

## **2017 NSSE**

# Summary of Selected Carleton Results from the 2017 National Survey of Student Engagement

AUGUST 2018

carleton.ca/oirp

The National Survey of Student Engagement (NSSE) is an annual survey which collects data on first-year and final-year undergraduate students. This survey's focus is on assessing the level of student participation and engagement in activities deemed to be educationally effective. NSSE is conducted by Indiana University's Center for Postsecondary Research.

In February 2017, Carleton took part in NSSE for the seventh time. As was done for the previous NSSE administration at Carleton, all students who were in their first or final year were invited to participate in the survey. All together, 4,004 students responded, resulting in a 44% response rate. This included 2,342 first-year respondents, and 1,662 final-year respondents (third-year students in a three-year program and fourth-year students in a four-year program).

In 2017 20 Ontario universities participated in NSSE as a consortium. Throughout this summary we compare Carleton results to those of the rest of the Ontario consortium<sup>1</sup>, on average. In general, the Ontario consortium is a comparison group for Carleton that is especially meaningful since all Ontario universities are subject to the same provincial policies and funding arrangements. However, it is important to keep in mind that each university has a distinct mission and program mix. In addition, while final-year at Carleton includes students in their last year of both three-year and four-year undergraduate programs, not all universities in Ontario have three-year degree programs. These factors may explain some of the variation.

#### A Profile of Carleton's NSSE Respondents

Fifty-four percent of first-year and 58 percent of final-year Carleton respondents were female. This indicates a slight female response bias. To control for some of this known gender response bias, NSSE weights institutional results to better reflect the actual gender distribution at an institution. The institutional level results in this report for both Carleton and the Ontario Consortium are weighted.

<sup>&</sup>lt;sup>1</sup> Throughout this summary, including charts and tables, any reference to the Ontario Consortium excludes Carleton (for both comparative purposes and statistical testing). Highlighted differences are statistically significant, unless otherwise noted.

**Table 1** shows the breakdown of Carleton respondents by academic Faculty and year level. The distribution of respondents across Faculties is similar to the Faculty distribution of first- and final-year students at Carleton.

Table 1: Number of Respondents in 2017 by Faculty					
	First-Year	Final-Year	Total		
Faculty of Arts and Social Sciences	496	464	960		
Faculty of Public Affairs	642	472	1114		
Sprott School of Business	179	120	299		
Faculty of Science	448	248	696		
Faculty of Engineering and Design	583	364	947		
Total	2,348	1,668	4,016		

Of respondents who were in their final year, 14 percent were in their 3<sup>rd</sup> year of study and 86 percent were in their 4<sup>th</sup> year of study. This is a slight under-representation of 3<sup>rd</sup> year students (in a three-year program) since they accounted for 18% of the population file.

At the time of the survey most first-year respondents were full-time students (94 percent); this proportion was slightly lower for final-year respondents (90 percent).

Roughly 40 percent of the first-year respondents reported living on-campus, compared to only five percent of final-year respondents.

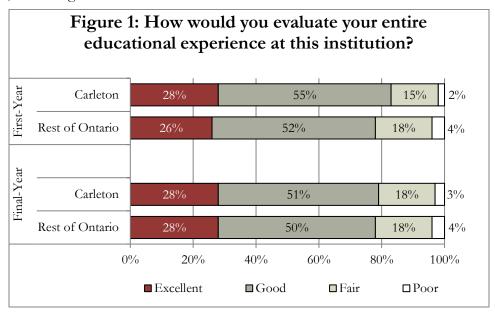
A first generation status was determined based on a question that asked: "What is the highest level of education completed by either of your parents (or those who raised you)?" Thirty-nine percent of Carleton respondents reported that neither parent/guardian had a bachelor's degree. Compared to the rest of the Ontario consortium, on average, Carleton has a similar proportion of first-generation first-year students, but has less final-year first generation respondents (final-year respondents: 39% vs 42% for the rest of Ontario)<sup>2</sup>.

Three percent of respondents self-identified as indigenous.

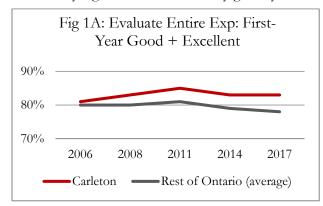
<sup>&</sup>lt;sup>2</sup> There are many definitions of first generation. In the Multi-Year Accountability process, Ontario's Ministry of Training, Colleges and Universities uses the definition of neither parent having <u>any post-secondary</u>. Under this definition, 14% of Carleton first-year respondents, and 15% of final-year respondents are first generation. The difference between definitions includes roughly 5% who attended but never completed university, and the remaining difference (20%) had at least some college or CEGEP.

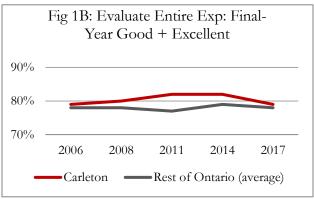
#### Overall Experience Results from the 2017 NSSE

'How would you evaluate your entire educational experience at this institution?' Eighty-three percent of first-year respondents and 79 percent of final-year respondents rated their overall experience at Carleton as either good or excellent. Carleton first-year respondents had higher ratings compared to the average Ontario consortium, whereas results are similar for final-year respondents. Figure 1 below shows the 2017 results for Carleton, in comparison to the rest of the Ontario consortium, on average.

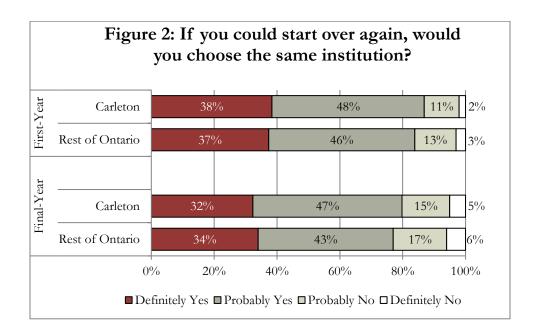


Carleton's 2017 rating amongst first-year respondents held steady from 2014, and were higher than the average for the Ontario consortium. Meanwhile there was a slight decline for final-year respondents at Carleton. Over time, for both first-year and final-year, Carleton's results have been consistently higher compared the Ontario consortium, on average, whether the difference was statistically significant or not in any given year.

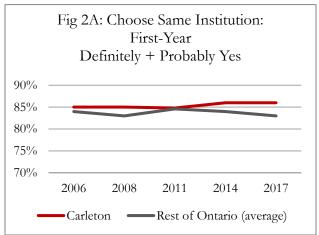


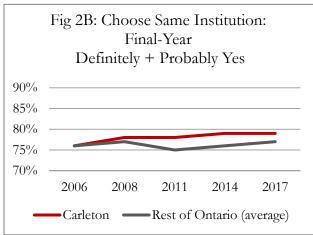


'If you could start over again, would you choose the same institution?' Results are shown in Figure 2. Eighty-six percent of first-year respondents and 79 percent of final-year respondents reported that they would choose Carleton again. Carleton's results are higher compared to the Ontario Consortium average, although the difference is only statistically significant for first-year respondents.

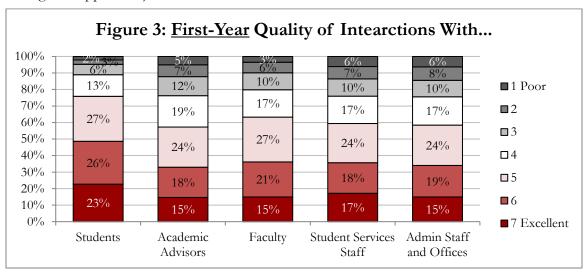


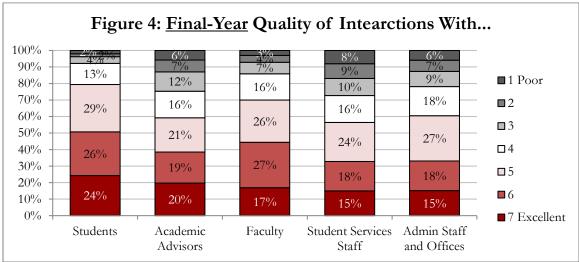
Carleton's 2017 responses on this question are similar to 2014. As with the overall satisfaction, Carleton's results on this question over time are consistently similar or better than the rest of the Ontario average, even though the differences are not always statistically significant.





There were five questions on the survey which asked about the quality of the interactions that the respondents had with others on campus<sup>3</sup>. **Figures 3 and 4** below summarize the 2017 results for first-year and final-year respondents at Carleton, respectively, for each of the five relationship types (excluding 'not applicable').





Compared to those at other Ontario institutions, on average, final-year respondents at Carleton reported better interactions with 3 groups: Academic advisors, Faculty, and Administrative staff/offices. First-year respondents were similar to Ontario's first-year. Compared to 2014, where there are differences, Carleton's students gave lower ratings in 2017 to the quality of interactions with: other students (first-year and final-year), academic advisors (final-year), and faculty (final-year).

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<sup>&</sup>lt;sup>3</sup> In the survey, the possible answers to these questions were on a seven-point scale ranging from 1 to 7, with only the low and high values labelled as 1=Poor, and 7=Excellent (plus an option of not applicable). Student services staff in this question was explained as 'career services, student activities, housing, etc...'. Other administrative staff and offices was explained as 'registrar, financial aid, etc...

#### **NSSE Engagement Indicators**

As a way of summarizing the data and establishing indicators, NSSE clusters survey items to create 10 engagement indicators. This allows for comparisons across a number of themes. Results of the statistically significant differences<sup>4</sup> between Carleton and the Ontario Consortium are presented in **Table 2** below.

Table 2: NSSE Engagement Indicators				
	First-Year	Final-Year		
Academic Challenge				
1. Higher-Order Learning		Higher		
2. Reflective & Integrative Learning	Lower			
3. Learning Strategies	Lower	Lower		
4. Quantitative Reasoning		Higher		
Learning with Peers				
5. Collaborative Learning	Lower	Lower		
6. Discussions with Diverse Others				
Experiences with Faculty				
7. Student Faculty Interaction	Lower			
8. Effective Teaching Practices	Higher	Higher		
Campus Environment				
9. Quality of Interactions		Higher		
10. Supportive Environment		Higher		

<u>Legend</u>
: No statistical difference from Ontario Consortium
Higher: Carleton's indicator score is higher than Ontario
Lower: Carleton's indicator score is lower than Ontario

Comparing 2017's NSSE engagement Indicators to 2014's shows that most differences over time show a decrease in the indicator score:

First-Year: 4 out of 10 indicators were different. All but one were lower in 2017.

	2014	2017
Reflective and Integrative Learning	34.7	33.0
Collaborative Learning	30.1	31.7
Effective Teaching Practices	36.6	35.8
Supportive Environment	32.7	30.9

Final-Year: 4 out of 10 indicators were different. All were lower in 2017.

	2014	2017
Learning Strategies	34.6	33.0
Effective Teaching Practices	38.0	36.7
Quality of Interactions	40.8	38.9
Supportive Environment	30.0	28.7

<sup>&</sup>lt;sup>4</sup> All statistical significant differences between Carleton and Ontario had an effect size of less than .2, which essentially means they are small differences in practical terms.

A breakout of the statistically significantly different indicators is presented below in an effort to understand the drivers of the differences noted in **Table 2**.

#### Breakout of Differences Noted in Table 2 (NSSE Engagement Indicators)

**Higher Order Learning** (Final-Year). Out of the four items, final-year Carleton respondent were more likely to than the Ontario average to report having done one item: Forming a new idea or understanding from various pieces of information.

Reflective & Integrative Learning (First-Year). Out of seven items, first-year Carleton respondents were less likely than the Ontario average to report having done four items: Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments; Examined the strengths and weaknesses of your own views on a topic or issue; Tried to better understand someone else's views by imagining how an issue looks from his or her perspective; and Learned something that changed the way you understand an issue or concept.

Learning Strategies (First-Year and Final-Year). Out of three items, first-year Carleton respondents were less likely than the Ontario average to report having done one item: Identified key information from reading assignments; whereas final-year students were less likely than the Ontario average to report having done two items: Reviewed your notes after class; and Summarized what you learned in class or from course materials.

**Quantitative Reasoning** (Final-Year). Out of the three items, final-year Carleton respondents were more likely than the Ontario average to report having done all three items: Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.); Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.); and Evaluated what others have concluded from numerical information.

Collaborative Learning (First-Year and Final-year). Out of four items, both first-year and final-year Carleton respondents were less likely than the Ontario average to have done two items: Asked another student to help you understand course material, and Worked with other students on course projects or assignments. Additionally, first-year Carleton respondents were also less likely to have Explained course material to one or more students.

**Student Faculty Interaction** (First-Year). Out of four items, first-year Carleton respondents were less likely than the Ontario average to have done all four items: Talked about career plans with a faculty member; Worked w/faculty on activities other than coursework (committees, student groups, etc.); Discussed course topics, ideas, or concepts with a faculty member outside of class; and Discussed your academic performance with a faculty member.

Effective Teaching Practices (First-Year and Final-Year). Out of five items, both first-year and final-year Carleton respondents were more likely than the Ontario average to report that their instructors have done all five items: Clearly explained course goals and requirements; Taught course sessions in an organized way; Used examples or illustrations to explain difficult points; Provided feedback on a draft or work in progress; Provided prompt and detailed feedback on tests or completed assignments.

Quality of Interactions (Final-Year). Out of five categories of interactions, final-year Carleton respondents rated three types of relationships as better than the Ontario average: Academic advisors, Faculty, and Other administrative staff and offices. The other two categories were similar to the Ontario average: Other students, and Student services staff (career services, student activities, housing, etc.).

Supportive Environment (Final-Year). Out of eight items, final-year Carleton respondents reported that their institution emphasized five items more than the Ontario average: Providing support to help students succeed academically; Using learning support services (tutoring services, writing center, etc.); Providing opportunities to be involved socially; Attending campus activities and events (performing arts, athletic events, etc.); Attending events that address important social, economic, or political issues.

#### **High-Impact Practices (HIPs)**

According to NSSE "High-Impact Practices (HIPs) represent enriching educational experiences that can be life changing. They typically demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and other students, encourage collaboration with diverse other students, and provide frequent and substantive feedback."<sup>5</sup>

There are six survey items that are considered HIPs, three for first-year students, and all six for final-year students. The goal of HIPs, according to NSSE's best practices, is for all students to have participated in at least two HIPs by the time they have graduated.

**Table 6** shows Carleton and Ontario's rates of participation in the NSSE HIPs. Generally, where there is a difference, Carleton students are less likely to participate in the high-impact practice compared to the Ontario consortium average.

Table 6: High-Impact Practices				
	First Year (% Participating)			
	Carleton	Ontario	Carleton	Ontario
Learning Community	6%	8%*	16%	17%
Service Learning	38%	45%*	36%	48%*
Research with Faculty	2%	2%	26%	23%*
Internship or Field Experience			38%	46%*
Study Abroad			6%	10%*
Culminating Senior Experience			39%	34%*
Participated in at least one	42%	49%	76%	81%
Participated in two or more	-	-	48%	53%

Note: replicated NSSE's HIP analysis - % participated is % who responded "Done or in progress", except for service learning (% reported at least some)

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<sup>\*</sup>denotes statistically significant difference from Ontario Consortium.

<sup>&</sup>lt;sup>5</sup> P1 NSSE, Engagement Indicators & High-Impact Practices (2017 NSSE results binder).

Since final-year at Carleton is made up of 3<sup>rd</sup> year students in three year programs, and 4<sup>th</sup> year students in four year programs, it's helpful to see how 'final-year' is broken down by 3, 4 year programs. Students in 3 year programs are more similar to first-year students than they are to students in 4 year programs, in terms of their participation rates in HIPs.

Table 6: High-Impact Practices – Carleton 3, 4 year programs				
	Final-Year (3 year programs)	Final-Year (4 year programs)		
Learning Community	8%	18%		
Service Learning	30%	38%		
Research with Faculty	8%	29%		
Internship or Field Experience	11%	42%		
Study Abroad	2%	7%		
Culminating Senior Experience	4%	44%		
Participated in at least one	47%	81%		
Participated in two or more	11%	54%		

Comparing Carleton's 2017 results to the 2014 results shows that where there are differences, the rate of participating in HIPs at Carleton decreased between the two survey years. This is especially the case for final-year students in terms of the proportion that participated in two or more HIPs (from 52% in 2014 to 48% in 2017).

Table 6: High-Impact Practices – Carleton over time						
		First Year (% Participating)		First Year Final-Yea (% Participating) (% Participat		
	2014	2017	2014	2017		
Learning Community	11%	6%	17%	16%		
Service Learning	36%	38%	36%	36%		
Research with Faculty	3%	2%	27%	26%		
Internship or Field Experience			38%	38%		
Study Abroad			7%	6%		
Culminating Senior Experience			43%	39%		
Participated in at least one	43%	42%	78%	76%		
Participated in two or more	-	-	52%	48%		

### Contributions of University Experience to Knowledge, Skills, and Personal Development

Respondents were asked "How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?" with respondents being able to select Very little, Some, Quite a bit, or Very Much.

A focus on final-year respondents is presented in **Table 7**.

Table 7: Perceived Gains – Final Year Carleton Respondents				
	% Very Little	% Some	% Quite a Bit	%Very Much
Thinking critically and analytically	2%	11%	40%	47%
Writing clearly and effectively	6	21	39	35
Working effectively with others	8	32	38	22
Speaking clearly and effectively	11	27	37	25
Developing or clarifying a personal code of values and ethics	16	32	33	18
Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc)	16	29	32	24
Acquiring job- or work- related knowledge and skills	18	33	31	18
Solving complex real-world problems	15	31	31	22
Being an informed and active citizen	18	32	31	20
Analyzing numerical and statistical information	15	25	30	30

Comparing Carleton's results to the Ontario average, as well as over time highlights a few statistically significant differences:

Statistically Significant Differences: % Quite a Bit or % Very Much					
Carleton Ontario					
Thinking critically and analytically	86%	84%			
Writing clearly and effectively	73%	70%			
Working effectively with others	60%	65%			
Developing a personal code of values/ethics	51%	56%			

Statistically Significant Differences: % Quite a Bit or % Very Much				
Carleton 2014 Carleton 2017				
Understanding people of other backgrounds	49%	56%		
Working effectively with others 63% 60%				

#### **Conclusion**

In 2017 Carleton University invited all first-year and final-year students to participate in NSSE. The results chosen for this report were those that are used for external reporting purposes, were of particular interest last time, or both.

As was the case in 2014, the last NSSE survey at Carleton, the participation of 20 Ontario Universities in NSSE in 2017 has meant particularly meaningful comparisons can be made. For example, first-year respondents at Carleton were more satisfied with their entire educational experience at their institution, compared to the rest of the Ontario consortium, on average, whereas final-year students have comparable satisfaction levels.

The large sample size collected in 2017 means that we can perform further analysis beyond this summary, such as determining results for academic Faculties, as well as digging deeper into individual survey items of interest to the Carleton community.

For more information on NSSE, please go to <u>nsse.iub.edu</u>. For more information on Carleton University, and the results of the surveys in which it participates, please go to <u>www.carleton.ca/oirp</u>.