
NSSE 2014
Engagement Indicators
University of Waterloo

About Your Engagement Indicators Report

Engagement Indicators (EIs) provide a useful summary of the detailed information contained in your students' NSSE responses. By combining responses to related NSSE questions, each EI offers valuable information about a distinct aspect of student engagement. Ten indicators, based on three to eight survey questions each (a total of 47 survey questions), are organized into four broad themes as shown at right.

Theme	Engagement Indicator
<i>Academic Challenge</i>	Higher-Order Learning
	Reflective & Integrative Learning
	Learning Strategies
	Quantitative Reasoning
<i>Learning with Peers</i>	Collaborative Learning
	Discussions with Diverse Others
<i>Experiences with Faculty</i>	Student-Faculty Interaction
	Effective Teaching Practices
<i>Campus Environment</i>	Quality of Interactions
	Supportive Environment

Report sections

- Overview (p. 3)** Displays how average EI scores for your first-year and senior students compare with those of students at your comparison group institutions.
- Theme Reports (pp. 4-13)** Detailed views of EI scores within the four themes for your students and those at comparison group institutions. Three views offer varied insights into your EI scores:

 - Mean Comparisons**
Straightforward comparisons of average scores between your students and those at comparison group institutions, with tests of significance and effect sizes (see below).
 - Score Distributions**
Box-and-whisker charts show the variation in scores *within* your institution and comparison groups.
 - Summary of Indicator Items**
Responses to each item in a given EI are displayed for your institution and comparison groups.
- Comparisons with High-Performing Institutions (p. 15)** Comparisons of your students' average scores on each EI with those of students at institutions whose average scores were in the top 50% and top 10% of 2013 and 2014 participating institutions.
- Detailed Statistics (pp. 16-19)** Detailed information about EI score means, distributions, and tests of statistical significance.

Interpreting comparisons

Mean comparisons report both statistical significance and effect size. Effect size indicates the practical importance of an observed difference. An effect size of .2 is generally considered small, .5 medium, and .8 large. Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview (p. 3).

EIs vary more among students within an institution than between institutions, like many experiences and outcomes in higher education. As a result, focusing attention on average scores alone amounts to examining the tip of the iceberg. It's equally important to understand how student engagement varies within your institution. Score distributions indicate how EI scores vary among your students and those in your comparison groups. The Report Builder—Institution Version and your *Major Field Report* (both to be released in the fall) offer valuable perspectives on internal variation and help you investigate your students' engagement in depth.

How Engagement Indicators are computed

Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

For more information on EIs and their psychometric properties, refer to the NSSE Web site: nsse.iub.edu

Engagement Indicators: Overview

Engagement Indicators are summary measures based on sets of NSSE questions examining key dimensions of student engagement. The ten indicators are organized within four themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The tables below compare average scores for your students with those in your comparison groups.

Use the following key:

- ▲ **Your students' average** was significantly higher ($p < .05$) with an effect size at least .3 in magnitude.
- △ **Your students' average** was significantly higher ($p < .05$) with an effect size less than .3 in magnitude.
- No significant difference.
- ▽ **Your students' average** was significantly lower ($p < .05$) with an effect size less than .3 in magnitude.
- ▼ **Your students' average** was significantly lower ($p < .05$) with an effect size at least .3 in magnitude.

First-Year Students

<i>Theme</i>	<i>Engagement Indicator</i>	Your first-year students compared with Ontario Universities	Your first-year students compared with U15	Your first-year students compared with Custom group
<i>Academic Challenge</i>	Higher-Order Learning	▽	△	--
	Reflective & Integrative Learning	▽	▽	▽
	Learning Strategies	--	▽	▽
	Quantitative Reasoning	△	△	△
<i>Learning with Peers</i>	Collaborative Learning	△	△	△
	Discussions with Diverse Others	△	△	--
<i>Experiences with Faculty</i>	Student-Faculty Interaction	△	△	△
	Effective Teaching Practices	--	--	--
<i>Campus Environment</i>	Quality of Interactions	△	△	△
	Supportive Environment	--	--	--

Seniors

<i>Theme</i>	<i>Engagement Indicator</i>	Your seniors compared with Ontario Universities	Your seniors compared with U15	Your seniors compared with Custom group
<i>Academic Challenge</i>	Higher-Order Learning	▽	▽	▽
	Reflective & Integrative Learning	▼	▼	▼
	Learning Strategies	▽	▽	▽
	Quantitative Reasoning	△	△	△
<i>Learning with Peers</i>	Collaborative Learning	△	△	△
	Discussions with Diverse Others	▽	--	▽
<i>Experiences with Faculty</i>	Student-Faculty Interaction	▽	▽	▽
	Effective Teaching Practices	▽	▽	▽
<i>Campus Environment</i>	Quality of Interactions	▽	--	--
	Supportive Environment	▽	▽	▽

Academic Challenge: First-year students

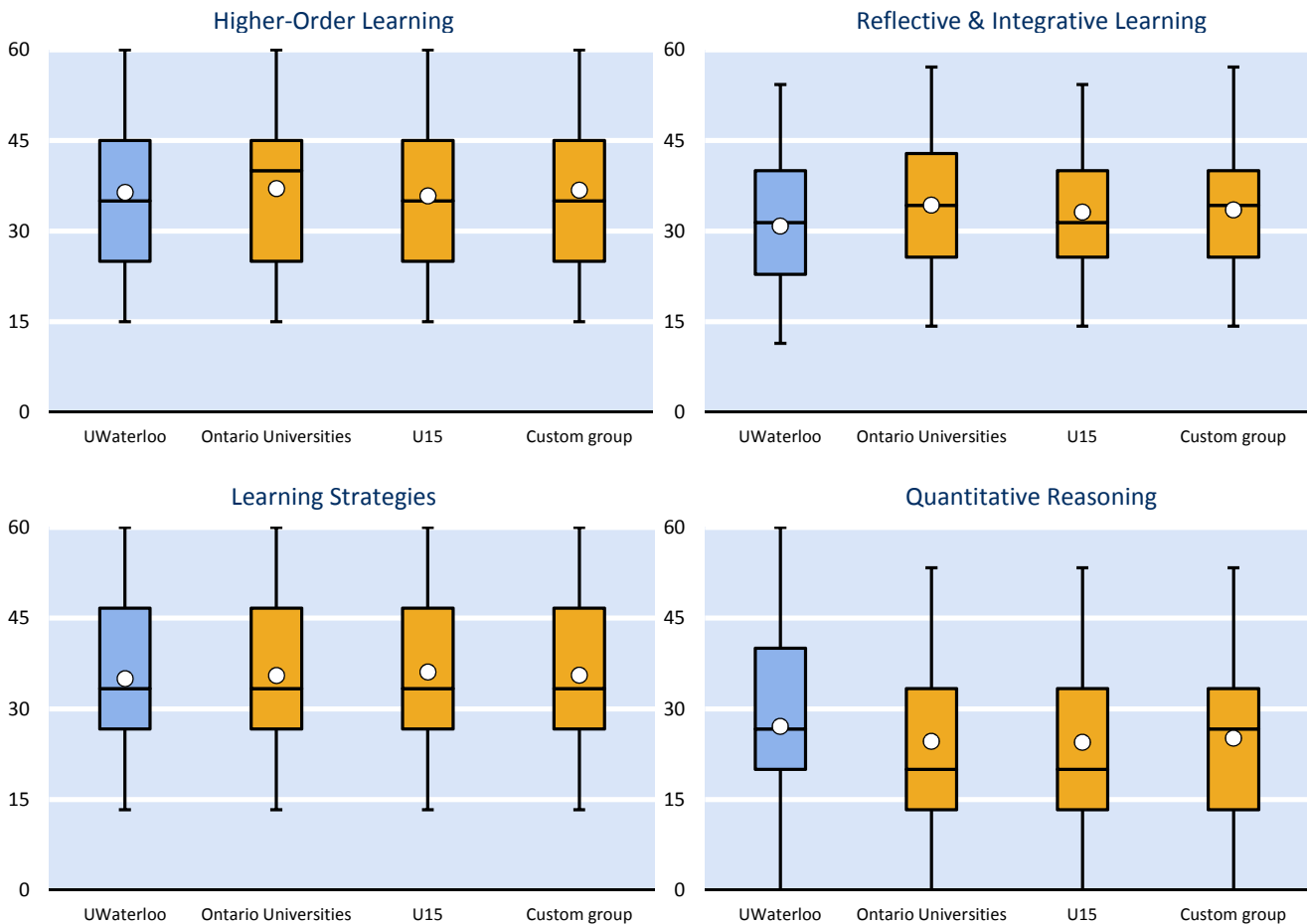
Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote student learning by challenging and supporting them to engage in various forms of deep learning. Four Engagement Indicators are part of this theme: *Higher-Order Learning*, *Reflective & Integrative Learning*, *Learning Strategies*, and *Quantitative Reasoning*. Below and on the next page are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	UWaterloo Mean	Your first-year students compared with					
		Ontario Universities		U15		Custom group	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Higher-Order Learning	36.4	37.0 *	-.05	35.8 *	.04	36.8	-.03
Reflective & Integrative Learning	30.8	34.3 ***	-.28	33.1 ***	-.19	33.5 ***	-.22
Learning Strategies	35.0	35.5	-.03	36.1 ***	-.08	35.6 *	-.04
Quantitative Reasoning	27.1	24.6 ***	.15	24.5 ***	.17	25.2 ***	.12

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.





































































Score Distributions



Notes: 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 represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Academic Challenge: First-year students (continued)

Summary of Indicator Items

	UWaterloo	Ontario Universities	U15	Custom group
Higher-Order Learning				
<i>Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized...</i>				
	%	%	%	%
4b. Applying facts, theories, or methods to practical problems or new situations	79 	73 	73 	75 
4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	68 	68 	67 	69 
4d. Evaluating a point of view, decision, or information source	51 	61 	55 	57 
4e. Forming a new idea or understanding from various pieces of information	58 	61 	58 	60 
Reflective & Integrative Learning				
<i>Percentage of students who responded that they "Very often" or "Often"...</i>				
2a. Combined ideas from different courses when completing assignments	53 	57 	56 	55 
2b. Connected your learning to societal problems or issues	39 	52 	49 	48 
2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	30 	42 	36 	39 
2d. Examined the strengths and weaknesses of your own views on a topic or issue	48 	56 	52 	54 
2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	54 	62 	59 	60 
2f. Learned something that changed the way you understand an issue or concept	62 	67 	66 	66 
2g. Connected ideas from your courses to your prior experiences and knowledge	70 	76 	76 	76 
Learning Strategies				
<i>Percentage of students who responded that they "Very often" or "Often"...</i>				
9a. Identified key information from reading assignments	73 	77 	76 	76 
9b. Reviewed your notes after class	50 	48 	51 	49 
9c. Summarized what you learned in class or from course materials	55 	56 	57 	56 
Quantitative Reasoning				
<i>Percentage of students who responded that they "Very often" or "Often"...</i>				
6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	54 	45 	46 	47 
6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	35 	33 	32 	32 
6c. Evaluated what others have concluded from numerical information	36 	33 	33 	34 

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

Academic Challenge: Seniors

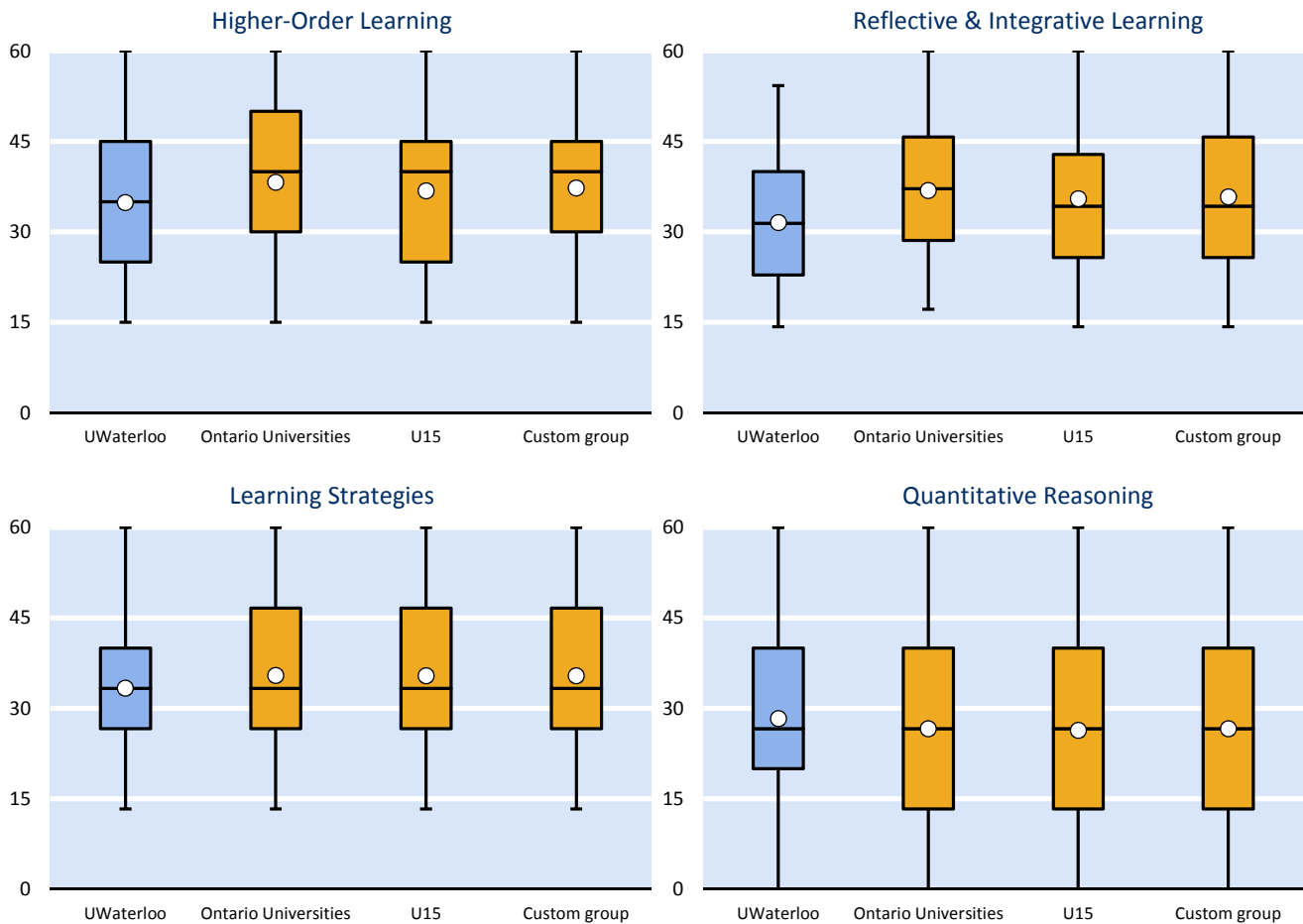
Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote student learning by challenging and supporting them to engage in various forms of deep learning. Four Engagement Indicators are part of this theme: *Higher-Order Learning*, *Reflective & Integrative Learning*, *Learning Strategies*, and *Quantitative Reasoning*. Below and on the next page are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	UWaterloo Mean	Your seniors compared with					
		Ontario Universities		U15		Custom group	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Higher-Order Learning	34.8	38.3 ***	-.25	36.8 ***	-.14	37.3 ***	-.17
Reflective & Integrative Learning	31.6	36.9 ***	-.42	35.5 ***	-.31	35.8 ***	-.33
Learning Strategies	33.4	35.5 ***	-.15	35.4 ***	-.14	35.4 ***	-.14
Quantitative Reasoning	28.3	26.6 ***	.10	26.4 ***	.12	26.6 ***	.10

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.





































































Score Distributions



Notes: 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 represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Academic Challenge: Seniors (continued)

Summary of Indicator Items

	UWaterloo	Ontario Universities	U15	Custom group
Higher-Order Learning				
<i>Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized...</i>				
	%	%	%	%
4b. Applying facts, theories, or methods to practical problems or new situations	73 	74 	73 	73 
4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	66 	72 	69 	69 
4d. Evaluating a point of view, decision, or information source	51 	66 	61 	62 
4e. Forming a new idea or understanding from various pieces of information	55 	65 	62 	63 
Reflective & Integrative Learning				
<i>Percentage of students who responded that they "Very often" or "Often"...</i>				
2a. Combined ideas from different courses when completing assignments	61 	70 	68 	67 
2b. Connected your learning to societal problems or issues	42 	60 	56 	56 
2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	31 	49 	42 	45 
2d. Examined the strengths and weaknesses of your own views on a topic or issue	46 	60 	57 	58 
2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	55 	65 	62 	62 
2f. Learned something that changed the way you understand an issue or concept	61 	70 	67 	68 
2g. Connected ideas from your courses to your prior experiences and knowledge	70 	80 	78 	78 
Learning Strategies				
<i>Percentage of students who responded that they "Very often" or "Often"...</i>				
9a. Identified key information from reading assignments	74 	80 	78 	79 
9b. Reviewed your notes after class	42 	44 	45 	44 
9c. Summarized what you learned in class or from course materials	52 	55 	55 	55 
Quantitative Reasoning				
<i>Percentage of students who responded that they "Very often" or "Often"...</i>				
6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	56 	47 	47 	47 
6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	38 	36 	35 	35 
6c. Evaluated what others have concluded from numerical information	42 	40 	40 	41 

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

Learning with Peers: First-year students

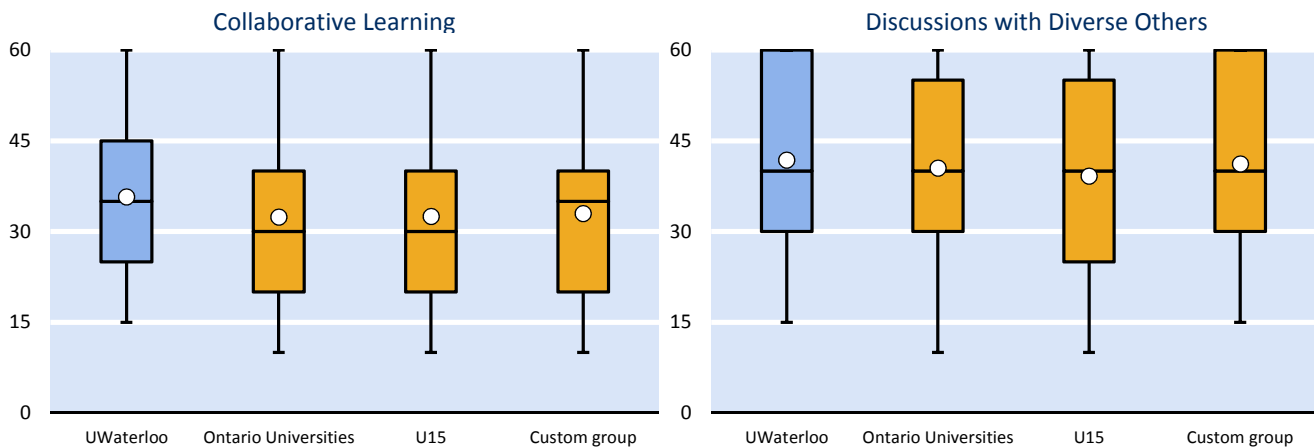
Collaborating with others in mastering difficult material and developing interpersonal and social competence prepare students to deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions with Diverse Others*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	UWaterloo Mean	Your first-year students compared with					
		Ontario Universities		U15		Custom group	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Collaborative Learning	35.7	32.3 ***	.23	32.5 ***	.22	33.0 ***	.19
Discussions with Diverse Others	41.7	40.5 ***	.08	39.1 ***	.16	41.1	.04

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.

Score Distributions



Notes: 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 represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Summary of Indicator Items

Collaborative Learning

Percentage of students who responded that they "Very often" or "Often"...

	UWaterloo	Ontario Universities	U15	Custom group
1e. Asked another student to help you understand course material	61	51	52	54
1f. Explained course material to one or more students	65	59	57	60
1g. Prepared for exams by discussing or working through course material with other students	57	51	51	50
1h. Worked with other students on course projects or assignments	59	50	51	51

Discussions with Diverse Others

Percentage of students who responded that they "Very often" or "Often" had discussions with...

	UWaterloo	Ontario Universities	U15	Custom group
8a. People from a race or ethnicity other than your own	78	75	71	77
8b. People from an economic background other than your own	72	70	67	71
8c. People with religious beliefs other than your own	74	71	66	71
8d. People with political views other than your own	64	63	62	63

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

Learning with Peers: Seniors

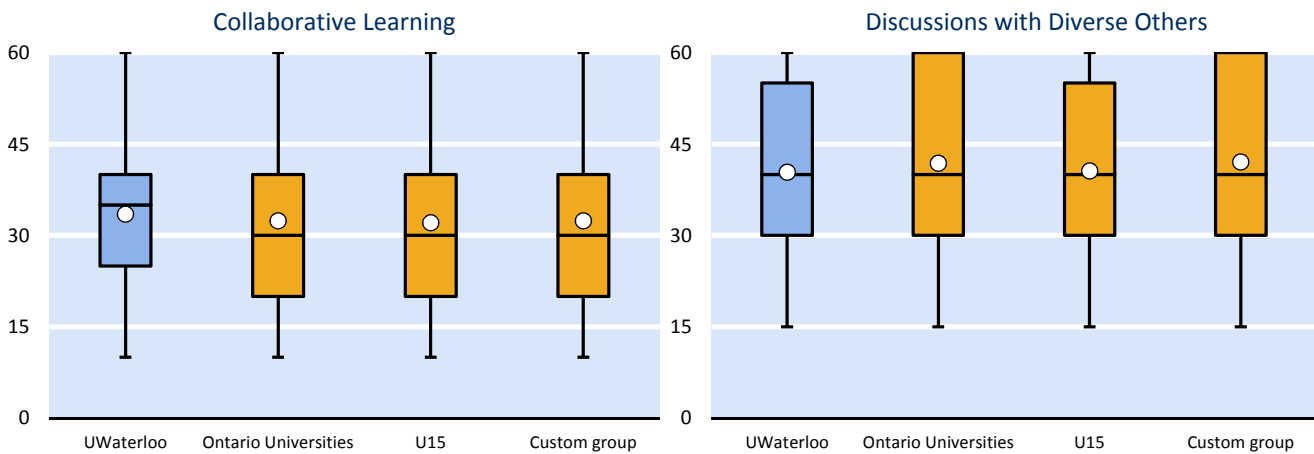
Collaborating with others in mastering difficult material and developing interpersonal and social competence prepare students to deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions with Diverse Others*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	UWaterloo Mean	Your seniors compared with					
		Ontario Universities		U15		Custom group	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Collaborative Learning	33.5	32.4 ***	.08	32.1 ***	.10	32.4 ***	.08
Discussions with Diverse Others	40.4	41.9 ***	-.09	40.6	-.01	42.1 ***	-.11

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.

Score Distributions



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Summary of Indicator Items

Collaborative Learning

Percentage of students who responded that they "Very often" or "Often"...

	UWaterloo	Ontario Universities	U15	Custom group
1e. Asked another student to help you understand course material	48	40	41	42
1f. Explained course material to one or more students	58	58	55	56
1g. Prepared for exams by discussing or working through course material with other students	50	47	46	46
1h. Worked with other students on course projects or assignments	65	63	62	63

Discussions with Diverse Others

Percentage of students who responded that they "Very often" or "Often" had discussions with...

	UWaterloo	Ontario Universities	U15	Custom group
8a. People from a race or ethnicity other than your own	76	77	75	79
8b. People from an economic background other than your own	69	73	69	72
8c. People with religious beliefs other than your own	70	73	68	72
8d. People with political views other than your own	63	68	66	67

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

Experiences with Faculty: First-year students

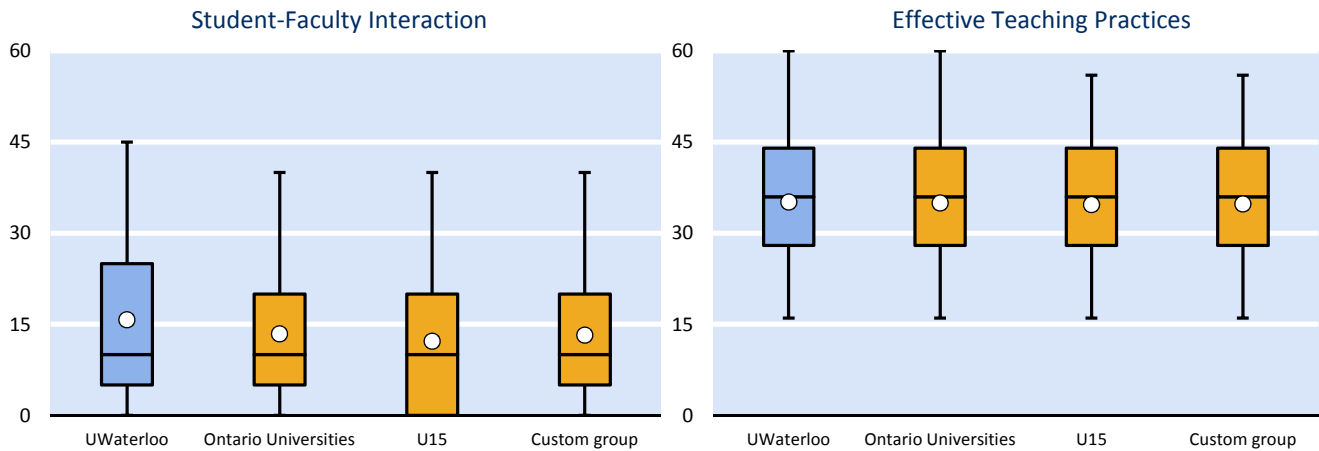
Students learn firsthand how experts think about and solve problems by interacting with faculty members inside and outside of instructional settings. As a result, faculty become role models, mentors, and guides for lifelong learning. In addition, effective teaching requires that faculty deliver course material and provide feedback in student-centered ways. Two Engagement Indicators investigate this theme: *Student-Faculty Interaction* and *Effective Teaching Practices*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	UWaterloo Mean	Your first-year students compared with					
		Ontario Universities		U15		Custom group	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Student-Faculty Interaction	15.7	13.4 ***	.17	12.2 ***	.27	13.2 ***	.19
Effective Teaching Practices	35.1	34.9	.01	34.7	.03	34.8	.03

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.

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Summary of Indicator Items

Student-Faculty Interaction

Percentage of students who responded that they "Very often" or "Often"...

	UWaterloo	Ontario Universities	U15	Custom group
3a. Talked about career plans with a faculty member	22	17	15	16
3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.)	16	11	10	11
3c. Discussed course topics, ideas, or concepts with a faculty member outside of class	23	18	16	18
3d. Discussed your academic performance with a faculty member	19	16	13	14

Effective Teaching Practices

Percentage responding "Very much" or "Quite a bit" about how much instructors have...

	UWaterloo	Ontario Universities	U15	Custom group
5a. Clearly explained course goals and requirements	75	74	77	75
5b. Taught course sessions in an organized way	77	75	77	76
5c. Used examples or illustrations to explain difficult points	76	73	75	75
5d. Provided feedback on a draft or work in progress	37	41	38	39
5e. Provided prompt and detailed feedback on tests or completed assignments	46	44	42	43

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

Experiences with Faculty: Seniors

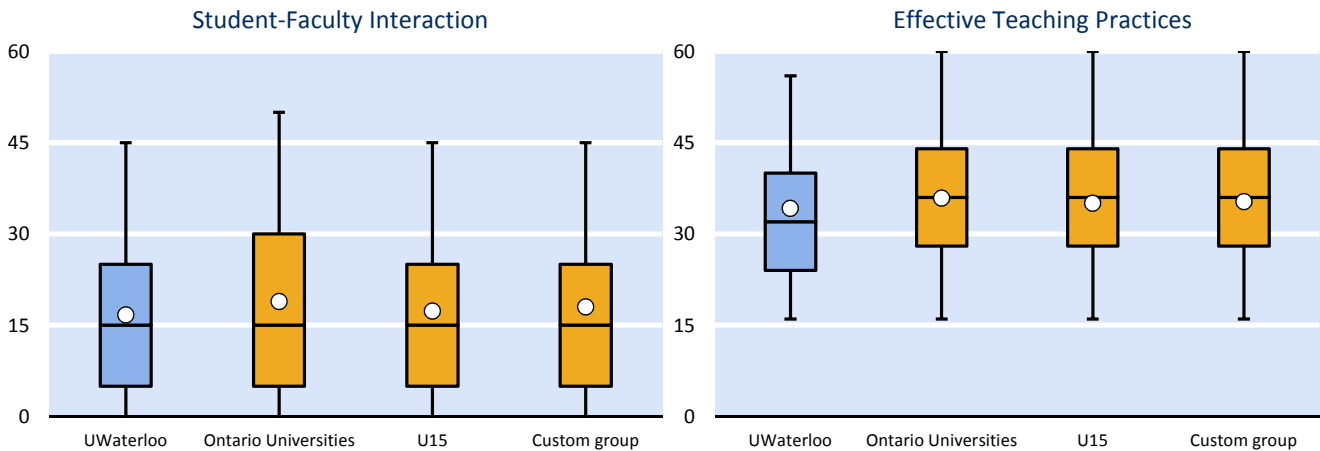
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		Mean	Effect size	Mean	Effect size	Mean	Effect size
Student-Faculty Interaction	16.7	18.9 ***	-.15	17.3 *	-.04	18.0 ***	-.09
Effective Teaching Practices	34.2	35.9 ***	-.13	35.0 ***	-.07	35.3 ***	-.09

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.

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Summary of Indicator Items

Student-Faculty Interaction

Percentage of students who responded that they "Very often" or "Often"...

	UWaterloo	Ontario Universities	U15	Custom group
3a. Talked about career plans with a faculty member	22	29	25	26
3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.)	17	19	17	19
3c. Discussed course topics, ideas, or concepts with a faculty member outside of class	24	27	24	26
3d. Discussed your academic performance with a faculty member	16	23	18	19

Effective Teaching Practices

Percentage responding "Very much" or "Quite a bit" about how much instructors have...

	UWaterloo	Ontario Universities	U15	Custom group
5a. Clearly explained course goals and requirements	71	77	77	77
5b. Taught course sessions in an organized way	73	76	77	76
5c. Used examples or illustrations to explain difficult points	73	73	75	74
5d. Provided feedback on a draft or work in progress	37	45	40	40
5e. Provided prompt and detailed feedback on tests or completed assignments	49	51	47	49

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

Campus Environment: First-year students

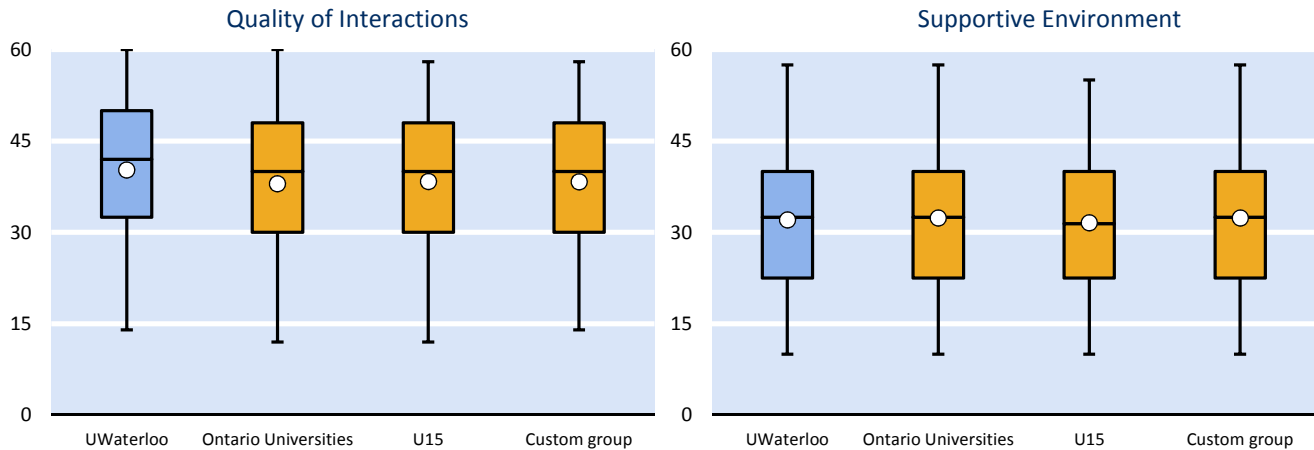
Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	UWaterloo Mean	Your first-year students compared with					
		Ontario Universities		U15		Custom group	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Quality of Interactions	40.2	38.0 ***	.17	38.3 ***	.14	38.3 ***	.15
Supportive Environment	32.0	32.4	-.02	31.6	.03	32.3	-.02

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.

Score Distributions



Notes: 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 represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Summary of Indicator Items

Quality of Interactions

Percentage rating a 6 or 7 on a scale from 1="Poor" to 7="Excellent" their interactions with...

	UWaterloo	Ontario Universities	U15	Custom group
13a. Students	61	59	59	59
13b. Academic advisors	40	35	36	35
13c. Faculty	42	37	37	37
13d. Student services staff (career services, student activities, housing, etc.)	42	37	37	37
13e. Other administrative staff and offices (registrar, financial aid, etc.)	36	36	36	35

Supportive Environment

Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized...

	UWaterloo	Ontario Universities	U15	Custom group
14b. Providing support to help students succeed academically	75	70	68	68
14c. Using learning support services (tutoring services, writing center, etc.)	69	68	64	67
14d. Encouraging contact among students from diff. backgrounds (soc., racial/eth., relig., etc.)	49	48	45	48
14e. Providing opportunities to be involved socially	59	63	61	64
14f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	64	63	62	64
14g. Helping you manage your non-academic responsibilities (work, family, etc.)	39	35	33	34
14h. Attending campus activities and events (performing arts, athletic events, etc.)	46	54	55	54
14i. Attending events that address important social, economic, or political issues	36	42	43	43

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

Campus Environment: Seniors

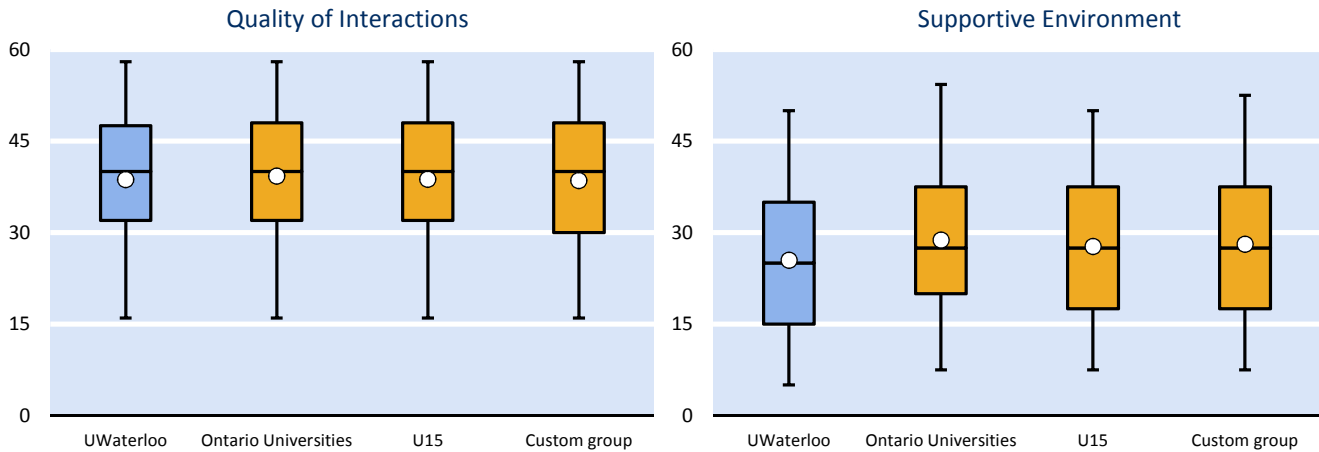
Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	UWaterloo Mean	Your seniors compared with					
		Ontario Universities		U15		Custom group	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Quality of Interactions	38.7	39.2 *	-.04	38.7	.00	38.5	.01
Supportive Environment	25.5	28.8 ***	-.24	27.7 ***	-.17	28.1 ***	-.20

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding.

Score Distributions



Notes: 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 represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Summary of Indicator Items

Quality of Interactions

Percentage rating a 6 or 7 on a scale from 1="Poor" to 7="Excellent" their interactions with...

	UWaterloo	Ontario Universities	U15	Custom group
13a. Students	57	63	61	60
13b. Academic advisors	36	37	34	33
13c. Faculty	41	47	45	45
13d. Student services staff (career services, student activities, housing, etc.)	32	34	33	33
13e. Other administrative staff and offices (registrar, financial aid, etc.)	32	34	33	32

Supportive Environment

Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized...

	UWaterloo	Ontario Universities	U15	Custom group
14b. Providing support to help students succeed academically	56	59	55	54
14c. Using learning support services (tutoring services, writing center, etc.)	45	56	49	51
14d. Encouraging contact among students from diff. backgrounds (soc., racial/eth., relig., etc.)	37	41	37	40
14e. Providing opportunities to be involved socially	46	57	56	57
14f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	49	56	55	55
14g. Helping you manage your non-academic responsibilities (work, family, etc.)	24	25	23	23
14h. Attending campus activities and events (performing arts, athletic events, etc.)	34	46	45	45
14i. Attending events that address important social, economic, or political issues	26	38	37	38

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE Web site.

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Comparisons with Top 50% and Top 10% Institutions

The results below compare the engagement of your first-year and senior students with those attending two groups of institutions identified by NSSE^a for their high average levels of student engagement:

- (a) institutions with average scores placing them in the top 50% of all 2013 and 2014 NSSE institutions, and
- (b) institutions with average scores placing them in the top 10% of all 2013 and 2014 NSSE institutions.

While the average scores for most institutions are below the mean for the top 50% or top 10%, your institution may show areas of distinction where your average student was as engaged as (or even more engaged than) the typical student at high-performing institutions. A check mark (✓) signifies those comparisons where your average score was at least comparable^b to that of the high-performing group. However, the absence of a significant difference between your score and that of the high-performing group does not mean that your institution was a member of that group.

It should be noted that most of the variability in student engagement is within, not between, institutions. Even "high-performing" institutions have students with engagement levels below the average for all institutions.

First-Year Students		UWaterloo	Your first-year students compared with						
<i>Theme</i>	<i>Engagement Indicator</i>		<i>Mean</i>	NSSE Top 50%			NSSE Top 10%		
				<i>Mean</i>	<i>Effect size</i>	✓	<i>Mean</i>	<i>Effect size</i>	✓
<i>Academic Challenge</i>	Higher-Order Learning	36.4	40.6 ***	-.31		42.7 ***	-.46		
	Reflective and Integrative Learning	30.8	37.3 ***	-.52		39.3 ***	-.67		
	Learning Strategies	35.0	41.2 ***	-.44		43.4 ***	-.60		
	Quantitative Reasoning	27.1	28.8 ***	-.10		30.6 ***	-.22		
<i>Learning with Peers</i>	Collaborative Learning	35.7	34.7 ***	.07	✓	37.0 ***	-.10		
	Discussions with Diverse Others	41.7	43.2 ***	-.10		45.6 ***	-.26		
<i>Experiences with Faculty</i>	Student-Faculty Interaction	15.7	23.3 ***	-.51		26.9 ***	-.70		
	Effective Teaching Practices	35.1	42.4 ***	-.55		44.6 ***	-.72		
<i>Campus Environment</i>	Quality of Interactions	40.2	44.0 ***	-.33		46.0 ***	-.50		
	Supportive Environment	32.0	39.4 ***	-.56		41.4 ***	-.72		
Seniors		UWaterloo	Your seniors compared with						
<i>Theme</i>	<i>Engagement Indicator</i>		<i>Mean</i>	NSSE Top 50%			NSSE Top 10%		
				<i>Mean</i>	<i>Effect size</i>	✓	<i>Mean</i>	<i>Effect size</i>	✓
<i>Academic Challenge</i>	Higher-Order Learning	34.8	43.3 ***	-.61		45.3 ***	-.77		
	Reflective and Integrative Learning	31.6	41.1 ***	-.75		43.1 ***	-.92		
	Learning Strategies	33.4	42.5 ***	-.63		44.9 ***	-.81		
	Quantitative Reasoning	28.3	31.3 ***	-.17		33.0 ***	-.28		
<i>Learning with Peers</i>	Collaborative Learning	33.5	35.4 ***	-.13		37.7 ***	-.31		
	Discussions with Diverse Others	40.4	43.9 ***	-.23		45.8 ***	-.36		
<i>Experiences with Faculty</i>	Student-Faculty Interaction	16.7	29.5 ***	-.80		34.4 ***	-1.10		
	Effective Teaching Practices	34.2	43.0 ***	-.65		45.1 ***	-.82		
<i>Campus Environment</i>	Quality of Interactions	38.7	45.3 ***	-.58		47.4 ***	-.75		
	Supportive Environment	25.5	36.1 ***	-.77		39.0 ***	-1.01		

Note: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); *p<.05, **p<.01, ***p<.001 (2-tailed); Effect size: Mean difference divided by the pooled standard deviation.

a. Precision-weighted means (produced by Hierarchical Linear Modeling) were used to determine the top 50% and top 10% institutions for each Engagement Indicator from all NSSE 2013 and 2014 institutions, separately for first-year and senior students. Using this method, Engagement Indicator scores of institutions with relatively large standard errors were adjusted toward the mean of all students, while those with smaller standard errors received smaller corrections. As a result, schools with less stable data—even those with high average scores—may not be among the top scorers. NSSE does not publish the names of the top 50% and top 10% institutions because of our commitment not to release institutional results and our policy against ranking institutions.

b. Check marks are assigned to comparisons that are either significant and positive, or non-significant with an effect size > -.10.

Detailed Statistics: First-Year Students

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
UWaterloo (N = 2911)	36.4	13.5	.25	15	25	35	45	60				
Ontario Universities	37.0	13.8	.07	15	25	40	45	60	42,107	-.6	.018	-.045
U15	35.8	13.6	.07	15	25	35	45	60	39,645	.6	.034	.041
Custom group	36.8	13.7	.09	15	25	35	45	60	28,382	-.4	.151	-.028
Top 50%	40.6	13.6	.03	20	30	40	50	60	228,419	-4.2	.000	-.307
Top 10%	42.7	13.6	.07	20	35	40	55	60	44,614	-6.3	.000	-.462
Reflective & Integrative Learning												
UWaterloo (N = 3003)	30.8	12.4	.23	11	23	31	40	54				
Ontario Universities	34.3	12.3	.06	14	26	34	43	57	43,934	-3.4	.000	-.278
U15	33.1	12.1	.06	14	26	31	40	54	41,225	-2.3	.000	-.187
Custom group	33.5	12.3	.08	14	26	34	40	57	29,554	-2.7	.000	-.216
Top 50%	37.3	12.5	.03	17	29	37	46	60	230,103	-6.5	.000	-.516
Top 10%	39.3	12.6	.06	20	31	40	49	60	3,395	-8.4	.000	-.671
Learning Strategies												
UWaterloo (N = 2772)	35.0	14.1	.27	13	27	33	47	60				
Ontario Universities	35.5	14.0	.07	13	27	33	47	60	40,118	-.5	.080	-.034
U15	36.1	14.0	.08	13	27	33	47	60	37,552	-1.1	.000	-.079
Custom group	35.6	14.0	.09	13	27	33	47	60	26,773	-.6	.047	-.040
Top 50%	41.2	14.0	.03	20	33	40	53	60	202,023	-6.2	.000	-.442
Top 10%	43.4	14.0	.07	20	33	40	60	60	3,145	-8.4	.000	-.598
Quantitative Reasoning												
UWaterloo (N = 2957)	27.1	15.5	.28	0	20	27	40	60				
Ontario Universities	24.6	16.2	.08	0	13	20	33	53	3,454	2.5	.000	.152
U15	24.5	15.8	.08	0	13	20	33	53	40,325	2.6	.000	.165
Custom group	25.2	15.8	.10	0	13	27	33	53	28,906	1.9	.000	.122
Top 50%	28.8	16.3	.03	0	20	27	40	60	3,024	-1.7	.000	-.105
Top 10%	30.6	16.2	.06	0	20	27	40	60	3,254	-3.5	.000	-.219
Learning with Peers												
Collaborative Learning												
UWaterloo (N = 3010)	35.7	13.8	.25	15	25	35	45	60				
Ontario Universities	32.3	14.4	.07	10	20	30	40	60	3,506	3.4	.000	.233
U15	32.5	14.3	.07	10	20	30	40	60	3,531	3.2	.000	.224
Custom group	33.0	14.3	.09	10	20	35	40	60	3,763	2.7	.000	.191
Top 50%	34.7	13.7	.03	15	25	35	45	60	274,518	1.0	.000	.074
Top 10%	37.0	13.6	.05	15	25	35	45	60	65,563	-1.3	.000	-.099
Discussions with Diverse Others												
UWaterloo (N = 2820)	41.7	16.2	.30	15	30	40	60	60				
Ontario Universities	40.5	16.4	.08	10	30	40	55	60	40,535	1.3	.000	.079
U15	39.1	16.5	.09	10	25	40	55	60	37,835	2.6	.000	.158
Custom group	41.1	16.0	.10	15	30	40	60	60	27,029	.6	.053	.038
Top 50%	43.2	15.4	.03	20	35	45	60	60	2,877	-1.5	.000	-.097
Top 10%	45.6	14.8	.06	20	40	50	60	60	3,078	-3.9	.000	-.259

Detailed Statistics: First-Year Students

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UWaterloo (N = 2959)	15.7	14.9	.27	0	5	10	25	45				
Ontario Universities	13.4	13.4	.07	0	5	10	20	40	3,319	2.3	.000	.170
U15	12.2	12.8	.07	0	0	10	20	40	3,312	3.5	.000	.272
Custom group	13.2	13.1	.08	0	5	10	20	40	3,498	2.5	.000	.187
Top 50%	23.3	15.0	.04	0	10	20	30	55	167,549	-7.6	.000	-.509
Top 10%	26.9	16.2	.10	5	15	25	40	60	3,773	-11.2	.000	-.699
Effective Teaching Practices												
UWaterloo (N = 2978)	35.1	12.4	.23	16	28	36	44	60				
Ontario Universities	34.9	12.7	.06	16	28	36	44	60	3,451	.2	.478	.013
U15	34.7	12.1	.06	16	28	36	44	56	40,802	.4	.077	.034
Custom group	34.8	12.3	.08	16	28	36	44	56	29,247	.3	.173	.026
Top 50%	42.4	13.2	.03	20	32	44	52	60	3,088	-7.3	.000	-.551
Top 10%	44.6	13.3	.07	20	36	44	56	60	3,565	-9.5	.000	-.719
Campus Environment												
Quality of Interactions												
UWaterloo (N = 2472)	40.2	13.0	.26	14	33	42	50	60				
Ontario Universities	38.0	13.6	.08	12	30	40	48	60	2,904	2.2	.000	.165
U15	38.3	13.2	.08	12	30	40	48	58	2,948	1.9	.000	.143
Custom group	38.3	13.0	.09	14	30	40	48	58	22,768	1.9	.000	.146
Top 50%	44.0	11.4	.03	22	38	46	52	60	2,533	-3.8	.000	-.330
Top 10%	46.0	11.6	.07	24	40	48	55	60	2,787	-5.8	.000	-.497
Supportive Environment												
UWaterloo (N = 2709)	32.0	13.2	.25	10	23	33	40	58				
Ontario Universities	32.4	13.8	.07	10	23	33	40	58	3,178	-.3	.219	-.024
U15	31.6	13.3	.07	10	23	31	40	55	35,591	.5	.086	.034
Custom group	32.3	13.4	.09	10	23	33	40	58	25,364	-.3	.293	-.021
Top 50%	39.4	13.2	.03	18	30	40	50	60	204,700	-7.4	.000	-.555
Top 10%	41.4	12.8	.06	20	33	40	53	60	46,797	-9.3	.000	-.725

a. Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).

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

c. Standard error of the mean, used 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 \pm 1.96 * SEM.

d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.

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

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

g. Effect size is the mean difference divided by the pooled standard deviation.

Detailed Statistics: Seniors

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
UWaterloo (N = 2455)	34.8	13.4	.27	15	25	35	45	60				
Ontario Universities	38.3	14.0	.09	15	30	40	50	60	2,965	-3.4	.000	-.245
U15	36.8	13.9	.08	15	25	40	45	60	2,927	-2.0	.000	-.143
Custom group	37.3	14.0	.09	15	30	40	45	60	3,081	-2.4	.000	-.174
Top 50%	43.3	13.7	.03	20	35	40	55	60	2,521	-8.4	.000	-.614
Top 10%	45.3	13.6	.06	20	40	45	60	60	2,726	-10.4	.000	-.768
Reflective & Integrative Learning												
UWaterloo (N = 2547)	31.6	12.4	.25	14	23	31	40	54				
Ontario Universities	36.9	12.8	.08	17	29	37	46	60	3,070	-5.3	.000	-.416
U15	35.5	12.9	.07	14	26	34	43	60	3,039	-4.0	.000	-.309
Custom group	35.8	13.1	.09	14	26	34	46	60	3,218	-4.3	.000	-.327
Top 50%	41.1	12.6	.03	20	31	40	51	60	2,620	-9.5	.000	-.753
Top 10%	43.1	12.5	.06	20	34	43	54	60	2,883	-11.5	.000	-.921
Learning Strategies												
UWaterloo (N = 2390)	33.4	14.1	.29	13	27	33	40	60				
Ontario Universities	35.5	14.3	.09	13	27	33	47	60	2,863	-2.1	.000	-.148
U15	35.4	14.3	.09	13	27	33	47	60	2,834	-2.0	.000	-.141
Custom group	35.4	14.3	.10	13	27	33	47	60	2,973	-2.0	.000	-.143
Top 50%	42.5	14.5	.03	20	33	40	60	60	2,442	-9.1	.000	-.628
Top 10%	44.9	14.1	.06	20	33	47	60	60	2,588	-11.5	.000	-.813
Quantitative Reasoning												
UWaterloo (N = 2508)	28.3	15.7	.31	0	20	27	40	60				
Ontario Universities	26.6	17.1	.10	0	13	27	40	60	3,081	1.7	.000	.101
U15	26.4	16.8	.10	0	13	27	40	60	3,022	2.0	.000	.118
Custom group	26.6	17.0	.11	0	13	27	40	60	3,197	1.7	.000	.102
Top 50%	31.3	17.2	.03	0	20	33	40	60	2,558	-3.0	.000	-.174
Top 10%	33.0	16.9	.06	0	20	33	47	60	2,710	-4.7	.000	-.279
Learning with Peers												
Collaborative Learning												
UWaterloo (N = 2575)	33.5	14.0	.28	10	25	35	40	60				
Ontario Universities	32.4	14.4	.09	10	20	30	40	60	3,098	1.1	.000	.076
U15	32.1	14.5	.08	10	20	30	40	60	3,067	1.4	.000	.098
Custom group	32.4	14.7	.10	10	20	30	40	60	3,237	1.1	.000	.077
Top 50%	35.4	13.8	.03	15	25	35	45	60	249,608	-1.9	.000	-.135
Top 10%	37.7	13.6	.06	15	30	40	50	60	51,934	-4.2	.000	-.308
Discussions with Diverse Others												
UWaterloo (N = 2395)	40.4	15.8	.32	15	30	40	55	60				
Ontario Universities	41.9	15.9	.10	15	30	40	60	60	2,861	-1.5	.000	-.095
U15	40.6	15.9	.10	15	30	40	55	60	29,977	-.2	.490	-.015
Custom group	42.1	15.5	.11	15	30	40	60	60	23,618	-1.7	.000	-.110
Top 50%	43.9	15.8	.03	20	35	45	60	60	2,434	-3.6	.000	-.226
Top 10%	45.8	15.4	.06	20	40	50	60	60	75,905	-5.5	.000	-.355

Detailed Statistics: Seniors

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UWaterloo (N = 2507)	16.7	14.0	.28	0	5	15	25	45				
Ontario Universities	18.9	14.8	.09	0	5	15	30	50	3,044	-2.2	.000	-.149
U15	17.3	14.2	.08	0	5	15	25	45	31,568	-.6	.044	-.042
Custom group	18.0	14.4	.10	0	5	15	25	45	25,005	-1.3	.000	-.090
Top 50%	29.5	16.1	.05	5	20	30	40	60	2,650	-12.9	.000	-.800
Top 10%	34.4	16.4	.13	10	20	35	45	60	3,672	-17.7	.000	-1.102
Effective Teaching Practices												
UWaterloo (N = 2531)	34.2	12.4	.25	16	24	32	40	56				
Ontario Universities	35.9	13.0	.08	16	28	36	44	60	3,071	-1.7	.000	-.132
U15	35.0	12.6	.07	16	28	36	44	60	31,900	-.9	.001	-.068
Custom group	35.3	12.8	.08	16	28	36	44	60	25,243	-1.1	.000	-.088
Top 50%	43.0	13.6	.03	20	36	44	56	60	2,620	-8.9	.000	-.652
Top 10%	45.1	13.4	.08	20	36	48	60	60	3,063	-10.9	.000	-.820
Campus Environment												
Quality of Interactions												
UWaterloo (N = 2264)	38.7	11.8	.25	16	32	40	48	58				
Ontario Universities	39.2	12.3	.08	16	32	40	48	58	2,752	-.5	.036	-.045
U15	38.7	12.2	.08	16	32	40	48	58	2,734	.0	.879	-.003
Custom group	38.5	12.3	.09	16	30	40	48	58	2,873	.2	.489	.015
Top 50%	45.3	11.3	.03	24	38	48	54	60	154,116	-6.6	.000	-.580
Top 10%	47.4	11.6	.06	24	40	50	58	60	42,866	-8.7	.000	-.745
Supportive Environment												
UWaterloo (N = 2336)	25.5	13.2	.27	5	15	25	35	50				
Ontario Universities	28.8	13.7	.09	8	20	28	38	54	2,831	-3.3	.000	-.242
U15	27.7	13.2	.08	8	18	28	38	50	28,865	-2.3	.000	-.173
Custom group	28.1	13.6	.10	8	18	28	38	53	2,940	-2.7	.000	-.195
Top 50%	36.1	13.8	.03	13	28	38	45	60	2,403	-10.6	.000	-.771
Top 10%	39.0	13.3	.08	17	30	40	50	60	32,509	-13.5	.000	-1.014

a. Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).

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

c. Standard error of the mean, used 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 \pm 1.96 * SEM.

d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.

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

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

g. Effect size is the mean difference divided by the pooled standard deviation.