

Canadian Graduate and Professional Student Survey (CGPSS) 2019

Aggregate Report

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Summary

The University of Toronto takes pride in being a leader in education and scholarship in Canada. We are committed to maintaining and improving the quality of our graduate programs. Participation in the **Canadian Graduate and Professional Student Survey (CGPSS)** provides us with feedback to assess our strengths and helps us identify areas for improvement.

In the spring of 2019, the University of Toronto's School of Graduate Studies, along with our Canadian peers¹ and 35 other Canadian universities² conducted the Canadian Graduate and Professional Student Survey (CGPSS). A total of 6,041 registered graduate students at U of T (34.3% of the graduate student population) took part in this survey. This report presents a selection of results collected through the survey, without statistical analysis and provides a general descriptive summary at the institutional level.

For some questions, information is disaggregated by type of degree program (i.e., doctoral program, research master's program and professional master's program). Some questions are reported for doctoral stream students. This term refers to doctoral students and research master's students combined. Where possible, 2019 results are compared with results from previous CGPSS results and Canadian peer data. Canadian peer results do not include University of Toronto results.

To facilitate comparisons with previous survey results, the structure of the report is similar to that produced in 2013 and 2016 including Canadian peer results for three benchmark scores³.

This report is structured around the sections of the CGPSS and covers several important aspects of graduate education:

- Respondent profile
- General satisfaction
- Satisfaction with program, quality of interactions, coursework
- Professional skills development and networking opportunities
- Program/department support
- Financial support
- University resources and student life
- Supportive campus environment
- General assessment

¹ Over the years, the Canadian peers group has changed names and grown. In 2005, the 'G10' included: Alberta, British Columbia, Laval, McGill, McMaster, Montreal, Queen's, Waterloo and Western. In 2007, the group was known as the 'G13' and included the original 10 universities plus Calgary, Dalhousie and Ottawa. In 2013, the group was known as the 'U15' and includes the 'G13' plus Manitoba and Saskatchewan.

² An invitation to participate in the CGPSS survey was sent to U15 universities and member institutions of the Canadian Association of Graduate Studies and Council of Ontario Universities.

³ Analysis of benchmark scores for the G13 Data Exchange (now the U15) was conducted by the G13 CGPSS data caretaker, University of Laval, and the University of Ottawa. These benchmarks provide an overview of various aspects of the graduate student experience by combining responses to similar questions in Sections three to seven of the CGPSS.

Administration:

This was the sixth time that the University of Toronto has participated in the survey and the fifth time the survey was hosted in Canada. The initial survey was conducted in 2005 (GPSS) in tandem with other Canadian and US universities⁴. In 2002, some of the questions were asked of students as part of the Higher Education Data Sharing (HEDS) Consortium graduate student survey.

The survey questionnaire was initially developed by the Massachusetts Institute of Technology (MIT) and Duke University, and is based on three pre-existing surveys from Rutgers, the Higher Education Data Sharing (HEDS) Consortium, and the Consortium on Financing Higher Education (COFHE). Some questions were revised in the development of a Canadian version. Following the 2005 administration of the tool, the survey was shortened and the wording of some questions was changed.

In 2010, two versions of the CGPSS were created to address differences between doctoral stream and professional programs. With the exception of some minor wording changes, the 'Regular' version of the CGPSS was identical to the 2007 CGPSS instrument and was distributed only to doctoral stream (i.e., doctoral and research master's) students. The 'Professional' version of the survey was only sent to professional master's students. This version excluded a number of research-related questions (e.g., presenting at conferences, satisfaction with thesis advisor) from the 2007 survey instrument and added several questions regarding professional skills development (e.g., opportunities for internships, practicums, and experiential learning).

In 2013, a single instrument was introduced, but with three different streams built in: LONG, MEDIUM, and SHORT. Institutions had the option to impose a stream for each respondent to follow. At the University of Toronto, doctoral and research master's students were asked a new 'thesis' question at the beginning of the survey, and led through either the long or medium stream path of the survey based on the response to the thesis question. Students responding that their program is 'mostly research-based, and (they) already have a research director/advisor' were led through the LONG stream path. Students responding that their program is 'mostly research-based, but (they) still do not have a research director/advisor' were led through the MEDIUM stream path. Professional master's students were led through the short stream path. This path was meant for students in programs which were 'mainly course-based'.

The 2016 and 2019 survey instruments retained this format. Table 1 displays the distribution of respondents by survey stream in 2019.

⁴ Other Canadian universities participating in the 2005 GPSS included: British Columbia, Laval, McMaster, McGill, Waterloo, Western, and York. Some US participating institutions in 2005 included: Brown, Duke, Florida, MIT, North Carolina – Chapel Hill, Rice, and Stanford.

Table 1 CGPSS 2019 Results Respondents by survey stream

	Description	AL	L
Stream	My program is	Count	%
Long	Mostly research-based, and I already have a research director/advisor	2,980	49%
Medium	Mostly research-based, but I still do not have a research director/advisor	340	6%
Short	Mainly course-based	2,721	45%
Total		6,041	100%

The University of Toronto opted to ask some supplemental questions pertaining to:

- How supportive supervisors, professors and peers were in encouraging the student to complete professional development activities,
- Which factors had a significant influence on the decision to attend professional development opportunities,
- How supported by the university students feel in various professional and personal skill development activities and career preparation activities,
- How prepared students feel for various working positions,
- How prepared students feel for various roles and sectors which they are prioritizing right now.

The results for these supplemental questions are reported in Section IV, 'Professional Skills Development and Networking Opportunities'.

Highlights of Survey Results:

Overall, results from 2019 have not changed drastically from those in 2016 and our areas of strength remain well-regarded:

- Most graduate students are pleased with their academic program experience 91% rated their academic experience as 'excellent', 'very good', or 'good'.
- Over three quarters (78%) of respondents responded that they will definitely or probably choose the same university if they were to start their graduate/professional career again.
- In evaluating their program, quality of interactions and coursework, students showed the highest levels of satisfaction with the intellectual quality of faculty members (96% positive) and their fellow students (93% positive).
- As in previous years, some differences are observed in responses by degree type. For instance, professional master's students reported higher satisfaction than doctoral stream students with opportunities for student collaboration or teamwork (94% of professional master's students were satisfied compared to 73% of doctoral stream students). On the other hand, doctoral stream students are more satisfied with opportunities to take coursework outside their departments (72% of doctoral stream students were satisfied compared to 63% of professional master's students).

- Only 57% of graduate students are satisfied with the advice on the availability of financial support. Satisfaction in this area has dropped in all degree types since 2010.
- On the whole, levels of participation and satisfaction for professional master's students with their professional skills development activities were higher than those observed for doctoral stream students. Professional master's students were most satisfied with the opportunities for contact with practicing professionals (82%) and advice/workshops on the standards for writing in their profession (76%). Doctoral stream students were most satisfied with feedback on their research (77%) and advice, workshops or tools on the standards for academic writing in their field (75%).
- Doctoral stream students, were least satisfied with opportunities for internships, practicum and experiential learning as part of the program (49%). In contrast, three quarters of professional master's students (75%) were satisfied with these types of opportunities.
- Doctoral stream students' participation in conducting independent research continues to be strong. Of the 94% who responded that they conducted research since the start of their graduate program, 82% rated the experience positively.
- On an array of questions regarding behaviours of their thesis advisors, doctoral students reported levels of satisfaction consistently above 80%; thesis advisors' ability to provide constructive feedback on their work and to advocate for their students received particularly high ratings (92% and 91% positive ratings respectively).
- There is one exception to this finding. Only two thirds (66%) of doctoral students agreed that their advisor encouraged discussions about the current job market and various career prospects.
- Over one-third of respondents (35%) reported that they expect to have no education-related debt at the end of their program.
- Library facilities remain the highest rated university resource in terms of use and satisfaction. Of the 92% of respondents that used this facility, 94% were satisfied with the quality. Food services still receive the lowest rating in terms of satisfaction. Of the 69% of respondents that used food services, only 46% were satisfied.
- Financial commitments are considered to be a major obstacle by 40% of respondents, and a minor obstacle by 37% of respondents.
- Our students continue to report high levels of satisfaction with their academic experience, their overall experience and their graduate programs; however, lower levels of satisfaction with their student life experience are reported.

I. Response Rates and Respondent Profile

In February 2019, 17,627 degree-seeking students who were registered in the Fall 2018 term and registered or invited in the Winter 2019 term were invited by email to participate in the CGPSS. Because the distribution of invitations and other information about the survey was web-based, it was necessary that each student have a valid email address recorded in ROSI⁵. Students completed the survey online. In total, 6,041 (34.3%) valid responses were collected and these responses form the basis of this report.

The highest number of responses came from professional master's students (2,721,45% of all survey participants), followed by doctoral students (2,208,37% of all survey participants), and then by research master's students (1,112; 18% of all survey participants).

Research master's students had the largest response rates (37%), compared to doctoral (35%) and Professional Master's (33%).

Compared to 2016, a lower proportion of doctoral stream (doctoral and research master's) students responded to the survey. However, a larger proportion of professional master's students responded.

The overall response rate for the CGPSS 2019 survey was 34.3%, similar to the national average (35.2%) and our response rate in 2016 (34.6%).

Table 2 compares the response rate by degree type for each CGPSS survey.

Table 2 CGPSS 2005, 2007, 2010, 2013, 2016, 2019 Results Response rate by degree type

	2005	2007	2010	2013	2016	2019
Doctoral	44.5%	47.9%	39.4%	47.7%	37.9%	35.1%
Research Master's	46.3%	43.9%	39.0%	51.2%	40.0%	36.7%
Professional Master's	33.8%	37.1%	32.1%	42.8%	29.7%	32.8%
Total	41.0%	43.1%	36.5%	46.4%	34.6%	34.3%

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⁵ Repository of Student Information, University of Toronto's student information system.

Table 3 displays response rates for each faculty. The faculty of Kinesiology and Physical Education had the highest response rate. Over half the graduate students from that faculty who were invited to participate responded to the survey.

Table 3 CGPSS 2019 Results
Response rates by faculty, from largest to smallest response rate

	All registered students*	Survey Participants	Response rate
Kinesiology and Physical Education	151	77	51.0%
Forestry	90	43	47.8%
UTSC	199	93	46.7%
Information	747	318	42.6%
Law	159	63	39.6%
Social Work	475	184	38.7%
Medicine	2,481	953	38.4%
Architecture, Landscape and Design	343	130	37.9%
Public Health, Dalla Lana School of	1,007	367	36.4%
Nursing	290	101	34.8%
Management	1,249	431	34.5%
Arts and Science	4,242	1,440	33.9%
Music	298	97	32.6%
Dentistry	107	34	31.8%
Pharmacy	117	37	31.6%
Applied Science and Engineering	2,298	706	30.7%
OISE	2,942	875	29.7%
UTM	432	92	21.3%
Total	17,627	6,041	34.3%

^{*}All doctoral, research master's and professional master's students registered in Fall 2018 and registered or invited in Winter 2019.

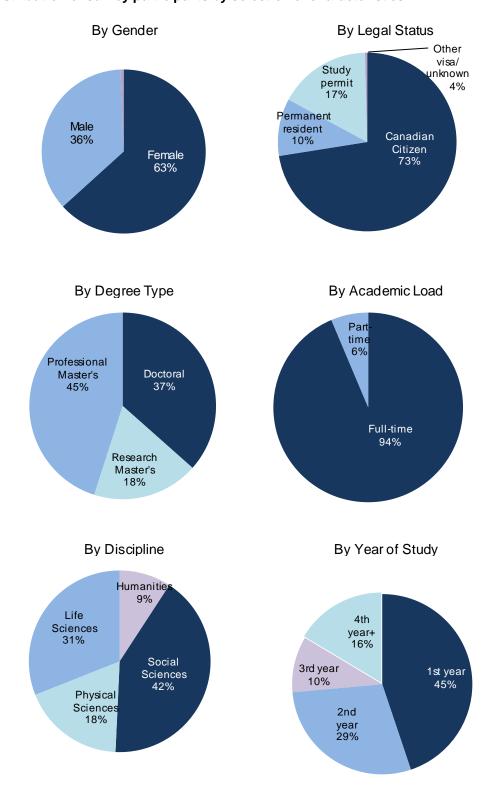
Students registered in self-funded professional graduate programs, Toronto School of Theology (TST) students, special students, and students in diploma/certificate programs are excluded.

The survey participants are reasonably representative of the population of U of T graduate students in terms of gender, legal status, degree type, enrolment category, and discipline. Table 4 compares the characteristics of survey participants to the graduate student population, and offers the response rate by characteristic. Figure 1 offers a visual presentation of the 2019 survey respondents by characteristic.

Table 4 CGPSS 2019 Results
Comparison of student characteristics between survey participants and the graduate student population, response rate by characteristic

Characteristic	Category	Survey participants		All invited	students	Response
		Count	%	Count	%	rate
Gender						
	Female	3,823	63.3%	10,018	56.8%	38.2%
	Male	2,181	36.1%	7,525	42.7%	29.0%
	Another/Unreported	37	0.6%	84	0.5%	44.0%
Legal Status						
	Canadian citizen	4,379	72.5%	12,482	70.8%	35.1%
	Permanent resident	627	10.4%	2,043	11.6%	30.7%
	Study permit	1,011	16.7%	2,988	17.0%	33.8%
	Othervisa	23	0.4%	111	0.6%	20.7%
	Unknown	1	0.0%	3	0.0%	33.3%
Degree Type						
	Doctoral	2,208	36.6%	6,299	35.7%	35.1%
	Research Master's Professional	1,112	18.4%	3,026	17.2%	36.7%
	Master's	2,721	45.0%	8,302	47.1%	32.8%
Academic Load	I					
	Full time	5,163	93.7%	14,679	92.1%	35.2%
	Part time	350	6.3%	1,251	7.9%	28.0%
SGS Division						
	Division I	556	9.2%	1,583	9.0%	35.1%
	Division II	2,509	41.5%	7,551	42.8%	33.2%
	Division III	1,103	18.3%	3,565	20.2%	30.9%
	Division IV	1,873	31.0%	4,928	28.0%	38.0%

Figure 1 CGPSS 2019 Results
Distribution of survey participants by selection of characteristics



II. General Satisfaction

Students were asked to give a general assessment of their experiences with academic programs by answering four overall questions (Figure 2 a-d).

A higher proportion of U of T students would choose the same university than their counterparts at Canadian peer institutions. Over three quarters (77%) of doctoral and professional master's students and over 80% of research master's students would choose U of T again, compared to 67% of doctoral students, 72% of research master's students and 74% of professional master's students at Canadian peer institutions.

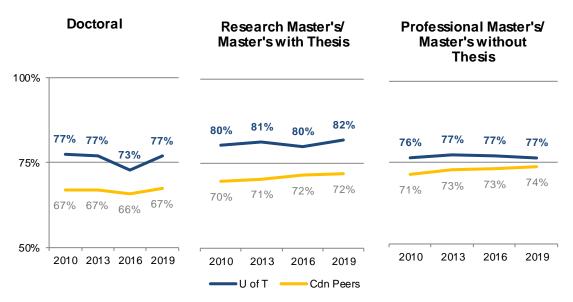
Over three quarters (78%) of doctoral stream and over 80% of professional master's students would select the same field of study. However, for each degree type, the proportion of U of T students who gave a positive rating was slightly lower than their Canadian peer institution counterparts.

Although a larger proportion of U of T doctoral students would recommend their program than their Canadian peer institution counterparts, there has been a steady decline in the proportion of doctoral students who would recommend their program. In 2010, 79% of doctoral students would recommend their program, compared to only 73% in 2019. Over 80% of U of T research master's students would recommend their program, compared to approximately 77% of Canadian peer institution counterparts. Approximately three quarters of U of T professional master's students gave a positive response, similar to the responses at Canadian peer institutions.

Over two thirds of U of T students would recommend this university to someone considering another field.

Figure 2 CGPSS 2013, 2016, 2019 Results General satisfaction: Proportion of Respondents who answered 'definitely' or 'probably', by degree type, University of Toronto compared to Canadian peers

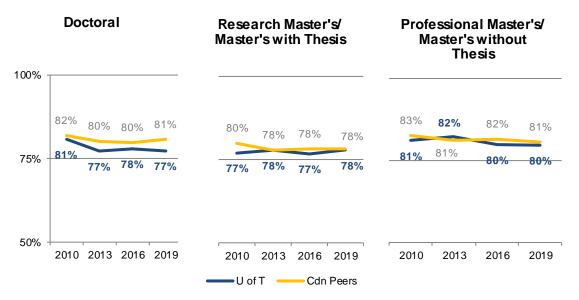
a) If you were to start your graduate/professional career again, would you choose the same university?



Proportion of respondents who answered 'definitely' or 'probably' Canadian peer results exclude U of T.

U of T data labels are written in bold blue; Canadian peer data labels are written in light grey.

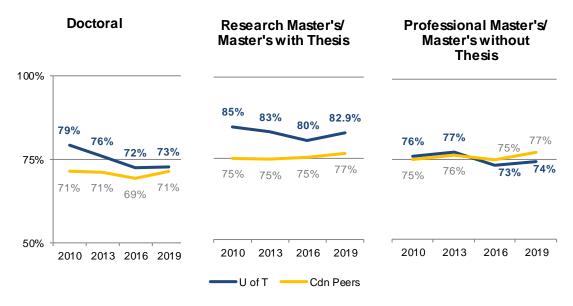
b) If you were to start your graduate/professional career again, would you select the same field of study?



Proportion of respondents who answered 'definitely' or 'probably' Canadian peer results exclude U of T.

U of T data labels are written in bold blue; Canadian peer data labels are written in light grey.

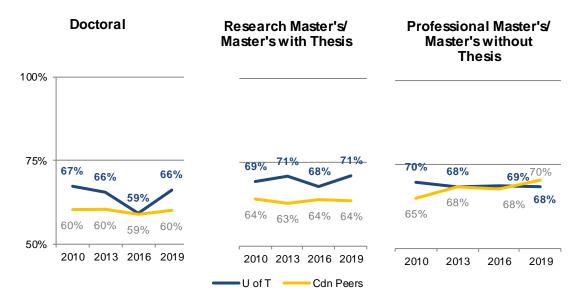
c) Would you recommend this university to someone considering your program?



Proportion of respondents who answered 'definitely' or 'probably' Canadian peer results exclude U of T.

U of T data labels are written in bold blue; Canadian peer data labels are written in light grey.

d) Would you recommend this university to someone in another field?



Proportion of respondents who answered 'definitely' or 'probably' Canadian peer results exclude U of T.

U of T data labels are written in bold blue; Canadian peer data labels are written in light grey.

III. Satisfaction with Program, Quality of Interactions, and Coursework

Results in this section focus on various dimensions of academic programs, such as academic quality, intellectual environment, program content, and program structure. Table 5 summarizes students' positive responses to these thirteen questions for each of the survey years.

In all years, students reported the greatest satisfaction with the intellectual quality of the faculty and the intellectual quality of their fellow students, with satisfaction levels for both above 90%. Students reported the least satisfaction with advice on the availability of financial support. Satisfaction for this dimension has fallen from 65% in 2010 to 57% in 2019.

Table 5 CGPSS 2010, 2013, 2016, 2019 Results All Degree Types Satisfaction with various program dimensions: Proportion of Respondents who answered 'excellent', 'very good', or 'good'

Dimension of program	2010	2013	2016	2019
The intellectual quality of the faculty	97.1%	97.5%	96.8%	96.1%
The intellectual quality of my fellow students	93.4%	93.5%	92.9%	92.6%
Overall quality of graduate level teaching by faculty	87.4%	87.0%	86.3%	86.1%
Support received from non-academic staff members (Dept/Program admin, tech, etc.)	85.8%	85.6%	81.0%	83.9%
The relationship between faculty and graduate students	84.5%	85.6%	84.4%	83.9%
Opportunities for student collaboration or teamwork	79.3%	79.4%	79.5%	82.3%
Relationship of program content in my research/professional goals	82.1%	81.4%	81.6%	82.2%
Amount of coursework	85.2%	83.2%	84.0%	81.5%
Availability of area courses I needed to complete my program	75.9%	77.5%	77.2%	78.3%
Quality of academic advising and guidance	73.2%	74.2%	74.0%	73.6%
Opportunities to engage in interdisciplinary work		73.7%	71.9%	73.4%
Opportunities to take coursework outside my own department	74.3%	72.6%	68.9%	67.8%
Advice on the availability of financial support	64.8%	64.3%	60.6%	56.5%

[&]quot;%" is the proportion of respondents who responded 'excellent', 'very good', or 'good'.

Table 6 summarizes student's positive responses for each degree type in 2019.

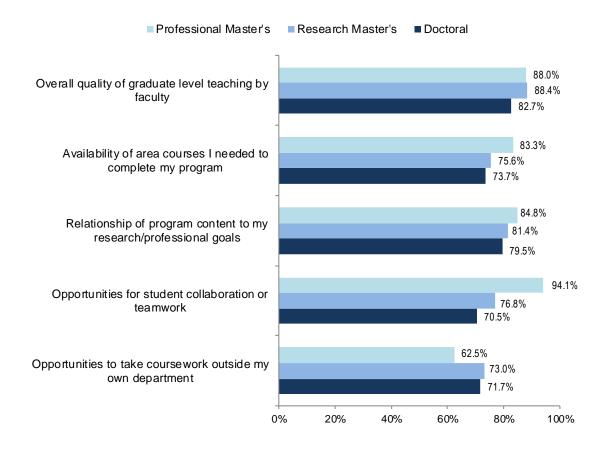
Table 6 CGPSS 2019 Results
Satisfaction with various program dimensions by Degree Type:
Proportion of Respondents who answered 'excellent', 'very good', or 'good'

Dimension of program	Doctoral	Research Master's	Prof Master's	AII
The intellectual quality of the faculty	96.7%	98.4%	94.6%	96.1%
The intellectual quality of my fellow students	93.6%	95.4%	90.6%	92.6%
Overall quality of graduate level teaching by faculty	82.7%	88.4%	88.0%	86.1%
Support received from non-academic staff members	82.6%	87.1%	83.6%	83.9%
The relationship between faculty and graduate students	78.9%	87.6%	86.4%	83.9%
Relationship of program content to my research/professional goals	79.5%	81.4%	84.8%	83.9%
Opportunities for student collaboration or teamwork	70.5%	76.8%	94.1%	82.3%
Amount of coursework	80.9%	83.7%	81.1%	81.5%
Availability of area courses I needed to complete my program	73.7%	75.6%	83.3%	78.3%
Quality of academic advising and guidance	75.4%	78.3%	70.2%	73.6%
Opportunities to engage in interdisciplinary work		74.8%	75.0%	73.4%
Opportunities to take coursework outside my own department		73.0%	62.5%	67.8%
Advice on the availability of financial support	58.7%	61.9%	52.4%	56.5%

Results in this section highlight the different experiences of students in doctoral stream and professional programs (Table 6, Figures 3-6).

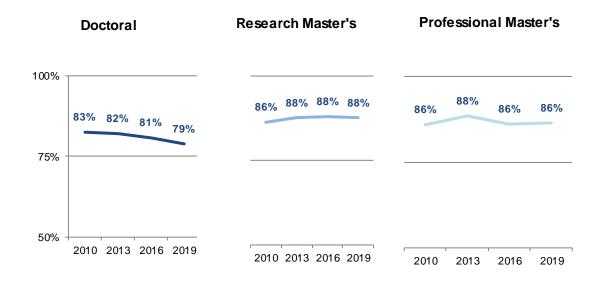
- Research and professional master's students reported higher levels of satisfaction with the overall quality of graduate teaching by faculty than doctoral students. Eighty eight percent of research master's, and professional master's gave positive responses compared to only 83% of doctoral students.
- Professional master's students reported higher levels of satisfaction with the availability of area courses than doctoral stream students. Eighty three percent of professional masters compared to only 74% of doctoral stream students gave positive responses.
- Professional master's students showed much higher levels of satisfaction with opportunities for student collaboration or teamwork than doctoral stream students.
 Ninety four percent of professional master's students compared to only 73% of doctoral stream students gave positive responses.
- However, doctoral stream students reported greater satisfaction than professional master's students with the opportunities to take coursework outside their own department. Close to three quarters (72%) of doctoral stream students compared to 63% of professional master's students gave positive responses.

Figure 3 CGPSS 2019 Results
Rate the following dimensions of your program:
Proportion of respondents who answered 'excellent', 'very good', or 'good' by degree type



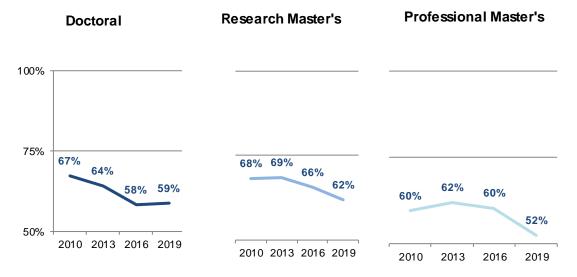
Student satisfaction with the relationship between faculty and graduate students varies somewhat by degree type. In a pattern consistent since 2010, both research master's and professional master's students reported greater satisfaction with their relationship with faculty than did doctoral students (Figure 4). The level of satisfaction reported by doctoral students has declined each year.

Figure 4 CGPSS 2010, 2013, 2016, 2019 Results
Rate the relationship between faculty and graduate students:
Proportion of respondents who answered 'excellent', 'very good', or 'good' by degree type



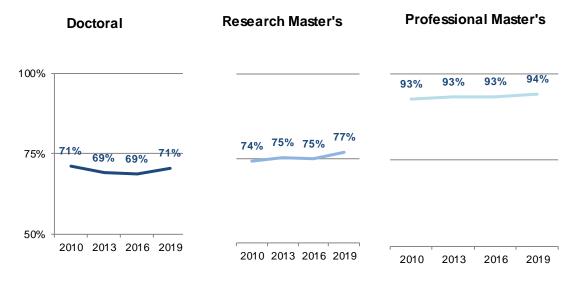
The proportion of students who were satisfied with the availability of financial support has decreased each survey year since 2010 (Figure 5). In 2010 67% of doctoral students were satisfied with advice on the availability of financial support. In 2019, only 59% of doctoral students reported being satisfied. Similarly, in 2010, 68% of research master's students and 60% of professional master's students were satisfied with the availability of financial support. In 2019 only 62% of research master's students and 52% of professional master's students gave positive responses to this question.

Figure 5 CGPSS 2010, 2013, 2016, 2019 Results
Rate the advice on the availability of financial support:
Proportion of respondents who answered 'excellent', 'very good', or 'good' by degree type



A much larger percentage of professional master's students (94% in 2019) reported being satisfied with opportunities for student collaboration or teamwork than doctoral stream students (71% of research master's, and 71% of doctoral students in 2019) (Figure 6).

Figure 6 CGPSS 2010, 2013, 2016 Results
Rate the opportunities for student collaboration or teamwork:
Proportion of respondents who answered 'excellent', 'very good', or 'good' by degree type



The U15 data exchange developed a benchmark score named 'Quality of Teaching'.

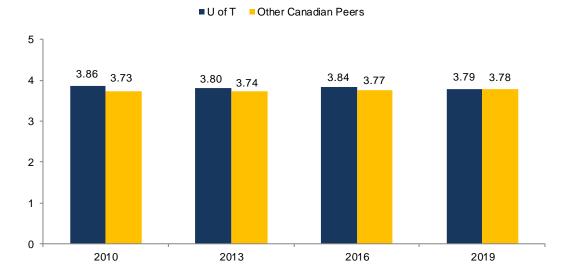
Ratings by doctoral students from the following four survey items were included in the benchmark score:

- 1. The intellectual quality of the faculty
- 2. The intellectual quality of my fellow students
- 3. The relationship between faculty and graduate students
- 4. Overall quality of graduate level teaching by faculty

where 1 = 'Poor' 2= 'Fair', 3 = 'Good', 4 = 'Very Good' and 5 = 'Excellent'

The results for U of T were slightly higher than at Canadian peer institutions in 2010, 2013, 2016. In 2019, the results for U of T and Canadian peer institutions were very similar. (Figure 7). The mean for each year was approaching 'very good'.

Figure 7 CGPSS 2010, 2013, 2016, 2019 Results, Doctoral Students Canadian peer benchmark scores: Quality of teaching



Canadian peer means exclude U of T.

IV. Professional Skills Development and Networking Opportunities

The survey asked students to rate the quality of support and training they received in various aspects of their professional skills development. Given the distinct nature of doctoral stream and professional programs, the questions in this section were tailored for each of these audiences, and the results are reported separately below.

In 2010, results of doctoral stream students were limited to a subset of students who indicated that their program includes a thesis, dissertation, or research paper (100% of doctoral students and 88% of research master's students). In 2013, the thesis question was changed, and all doctoral students and research master's students followed either the long or medium stream paths of the survey. Although 2010 results are included in the time series tables, we should compare 2010 results to later years in this section cautiously.

Table 7 displays the participation rate and satisfaction rate of doctoral stream students in a variety of professional skills development activities. The majority of students were satisfied with feedback on their research. In 2019, 77% of doctoral stream students gave ratings of 'excellent', 'very good', or 'good'. A large proportion of students also reported satisfaction with advice, workshops and tools on academic writing standards (75%), advice, workshops and tools about research ethics (73% in human subject research and 74% in the use of animals), courses, workshops, or orientation on teaching (72%), courses, and advice, workshops or tools on writing grant proposals (71%).

The lowest levels of satisfaction were related to career and job preparations. All doctoral stream students were least satisfied with information provided about career options outside academia (52%), as well as research positions (54%).

For the first time, doctoral stream students were asked to rate the quality of support and training they received in opportunities for internships, practicum and experiential learning as part of the program and opportunities for contact (lectures, seminars, discussion) with practicing professionals. Of the 62% of doctoral students and 64% of research master's students who participated in opportunities for internships, practicums and experiential learning, only 46% of doctoral students and 55% of research master's students were satisfied. Of the 80% of doctoral and research master's students who participated in opportunities for contact with practicing professionals, 69% of doctoral students and 66% of research master's students were satisfied.

Participation levels for doctoral stream students in these fifteen activities range from 36% for 'advice, workshops or tools about research ethics in the use of animals'; to 93% for 'feedback on your research'.

Table 7 CGPSS 2010, 2013, 2016, 2019 Results, Doctoral Stream Students Professional skills development activities: Participation and satisfaction of doctoral stream students

Bufacianal akilla davalanana	Percent Participated			Percent Satisfied				
Professional skills development activity	2010	2013	2016	2019	2010	2013	2016	2019
Feedback on your research	92.7%	91.9%	91.6%	93.4%	78.8%	76.7%	77.8%	77.2%
Advice/workshops/tools on the standards for academic writing in your field	70.2%	72.8%	72.4%	75.3%	75.6%	71.2%	69.3%	75.4%
Advice/workshops/tools about research ethics in the use of animals	30.8%	34.1%	35.8%	36.4%	72.2%	70.6%	70.3%	73.7%
Advice/workshops/tools about research ethics in human subject research	56.7%	55.1%	57.2%	60.7%	73.5%	70.3%	70.5%	72.8%
Courses, workshops or orientation on teaching	79.8%	82.9%	83.0%	78.5%	77.9%	74.8%	74.5%	71.5%
Advice/workshops/tools on writing grant proposals	70.2%	72.8%	70.8%	72.4%	73.9%	68.7%	67.2%	71.4%
Opportunities for contact (lectures, seminars, discussions) with practicing professionals	n/a	n/a	n/a	79.7%	n/a	n/a	n/a	68.9%
Advice/workshops/tools on publishing your work	66.8%	66.3%	67.2%	69.1%	63.8%	58.0%	57.0%	58.7%
Advice/workshops/tools on job searching (CV prep, interview skills, etc.)	n/a	n/a	63.9%	64.4%	n/a	n/a	57.9%	58.0%
Advice/workshops/tools on career options within academia	68.2%	71.5%	71.4%	66.2%	58.1%	59.3%	62.7%	56.8%
Advice/workshops/tools on preparing for candidacy examinations	57.9%	59.0%	60.1%	62.7%	59.5%	56.8%	61.2%	56.8%
Advice/tools on intellectual property issues	60.6%	63.2%	60.7%	56.9%	57.5%	55.5%	56.3%	56.4%
Advice/workshops/tools about research positions	66.6%	67.9%	68.4%	68.7%	50.2%	48.7%	51.0%	53.8%
Advice/workshops/tools about career options outside academia	68.4%	71.2%	71.6%	70.0%	45.1%	44.6%	49.7%	51.7%
Opportunities for internships, practicums, and experiential learning as part the program	n/a	n/a	n/a	62.5%	n/a	n/a	n/a	48.9%

Table 8 CGPSS 2019 Results
Professional skills development activities: Participation and satisfaction by degree type

	Percent Participated			Percent Sat	tisfied	
Professional skills development activity	Doctoral	Research Master's	All	Doctoral	Research Master's	All
Feedback on your research	94.1%	91.6%	93.4%	76.1%	79.9%	77.2%
Advice/workshops/tools on the standards for academic writing in your field	76.8%	71.8%	75.3%	73.7%	79.7%	75.4%
Advice/workshops/tools about research ethics in the use of animals	32.0%	47.4%	36.4%	71.6%	77.1%	73.7%
Advice/workshops/tools about research ethics in human subject research	59.2%	64.4%	60.7%	71.2%	76.4%	72.8%
Courses, workshops or orientation on teaching	81.8%	70.4%	78.5%	70.0%	75.6%	71.5%
Advice/workshops/tools on writing grant proposals	75.7%	64.4%	72.4%	70.7%	73.3%	71.4%
Opportunities for contact (lectures, seminars, discussions) with practicing professionals	79.6%	80.0%	79.7%	66.0%	74.9%	68.9%
Advice/workshops/tools on publishing your work	73.5%	58.6%	69.1%	57.3%	62.9%	58.7%
Advice/workshops/tools on job searching (CV prep, interview skills, etc.)	66.7%	58.7%	64.4%	57.7%	58.7%	58.0%
Advice/workshops/tools on career options within academia	69.5%	58.2%	66.2%	55.6%	60.5%	56.8%
Advice/workshops/tools on preparing for candidacy examinations	70.7%	43.2%	62.7%	54.1%	67.5%	56.8%
Advice/tools on intellectual property issues	56.0%	59.0%	56.9%	51.6%	67.5%	56.4%
Advice/workshops/tools about research positions	70.5%	64.5%	68.7%	51.6%	59.7%	53.8%
Advice/workshops/tools about career options outside academia	71.9%	65.4%	70.0%	49.8%	56.6%	51.7%
Opportunities for internships, practicum, and experiential learning as part the program	62.1%	63.5%	62.5%	45.7%	55.3%	48.9%

There are some differences in the participation and satisfaction rates between doctoral students and research master's students. Figure 8 shows participation and satisfaction rates for doctoral students. For example, of the 94% of doctoral students who received feedback on their research, 76% were satisfied. Of the 62% of doctoral students who participated in opportunities for internships, practicums and experiential learning as part of their program, only 46% were satisfied.

Figure 8 CGPSS 2019 Results, Doctoral Students Professional skills development activities: Satisfaction rates of participating doctoral students

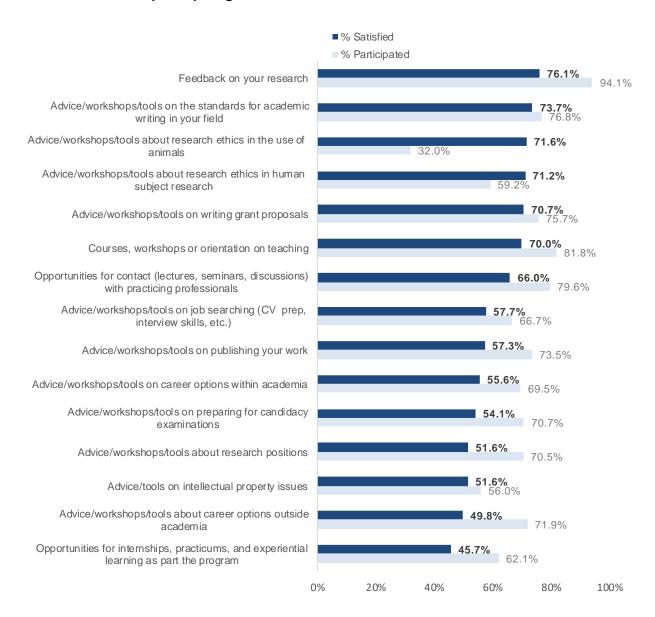
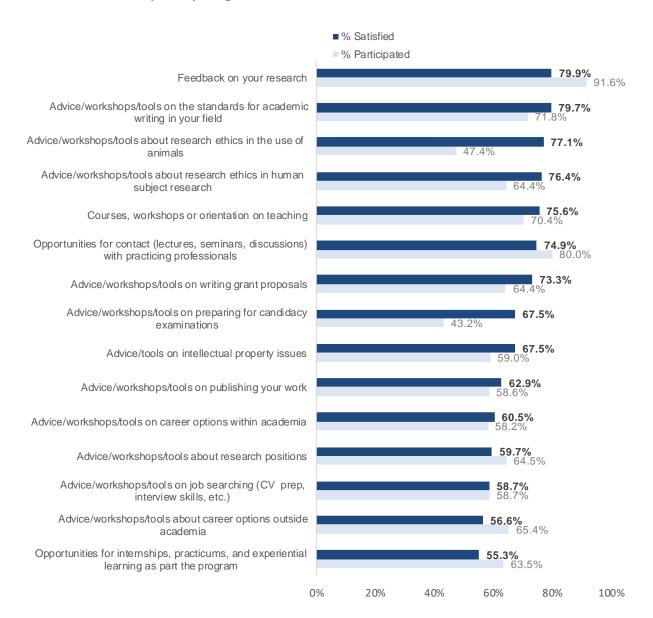


Figure 9 shows participation and satisfaction rates for research master's students. Of the 92% of research master's students who participated in 'feedback on your research', 80% were satisfied. Of the 64% of research master's students who participated in opportunities for internships, practicums and experiential learning as part of their program, only 64% were satisfied.

Figure 9 CGPSS 2019 Results, Research Master's Students Professional skills development activities: Satisfaction rates of participating research master's students

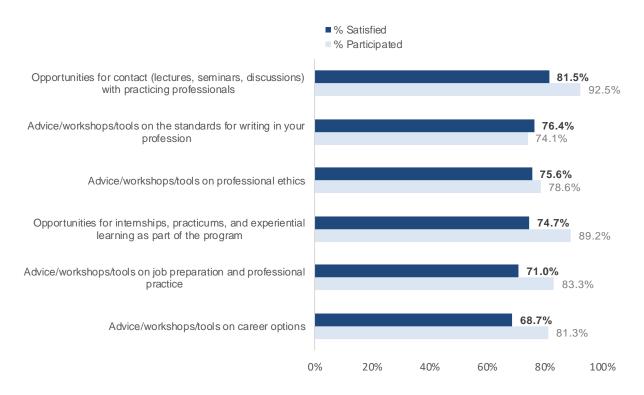


On the whole, levels of participation and satisfaction for professional master's students with their professional skills development activities were higher than those observed for doctoral stream students (Table 9). Professional master's students were most satisfied with the opportunities for contact with practicing professionals (82%) and advice, workshops and tools on the standards for writing in their profession (76%). However, they were least satisfied with the information they received about job preparation and professional practice (71%) and career options (69%). This is still a higher level of satisfaction compared to doctoral and research master's students.

Table 9 CGPSS 2010, 2013, 2016, 2019 Results, Professional Master's Students Professional skills development activities: Participation and satisfaction of professional master's students

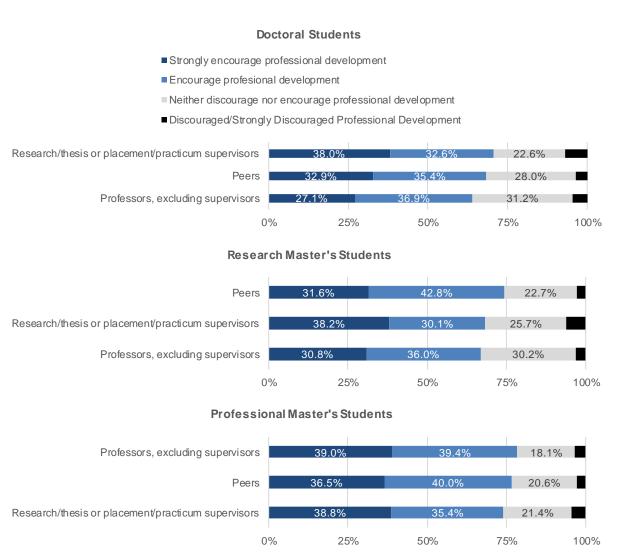
	Percent Participated			Percent Satisfied				
Professional skills development activity	2010	2013	2016	2019	2010	2013	2016	2019
Opportunities for contact (lectures, seminars, discussion) with practicing professionals	92.9%	93.6%	91.5%	92.5%	82.1%	81.0%	83.0%	81.5%
Advice/workshops/tools on the standards for writing in your profession	76.3%	71.0%	71.5%	74.1%	71.1%	74.9%	77.1%	76.4%
Advice/workshops/tools on professional ethics	76.8%	75.0%	75.9%	78.6%	71.2%	71.1%	75.1%	75.6%
Opportunities for internships, practicum, and experiential learning as part of the program	86.6%	88.1%	87.9%	89.2%	70.6%	71.5%	73.8%	74.7%
Advice/workshops on job preparation and professional practice	78.6%	80.6%	80.5%	83.3%	65.1%	67.2%	69.4%	71.0%
Advice/workshops on career options	79.2%	78.3%	78.8%	81.3%	61.7%	64.4%	68.4%	68.7%

Figure 10
CGPSS 2019 Results, Professional Master's Students
Professional skills development activities:
Satisfaction rates of participating professional master's students



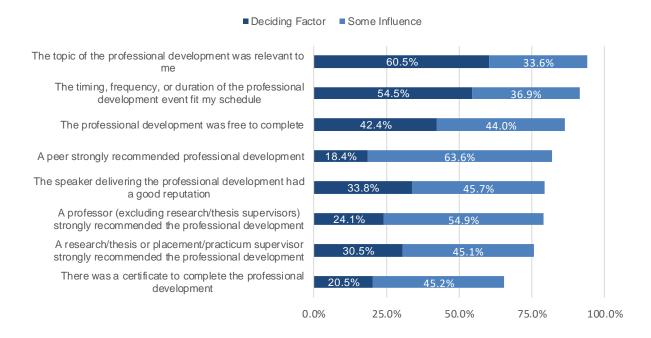
In the 2019 survey, students were asked in a supplemental question whether they believed they were encouraged or discouraged to take part in professional development activities by three groups of people (Figure 11). Doctoral students were most influenced by their supervisors. Seventy one percent were encouraged or strongly encouraged by their supervisors to take part in professional development activities. Research master's students were most influenced by their peers (74%), and professional master's students were most influenced by their professors (78%).

Figure 11
CGPSS 2019 Results
Professional skills development activities:
Group of people who encouraged/discouraged completion of professional development activities



In another supplemental question (Figure 12), students were asked which factors had a significant influence on the decision to attend professional development opportunities. The largest influencing factor was the topic of the professional development activity (94% considered this a deciding factor or had some influence). The timing, frequency or duration of the professional development event was also a large factor (91% considered this a deciding factor or had some influence).

Figure 12
CGPSS 2019 Results, All Degree Types
Professional skills development activities:
Factors which influenced the decision to attend a professional skills development opportunity



Students were asked how important it was to take part in seven types of networking opportunities, and whether these networking opportunities have been available to them during their program (Table 10, Figures 13-15).

Eighty four percent of respondents (all degree types) believe that opportunities to work or collaborate with other academics or graduate students in other departments or disciplines at the same institution are 'very important' or 'somewhat important', and 68% have had an opportunity to participate in this networking activity.

Similarly, 81% of respondents believe it is important to work or collaborate with other academics or graduate students at other research institutions in Canada. However, only 55% have had an opportunity to participate in this networking activity.

Table 10 CGPSS 2019 Results, All Degree Types

Networking activities: Opportunities to network are available during current program Proportion of respondents feel it's 'somewhat important' or 'very important' to have the opportunity:

Proportion of respondents who have had an opportunity to participate 'to some extent' or 'to a great extent'

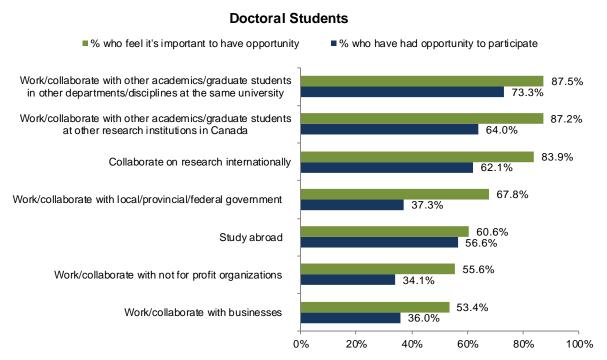
	% who feel it's important to have opportunity	% who have had opportunity to participate
Work/collaborate with other academics/graduate students in other departments/disciplines at the same university	84.2%	68.2%
Work/collaborate with other academics/graduate students at other research institutions in Canada	81.2%	55.3%
Work/collaborate with local/provincial/federal government	74.4%	45.3%
Collaborate on research internationally	71.6%	51.3%
Work/collaborate with businesses	66.3%	49.0%
Work/Collaborate with not for profit organizations	65.0%	48.9%
Study abroad	57.5%	56.9%

^{&#}x27;Percent who feel it's important to have an opportunity' indicates the proportion of students who responded 'somewhat important' or 'very important' to have the opportunity to participate.

The results varied by degree type. Figure 13 shows the proportion of doctoral students who believe it is important to have the opportunity to participate in each networking activity (upper bar) compared to the percentage of doctoral students who have had an opportunity to participate in the networking activity. As an example, this figure illustrates that 88% of doctoral students feel that it is important to work or collaborate with other academics or graduate students in other departments or disciplines at the same institution, and 73% have had an opportunity to do so during their graduate program.

^{&#}x27;Percent who had an opportunity to participate' indicates the proportion of students who responded 'yes, to a great extent' or 'yes, to some extent' to the question 'to date, as it relates to your current program, have opportunities been available to (participate in the network activity)'.

Figure 13
CGPSS 2019 Results, Doctoral Students
Networking activities: Proportion of respondents who feel it is important to have the opportunity to participate (upper bar) compared to Proportion of respondents who have had opportunities to participate (lower bar)



'Percent who feel it's important to have an opportunity' indicates the proportion of students who responded 'somewhat important' or 'very important' to have the opportunity to participate.

'Percent who had an opportunity to participate' indicates the proportion of students who responded 'yes, to a great extent' or 'yes, to some extent' to the question 'to date, as it relates to your current program, have opportunities been available to (participate in the network activity)'.

Similar information is shown for research master's students in figure 14. As an example, 85% of research master's students feel that it is important to work or collaborate with other academics or graduate students at other research institutions in Canada, however only 58% have had an opportunity to do so during their graduate program.

Similarly, figure 15 shows information for professional master's students. As an example, 82% of professional master's students feel that it is important to work or collaborate with local provincial or federal governments, however only 55% have had an opportunity to do so during their graduate program.

Figure 14
CGPSS 2019 Results, Research Master's Students
Networking activities: Proportion of respondents who feel it is important to have the opportunity to participate (upper bar) compared to Proportion of respondents who have had opportunities to participate (lower bar)

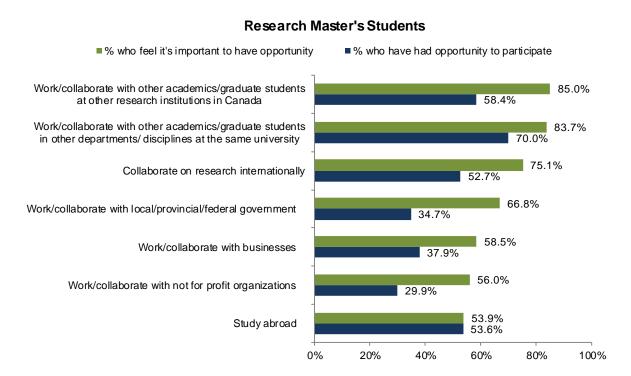
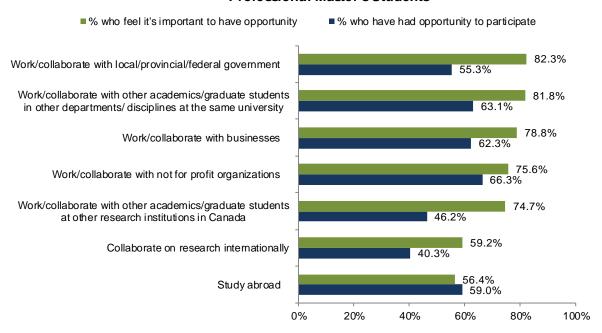


Figure 15
CGPSS 2019 Results, Professional Master's Students
Networking activities: Proportion of respondents who feel it is important to have the opportunity to participate (upper bar) compared to Proportion of respondents who have had opportunities to participate (lower bar)

Professional Master's Students



'Percent who feel it's important to have an opportunity' indicates the proportion of students who responded 'somewhat important' or 'very important' to have the opportunity to participate.

'Percent who have had an opportunity to participate' indicates the proportion of students who responded 'yes, to a great extent' or 'yes, to some extent' to the question 'to date, as it relates to your current program, have opportunities been available to (participate in the network activity).

In a third supplemental question, students were asked how supported they feel by the University in a variety of personal and professional skills development and career preparation areas. This varied by degree type. Over 80% of doctoral students 'strongly agreed' or 'agreed' that U of T supported them in presenting papers at academic conferences. This compares to only 74% of research master's students and 44% of professional master's students. Table 11 shows the results by degree type.

Table 11
CGPSS 2019 Results
Supportive environment: Feel supported by the University in the following personal, professional skills development or career preparation areas
Proportion of respondents who answered 'strongly agree', or 'agree' by degree type

Doctoral		Research Master's		Professional Master'	s
Present papers at academic conferences	80.3%	Publish Academic Papers	75.8%	Spend time on your academic professional development	67.3%
	74.2%	Present papers at academic conferences	74.2%	Engage in wellness or health-related activities	
Publish Academic Papers Spend time on your academic professional		Spend time on your academic professional		(sports, yoga, etc.) Learn how to communicate research to non-specialist	61.1%
development Engage in wellness or	68.5%	development Engage in wellness or	71.5%	audiences Spend time on your non-	57.3%
health-related activities (sports, yoga, etc.)	62.6%	health-related activities (sports, yoga, etc.)	64.9%	academic professional development	55.8%
Have opportunities to communicate your research to non-specialist audiences (Three Minutes Thesis, Investor Pitches, Interdepartmental Discussions)	56.1%	Learn how to communicate research to non-specialist audiences	61.4%	Learn new skills not required for your research, teaching or lab work	54.6%
Learn how to communicate research to non-specialist audiences	51.2%	Have opportunities to communicate your research to non-specialist audiences (Three Minutes Thesis, Investor Pitches, Interdepartmental Discussions)	55.6%	Participate in interdisciplinary projects/initiatives	52.8%
Participate in interdisciplinary projects/initiatives	42.4%	Learn new skills not required for your research, teaching or lab work	50.2%	Participate, whether paid or unpaid, in projects or internships not directly part of your research program	48.7%

Doctoral		Research Master's		Professional Master's	
Learn new skills not required for your research,	40.00/	Spend time on your non-academic professional	40.00/	Have opportunities to communicate your research to non-specialist audiences (Three Minutes Thesis, Investor Pitches, Interdepartmental	47.00/
teaching or lab work	42.2%	development Participate in	46.0%	Discussions)	47.3%
Participate in international experiences/initiatives	38.4%	interdisciplinary projects/initiatives	44.4%	Volunteer within or outside the university	47.1%
Spend time on your non- academic professional development	37.7%	Volunteer within or outside the university	41.9%	Gain relevant work experience, paid or unpaid, beyond RAships or Taships	43.8%
Volunteer within or outside the university	33.9%	Participate, whether paid or unpaid, in projects or internships not directly part of your research program	35.1%	Present papers at academic conferences	43.8%
Participate, whether paid or unpaid, in projects or internships not directly part of your research program	30.9%	Participate in international experiences/initiatives	32.9%	Participate in international experiences/initiatives	42.8%
Gain relevant work experience, paid or unpaid, beyond RAships or Taships	30.3%	Gain relevant work experience, paid or unpaid, beyond RAships or Taships	31.2%	Publish Academic Papers	38.8%

In a fourth supplemental question, students were asked how well prepared they feel to succeed in a number of specified roles if they were to begin a new job tomorrow. This varied by degree type. Eighty one percent of doctoral students felt 'very prepared' or 'prepared' for work as a researcher in the respondent's field at a post-secondary institution. 73% of master's students (research and professional) felt 'very prepared' or 'prepared' to work in a non-academic private or public sector job related to the respondent's research area. Table 12 shows the results by degree type.

Table 12 CGPSS 2019 Results If you were to begin a new job tomorrow, how well prepared do you feel to succeed in the following roles...

Proportion of respondents who answered 'very prepared, or 'prepared' by degree type

Doctoral		Research Master's		Professional Master's	
Researcher in my field at a post-secondary institution	81.2%	Non-academic private or public sector job related to my research area	72.6%	Non-academic private or public sector job related to my research area	72.4%
Non-academic private or public sector job related to my research area	74.6%	Researcher in my field at a post-secondary institution		Consulting job related to my research area	65.3%
Consulting job related to my research area		Consulting job related to my research area	67.3%	Non-academic private or public sector job unrelated to my research area	52.1%
Professorship in my field at a post-secondary institution		Administration at a post- secondary institution		Administration at a post- secondary institution	51.7%
Administration at a post- secondary institution		Professorship in my field at a post-secondary institution	42.5%	Researcher in my field at a post-secondary institution	51.7%
Non-academic private or public sector job unrelated to my research area		Non-academic private or public sector job unrelated to my research area		Entrepreneur or small business owner	36.8%
Entrepreneur or small business owner	25.4%	Entrepreneur or small business owner	25.4%	Professorship in my field at a post-secondary institution	34.1%

Excludes respondents who chose 'not applicable"

In a very similar supplemental question, students were asked how prepared they feel to succeed in the following roles or sectors, for the careers that they are prioritizing right now (Table 13).

Of the students who were prioritizing these types of roles or sectors, seventy two percent of doctoral students felt very prepared or prepared in the role of Professor or Faculty; 61% of research master's students and 74% of professional master's students felt prepared or very prepared to take on roles in the private sector or industry. Students who reported that they are not prioritizing this role were excluded from the results below.

Table 13 CGPSS 2019 Results

Some graduate and professional students enter their program with a singular career focus while others have multiple career interests.

For the careers that you are prioritizing right now, how well prepared do you feel to succeed in the following roles or sectors...

Proportion of respondents who answered 'very prepared, or 'prepared' by degree type

Doctoral		Research Master's		Professional Master's	
Professor or Faculty	71.5%	Private sector or industry	61.3%	Private sector or industry	73.5%
Post-Secondary Education Staff or Administrator	59.8%	Post-Secondary Education Staff or Administrator	56.0%	Non-Government organization or non-profit organization	70.8%
Private sector or industry	55.4%	Government or Public Sector	55.6%	Government or Public Sector	68.6%
Government or Public Sector	53.2%	Non-Government organization or non-profit organization	53.9%	Professor or Faculty	46.7%
Non-Government organization or non-profit organization	50.7%	Professor or Faculty	51.8%	Entrepreneur or self- employed	44.9%
Entrepreneur or self- employed	34.1%	Entrepreneur or self- employed	32.9%	Post-Secondary Education Staff or Administrator	24.1%

Excludes 'not a career that I am prioritizing'.

The U15 data exchange developed a benchmark score named 'Research Training and Career Orientation'.

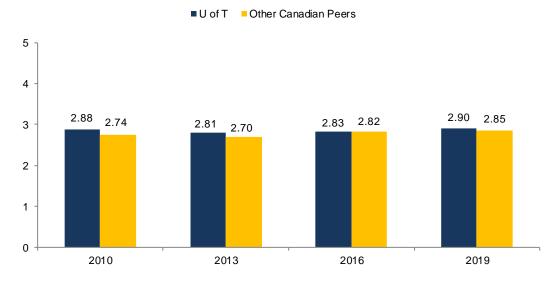
Data from nine CGPSS items were included in calculations for this benchmark score:

- 1. Advice/workshops on the standards for academic writing in your field
- 2. Advice/workshops on writing grant proposals
- 3. Advice/workshops on publishing your work
- 4. Advice/workshops on career options within academia
- 5. Advice/workshops on career options outside academia
- 6. Advice/workshops about research positions
- 7. Advice/workshops about research ethics in human subject research
- 8. Advice/workshops about research ethics in the use of animals
- 9. Advice/workshops on intellectual property issues

where 1 = 'Poor' 2= 'Fair', 3 = 'Good', 4 = 'Very Good' and 5 = 'Excellent'

U of T doctoral students were, on the whole, slightly more satisfied with training in research activities and career information than doctoral students at our Canadian peer institutions. The mean for each year was approaching 'good'. Figure 16 shows benchmark scores for 2010, 2013, 2016 and 2019 for 'Research Training and Career Orientation'.

Figure 16 CGPSS 2010, 2013, 2016, 2019 Results, Doctoral Students Canadian peer benchmark scores: Research training and career orientation



Canadian peer means exclude U of T.

V. Program/Department Support

This section of the report combines results regarding students' involvement in research, presentations and publications, and their satisfaction with thesis advisors. As in the preceding section, the following data summary is limited to respondents in 2010 who had indicated that their program includes a thesis, dissertation or research paper (100% doctoral students and 88% research master's students). In 2013 the thesis question changed. The 2013 and 2016 responses below include all doctoral stream students, as they would have been led through the long stream path or medium stream path of the survey. As a result, any comparisons to data from the 2010 aggregate report should be made with caution.

In 2019, 94% of all doctoral stream students conducted independent research since starting their graduate program, with 82% rating their experience as 'excellent', 'very good', or 'good'. Three quarters of doctoral stream students who received faculty guidance in formulating a research topic and close to three quarters of doctoral stream students who collaborated with one or more faculty members reported being satisfied. Although over 93% of doctoral stream students participated in training in research methods, only 66% were satisfied. Only two thirds of doctoral stream students reported collaborating with faculty in writing grant proposals. Of those students, only 60% were satisfied with that experience. (Table 14).

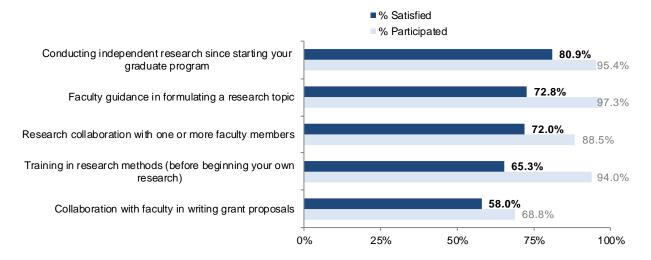
Table 14 CGPSS 2010, 2013, 2016, 2019 Results, Doctoral Stream Students
Research experience:
Participation and satisfaction rates of doctoral stream students (doctoral and research master's)

	Percent Participated				Percent Satisfied			
Research activity	2010	2013	2016	2019	2010	2013	2016	2019
Conducting independent research since starting your graduate program	95.3%	93.8%	93.7%	94.3%	83.8%	79.5%	79.5%	81.8%
Faculty guidance in formulating a research topic	97.1%	95.7%	96.0%	96.0%	76.1%	73.4%	72.8%	74.4%
Research collaboration with one or more faculty members	82.5%	79.7%	80.7%	87.5%	74.9%	76.2%	74.8%	73.9%
Training in research methods (before beginning your own research)	92.7%	91.8%	91.9%	93.3%	64.8%	62.4%	61.8%	65.7%
Collaboration with faculty in writing grant proposals	58.6%	58.8%	60.5%	66.8%	61.9%	60.7%	60.6%	60.3%

'Percent participated' excludes the proportion of valid cases that responded 'did not participate' or 'not applicable'. 'Percent satisfied' indicates the proportion of students participating in the activity that rated it as 'excellent', 'very good', or 'good'.

There are some differences between doctoral students and research master's students. Figure 17 shows participation and satisfaction rates for doctoral students. As an example, 95% of doctoral students participated in the activity 'conducting independent research since starting your graduate program'. Of those students, 81% were satisfied.

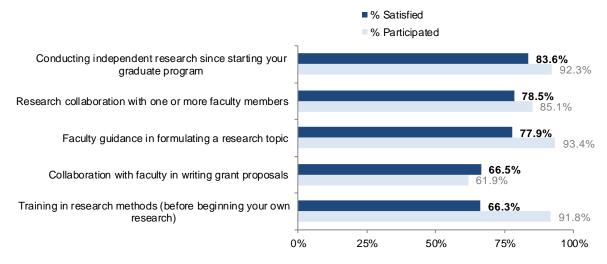
Figure 17 CGPSS 2019 Results, Doctoral Students
Research experience:
Satisfaction rates of participating doctoral students with each research activity



'Percent participated' excludes the proportion of valid cases that responded 'did not participate' or 'not applicable'. 'Percent satisfied' indicates the proportion of students participating in the activity that rated it as 'excellent', 'very good', or 'good'.

Figure 18 shows participation and satisfaction rates for research master's students. As an example, 92% of research master's students participated in the activity 'conducting independent research since starting your graduate program'. Of those, 83.6% were satisfied.

Figure 18 CGPSS 2016 Results, Research Master's Students
Research experience:
Satisfaction rates of participating research master's students with each research activity

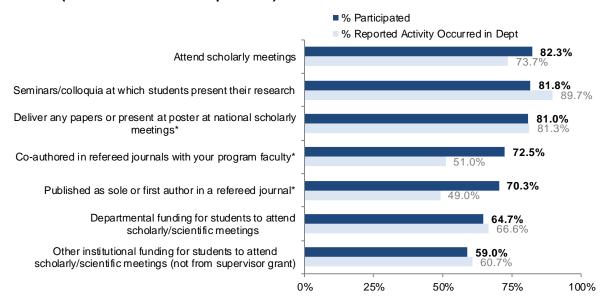


'Percent participated' excludes the proportion of valid cases that responded 'did not participate' or 'not applicable'. 'Percent satisfied' indicates the proportion of students participating in the activity that rated it as 'excellent', 'very good', or 'good'.

Students were asked about the prevalence of various activities relating to publications and presentations within their departments. Types of activities include attendance at scholarly meetings, and publishing or presenting research. Students who responded that a particular activity occurred in their department were then asked how many times they participated in the activity.

Figure 19 shows the proportion of doctoral student who participated in publication and presentation activities, and Figure 20 shows research master's student participation rates. A larger proportion of doctoral students indicated involvement in these activities than research master's students. For instance, a larger proportion of doctoral students than research master's students participated in the activity seminars/colloquia at which students present their research. Eighty two percent of doctoral students compared to only 75% of research master's had participated in that activity in 2019.

Figure 19 CGPSS 2019 Results, Doctoral Students
Publications and presentations:
Proportion of doctoral students that indicated they have participated at least once in the following activities (if it occurred in their department)

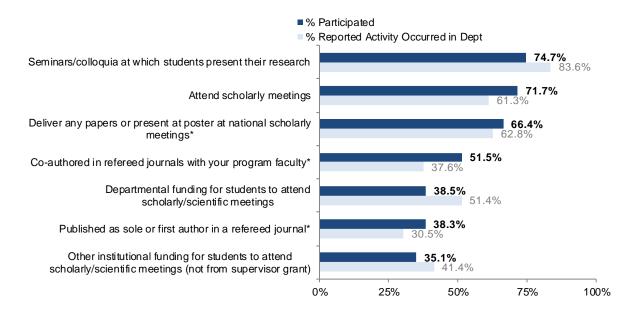


^{*}Long stream respondents only.

'Percent participated' indicates the proportion of students who responded 'yes, this activity occurs in my department', and responded that they participated one or more times in that activity.

Figure 20 CGPSS 2019 Results, Research Master's Students Publications and presentations:

Proportion of research master's students that indicated they have participated at least once in the following activities (if it occurred in their department)

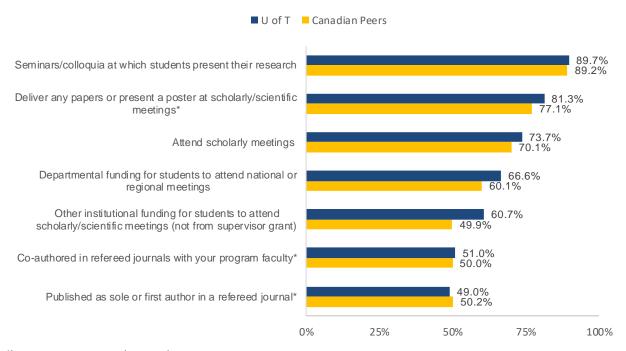


^{*}Long stream respondents only.

'Percent participated' indicates the proportion of students who responded 'yes, this activity occurs in my department', and responded that they participated 1 or more times in that activity.

In comparison with doctoral students at Canadian peer institutions, U of T students have similar opportunities to participate in publication and presentation activities such as seminars or colloquia at which student present their research (90% of U of T doctoral student say this occurs in their department compared to 89% of doctoral students at Canadian peer institutions). U of T doctoral students have more funding opportunities than their Canadian peer counterparts. For instance, two thirds of U of T doctoral students indicate that department funding for students to attend national or regional meetings is available in their department compared to only 60% of their Canadian peer counterparts. Sixty one percent of U of T doctoral students indicate that other institutional funding for students to attend scholarly or scientific meetings is available in their department compared to only 50% of doctoral students at Canadian peer institutions (Figure 21).

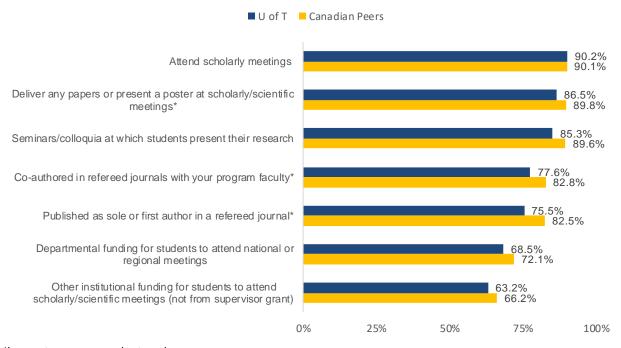
Figure 21 CGPSS 2019 Results Doctoral students
Publications and Presentations:
U of T compared to Canadian peers
Proportion of respondents that indicated that this activity occurred in their department



^{*}Long stream respondents only.

Ninety percent of doctoral students at U of T and at Canadian peer institutions attend scholarly meetings at least once if this opportunity exists in their department. Doctoral students at Canadian peer institutions participate slightly more than doctoral students at U of T in various activities if they have an opportunity to do so. For instance, seventy six percent of U of T doctoral students published as sole or first author in a refereed journal at least once, compared to 83% of doctoral students at Canadian peer institutions (Figure 22).

Figure 22 CGPSS 2019 Results Doctoral students
Publications and presentations:
U of T compared to Canadian peers
Proportion of respondents who indicated that they have participated at least once in the following activities (if it occurred in their department)



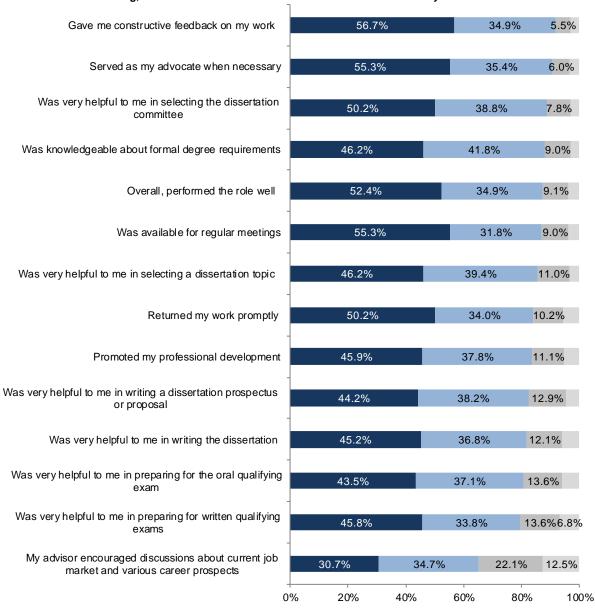
*Long stream respondents only.

Consistent with previous results, doctoral students gave very positive assessments to the performance of their dissertation supervisor in a variety of mentoring activities (Figure 23). Doctoral students were most satisfied with how their thesis advisor gave constructive feedback on their work (92%) and with how their thesis advisor served as their advocate when necessary (91%). Of those surveyed, 87% of doctoral respondents 'strongly agree' or 'agree' that overall, their advisor performed the role well. Student were least satisfied with whether their advisor encouraged discussions about the current job market and various career prospects. Only 65% of doctoral students replied positively.

Figure 23 CGPSS 2019 Results, Doctoral Students
Advisor and dissertation: Responses of doctoral students (long stream only)

■ Strongly agree ■ Agree ■ Disagree ■ Strongly disagree

For each of the following, indicate the extent to which it describes the behaviour of your advisor:



The U15 data exchange developed a benchmark score for the 'Supportive Dissertation Advisor'.

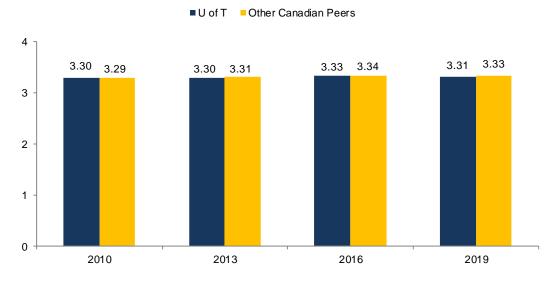
Ratings by doctoral students from the following twelve survey items were included in the benchmark score:

- 1. Served as my advocate when necessary
- 2. Gave me constructive feedback on my work
- 3. Returned my work promptly
- 4. Promoted my professional development
- 5. Overall, performed the role well
- 6. Was available for regular meetings
- 7. Was very helpful to me in preparing for written qualifying exams
- 8. Was very helpful to me in preparing for the oral qualifying exam
- 9. Was very helpful to me in selecting a dissertation topic
- 10. Was very helpful to me in writing a dissertation prospectus or proposal
- 11. Was very helpful to me in writing the dissertation
- 12. Was very helpful to me in selecting the dissertation committee

where 1 = 'Strongly disagree' 2= 'Disagree', 3 = 'Agree', and 4 = 'Strongly agree'

Benchmark scores for 'Supportive Dissertation Advisor' are displayed in Figure 24. U of T's doctoral students were just as satisfied with the support they receive from their dissertation advisor as their Canadian peer institution counterparts. The mean for each year was just over 'agree'.

Figure 24 CGPSS 2010, 2013, 2016, 2019 Results, Doctoral Students Canadian peer benchmark scores: Supportive dissertation advisor



 $Can adian\ peer\ means\ exclude\ University\ of\ Toronto.$

In 2019, doctoral students were asked if they had an advisory committee. Almost 78% said they did, and over three quarters (77%) had already interacted at least once with their advisory committee. The vast majority (94%) interacted in a formal meeting, as opposed to through email or telephone contact. Over 91% of doctoral students strongly agree or agree with the statement 'up to now, I have found my advisory committee's feedback constructive and useful.'

VI. Financial Support

Several survey questions inquire about the kinds of financial support that graduate students have received, the amount of undergraduate and graduate educational debt students expect to have by the end of their program, and student satisfaction with advice on the availability of financial support.

Students were asked to select all the different forms of support they received while they were enrolled in their program. The responses varied greatly by degree type. Among doctoral students, University funded fellowships (59%), graduate teaching assistantship (58%) and graduate research assistantships (49%) were the most common forms of support. Both research master's students and professional master's students indicated that loans, savings or family assistance was the most common form of support (43% of research master's, 64% of professional master's). Table 15 shows the different forms of support, ordered by most to least common form of support, for each degree type.

Table 15 CGPSS 2019 Results Financial Support by Degree Type

Doctoral		Research Master	r's	Professional Master's		
Forms of Support	% who received this form of support	Forms of Support	% who received this form of support	Forms of Support	% who received this form of support	
University funded fellowships	59.2%	Loans, savings, or family assistance	43.2%	Loans, savings, or family assistance	64.1%	
Graduate teaching assistantship	58.4%	University funded fellowships	40.1%	University-funded bursary	32.9%	
Graduate research assistantship	48.7%	Graduate teaching assistantship	37.8%	Off campus employment	25.5%	
Loans, savings, or family assistance	37.0%	Graduate research assistantship	33.2%	Provincial bursary (non- refundable)	21.5%	
Provincial Government Scholarship/Fellowship	34.0%	University-funded bursary	30.7%	Provincial Government Scholarship/Fellowship	21.2%	
University-funded bursary	33.4%	Provincial Government Scholarship/Fellowship	20.6%	Partial tuition scholarships or waivers	16.3%	
Full tuition scholarships or waivers	32.8%	Full tuition scholarships or waivers	20.2%	Other campus employment	9.1%	
Federal Granting Council Scholarship/Fellowship	29.1%	Federal Granting Council Scholarship/Fellowship	18.3%	Employee benefit or employer funding	8.2%	
External (to university) non-government fellowship	16.3%	Off campus employment	14.2%	Federal Granting Council Scholarship/Fellowship	8.0%	
Off campus employment	15.6%	Provincial bursary (non- refundable)	11.1%	University funded fellowships	6.9%	
Other part-time research employment	12.3%	External (to university) non-government fellowship	7.8%	Graduate teaching assistantship	6.7%	
Provincial bursary (non- refundable)	8.5%	Partial tuition scholarships or waivers	7.2%	Graduate research assistantship	4.4%	
Other part-time teaching employment	7.9%	Other campus employment	6.1%	External (to university) non-government fellowship	4.3%	
Other campus employment	7.8%	Other part-time research employment	5.5%	Other part-time research employment	4.3%	
Partial tuition scholarships or waivers	6.0%	Employee benefit or employer funding	3.8%	Full tuition scholarships or waivers	2.7%	
Employee benefit or employer funding	5.1%	Other part-time teaching employment	3.5%	Other part-time teaching employment	2.5%	
Support from a Foreign Government	3.7%	Support from a Foreign Government	1.1%	Support from a Foreign Government	1.5%	
Residence Donship	0.7%	Residence Donship	0.8%	Residence Donship	0.5%	

Note: Respondents were able to choose multiple forms of support.

Respondents were asked to estimate the amount of undergraduate educational debt, if any, and the amount of graduate educational debt, if any, they would have to repay once they complete their graduate program. Table 16 summarizes the proportion of respondents who estimate that they will have no debt, both undergraduate and graduate debt, or either only undergraduate debt or only graduate debt when they complete their graduate program. These combinations of debt vary by degree type. In 2019, 48% of doctoral students and 42% of research master's students expected that they will have neither undergraduate nor graduate debt at the time of completion, compared to only 23% of professional master's students. An increasing number of research master's students reported that they expect to have both undergraduate and graduate debt (22% of research master's in 2010 compared to 27% in 2016 and 2019).

Table 16 CGPSS 2010, 2013, 2016, 2019 Results
Combinations of undergraduate and graduate debt that respondents expect to have by the time they finish their graduate program by degree type

Doctoral Students	2010	2013	2016	2019
Neither undergraduate debt nor grad debt	45.7%	46.2%	44.1%	47.7%
No undergraduate debt but grad debt	23.2%	21.4%	23.0%	23.7%
Undergraduate debt but no grad debt	13.7%	12.9%	14.3%	12.1%
Both undergrad and grad debt	17.4%	19.4%	18.5%	16.4%

Research Master's Students	2010	2013	2016	2019
Neither undergraduate debt nor grad debt	43.7%	42.6%	41.1%	42.2%
No undergraduate debt but grad debt	15.7%	16.2%	13.8%	14.2%
Undergraduate debt but no grad debt	18.5%	17.8%	17.9%	16.7%
Both undergrad and grad debt	22.0%	23.4%	27.2%	26.9%

Professional Master's Students	2010	2013	2016	2019
Neither undergraduate debt nor grad debt	28.0%	24.7%	26.1%	22.8%
No undergraduate debt but grad debt	37.7%	36.8%	34.7%	39.2%
Undergraduate debt but no grad debt	3.9%	2.6%	1.7%	2.2%
Both undergrad and grad debt	30.4%	35.8%	37.4%	35.8%

Levels of expected indebtedness are measured in categories that have not been adjusted for inflation (Table 17). Expected debt levels differ for doctoral stream and professional master's students. While proportions of students who expect to carry undergraduate debt are similar between students in different degree types, the proportion of students expecting to carry graduate debt are much lower for doctoral stream students; 59% of doctoral students and 57% of research master's students expect to have no graduate debt, while only 22% of professional master's students expect the same.

Table 17 CGPSS 2010, 2013, 2016, 2019 Results Expected educational debts upon graduation by degree type

Doctoral Students

Debt amount	2010	2013	2016	2019
Undergraduate debt				
\$0	68.9%	67.8%	67.2%	71.4%
\$1 - \$19,999	15.7%	14.2%	13.8%	10.9%
\$20,000 - \$39,999	11.2%	12.6%	12.1%	10.7%
\$40,000 - more	4.3%	5.4%	6.9%	7.0%
Graduate debt				
\$0	59.0%	59.0%	58.4%	59.2%
\$1 - \$19,999	24.4%	24.9%	24.4%	22.6%
\$20,000 - \$39,999	10.6%	10.0%	9.6%	10.2%
\$40,000 - more	6.0%	6.1%	7.6%	8.0%

Research Master's Students

Debt amount	2010	2013	2016	2019
Undergraduate debt				
\$0	59.4%	59.0%	55.1%	57.7%
\$1 - \$19,999	15.9%	17.6%	17.4%	13.9%
\$20,000 - \$39,999	18.9%	16.5%	18.8%	18.9%
\$40,000 - more	5.7%	6.9%	8.7%	9.5%
Graduate debt				
\$0	61.2%	60.3%	58.6%	57.2%
\$1 - \$19,999	28.6%	30.1%	29.9%	32.3%
\$20,000 - \$39,999	6.9%	5.7%	7.6%	7.4%
\$40,000 - more	3.4%	3.9%	3.9%	3.1%

Professional Master's Students

Debt amount		2010	2013	2016	2019
Undergraduate debt					
	\$0	66.1%	61.4%	60.7%	61.8%
	\$1 - \$19,999	15.5%	16.7%	15.8%	14.2%
\$20,	000 - \$39,999	12.4%	14.7%	16.0%	16.2%
\$-	10,000 - more	6.0%	7.2%	7.6%	7.8%
Graduate debt					
	\$0	29.7%	27.4%	27.8%	22.2%
	\$1 - \$19,999	36.4%	33.2%	32.6%	30.0%
\$20,	000 - \$39,999	17.7%	22.9%	23.7%	25.4%
\$-	10,000 - more	16.2%	16.5%	15.8%	22.3%

Table 18 compares combinations of undergraduate debt and graduate debt of U of T students compared to our Canadian peers. The proportion of U of T students who expect to have neither undergraduate debt nor graduate debt at the end of their programs (35%, all degree types) is lower than students at our Canadian peer institutions (43%, all degree types). The biggest difference is between professional master's students. A smaller proportion of U of T professional master's students (23%) expect to be free of debt at the end of their programs compared to their Canadian peer counterparts (36%).

Table 18 CGPSS 2019 Results
Combinations of undergraduate and graduate debt, U of T compared to Canadian peers

		U of T		Canadian peers			
	Doctoral	Research Master's	Professional Master's	Doctoral	Master's with thesis	Master's without thesis	
Neither undergraduate debt nor grad debt	47.7%	42.2%	22.8%	51.5%	42.7%	35.7%	
No undergraduate debt but grad debt	23.7%	14.2%	39.2%	23.0%	21.3%	33.8%	
Undergraduate debt but no grad debt	12.1%	16.7%	2.2%	8.2%	9.1%	3.7%	
Both undergrad and grad debt	16.4%	26.9%	35.8%	17.3%	26.9%	26.8%	

Canadian peer values exclude U of T

Levels of expected indebtedness are measured in categories that have not been adjusted for inflation. Table 19 compares U of T students to their Canadian peers. Doctoral students at U of T have a similar distribution of expected debt at the undergraduate and graduate levels. A larger proportion of U of T master's students expect to have more than \$20,000 in undergraduate debt (28% research master's, 24% professional master's) than their Canadian counterparts (19% master's with thesis, 14.3% master's without thesis).

Table 19 CGPSS 2019 Results Expected Educational debt upon graduation, U of T compared to Canadian peers

		U of T		Ca	anadian Peers	
Debt amount	Doctoral	Research Masters	Professional Masters	Doctoral	Masters with Thesis	Masters Without Thesis
Undergraduate debt						
\$0	71.4%	57.7%	61.8%	74.4%	64.0%	69.5%
\$1 - \$19,999	10.9%	13.9%	14.2%	11.1%	17.4%	16.3%
\$20,000 - \$39,999	10.7%	18.9%	16.2%	8.9%	12.0%	9.3%
\$40,000 - more	7.0%	9.5%	7.8%	5.5%	6.7%	5.0%
Graduate debt						
\$0	59.2%	57.2%	22.2%	57.9%	50.9%	37.9%
\$1 - \$19,999	22.6%	32.3%	30.0%	22.2%	34.3%	34.9%
\$20,000 - \$39,999	10.2%	7.4%	25.4%	11.0%	10.6%	18.2%
\$40,000 - more	8.0%	3.1%	22.3%	8.9%	4.2%	9.0%

Canadian peer values exclude U of T

As seen in section IV (Satisfaction with Program, Quality of Interactions, and Coursework), professional master's students and doctoral stream students have slightly different levels of satisfaction with the advice they receive on the availability of financial support. Figure 5 on p. 19 of this report shows the results of this question by degree type and year.

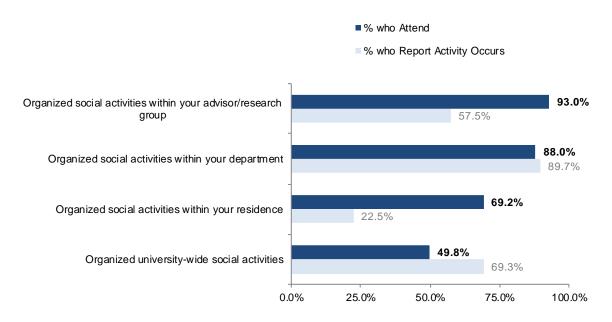
In 2019, professional master's students reported the lowest satisfaction with only 52% rating it as 'excellent', 'very good', or 'good', followed by 59% of doctoral students and 62% of research master's students.

There has been a noticeable decline in satisfaction on the availability of financial support among all degree types. In 2010, 60% of professional master's students gave a positive response to this question. In 2019, only 52% of professional master's students gave a positive response. Similarly, in 2010, 67% of doctoral students and 68% of research master's students gave a positive response to this question, compared to only 59% of doctoral students and 62% of research master's students in 2019.

VII. University Resources and Student Life

Students were asked whether social functions linked to their graduate studies occurred, and if so, if they attended these functions (Figure 25). Students were more likely to participate in social activities organized by their advisor/research group. Of the students who reported that their advisor/research group organized social activities, 93% attended 'frequently' or 'occasionally'. Students expressed less interest in university-wide activities. Although 69% of respondents acknowledged that university wide social activities occurred, only half of respondents attended.

Figure 25 CGPSS 2019 Results, All Degree Types Social activities: Occurrence and participation in social activities on campus



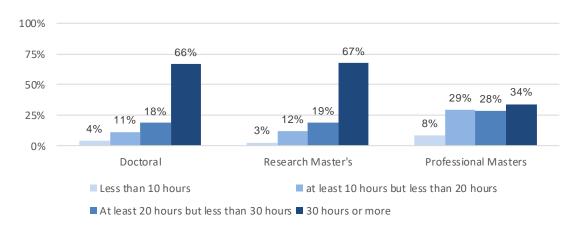
'Percent who report that activity occurs' refers to the proportion of respondents who answered that this activity occurs 'frequently' or 'occasionally';

In 2019, respondents were asked if they were physically present on campus on a regular basis, or have been away most of the time (e.g. out of town, out of the country, field work, distance program, working at a separate location). The majority of respondents (86%) reported being physically present on campus. A larger proportion of doctoral students (17%) reported being away, followed by professional master's students (13%) and research master's students (12%).

^{&#}x27;Percent who attend' refers to the proportion of respondents who answered that they attended these events 'frequently or occasionally'.

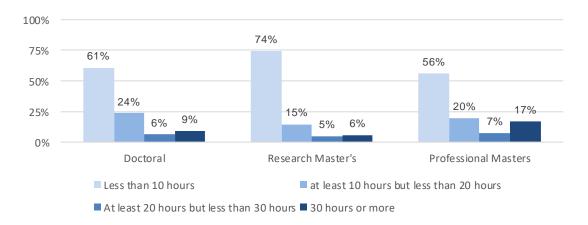
Respondents were asked how many hours on average they spend working on their studies and/or research (Figure 26). Two thirds of doctoral stream students and one third of professional master's students spend 30 or more hours working on their studies or and/or research.

Figure 26 CGPSS 2019 Results Average Hours spent each week on studies and/or research



Respondents were also asked how many hours on average they spend each week doing paid work (with little or no connection to studies or research) (Figure 27). 74% of research master's students, 61% of doctoral stream students and 56% of professional master's students spend less than 10 hours on paid work unrelated to their studies or research.

Figure 27 CGPSS 2019 Results
Average Hours spent each week on paid work unrelated to studies and/or research

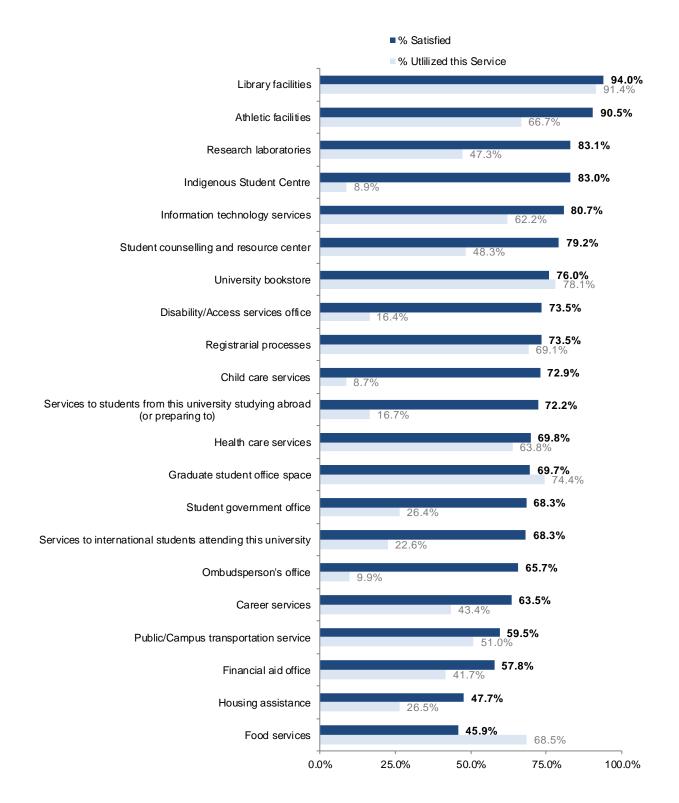


Students rated their satisfaction with 21 specific university facilities and services (Figure 28). Some university resources are used frequently and are rated highly by graduate students. For instance, of the 91% of respondents that reported they used the library facilities, 94% were satisfied with their experience. Of the 78% of respondents that reported they used the university bookstore, 76% were satisfied with their experience.

Other resources are used less frequently, but are still evaluated positively by the students who use them. For instance, although only 9% of respondents used the Indigenous Student Centre, 83% of these users were satisfied with their experience.

Facilities and services which were rated the lowest in terms of satisfaction are food services (46% satisfied) and housing assistance (48% satisfied).

Figure 28 CGPSS 2019 Results, All Degree Types University facilities and services: Participation and satisfaction with quality of experience by location of office



VIII. Supportive Campus Environment

Of the 8% of all respondents who self-identified with a disability or impairment, over half (58%) specified that they had a mental health-related disability, over a quarter (26%) specified that they had a learning disability, and 17% specified that they had a chronic condition such Crohn's disease, Colitis or Multiple Sclerosis. Table 20 shows responses by degree type.

Table 20 CGPSS 2019 Results
Type of Disability or Impairment
Respondents who answered 'yes' to 'Do you self-identify with any disability or impairment?'

	Doctoral	Research Master's	Professional Master's	Total
Percentage who self-identified with a disability or impairment	7.6%	7.4%	7.7%	7.6%
Mental Health (e.g. Depression, Bipolar)	51.4%	69.1%	59.0%	58.1%
Learning (e.g. ADHD, Dyslexia)	25.7%	26.5%	26.2%	26.1%
Chronic (e.g. Chron's, Colitis, MS)	15.0%	20.6%	18.0%	17.4%
Sensory (vision or hearing)	15.0%	4.4%	12.0%	11.8%
Mobility	9.3%	5.9%	5.5%	6.9%
Autism spectrum (e.g. Autism, Asperger's)	6.4%	5.9%	3.8%	5.1%
A disability or impairment not listed above	14.3%	11.8%	9.3%	11.5%
Prefer not to respond	7.1%	2.9%	3.8%	4.9%

Respondents could choose multiple responses

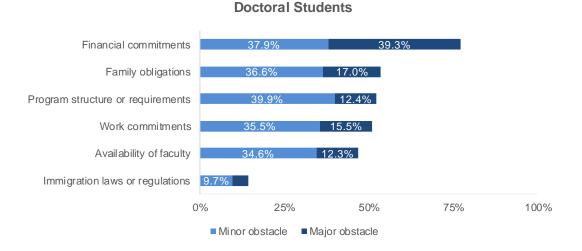
Only responses from respondents that self-identified with any disability or impairment (7.6% of total respondents) are included.

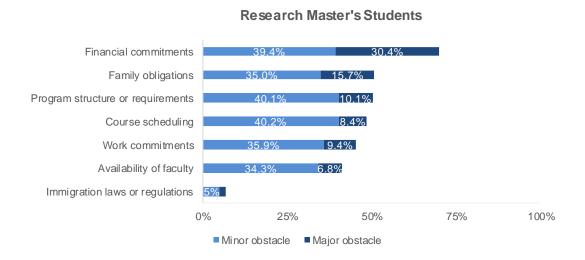
Students who self-identified with a disability or impairment were asked how satisfied they were with the institution's efforts to accommodate their disability or impairment in their graduate program. Professional master's students were the most satisfied, with 65% giving a rating of 'excellent', 'very good', or 'good', followed by research master's students (62%). Only 49% of doctoral students who self-identified with a disability or impairment were satisfied with the institution's efforts to accommodate their disability or impairment in their graduate program.

IX. General Assessment

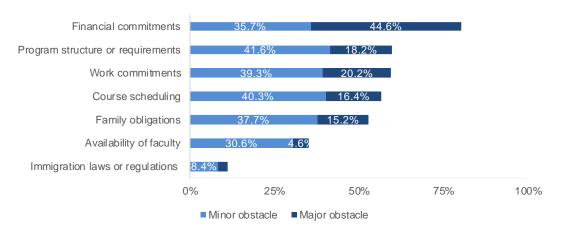
The final section of the survey asked questions about students' general satisfaction with their graduate school experience and about obstacles to their academic progress. Students from all degree types rated financial commitments as the largest obstacle to their academic progress, but this was particularly so for professional master's (80% indicated this as a minor or major obstacle) and doctoral students (77% indicated this as a minor or major obstacle). Family obligations were noted as the second largest obstacle for doctoral stream students (54%); professional master's students indicated program structure or requirements were the second largest obstacle (60% indicated this as a minor or major obstacle (Figure 29).

Figure 29 CGPSS 2019 Results
Minor and Major obstacles to students' academic progress
Respondents who rated the factor as 'a minor obstacle' or 'a major obstacle' to their academic progress





Professional Master's Students

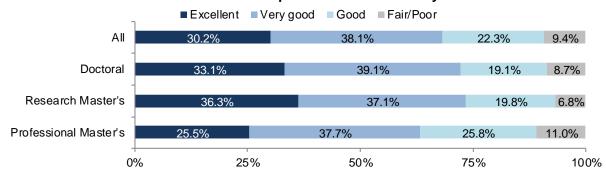


Students also rated their satisfaction with the quality of their academic experience, student life experience, graduate program, and overall experience at the University (Figure 30). In general, students rated their experiences very positively. Results were very similar across the degree types. Students showed the highest levels of satisfaction with the academic experience; 91% of students considered it to have been 'excellent', 'very good', or 'good'. The majority of students were also satisfied with their graduate/professional program (86%) and their experience overall (86%), but as in previous years, rate their student life experience less favourably (74%).

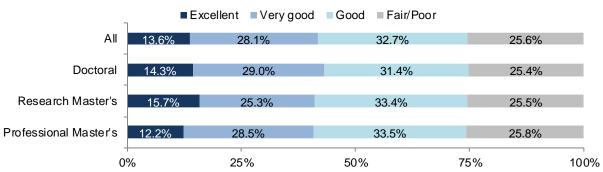
Figure 30 CGPSS 2019 Results General assessment by degree type

Overall how would you rate...

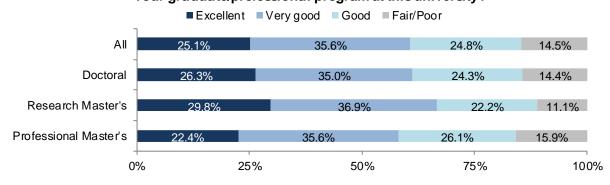
Your academic experience at the university?



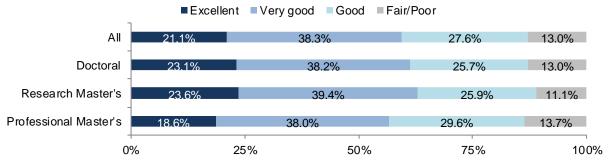
Your student life experience at this university?



Your graduate/professional program at this university?





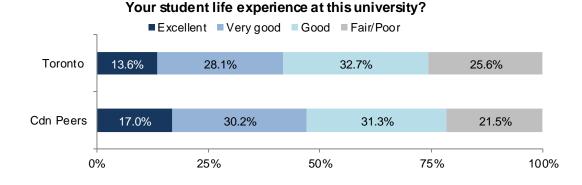


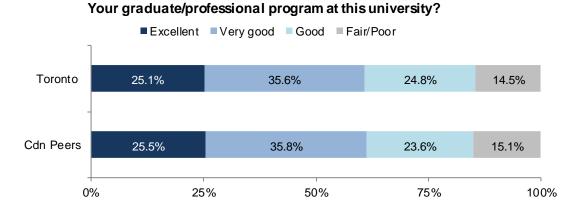
With respect to satisfaction with the academic experience, graduate program and overall experience, U of T graduate students responded in a very similar pattern to students at our Canadian peer institutions (Figure 31). It is only in the area of 'student life' that our graduate students responded less favourably than students at our Canadian peer institutions. Only three quarters (74%) of graduate students at U of T rated their student life experience as 'excellent', 'very good', or 'good' compared to 79% of our Canadian peers in 2019.

Overall how would you rate...

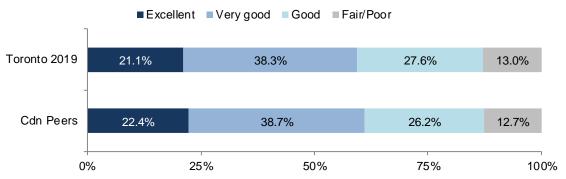
Figure 31 CGPSS 2019 Results All degree types General assessment: Comparison to Canadian peer universities

Your academic experience at the university? ■ Excellent ■ Very good ■ Good ■ Fair/Poor Toronto 30.2% 38.1% 22.3% 9.4% Cdn Peers 27.4% 39.2% 11.0% 22.4% 100% 0% 25% 50% 75%





Your overall experience at this university?



X. Conclusions

This report places the 2019 CGPSS results into context with results from 2010, 2013 and 2016. The new method of directing students into three separate survey stream paths has increased specificity for questions asked of our doctoral stream and professional master's students, but has limited some comparisons to 2010 data.

Nevertheless, with current results showing few major changes since 2016, we are pleased to report that our students remain satisfied with their educational experience at U of T. We continue to perform the same or better than our Canadian peers in students' satisfaction with their academic experience, graduate program and overall experience. Our students value highly the intellectual quality of faculty and their fellow students. The high proportion of doctoral stream students participating in independent research continues to grow and on the whole, doctoral students are very satisfied with the support they receive from their thesis advisors.

It is also encouraging to know that graduate students continue to show satisfaction with many professional skills development activities.

The CGPSS results inform us that our professional master's students are highly engaged and satisfied with their professional skills development, particularly in opportunities for contact with practicing professionals. Satisfaction levels for professional master's students also exceed those for doctoral stream students in regards to the relationship of their program content to their professional goals, and to opportunities for student collaboration and teamwork.

However, the survey results also identify a number of areas that still require improvement. While our students are satisfied with their scholastic experience, their satisfaction with their student life experience lags behind.

Both doctoral stream and professional students also expressed lower levels of satisfaction with the advice they received about career options and information on the availability of financial support.

With feedback from a substantial proportion of our graduate student population, we value the information we have received from the CGPSS 2019 and look forward to building on our strengths and assessing our response to challenges in the next administration of this survey in 2022.