending significant amount of time studying and on academic work



### Box and Whiskers Charts

A visual display of first-year and senior benchmark score dispersion for your institution and your selected comparison or consortium groups.

<sup>a</sup> See *Contextualizing NSSE Effect Sizes* at [nsse.iub.edu/pdf/effect\\_size\\_guide.pdf](http://nsse.iub.edu/pdf/effect_size_guide.pdf) for additional information.

## Level of Academic Challenge (LAC)

### Mean Comparisons

University of Guelph compared with:

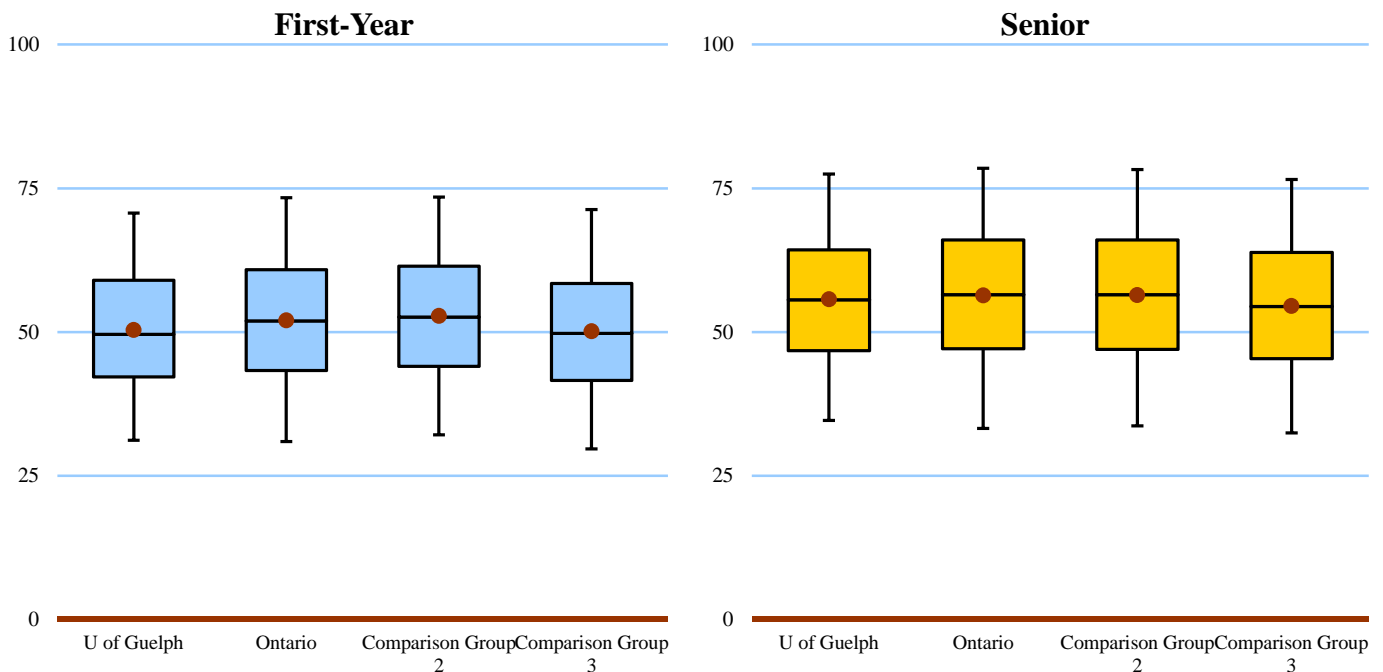
Class	U of Guelph	Ontario			Comparison Group 2			Comparison Group 3		
	Mean <sup>a</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>
First-Year	50.4	52.0	***	-.13	52.8	***	-.19	50.1		.02
Senior	55.7	56.4	*	-.05	56.4	*	-.06	54.5	***	.09

<sup>a</sup> Weighted by gender and enrollment status (and by institution size for comparison groups).

<sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>c</sup> Mean difference divided by the pooled standard deviation.

### Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

### Level of Academic Challenge (LAC) Items

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.

- Hours spent preparing for class (studying, reading, writing, doing homework or lab work, etc. related to academic program)
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more, between 5 and 19 pages, and fewer than 5 pages
- Coursework emphasizes: **Analysis** of the basic elements of an idea, experience or theory
- Coursework emphasizes: **Synthesis** and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
- Coursework emphasizes: **Making of judgments** about the value of information, arguments, or methods
- Coursework emphasizes: **Applying** theories or concepts to practical problems or in new situations
- Working harder than you thought you could to meet an instructor's standards or expectations
- Campus environment emphasizes: Spending significant amount of time studying and on academic work

## Active and Collaborative Learning (ACL)

### Mean Comparisons

University of Guelph compared with:

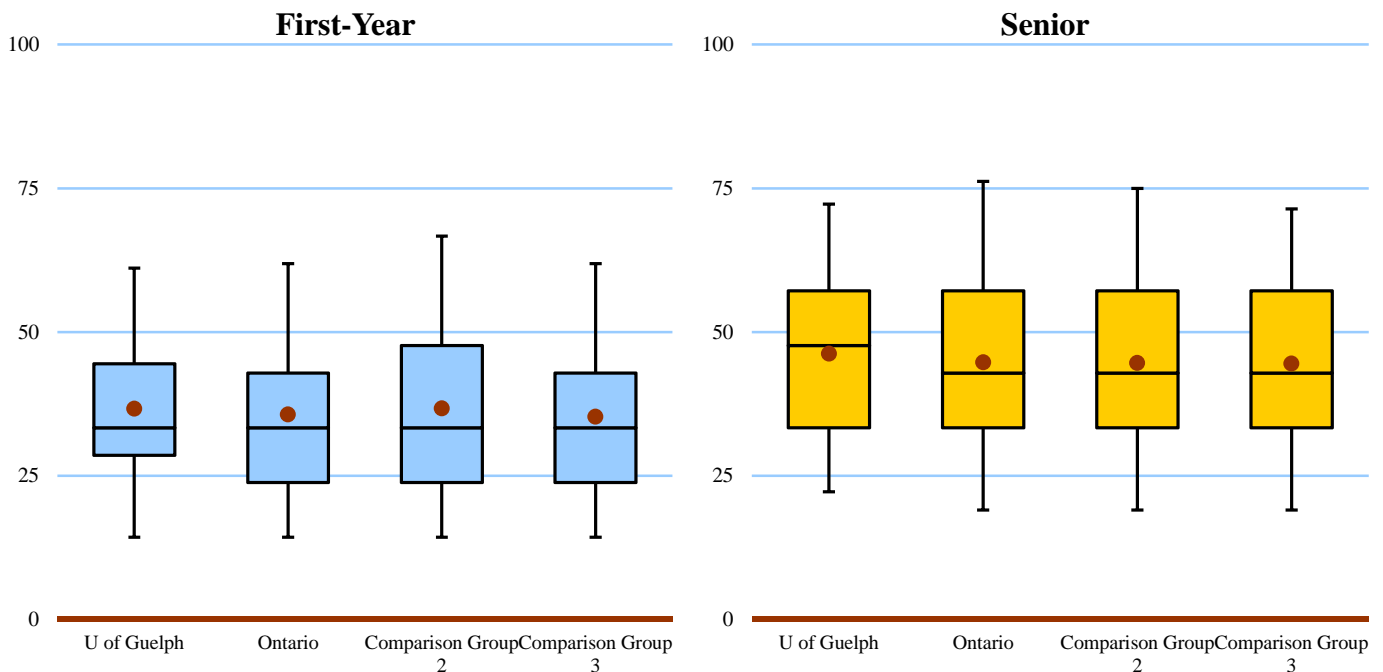
Class	U of Guelph	Ontario		Effect Size <sup>c</sup>	Comparison Group 2		Effect Size <sup>c</sup>	Comparison Group 3		Effect Size <sup>c</sup>
	Mean <sup>a</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>		Mean <sup>a</sup>	Sig <sup>b</sup>		Mean <sup>a</sup>	Sig <sup>b</sup>	
First-Year	36.7	35.6	**	.07	36.7		.00	35.2	***	.09
Senior	46.2	44.7	***	.09	44.6	***	.10	44.5	***	.11

<sup>a</sup> Weighted by gender and enrollment status (and by institution size for comparison groups).

<sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>c</sup> Mean difference divided by the pooled standard deviation.

### Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

### Active and Collaborative Learning (ACL) Items

Students learn more when they are intensely involved in their education and asked to think about what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students for the messy, unscripted problems they will encounter daily during and after college.

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects **during class**
- Worked with classmates **outside of class** to prepare class assignments
- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project (e.g., service learning) as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

## Student-Faculty Interaction (SFI)

### Mean Comparisons

University of Guelph compared with:

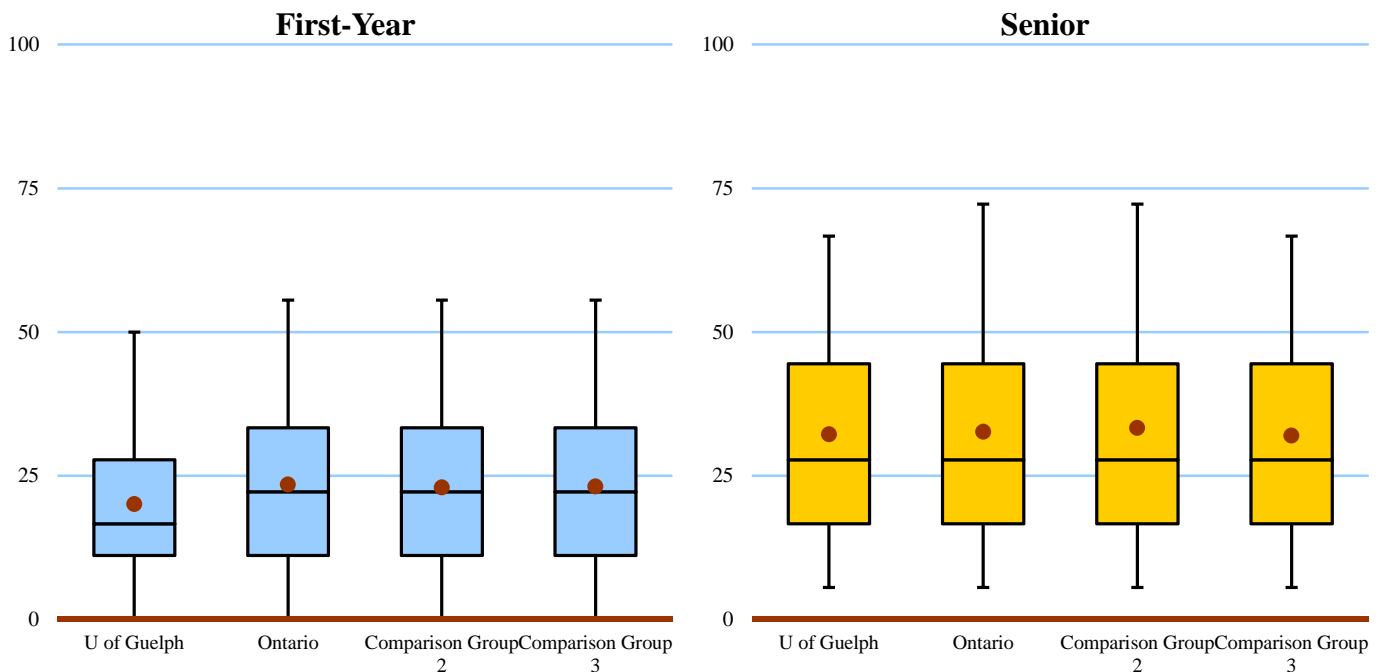
Class	U of Guelph	Ontario			Comparison Group 2			Comparison Group 3		
	Mean <sup>a</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>
First-Year	20.1	23.5	***	-.21	23.0	***	-.18	23.1	***	-.19
Senior	32.2	32.6		-.02	33.3	*	-.06	32.0		.01

<sup>a</sup> Weighted by gender and enrollment status (and by institution size for comparison groups).

<sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>c</sup> Mean difference divided by the pooled standard deviation.

### Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

### Student-Faculty Interaction (SFI) Items

Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your readings or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
- Received prompt written or oral feedback from faculty on your academic performance
- Worked on a research project with a faculty member outside of course or program requirements

## Enriching Educational Experiences (EEE)

### Mean Comparisons

University of Guelph compared with:

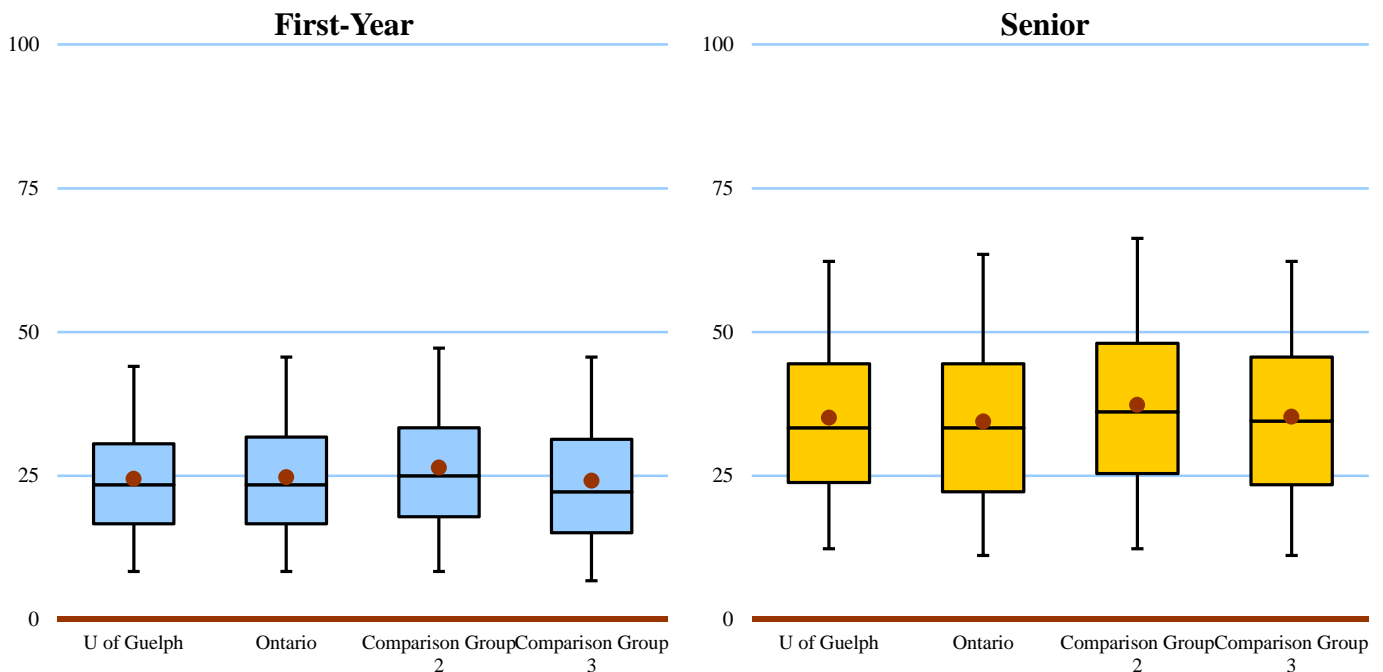
Class	U of Guelph	Ontario			Comparison Group 2			Comparison Group 3		
	Mean <sup>a</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>	Effect Size <sup>c</sup>
First-Year	24.4	24.7		-.02	26.4	***	-.16	24.1		.03
Senior	35.1	34.4		.04	37.3	***	-.14	35.3		-.01

<sup>a</sup> Weighted by gender and enrollment status (and by institution size for comparison groups).

<sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>c</sup> Mean difference divided by the pooled standard deviation.

### Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

### Enriching Educational Experiences (EEE) Items

Complementary learning opportunities enhance academic programs. Diversity experiences teach students valuable things about themselves and others. Technology facilitates collaboration between peers and instructors. Internships, community service, and senior capstone courses provide opportunities to integrate and apply knowledge.

- Hours spent participating in co-curricular activities (organizations, campus publications, student gov., social fraternity or sorority, etc.)
- Practicum, internship, field experience, co-op experience, or clinical assignment
- Community service or volunteer work
- Foreign language coursework and study abroad
- Independent study or self-designed major
- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)
- Serious conversations with students of different religious beliefs, political opinions, or personal values
- Serious conversations with students of a different race or ethnicity than your own
- Using electronic medium (e.g., listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment
- Campus environment encouraging contact among students from different economic, social, and racial or ethnic backgrounds
- Participate in a learning community or some other formal program where groups of students take two or more classes together

## Supportive Campus Environment (SCE)

### Mean Comparisons

University of Guelph compared with:

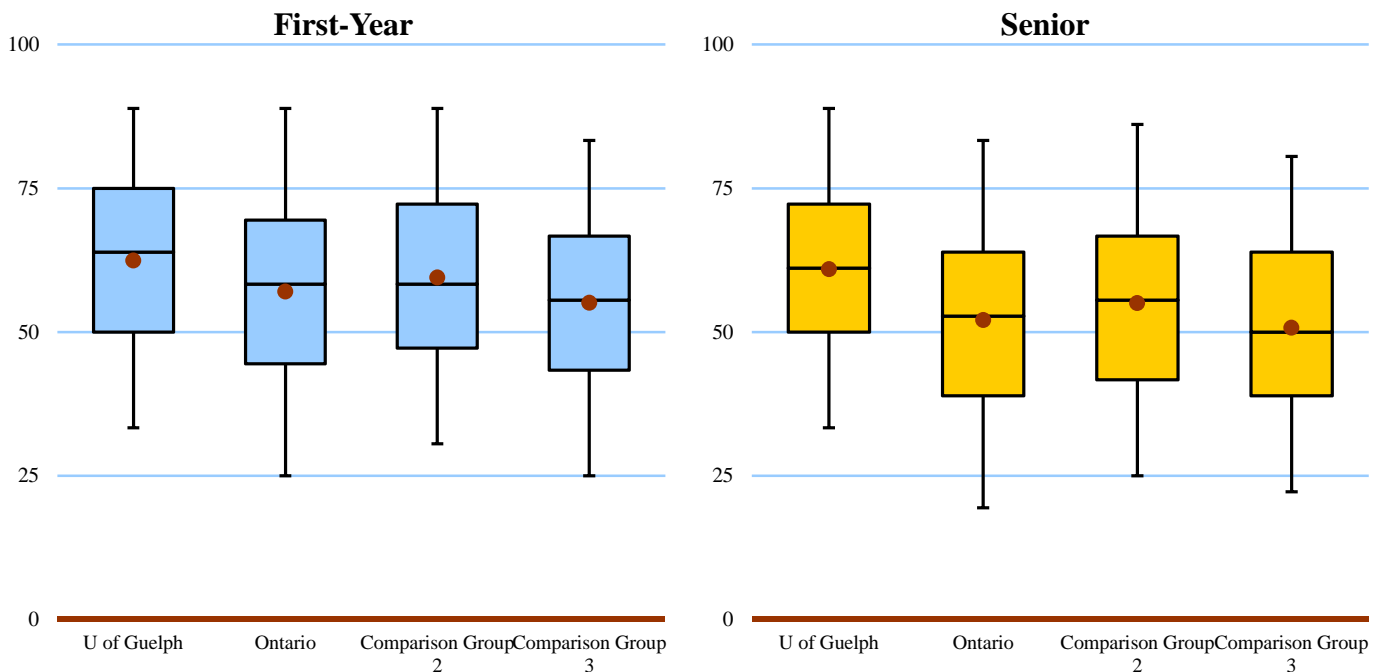
Class	U of Guelph	Ontario		Effect Size <sup>c</sup>	Comparison Group 2		Comparison Group 3		Effect Size <sup>c</sup>	
	Mean <sup>a</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>		Mean <sup>a</sup>	Sig <sup>b</sup>	Mean <sup>a</sup>	Sig <sup>b</sup>		
First-Year	62.4	57.0	***	.29	59.5	***	.17	55.0	***	.42
Senior	60.9	52.1	***	.46	55.0	***	.32	50.7	***	.57

<sup>a</sup> Weighted by gender and enrollment status (and by institution size for comparison groups).

<sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>c</sup> Mean difference divided by the pooled standard deviation.

### Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

### Supportive Campus Environment (SCE) Items

Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus.

- Campus environment provides the support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Campus environment provides the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices

**First-Year Students**

	Mean Statistics			Distribution Statistics					Reference Group Comparison Statistics			
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	Percentiles <sup>d</sup>					Deg. of Freedom <sup>e</sup>	Mean Diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
				5th	25th	50th	75th	95th				
<b>LEVEL OF ACADEMIC CHALLENGE (LAC)</b>												
U of Guelph (N = 1643)	50.4	12.0	.3	31	42	50	59	71				
Ontario	52.0	12.9	.1	31	43	52	61	73	1,874	-1.7	.000	-.13
Comparison Group 2	52.8	12.7	.1	32	44	53	61	73	2,300	-2.4	.000	-.19
Comparison Group 3	50.1	12.8	.1	30	42	50	58	71	2,108	.2	.430	.02
Top 50%	56.3	12.9	.0	35	48	56	65	77	1,702	-5.9	.000	-.46
Top 10%	60.7	12.3	.1	40	52	61	69	80	15,285	-10.3	.000	-.84
<b>ACTIVE AND COLLABORATIVE LEARNING (ACL)</b>												
U of Guelph (N = 1735)	36.7	14.0	.3	14	29	33	44	61				
Ontario	35.6	15.8	.1	14	24	33	43	62	2,001	1.0	.003	.07
Comparison Group 2	36.7	15.5	.2	14	24	33	48	67	2,487	.0	.975	.00
Comparison Group 3	35.2	15.3	.1	14	24	33	43	62	2,249	1.4	.000	.09
Top 50%	47.5	16.7	.1	24	33	48	57	76	1,833	-10.8	.000	-.65
Top 10%	51.8	17.8	.1	24	38	52	62	81	2,420	-15.1	.000	-.87
<b>STUDENT-FACULTY INTERACTION (SFI)</b>												
U of Guelph (N = 1655)	20.1	14.3	.4	0	11	17	28	50				
Ontario	23.5	16.7	.1	0	11	22	33	56	1,930	-3.4	.000	-.21
Comparison Group 2	23.0	16.4	.2	0	11	22	33	56	2,443	-2.9	.000	-.18
Comparison Group 3	23.1	16.0	.1	0	11	22	33	56	2,176	-3.1	.000	-.19
Top 50%	38.8	19.2	.1	11	25	33	50	73	1,785	-18.8	.000	-.98
Top 10%	43.4	21.2	.2	11	28	39	56	83	2,729	-23.3	.000	-1.13
<b>ENRICHING EDUCATIONAL EXPERIENCES (EEE)</b>												
U of Guelph (N = 1615)	24.4	11.4	.3	8	17	23	31	44				
Ontario	24.7	12.3	.1	8	17	23	32	46	1,848	-.3	.306	-.02
Comparison Group 2	26.4	12.0	.1	8	18	25	33	47	2,265	-1.9	.000	-.16
Comparison Group 3	24.1	12.3	.1	7	15	22	31	46	2,089	.3	.296	.03
Top 50%	30.3	13.3	.0	11	21	29	38	52	1,674	-5.9	.000	-.44
Top 10%	33.5	13.9	.1	12	23	33	42	57	2,033	-9.1	.000	-.66
<b>SUPPORTIVE CAMPUS ENVIRONMENT (SCE)</b>												
U of Guelph (N = 1600)	62.4	17.2	.4	33	50	64	75	89				
Ontario	57.0	18.6	.1	25	44	58	69	89	1,832	5.4	.000	.29
Comparison Group 2	59.5	17.9	.2	31	47	58	72	89	10,930	3.0	.000	.17
Comparison Group 3	55.0	17.6	.2	25	43	56	67	83	14,790	7.4	.000	.42
Top 50%	66.9	18.4	.1	36	56	67	81	97	1,669	-4.5	.000	-.24
Top 10%	70.7	17.9	.1	39	58	72	83	100	1,975	-8.3	.000	-.46

<sup>a</sup> All statistics are weighted by gender and enrollment status. Comparison group statistics are also weighted by institutional size.

<sup>b</sup> Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.

<sup>c</sup> Standard Error of the Mean: Use SEM to compute a confidence interval (CI) around the sample mean. For example, the 95% CI is the range of values that is 95% likely to contain the true population mean, equal to the sample mean +/- 1.96 \* SEM.

<sup>d</sup> A percentile is the point in the distribution of student-level benchmark scores at or below which a given percentage of benchmark scores fall.

<sup>e</sup> Degrees of freedom used to compute the t-tests. Values vary for the total Ns due to weighting and whether equal variances were assumed.

<sup>f</sup> Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

<sup>g</sup> Effect size is calculated by subtracting the comparison group mean from the school mean, and dividing the result by the pooled standard deviation.

**Seniors**

	Mean Statistics		Distribution Statistics					Reference Group Comparison Statistics				
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	Percentiles <sup>d</sup>					Deg. of Freedom <sup>e</sup>	Mean Diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
				5th	25th	50th	75th	95th				
<b>LEVEL OF ACADEMIC CHALLENGE (LAC)</b>												
U of Guelph (N = 1629)	55.7	12.8	.3	35	47	56	64	77				
Ontario	56.4	13.8	.1	33	47	56	66	78	1,848	-.7	.039	-.05
Comparison Group 2	56.4	13.6	.1	34	47	56	66	78	2,326	-.8	.030	-.06
Comparison Group 3	54.5	13.4	.1	32	45	54	64	77	2,001	1.2	.000	.09
Top 50%	60.1	13.7	.0	37	51	61	70	82	1,680	-4.5	.000	-.33
Top 10%	64.1	13.0	.1	42	55	65	73	84	18,931	-8.4	.000	-.64
<b>ACTIVE AND COLLABORATIVE LEARNING (ACL)</b>												
U of Guelph (N = 1684)	46.2	16.0	.4	22	33	48	57	72				
Ontario	44.7	17.2	.1	19	33	43	57	76	1,905	1.6	.000	.09
Comparison Group 2	44.6	16.7	.2	19	33	43	57	75	11,410	1.6	.000	.10
Comparison Group 3	44.5	16.6	.1	19	33	43	57	71	18,920	1.8	.000	.11
Top 50%	55.8	17.2	.1	29	43	57	67	86	1,744	-9.6	.000	-.56
Top 10%	60.0	17.8	.1	33	48	61	71	90	2,092	-13.7	.000	-.78
<b>STUDENT-FACULTY INTERACTION (SFI)</b>												
U of Guelph (N = 1640)	32.2	18.7	.5	6	17	28	44	67				
Ontario	32.6	19.7	.1	6	17	28	44	72	1,849	-.4	.352	-.02
Comparison Group 2	33.3	19.8	.2	6	17	28	44	72	2,338	-1.1	.025	-.06
Comparison Group 3	32.0	19.0	.1	6	17	28	44	67	18,121	.2	.627	.01
Top 50%	48.7	21.7	.1	17	33	44	61	89	1,727	-16.4	.000	-.76
Top 10%	55.8	22.5	.2	22	39	56	72	94	2,356	-23.6	.000	-1.07
<b>ENRICHING EDUCATIONAL EXPERIENCES (EEE)</b>												
U of Guelph (N = 1616)	35.1	15.4	.4	12	24	33	44	62				
Ontario	34.4	16.1	.1	11	22	33	44	63	1,821	.7	.084	.04
Comparison Group 2	37.3	16.1	.2	12	25	36	48	66	2,284	-2.2	.000	-.14
Comparison Group 3	35.3	15.9	.1	11	23	35	46	62	1,974	-.2	.681	-.01
Top 50%	46.1	17.8	.0	17	33	46	58	76	1,666	-11.0	.000	-.62
Top 10%	54.8	17.0	.1	25	44	56	67	82	1,999	-19.7	.000	-1.16
<b>SUPPORTIVE CAMPUS ENVIRONMENT (SCE)</b>												
U of Guelph (N = 1607)	60.9	17.1	.4	33	50	61	72	89				
Ontario	52.1	19.2	.1	19	39	53	64	83	1,843	8.8	.000	.46
Comparison Group 2	55.0	18.5	.2	25	42	56	67	86	2,324	5.9	.000	.32
Comparison Group 3	50.7	18.1	.1	22	39	50	64	81	1,984	10.2	.000	.57
Top 50%	64.7	18.9	.1	33	53	67	78	94	1,672	-3.8	.000	-.20
Top 10%	68.7	18.5	.1	36	56	69	83	100	2,000	-7.8	.000	-.42

<sup>a</sup> All statistics are weighted by gender and enrollment status. Comparison group statistics are also weighted by institutional size.

<sup>b</sup> Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.

<sup>c</sup> Standard Error of the Mean: Use SEM to compute a confidence interval (CI) around the sample mean. For example, the 95% CI is the range of values that is 95% likely to contain the true population mean, equal to the sample mean +/- 1.96 \* SEM.

<sup>d</sup> A percentile is the point in the distribution of student-level benchmark scores at or below which a given percentage of benchmark scores fall.

<sup>e</sup> Degrees of freedom used to compute the t-tests. Values vary for the total Ns due to weighting and whether equal variances were assumed.

<sup>f</sup> Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

<sup>g</sup> Effect size is calculated by subtracting the comparison group mean from the school mean, and dividing the result by the pooled standard deviation.