2014 NSSE

Summary of Selected Results from the 2014 National Survey of Student Engagement (NSSE)

Prepared by the Office of Institutional Research and Planning September 2014

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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 2014, Carleton took part in NSSE for the sixth 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, 2,908 students responded, resulting in a 33% response rate. This included 1,549 first-year respondents, and 1,359 final-year respondents (third-year students in a three-year program and fourth-year students in a four-year program).

In 2014 20 Ontario universities participated in NSSE. Throughout this summary we compare Carleton results to those of the rest of the Ontario consortium¹, on average. Participating as part of a consortium allowed the Ontario participants to collectively add a number of supplementary questions to the standard NSSE survey. 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-six percent of first-year and 58 percent of final-year Carleton respondents were female. This indicates a slight gender response bias, since the gender distribution of students at Carleton is closer to being evenly split: 47 percent of first-year students and 51 percent of final-year students invited to complete the survey were female. 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.

¹ Throughout this summary, including charts and tables, any reference to the Ontario Consortium excludes Carleton (for both comparative purposes and statistical testing).

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 2014 by Faculty					
	First-Year	Final-Year	Total		
Faculty of Arts and Social Sciences	399	412	811		
Sprott School of Business	128	101	229		
Faculty of Engineering and Design	324	287	611		
Faculty of Public Affairs	464	363	827		
Faculty of Science	234	196	430		
Total	1,549	1,359	2,908		

Of respondents who were in their final year, 16 percent were in their 3rd year of study and 84 percent were in their 4th year of study. This is an under-representation of 3rd year students (in a three-year program) since they accounted for 25% of the population file.

At the time of the survey most first-year respondents were full-time students (96 percent); this proportion was slightly lower for final-year respondents (90 percent).

Almost half of the first-year respondents (49 percent) reported living on-campus, compared to only four 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)?" Forty percent of first-year and 38% of final-year respondents reported that neither parent/guardian had a bachelor's degree. Compared to the rest of the Ontario consortium, on average, Carleton has a lower proportion of first generation respondents (first year respondents: 40% vs 43% for the rest of Ontario; final-year respondents: 38% vs 45% for the rest of Ontario)².

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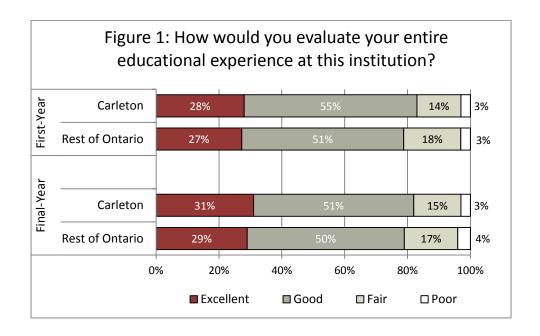
² There are many definitions of first generation. In the Multi-Year Accountability process, Ontario's Ministry of Training, Colleges and Universities uses the definition of neither parent having <u>any post-secondary</u>. Under this definition, 15% of Carleton respondents are first generation (for both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

Selected Results from the 2014 NSSE

We present here the results for selected NSSE survey items, for both Carleton and the rest of the Ontario consortium. Also, this year's results will be compared to the 2011 NSSE results. Differences that are statistically significantly different will be noted. Also, please note that due to rounding, some of the result distributions in the following graphs do not add up to 100 percent.

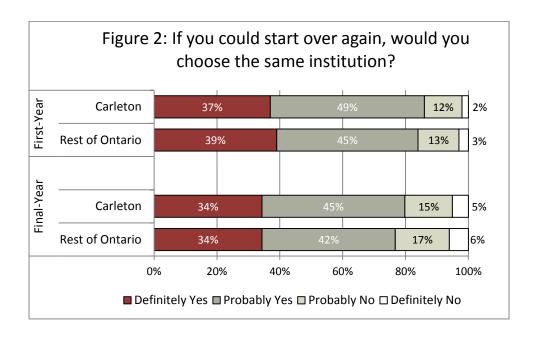
Many of the survey items in NSSE address specific learning experiences and/or are used to construct 10 NSSE "Engagement Indicators" (described later in this report). There are also a few questions that deal with a student's <u>overall</u> impression of their institution, such as: 'How would you evaluate your entire educational experience at this institution?'

Eighty-three percent of first-year respondents and 82 percent of final-year respondents rated their overall experience at Carleton as either good or excellent. Carleton's results are higher than those of the Ontario consortium, where 78% of first-year and 79% of final-year respondents rated their overall experience at their institution as either good or excellent. **Figure 1** below shows the 2014 results for Carleton, in comparison to the rest of the Ontario consortium.



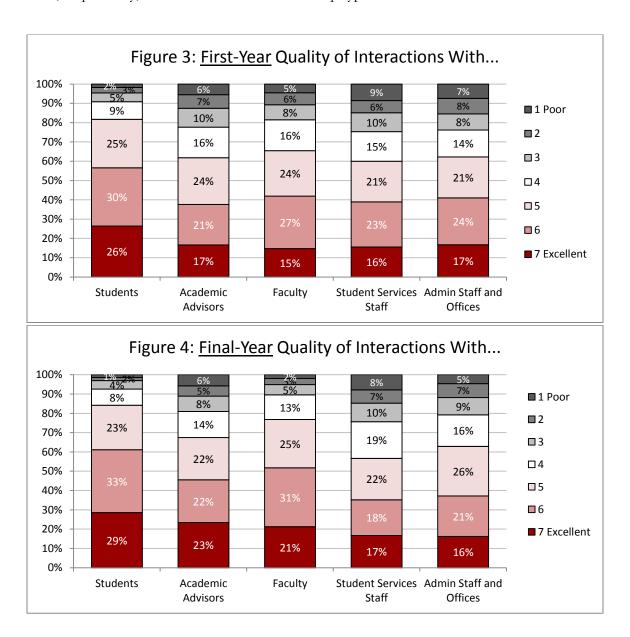
Reported first-year satisfaction amongst Carleton respondents decreased somewhat between 2011 and 2014 (from 85% good or excellent in 2011 to 83% in 2014). A similar decrease was also seen for the consortium overall (from 81% to 78%).

Respondents were asked if they had to make the decision again, would they 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. Both first-year and final-year results were similar to the Ontario Consortium, excluding Carleton. Differences between 2014 and 2011 are not 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. 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. 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...).

Figures 3 and 4 below summarize the 2014 results for first-year and final-year respondents at Carleton, respectively, for each of the five relationship types.



Compared to those at other Ontario institutions, on average, respondents at Carleton (both first-and final-year) reported better interactions with 3 groups: Academic advisors, Faculty, and Administrative staff/offices (based on a means comparison that NSSE conducts). This question has changed considerably since 2011, so an over-time comparison is not possible.

NSSE Engagement Indicators

As a way of summarizing the data and establishing indicators, NSSE has recently started using clusters of survey items to create 10 engagement indicators³. This allows for comparisons across a number of themes. Results of the statistically significant differences⁴ between Carleton and the Ontario Consortium are presented in **Table 2** below. A breakout of the statistically significantly different indicators is presented on the following page in an effort to understand the drivers of the differences. NSSE's description of each theme, indicator scores, and the specific survey items for each indicator can be found in the NSSE 2014 Engagement Indicator report for Carleton, available by going to: oirp.carleton.ca/main/surveys-nsse

The ten engagement indicators are organized under four themes:

- Academic Challenge
- Learning with Peers
- Experiences with Faculty
- Campus Environment

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

Legend

--: No statistical difference from Ontario Consortium

Higher: Carleton's indicator score is higher than Ontario

Lower: Carleton's indicator score is lower than Ontario

³ These engagement indicators are different from the previously highlighted NSSE benchmarks from 2011 and before. No over-time comparison is possible.

⁴ 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.

Breakout of Differences Noted in Table 2

Reflective & Integrative Learning (First-Year). Out of seven items, first-year Carleton respondents more likely than the Ontario average to report having done two items: Combine ideas from different courses when completing assignments, and Connected your learning to societal problems or issues.

Learning Strategies (First-Year). Out of three items, first-year Carleton respondents were less likely than the Ontario average to report having done two items: Identified key information from reading assignments, and Reviewed notes after class.

Collaborative Learning (First-Year and Final-Year). Both first-year and final-year Carleton respondents were less likely than the Ontario average to report having done all four items in this indicator: Asked another student to help you understand course material, Explained course material to one or more students, Prepared for exams by discussing or working through course material with others, and Worked with other students on course projects or assignments.

Student Faculty Interaction (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: Talked about career plans with a faculty member, and Worked with a faculty member on activities other than coursework. In addition, first-year Carleton respondents were also less likely to have Discussed 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 the following four items: Clearly explained course goals and requirements, Taught course sessions in an organized way, Used examples or illustrations to explain difficult points, Provided prompt and detailed feedback on tests or completed assignments. In addition, final-year Carleton respondents also reported that their instructors were more likely to have Provided feedback on a draft or work in progress.

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: Faculty, Academic advisors, and Other administrative staff and offices. The other two categories were similar to the Ontario average: Other students, and Student services staff.

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, Providing support for your overall well-being, Attending campus activities and events, and Attending events that address important social, economic or political issues.

Most Needed Improvement

Participating as a consortium, the Ontario institutions were able to add a set of questions to the standard NSSE survey instrument. The results in this section come from these Ontario consortium questions.

The Ontario NSSE respondents were asked to select up to two items that they believed their university most needed to address to improve the student academic/learning experience, both in and out of the classroom (two separate questions).

Starting with the results of most needed improvements <u>inside</u> the classroom, we see in **Table 3** that first-year Carleton respondents were most likely to choose ensuring a better fit between course content, assignments and test/exams (27%), Improving the quality of course instruction by professors (26%) and Improving the quality of teaching assistants (25%). Final-year respondents were most likely to choose increasing the number or variety of course offerings *in their major* (34%), as well as the quality of course instruction by professors (26%). Table 3 is sorted by first-year priorities.

Table 3: Improving the Student Academic Experience In the Classroom at Carleton Proportion of Respondents who Selected Each Item ⁵			
University most needs to address	First-Year	Final-Year	
Ensuring a better fit between course content, assignments and tests/exams	27 (-)	17 (-)	
Improving the quality of course instruction by professors	26 (-)	26 (-)	
Improving the quality of teaching assistants	25	16 (+)	
Increasing the number or variety of course offerings in your major	22	34	
Improving the quality of classrooms or lecture halls	20 (+)	21 (+)	
Reducing class sizes overall	14	12	
Increasing opportunities to learn more about global issues	12 (+)	7 (-)	
Providing more current/relevant courses and curriculum	11	16 (+)	
Increasing the number or variety of course offerings outside your major	9	9	
Changing the mix of lectures, seminars, tutorials and labs	8	8	
Improving student access to information technology	6	6 (+)	
Improving the quality of labs	5	8 (+)	

⁺ Denotes Carleton's proportion is statistically significantly higher than Ontario, whereas – denotes a lower proportion.

⁵ Columns will add up to more than 100% since respondents could choose up to two items from the list.

The stand out differences in **Table 3** (4% or more) from 2011 results:

- Less final-year respondents identified TAs in 2014 (16% vs. 21% in 2011)
- Less first-year respondents identified Reducing Class Sizes in 2014 (14% vs. 22% in 2011)
- Less final-year respondents identified Opportunities to learn about global issues (7% vs. 11% in 2011)

The stand out differences in **Table 3** (4% or more) from Ontario Consortium 2014 results:

- Carleton final-year respondents less likely to identify Ensuring a better fit between content and assessment (17% vs. 23% for Rest of Ontario, on average)
- Carleton final-year respondents less likely to identify Improving quality of teaching by professors (26% vs. 31% for Rest of Ontario, on average)

Table 4 shows the results of a similarly styled question that sought to find out what students felt was most needed to improve their academic/learning experience <u>outside</u> the classroom. First-year Carleton respondents selected the quality/availability of study spaces most often. Responses amongst final-year respondents at Carleton were slightly more concentrated than those from first-year respondents. Specifically they reported that improving the quality/availability of study spaces and more opportunities to undertake research with faculty were most needed.

Table 4: Improving the Student Academic Experience <u>Outside the Classroom</u> at Carleton Proportion of Respondents who Selected Each Item ⁶				
University most needs to address	First- Year	Final- Year		
Improving the quality/availability of study spaces	34 (-)	44 (-)		
Working to provide a better social environment for students	27 (+)	17		
Increasing contact with professors outside of class (e.g., office hours)	25	13 (-)		
Expanding and/or improving the quality of academic support services (e.g., study skills, library skills, writing/math skills, academic advising, career advising, etc.)	23	17 (-)		
Increasing opportunities for international experiences (e.g., exchanges, study abroad)	22 (+)	16 (+)		
Providing students with more opportunities to undertake research with faculty	21 (-)	38 (+)		
Expanding and/or improving the quality of personal support services (e.g., counselling)	15	16		
Improving library services (e.g., circulation, staff availability, internet/computer availability, etc.)	8	8 (+)		
Improving the library collection	6 (+)	7 (+)		

⁺ Denotes Carleton's proportion is statistically significantly higher than Ontario, whereas - denotes a lower proportion.

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⁶ Columns will add up to more than 100% since respondents could choose up to two items from the list.

The stand out differences in **Table 4** (4% or more) from 2011 results are all for <u>final-year</u> results:

- More final-year respondents identified Study space in 2014 (44% vs. 39% in 2011)
- Less final-year respondents identified Improving library services (8% vs. 12% in 2011)
- Less final-year respondents identified Improving library collection (7% vs. 12% in 2011)

The stand out differences in **Table 4** (4% or more) from the rest of Ontario, on average:

- Carleton first-year respondents less likely to identify Study space (34% vs. 42% for rest of Ontario)
- Carleton first-year respondents more likely to identify Opportunities for international experiences (22% vs. 16% for rest of Ontario)
- Carleton final-year respondents less likely to identify Increasing contact with professors outside class (13% vs. 19% for rest of Ontario)
- Carleton final-year respondents less likely to identify Expanding or improving academic support services (17% vs. 22% for rest of Ontario)
- Carleton final-year respondents more likely to identify Opportunities for research with faculty (38% vs. 33% for rest of Ontario)

Obstacles to Academic Progress

Another Ontario consortium question focused on obstacles to academic progress. Given a list of potential factors which may be considered an obstacle to a student's academic progress, respondents were asked to indicate the degree to which each factor is or was an obstacle to their academic progress (respondents chose from: 'not an obstacle', 'a minor obstacle', or 'a major obstacle').

Table 5 shows the breakdown for Carleton, alongside the results for the Ontario consortium when the differences were determined to be statistically significant.

Amongst first-year respondents, the most common obstacles are financial pressures or work obligations, and a student's academic performance at university. For final-year respondents the most often cited obstacle is financial pressures or work obligations. There were some differences between Carleton's results and the rest of the Ontario universities, on average. In most cases of statistically significant differences, Carleton respondents were less likely to report that the survey item was a major obstacle. The one exception is the proportion of first-year respondents reporting difficulties with a disability or health condition as obstacles was slightly higher at Carleton.

Table 5: Obstacles to Academic Progress				
Comparison of Carleton and Ontario Consortium				
	First-Year		Final-Year	
Factor:	Carleton	Ontario (excluding Carleton)	Carleton	Ontario (excluding Carleton)
Financial pressures or work obligations				
Not an obstacle	27%	similar	22%	similar
A Minor obstacle	39	Similar	38	Sillilai
A Major obstacle	33		40	
Your academic performance at university				
Not an obstacle	32	28	43	38
A Minor obstacle	41	41	38	38
A Major obstacle	27	31	20	24
Personal or family problems				
Not an obstacle	43	similar	39	similar
A Minor obstacle	41	similar	39	Similar
A Major obstacle	17		22	
Course availability/scheduling				
Not an obstacle	42	39	28	23
A Minor obstacle	48	46	53	50
A Major obstacle	10	16	19	27
Lack of good academic advising				
Not an obstacle	59	similar	58	47
A Minor obstacle	31	Similar	29	35
A Major obstacle	10		13	18
Difficulties with academic regulations				
Not an obstacle	68	,	71	66
A Minor obstacle	25	similar	23	25
A Major obstacle	7		6	9
Language/cultural barriers				
Not an obstacle	78	,	84	82
A Minor obstacle	16	similar	12	14
A Major obstacle	6		3	4
Difficulties associated with a disability or				
chronic health condition				
Not an obstacle	82	84	82	similar
A Minor obstacle	13	11	11	
A Major obstacle	6	5	7	
Primary care giving responsibilities for a				
dependent				
Not an obstacle	89	similar	90	similar
A Minor obstacle	7		7	
A Major obstacle	3		3	

^{*} similar means that results are <u>not</u> statistically significantly different.

Conclusion

In 2014 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 2011, the last NSSE survey at Carleton, the participation of 20 Ontario Universities in NSSE in 2014 has meant particularly meaningful comparisons can be made. Both first and final-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.

The ten Engagement Indicators were newly introduced as a way of organizing the results into themes. Using these indicators to compare Carleton's results to the Ontario consortium resulted in a mixed bag of differences, although in all cases the differences were considered small.

Other highlights from this summary when comparing Carleton to the Ontario consortium:

- Carleton respondents reported <u>better</u> interactions with others where there were differences.
- Most stand-out differences for improvement needed inside the classroom indicated <u>less</u> need for improvement (compared to Ontario <u>and</u> compared to 2011 results).
- Generally, where there were differences, respondents were <u>less</u> likely to consider factors to be major obstacles compared to Ontario counterparts.

However, in the spirit of continuous improvement, it is important to also highlight that first-year overall satisfaction scores decreased in 2014 compared to 2011 (a similar decrease was seen in Ontario). As well, many results, including some engagement indicators for both Carleton and Ontario, are significantly below the NSSE average. This may be due to a regional/cultural bias in the survey (i.e., differences in higher education between Canada and the US), but may also reflect some real differences that we may want to be mindful of in our journey to achieve excellence.

The large sample size collected in 2014 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>.