

Highlights of Results



INTRODUCTION

The National Survey of Student Engagement (NSSE) is based on the premise that active learning, or student engagement, relates positively to desired educational outcomes.¹ NSSE is distinct from many other student surveys in that, rather than focusing on student satisfaction, it measures the extent to which students are engaged actively in their learning. NSSE was conducted for the sixth time at Ryerson in 2017.

Most of the NSSE questionnaire examines the extent to which students are involved in a wide range of activities rather than emphasizing student satisfaction with services. Developed during the late 1990s at the Indiana University Center for Postsecondary Research, the survey has since been adapted for Canadian use. In 2017, 722 institutions across North America participated in NSSE, including 72 Canadian and 650 American institutions. All Ontario universities began administering NSSE in 2006. The survey is now conducted on a triennial basis across the province.

7,662 first-year and 9,612 fourth-year Ryerson students were contacted by email and asked to complete the survey online. The total sample of 5,081 students yields a response rate of 29.4 percent (5 percentage points higher than in 2014). The sample size and response rate contribute to a reasonable level of estimated statistical error.²

NSSE results inform decision-making geared to initiating improvement across the University. This includes use of the NSSE data as indicators to monitor progress in achieving academic objectives, and as a source of information while making resource allocation decisions.

This report provides an overview of Ryerson's NSSE results for 2017. It is organized into four major sections. First, it examines performance on "engagement indicators" that have been created by the Indiana University Center for Postsecondary Research. It then presents a set of core questions that are of particular relevance to Ryerson. Next, the report provides results for the individual survey questions from which the engagement indicators were constructed, as well as for other related items. The final section focuses on student characteristics such as employment, parental education and commuting time to campus.

ENGAGEMENT INDICATORS

The NSSE questionnaire includes more than 100 items. The Indiana Center attempts to summarize this large amount of information with the use of ten engagement indicators covering four major themes. These were developed with the use of a statistical technique known as principal components analysis to group the survey questions in a meaningful way. The indicators can be thought of as subtypes or aspects of student engagement. They include:

¹Kuh, G. D. (2016). Making learning meaningful: Engaging students in ways that matter to them. *New Directions for Teaching and Learning*, 145, 49-56.

² Nineteen times out of twenty, the percentages shown throughout this report are estimated to be accurate to within: 1.2 percentage points for first-year and fourth-yearstudents combined, 1.7 percentage points for first-year students alone, and 1.6 percentage points for fourth-year students alone (assuming p=0.5).

Academic Challenge Higher Order Learning

Reflective and Integrative Learning

Learning Strategies Quantitative Reasoning

Learning with Peers Collaborative Learning

Discussions with Diverse Others

Experiences with Faculty Student-Faculty Interaction

Effective Teaching Practices

Campus Environment Quality of Interactions

Supportive Environment

A composite score for each indicator is calculated by averaging each student's answers to the relevant questions.³ The scores provide a method of summarizing the extent to which students at a particular institution are engaged compared with students elsewhere. Table 1 provides Ryerson's indicator scores and those of other Ontario universities, and U.S. Peer institutions as selected using Carnegie Classification data.⁴ The 2017 U.S. Peers are those 9 American institutions participating in the survey that are identified as public, urban, commuter universities with more than 20,000 students, and are in the "Doctoral Universities" or "Master's Colleges & Universities: Larger Universities" categories of the Carnegie Classification framework.

Broadly speaking, Ryerson scores above other Ontario universities as well as its American comparators in the area of Learning with Peers. However, Ryerson tends to lag behind scores achieved by U.S. peer institutions for other engagement indicators, and is lower than the Ontario average on a number of indicators; these differences are identified by NSSE as statistically significant. See Table 1 for a summary of scores.

³ Responses for individual questions within the engagement indicators are reported by students using a Likert scale (e.g., strongly disagree, disagree, agree, agree strongly). NSSE converts these to numeric values on 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 indicator, while a score of 60 indicates responses at the top of the scale on every item.

⁴ The institutions in the 2017 U.S. Peers group for Ryerson University are: California State Polytechnic University-Pomona, California State University - Los Angeles, California State University - Fullerton, California State University-Sacramento, Florida International University, San Francisco State University, San Jose State University, University of Texas at Arlington, University of Texas at San Antonio

Table 1: Comparison of Engagement Indicator scores

		1 st Year		4 th Year			
Engagement Indicator	Ryerson	Ontario	U.S. Peers	Ryerson	Ontario	U.S. Peers	
ACADEMIC CHALLENGE							
Higher Order Learning	35.4	36.6	38.3	37.0	37.3	39.7	
Reflective and Integrative Learning	34.1	33.5	35.4	36.4	36.2	37.8	
Learning Strategies	33.9	34.7	37.2	33.0	34.3	38.2	
Quantitative Reasoning	23.3	25.1	27.5	27.0	27.5	29.5	
LEARNING WITH PEERS							
Collaborative Learning	34.9	33.5	32.7	35.1	33.1	34.4	
Discussions with Diverse Others	40.9	39.4	40.0	42.8	40.3	42.1	
EXPERIENCES WITH FACULTY							
Student-Faculty Interaction	12.8	13.8	18.2	17.9	18.8	21.6	
Effective Teaching Practices	31.8	33.9	39.0	32.4	34.8	39.4	
CAMPUS ENVIRONMENT							
Quality of Interactions	36.9	38.0	39.0	36.8	38.1	40.4	
Supportive Environment	31.4	31.0	35.3	28.2	27.0	31.6	

CORE QUESTIONS

The NSSE engagement indicators are one way of summarizing Ryerson's performance. As they are intended to serve as composite measures, these indicators do not provide direction about specific items or activities on which the University should focus its efforts.

To address this issue, the University Planning Office consulted in Fall 2006 with the NSSE Advisory Committee, the Academic Planning Group of Deans and other senior academic administrators, and academic Chairs/Directors to identify particular questions of interest. These consultations yielded a set of core questions for which the scores are being monitored over time.

Table 2 outlines scores achieved on the core questions in 2017 and the previous three rounds of NSSE.⁵

⁵ The exact wording of several survey items was changed effective 2014. Table 2 indicates items where the change in wording may make comparisons to results from previous years difficult. These items include:

a) Applying facts, theories or methods to practical problems or new situations (emphasis of coursework) WAS: Applying theories or concepts to practical problems or in new situations

b) Providing support to help students succeed academically WAS: Providing the support you need to help you succeed academically

c) Quality of interactions with other administrative staff and offices (registrar, financial aid, etc.) excluding student services WAS: Quality of relationships with administrative personnel and offices

d) Received prompt and detailed feedback on tests or completed assignments WAS: Received prompt written or oral feedback on your academic performance

Table 2: Core NSSE Questions, Responses from 2008 to 2017

	First-year			Fourth-year				
Question	2008	2011	2014	2017	2008	2011	2014	2017
Asked questions or contributed to class discussions in other ways: often or very often	37%	37%	38%	35%	51%	50%	50%	48%
Complete a culminating senior experience (capstone course, thesis, project, comprehensive exam, portfolio etc.): plan to do or done	31%	33%	45%	47%	48%	48%	61%	62%
Participating in co-curricular activities (organizations, campus publications, student government, sports, etc.): % not participating at all in typical week	65%	59%	58%	50%	61%	60%	52%	48%
Participate in an internship, co-op, field experience, student teaching, or clinical placement: plan to do or done	82%	80%	84%	80%	74%	70%	71%	68%
Applying facts, theories or methods to practical problems or new situations (emphasis of coursework) ⁵ : quite a bit or very much	76%	79%	72%	72%	82%	84%	74%	74%
Providing support to help students succeed academically ⁵ : quite a bit or vey much	69%	72%	68%	68%	58%	60%	54%	55%
Quality of interactions with other administrative staff and offices (registrar, financial aid, etc.) excluding student services ⁵ : Scale from 1 (poor) to 7 (excellent)	4.4	4.6	4.3	4.5	4.1	4.3	4.2	4.3
Discussed course topics, ideas, or concepts with a faculty member outside of class: often or very often	19%	17%	18%	17%	23%	23%	24%	25%
Received prompt and detailed feedback on tests or completed assignments ⁵ : often or very often	43%	45%	43%	36%	51%	53%	47%	44%
Item needing improvement in classroom: Quality of course instruction by professors: % indicating university needs to address	30%	33%	31%	41%	39%	35%	35%	38%
Item needing improvement in classroom: Increasing the number or variety of course offerings in your major: % indicating university needs to address	19%	22%	19%	24%	30%	38%	29%	38%
Item needing improvement outside classroom: Library collection: % indicating university needs to address	13%	11%	5%	6%	20%	14%	6%	8%
Item needing improvement outside classroom: Quality or availability of study spaces: % indicating university needs to address	35%	44%	52%	47%	38%	44%	57%	38%
How would you evaluate your entire educational experience at this institution?: good or excellent	78%	81%	76%	77%	77%	77%	75%	72%
University's contribution to development of skills in writing clearly and effectively: quite a bit or very much	61%	62%	54%	54%	72%	72%	68%	67%

INSIDE THE ENGAGEMENT INDICATORS

NSSE's engagement indicators are developed by combining responses from a number of related survey questions. This section outlines the specific survey items that are used for each engagement indicator.

1. Academic Challenge

According to NSSE, challenging intellectual and creative work is central to student learning, and universities should challenge and support students to engage in various forms of deep learning. Four indicators are used to summarize the level of academic challenge that students experience. Results are summarized in Figures 1a through 1d.

- a) Higher-Order Learning challenges students to analyze, evaluate or apply the material they learn in class in a variety of ways. 74 percent of respondents report that there is "quite a bit" or "very much" emphasis in their coursework on the application of facts, theories or methods to practical problems or new situations. 61 percent report a similar emphasis on forming a new idea or understanding from various pieces of information. Ryerson is similar to other Ontario universities in fourth year, but below the Ontario average in first year with respect to the Higher-Order Learning indicator.
- b) Reflective and Integrative Learning asks students to evaluate their own way of thinking, connect their learning to broader issues, or consolidate information from a variety of sources. Examples include connecting course materials to prior knowledge and experiences (79 percent report doing this often or very often) or learning something that changed the way one understands an issue or topic, which is done often or very often by 71 percent. Ryerson is similar to the Ontario average on this indicator at fourth year and is higher than the province at first year.
- c) Learning Strategies are practices that students may undertake to help them understand and retain course material. An example is reviewing notes after class, which is done often or very often by 44 percent of students. Ryerson is lower than the Ontario average on this indicator at first and fourth year.
- d) Quantitative Reasoning challenges students to use numerical information. For example, 44 percent report that, often or very often, they reach conclusions based on their own analysis of numerical information (e.g., numbers, graphs, statistics). About one third report using numerical information often or very often to examine a real-world problem or issue (e.g., unemployment, climate change, public health). A higher proportion of fourth-year students than first-year students indicate that they use numerical information in their courses. Ryerson is similar to the Ontario average on the Quantitative Reasoning indicator at fourth year and below the province at first year.

Very much

Quite a bit

Some

Figure 1a: Higher-Order Learning

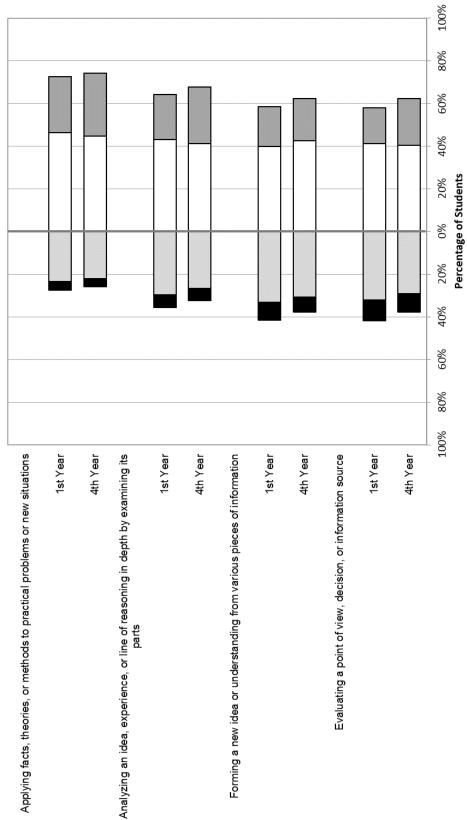


Figure 1b: Reflective and Integrative Learning

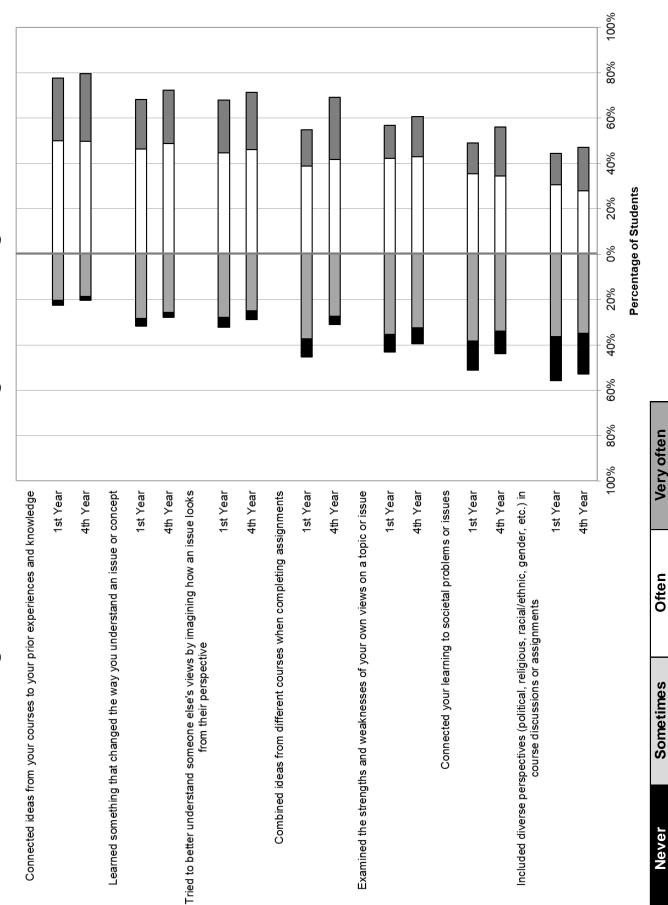


Figure 1c: Learning Strategies

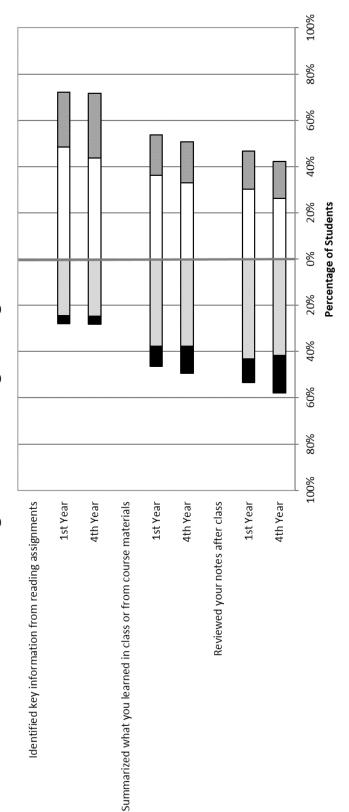
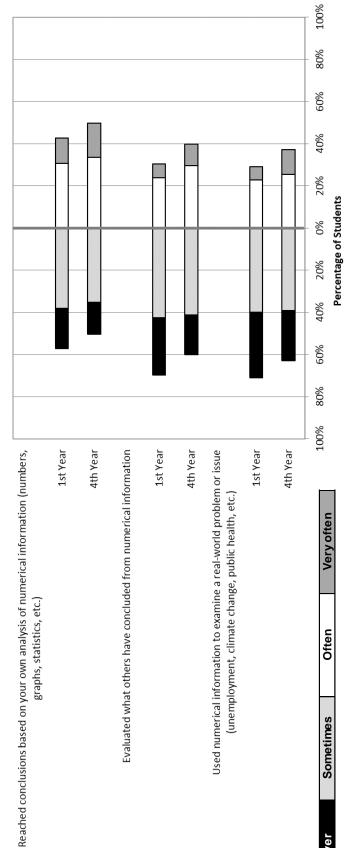


Figure 1d: Quantitative Reasoning



2. Learning with Peers

One of the premises on which NSSE is based is that "collaborating with others in solving problems or mastering difficult material prepares students for the messy, unscripted problems they will encounter daily during and after college." Figures 2a and 2b summarize two engagement indicators relating to respondents' interactions with other students.

- a) Collaborative Learning occurs when students' academic work involves others. The most common form of active and collaborative learning reported is working with other students on course projects or assignments. 62 percent of first-year students and 72 percent of fourth-year students report doing this often or very often. 52 percent of all respondents report that they've asked another student to help them understand course material. Ryerson's score is higher than the Ontario average on this indicator at both first and fourth year, which has been the case for the past several rounds of the survey.
- b) Discussions with Diverse Others occur more frequently among Ryerson respondents than the Ontario average at both first and fourth year. Students are asked about the frequency with which they have discussions with people who differ from themselves in terms of race or ethnicity, economic background, religious beliefs, or political views. 81 percent of Ryerson respondents report engaging in discussions with people of a different race or ethnicity often or very often. Students appear to be least likely to have discussions with people who hold different political views from their own; 61 percent report engaging in discussions with such people often or very often.

3. Experiences with Faculty

Engagement indicators in this area reflect the notion that one of the best ways for students to learn how "experts" think about and solve problems is through interactions with faculty members. Two indicators, student-faculty interaction and effective teaching practices, measure Ryerson's success in this area and are summarized in Figures 3a and 3b.

- a) Student-Faculty Interaction includes four survey questions evaluating the frequency with which students engage directly with faculty. Not surprisingly, fourth-year students are more likely than first-year students to report engaging with faculty often or very often. About a quarter of fourth-year students report talking about career plans with a faculty member (compared to 18 percent of first-year students). A quarter of fourth-year students also report discussing course topics with a faculty member outside of class often or very often (compared to 17 percent at first year). Ryerson's score on the Student-Faculty Interaction indicator is lower than the Ontario average at both first and fourth year.
- b) Effective Teaching Practices is measured by asking students to report on the feedback they receive from faculty and selected aspects of teaching. Two-thirds of respondents, for example, report that instructors clearly explain course goals and requirements, and a similar proportion believe instructors use examples or illustrations to explain difficult points "quite a bit" or "very much." 40 percent indicate that, quite a bit or very much, instructors provide prompt and detailed feedback on tests or completed assignments. Ryerson scores lower on this indicator than the Ontario average at both first and fourth year.

⁶ Indiana University Center for Postsecondary Research, "Ryerson University Benchmark Comparisons", Bloomington, IN: Indiana University Center for Postsecondary Research, 2006, p. 4.

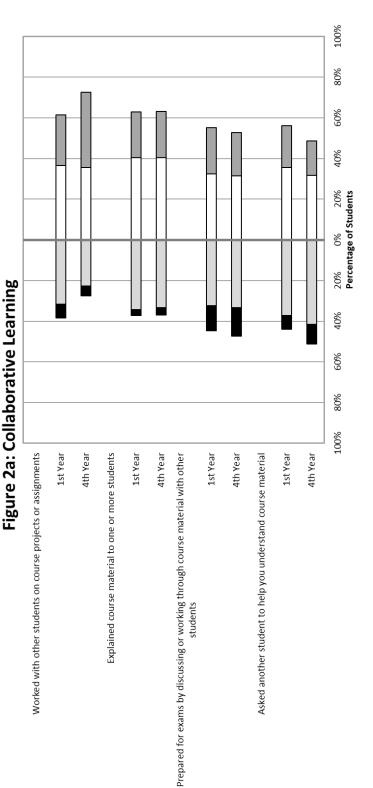
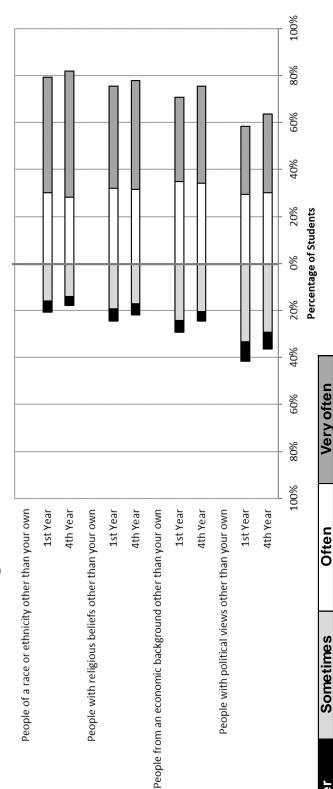


Figure 2b: Discussions with Diverse Others



100%

80%

%09

40%

20%

%0

70%

40%

%09

80%

100%

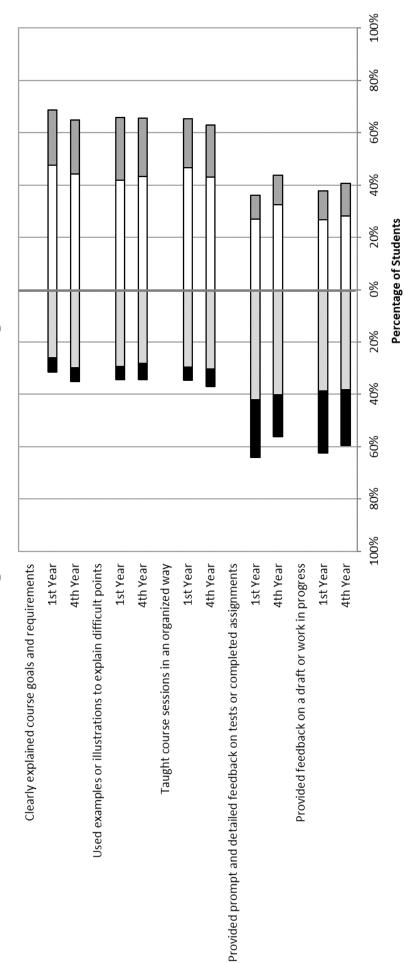
Percentage of Students

Figure 3a: Student-Faculty Interaction 4th Year 1st Year 4th Year 4th Year Talked about career plans with a faculty member Worked with a faculty member on activities other than coursework 1st Year Discussed course topics, ideas, or concepts with a faculty member outside of Discussed your academic performance with a faculty member 1st Year 4th Year 1st Year (committees, student groups, etc.)

Never Sometimes Often Very often

Very much

Figure 3b: Effective Teaching Practices



Very little Some Quite a bit

4. Campus Environment

province at first year.

Aspects of the campus environment assessed by NSSE include the quality of interactions among students, faculty and staff and the extent to which the university fosters a supportive campus climate. Responses are summarized in Figures 4a and 4b.

a) Quality of Interactions is an engagement indicator created by asking students to rate, on a scale from 1 (poor) to 7 (excellent), the quality of their interactions with other students, academic advisors, faculty, student services staff, and administrative staff. Respondents rate the quality of interactions with fellow students highest, particularly at fourth year. Ryerson scores lower than the Ontario average on this indicator.

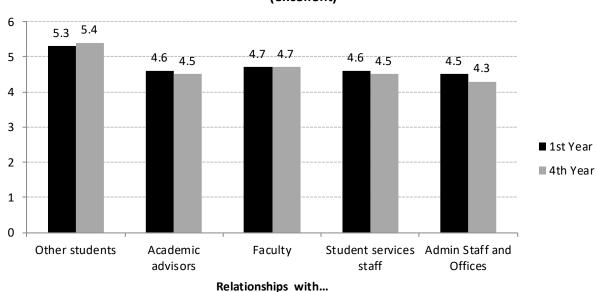


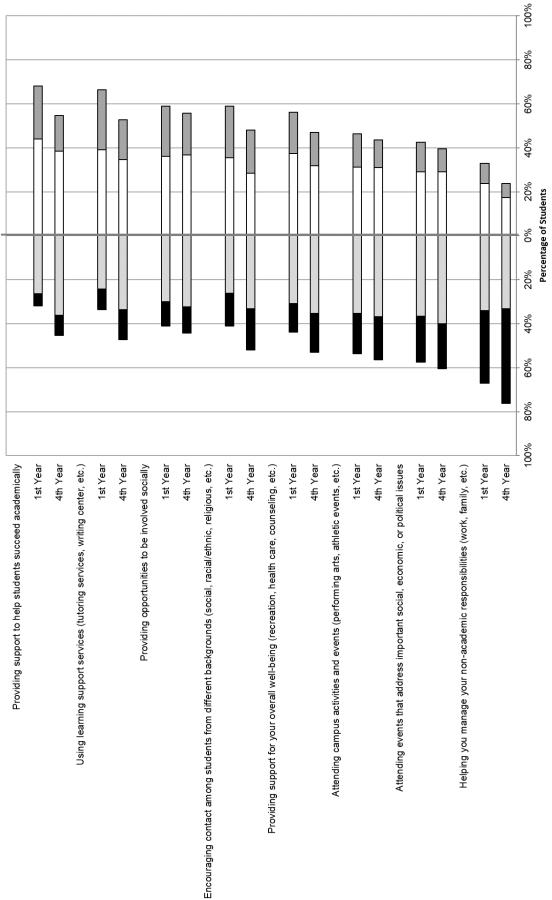
Figure 4a: Quality of interactions with others on a scale from 1 (poor) to 7 (excellent)

b) A Supportive Environment is one where the university fosters student success and encourages students to become involved in campus life. For example, 68 percent of first-year students and 55 percent at fourth year indicate that Ryerson emphasizes the provision of support to help students succeed academically "quite a bit" or "very much." 59 percent at first year and 56 percent of fourth-year students believe the university emphasizes the provision of opportunities to become involved socially. Ryerson scores higher than the Ontario average in the area of Supportive Environment at fourth year and is similar to the

Very little Some Quite a bit

Very much

Figure 4b: Supportive Environment



ADDITIONAL TOPICS

Co-Curricular Participation

Although it is not included in the Campus Environment indicators, a related feature of the university experience is the amount of time students spend in co-curricular activities (e.g., organizations, campus publications, student government, intercollegiate or intramural sports). In 2017, 50 percent of respondents report participating in co-curricular activities during a typical week. Relatively low levels of participation are found even among those who live close to campus: 55 percent of students whose travel time to campus is 20 minutes or less indicate that they participate in co-curricular activities.

The reported level of participation in co-curricular activities at Ryerson has improved steadily over each of the past rounds of NSSE, with the percentage of students reporting involvement going from 35 percent in 2005, and 40 percent in 2011, to 44 percent in 2014 and 50 percent in 2017. (Across Ontario, 39 percent report that they do not participate in co-curricular activities in a typical week.) Results for 2017 are summarized in Figure 5.

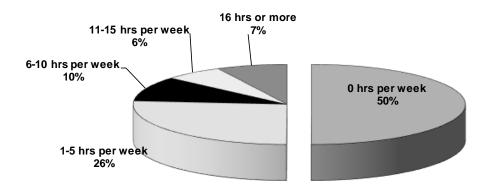


Figure 5: Hours per week in co-curricular activities

Skills Development

Respondents were asked to rate the institution's contribution to their development of skills in a variety of areas. The most highly rated area is the ability to think critically and analytically. 76 percent of students report that the University contributed to the development of critical and analytical thinking skills "quite a bit" or "very much." Two-thirds report that the University contributed in this way to their ability to work effectively with others, and 62 percent report similarly with regard to their ability to write clearly and effectively. 50 percent report that the University has contributed to their ability to analyze numerical and statistical information.

54 percent of students report that the University contributed "quite a bit" or "very much" to the acquisition of job- or work-related knowledge and skills. 53 percent indicate that the University made this contribution to skills in solving complex, real-world problems.

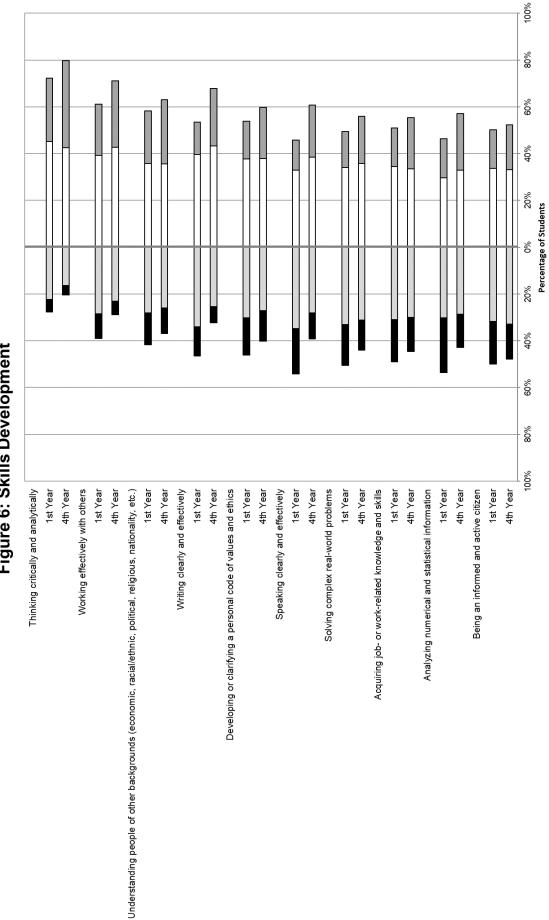
Fourth-year students tend to provide more positive responses on skills development than do first-year students. Ratings are outlined in Figure 6.

Very much

Quite a bit

Some

Figure 6: Skills Development



High Impact Practices

High Impact practices are used to promote integrative and engaged student learning which in return helps increase student retention (Kuh, 2012)⁷. NSSE has identified "High Impact Practices," six activities that have significant associations with student learning and engagement. High Impact Practices share a number of common elements: they demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and students, encourage collaboration with diverse others, and provide frequent and substantive feedback. NSSE recommends that institutions should aspire for all students to participate in at least two High Impact Practices over the course of their undergraduate experience.

The proportion of students participating in each of three of these activities is measured in first year, and the proportion participating in each of the six activities is measured in fourth-year. Respondents are asked whether they have *ever* participated in these activities at any point during their time at Ryerson.

The proportion of students completing at least two High Impact Practices at Ryerson is similar to the Ontario average, but there are differences in terms of the specific activities undertaken. Students at Ryerson appear more likely than the Ontario average to have participated in service learning and to have undertaken a culminating senior experience. Students at the provincial level are more likely than Ryerson students to participate in research with faculty.

Each of the High Impact Practices is listed in Table 3. (Note that NSSE considers only three activities as being applicable in first year, while all six are measured in fourth year.)

Table 3: Percentage of Students Who Have Participated in High Impact Practices

High Impact Practice	First	Year	Fourth Year		
nigh impact Fractice	Ryerson	Ontario	Ryerson	Ontario	
Learning Community (or some other formal program where groups of students take two or more classes together)	7%	10%	15%	18%	
Service Learning (e.g., community-based project)	48%	43%	53%	47%	
Research with Faculty	2%	3%	14%	24%	
Internship or Field Experience (including co-op, student teaching, clinical placement)			49%	46%	
Study Abroad			7%	10%	
Culminating Senior Experience (e.g., capstone course, senior project or thesis, comprehensive exam, portfolio)			42%	33%	
Participated in at least two activities	5%	6%	53%	52%	

⁷ Kuh, G. D. (2012). High-impact educational practices: What they are, who has access to them, and why they matter. *Peer Review, 14*(3), 29.

Overall Experience

The majority of respondents are satisfied with their experience at Ryerson. 75 percent indicate that their "entire educational experience" is good or excellent; 79 percent report that if they could start over, they would probably or definitely attend Ryerson again.

Students were asked to identify the extent to which various factors may have posed obstacles to their academic progress. Financial pressures or work obligations are said to pose an obstacle for 47 percent of fourth-year students at 32 percent at first year. Course availability/scheduling is named as an obstacle by 35 percent of fourth-year and 19 percent of first-year students. Academic performance is identified as an obstacle by 28 percent of fourth-year and 30 percent of first-year students. Personal or family problems are an obstacle for 29 percent of fourth-year and 20 percent of first-year respondents.

For the most part, the proportion of students facing each of the potential obstacles is similar to the previous round of NSSE, except for a decline in the proportion of students reporting issues with financial pressures or work obligations.

Information provided to students

Respondents were asked to rate the quality of information they received from the University at the beginning of the school year. 50 percent report that information on the content and focus of their academic program was good or very good, and 46 percent report similarly with respect to information on how they would be evaluated in their courses.

40 percent of students appear to be satisfied with information about how to access learning and support services, and 21 percent rate the quality of information about common academic problems as good or very good.

25 percent report satisfaction with information about career opportunities after graduation.

First-year students tend to provide somewhat more positive answers than do fourth-year students.

Priorities for Improvement

Respondents were provided with a list of items related to the student learning experience and were asked to choose two items that most need improvement *in the classroom*, and two items that most need improvement *outside the classroom*. Responses are summarized in Figures 7 and 8.

Priorities <u>in</u> the classroom: The items cited most frequently as requiring improvement in the classroom by first-year students include the quality of course instruction by professors (selected by 42 percent) and ensuring a better fit among course content, assignments and tests/exams (selected by 31 percent).

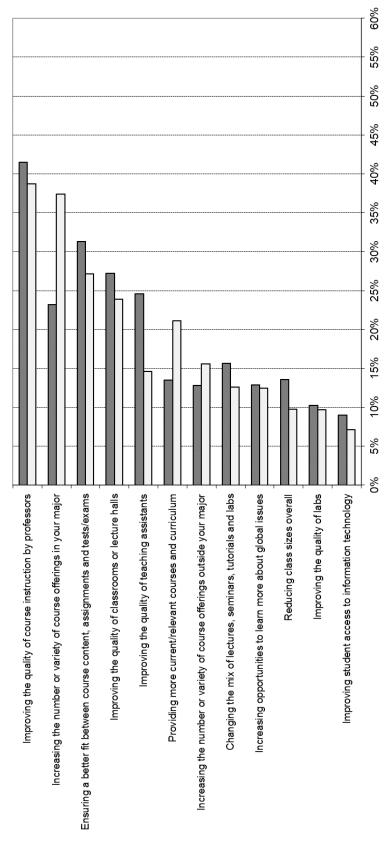
39 percent of fourth-year students name the quality of course instruction in their top two items. Increasing the number or variety of course offerings within one's major is identified as a priority by 37 percent of respondents in fourth-year.

Priorities <u>outside</u> the classroom: Outside of the classroom, the areas cited most commonly by fourth-year students as needing improvement are providing students with more opportunities to undertake research with faculty and improving the quality or availability of study spaces. Each is named by 38 percent of fourth-year students.

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Priorities identified most commonly among first-year students include study space, named by 47 percent; increasing contact with professors outside of class (e.g., office hours), which was named by 29 percent; and providing a better social environment for students, named by 28 percent.

Figure 7: Top two priorities for improvement <u>in</u> the classroom



Percentage of students naming items as one of their top two priorities (percentages total more than 100, as students typically selectmore than one item)

■1st-Year □4th-Year

%09 Percentage of students naming item as one of their top two priorities (percentages total more than 100, as students typically select more than one item) 22% 20% 45% Figure 8: Top two priorities for improvement outside the classroom 40% □ 4th-Year 35% 30% ■ 1st-Year 25% 20% 15% 10% 2% %0 Improving the library collection Working to provide a better social environment for students Improving the quality/availability of study spaces Providing students with more opportunities to undertake research with faculty Increasing contact with professors outside of class (e.g., office hours) Increasing opportunities for international experiences (e.g., exchanges, study Improving library services (e.g., circulation, staff availability, Expanding and/or improving the quality of personal support services Expanding and/or improving the quality of academic support services internet/computer availability)

TRANSITIONS TO AND FROM RYERSON

In 2017, Ryerson added a series of questions to the regular NSSE survey to assess first-year experiences and senior transitions. These questions complement data that Ryerson receives as part of its participation in the Canadian University Survey Consortium, which conducts the triennial First Year Student Survey and Graduating Student Survey, respectively.

First Year Experiences

Students in first year were asked about habits related to persistence and academic success, the extent to which they seek help from various sources, and whether they have considered leaving the institution.

Almost all respondents report that they finish something even when encountering challenges, and they find additional information when they do not understand course material. First-year students report participating in course discussions even when they don't feel like it, and asking instructors for help, less frequently. Results are summarized in Figure 9.

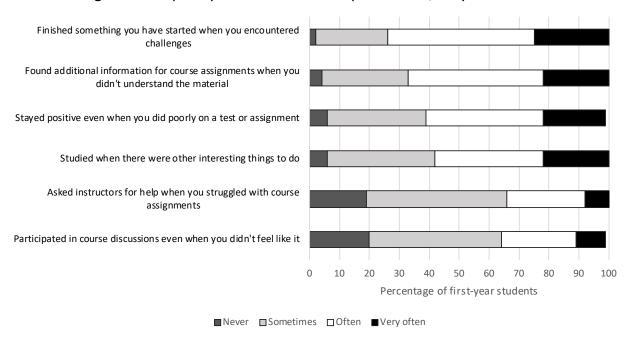


Figure 9: Frequency of habits related to persistence, 1st year students

First-year students were asked how often they have sought help with coursework from each of a variety of sources. By a very large margin, the source used most is friends or other students, with 71 percent of first-year students indicating that they seek help from them often or very often. Responses appear in Figure 10.

First-year students were asked whether, during the current year, they have seriously considered leaving the institution. Slightly more than one in four (27 percent) at Ryerson replied "yes." This is the same as the Ontario average. Among those indicating that they've considered leaving, the reasons cited most commonly are: to change career options (40 percent); personal reasons

(e.g., family issues, health, stress) (31 percent); and finding that academics are too difficult (28 percent).

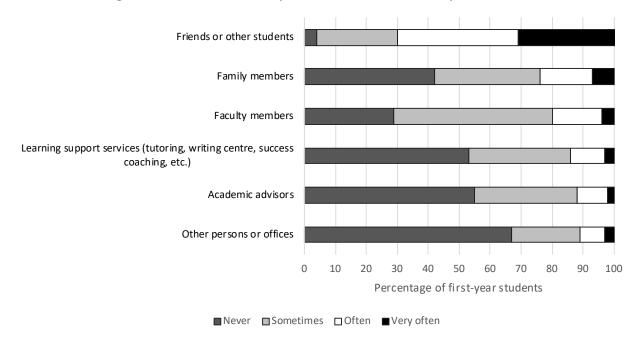


Figure 10: Sources of help with coursework, 1st year students

Senior Transitions

Students in fourth year were asked about plans following graduation, self-assessment of various work-related skills, and emphasis of coursework.

About two-thirds of fourth-year respondents report that they plan to work immediately following graduation and 14 percent indicate that they plan to continue to professional or graduate school. 78 percent indicate that they plan to work eventually in a field related to their major (with a further 16 percent unsure of their eventual field of work). One third of students plans to start their own business someday.

At the time of the survey (Winter 2017), 38 percent of respondents who plan to work had a job secured for after graduation.

55 percent of fourth-year respondents indicate that their coursework has prepared them for their post-graduation plans "quite a bit" or "very much." Students were asked to what extent their courses have emphasized various approaches to problem-solving. Results are outlined in Table 4.

Table 4: Emphasis of coursework as perceived by fourth-year students

	% of respondents				
To what extent has your coursework in your major emphasized	Quite a bit or very much	Some	Very little		
Generating new ideas or brainstorming	67	28	6		
Evaluating multiple approaches to a problem	65	27	8		
Taking risks in your coursework without fear of penalty	37	32	31		
Inventing new methods to arrive at unconventional solutions	49	33	18		

Fourth-year students were asked to rate their ability to complete tasks that require various skills. Results are outlined in Figure 11.

Creative thinking and problem solving Critical thinking and analysis of arguments and information Clear writing Leadership skills Research skills Technological skills Persuasive speaking Networking and relationship building Financial and business management skills Entrepreneurial skills 0 10 20 30 40 50 70 80 100 Percentage of fourth-year students ■ Very little ■ Some □ Quite a bit ■ Very much

Figure 11: Self-assessment of skills, 4th year students

PROFILE OF RESPONDENTS

The characteristics of the survey sample are compared to the population in terms of gender, Faculty and course load in Table 4.

In first year, students from the Faculty of Communication and Design and Faculty of Community Services tend to be somewhat over-represented while those in Faculty of Engineering and Architectural Science and Ted Rogers School of Management are somewhat under-

represented. In fourth year, there is over-representation from Community Services and underrepresentation from Ted Rogers School of Management.

Female students are over-represented in the sample.

Students taking a part-time course load in fourth year were less likely to complete the survey than those on a full-time course load. In first year, the proportion of survey respondents on a part-time load approximates that among the population.

Table 5: Comparison of survey sample and population characteristics

1st year

4th year

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	Sam	ple	Population		Sample		Popul	ation
Gender								
Female	1,558	67.2%	4,282	55.9%	1,649	59.7%	4,845	50.4%
Male	762	32.8%	3,380	44.1%	1,112	40.3%	4,767	49.6%
Total	2,320	100.0%	7,662	100.0%	2,761	100.0%	9,612	100.0%
Faculty								
Arts	360	15.5%	1,169	15.3%	358	13.0%	1,116	11.6%
Communication								
& Design	443	19.1%	1,338	17.5%	378	13.7%	1,356	14.1%
Community								
Services	337	14.5%	923	12.0%	592	21.4%	1,613	16.8%
Engineering & Architectural								
Sci	319	13.8%	1,213	15.8%	463	16.8%	1,696	17.6%
Science	232	10.0%	720	9.4%	237	8.6%	778	8.1%
Ted Rogers								
School of Mgt	629	27.1%	2,299	30.0%	733	26.5%	3,053	31.8%
Total	2,320	100.0%	7,662	100.0%	2,761	100.0%	9,612	100.0%
Course Load								
Full-time	2,147	92.5%	6,946	90.7%	1,829	66.2%	5,916	61.5%
Part-time	173	7.5%	716	9.3%	932	33.8%	3,696	38.5%
Total	2,320	100.0%	7,662	100.0%	2,761	100.0%	9,612	100.0%

Grades

Among respondents in first year, the percentage of those with a self-reported average grade is as follows: A (28 percent), B (56 percent), C (12 percent) and C- or lower (4 percent). The distribution of respondents in fourth year by self-reported average grade is: A (28 percent), B (59 percent), C (12 percent) and C- or lower (1 percent).

Parental Education

53 percent of respondents indicate that at least one of their parents completed a university degree (bachelor's, master's or doctoral). A further 4 percent attended university without earning a degree. 18 percent report that at least one parent attended (but not necessarily completed) college, while 17 percent indicate that the highest level of education completed by their parents is high school. 8 percent report that neither of their parents completed high school. Using the definition of parents never attending any post-secondary education, the proportion of respondents who are First Generation students is 25 percent, which is the same as the proportion found in the previous round of NSSE conducted in 2014.

Members of Racialized Groups

Respondents are asked to provide information about their ethno-cultural background, which may be used to estimate whether a given student is likely to identify as a member of a racialized

group. It is estimated that 57 percent of respondents are members of racialized groups. This is similar to the estimate derived from the previous round of NSSE.

Students with Disabilities

12 percent of respondents indicate that they have a disability. The most commonly reported type of disability is a mental health disorder, followed by a learning disability.

Employment

62 percent of students report working for pay in a typical week. Among those who are employed, 77 percent work off campus only, 8 percent work on campus only, and 15 percent work both on and off campus.

Students who are employed report higher average levels of engagement than non-employed students on a number of indicators, including Student-Faculty Interaction, Reflective and Integrative Learning, and to a somewhat lesser extent, Quantitative Reasoning and Collaborative Learning.⁸

Students with *on-campus* employment (including those doing a combination of on- and off-campus work) score more highly on four engagement indicators than do students who report working only off campus⁹: Student-Faculty Interaction, Quantitative Reasoning, Supportive Environment, and Collaborative Learning. Differences between those with on-campus employment and those with only off-campus employment are particularly marked in the area of Student-Faculty Interaction.

Commuting to Campus

79 percent of respondents use public transit to travel to campus while 15 percent walk or cycle. The remainder of students uses a car to get to campus, either alone or sharing a drive with others. 65 percent of respondents travel over 40 minutes to get to campus from their place of residence. The distribution of students by reported length of commute is summarized in Figure 12.

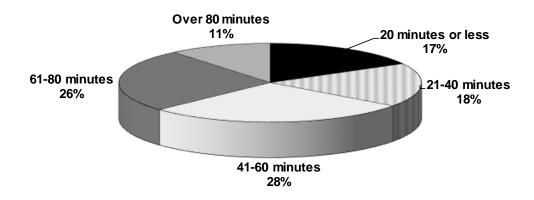


Figure 12: Travel time to campus from place of residence

⁸ Differences between employed and non-employed students: Student-Faculty Interaction (t=11.06, p< .001); Reflective and Integrative Learning (t=7.90, p< .001); Quantitative Reasoning (t=3.84; p< .001); Collaborative Learning (t=3.23, p< .001).

⁹ Differences between students working on campus (including a combination of on- and off-campus work) and those working only off campus: Student-Faculty Interaction (t=15.09, p< .001); Quantitative Reasoning (t=6.12, p< .001); Supportive Environment (t=3.75, p< .001); Collaborative Learning (t=2.91, p< .01).

SUMMARY

At Ryerson, NSSE underpins student experience and engagement initiatives by providing a robust, long-term measurement regime. The survey has become an integral part of the University's planning processes. Ryerson has increased its sample size beyond standard NSSE levels to allow for disaggregation of responses to the level of individual programs. This has allowed survey results to inform planning within academic departments and Faculties in addition to University-wide efforts.

Overall satisfaction with the educational experience offered at Ryerson is high: 79 percent of respondents report that if they could start over, they would attend Ryerson again.

The reported level of participation in co-curricular activities has improved steadily over successive rounds of NSSE.

The survey results suggest possible areas for enhancement at Ryerson, and a review of these items is underway. A variety of initiatives at Ryerson has been informed by NSSE results. For example, the past few rounds of NSSE have underscored the importance of study space, and planning for increased student space was made an integral part of new building plans. Similarly, survey responses have been considered in curriculum reviews, and subsequent initiatives have been undertaken in an effort to provide students with more choice in their selection of courses.

NSSE and other student surveys will continue to provide an important source of information about Ryerson's progress in enabling engagement and success for all students.