

Student:Faculty Ratios at UOIT

DISCUSSION PAPER SERIES

ACADEMIC COUNCIL

Robert Bailey

Provost & VP Academic (Interim)

June 2017

Abstract

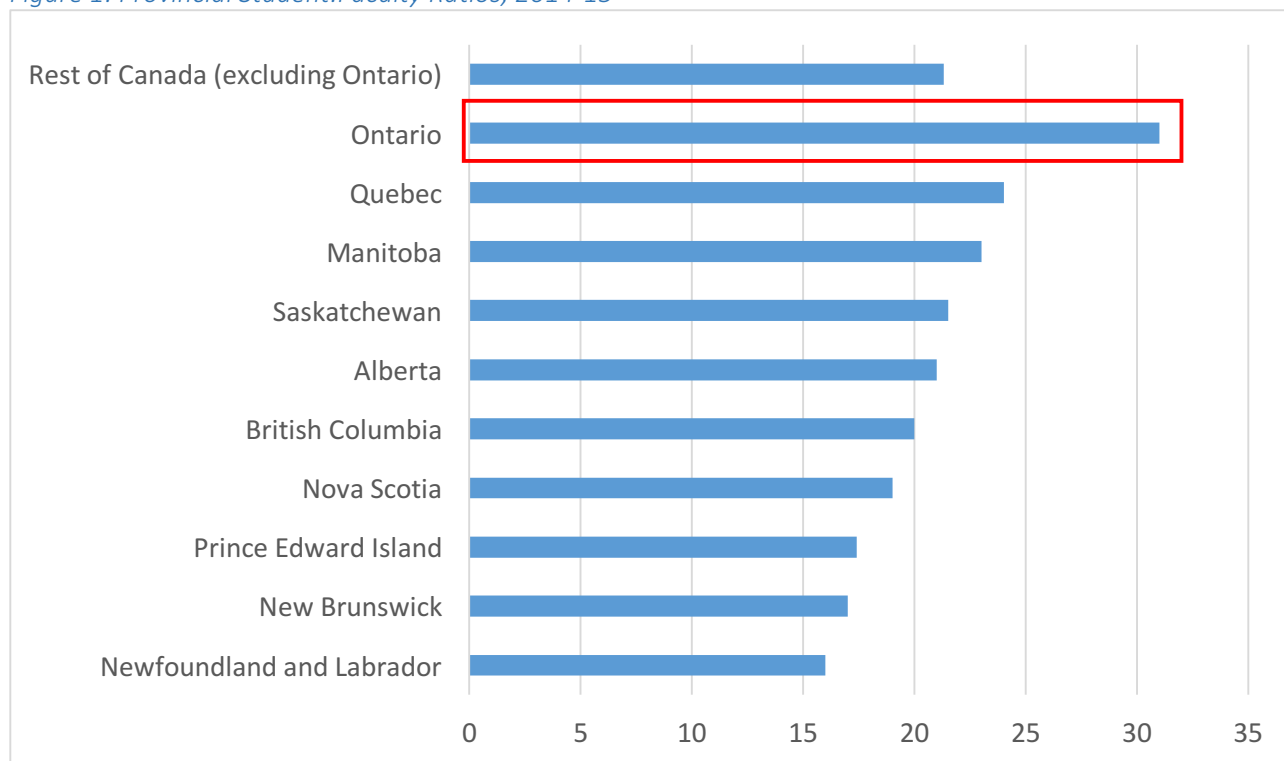
Student:faculty ratio is often considered a reasonable measure of the quality of the educational experience at a university. A smaller ratio implies more attention paid by faculty members to each of the students that they teach, whereas a high ratio suggests large classes and little time for attention to the needs and success of each student. It is an attractive metric because it is relatively easy to calculate, but it can be deceptively simple. The program, level, and nature of a course; the number of courses each faculty member teaches; and the number of courses taught by sessional and contract instructors can all affect the average number of students sharing a given student's learning experience at UOIT and the quality of their educational experience.

In 2011, UOIT's Senior Academic Team set a goal to improve UOIT's ratio from 36:1 to 31:1 in an effort to enhance the educational experience of our students and move closer to the provincial average. Since that time, UOIT has added 78 hires (51 TTT; 27 TF) for a total of 286 faculty members and a ratio of 31:1 in 2016.

UOIT's Overall Student:Faculty Ratio

A recent publication from Ontario Confederation of University Faculty Associations¹ (OUCFA) highlighted that Ontario has the highest student:faculty ratio in the country, with an average of 31:1. Based on the information above UOIT would be at the Ontario average.

Figure 1: Provincial Student:Faculty Ratios, 2014-15



To understand how UOIT compared to other Ontario universities, our Office of Institutional Research used ministry enrolment submissions and faculty numbers submitted to the **Ontario Council of Academic Vice-Presidents (OCAV) database** for 2015-16. Although UOIT has the second highest ratio in Ontario (44:1) for TTT faculty (Figure 2), it is lower than the Ontario average (UOIT 31:1 v Ontario average 33:1) when both TTT and TF faculty are counted (Figure 3).

¹ Preserving the quality of university education in Ontario: OUCFA's 2017 pre-budget submission, January 2017.

Figure 2: Ontario Student:Faculty Ratios (2015-16), Tenured/ Tenure Track Faculty Only

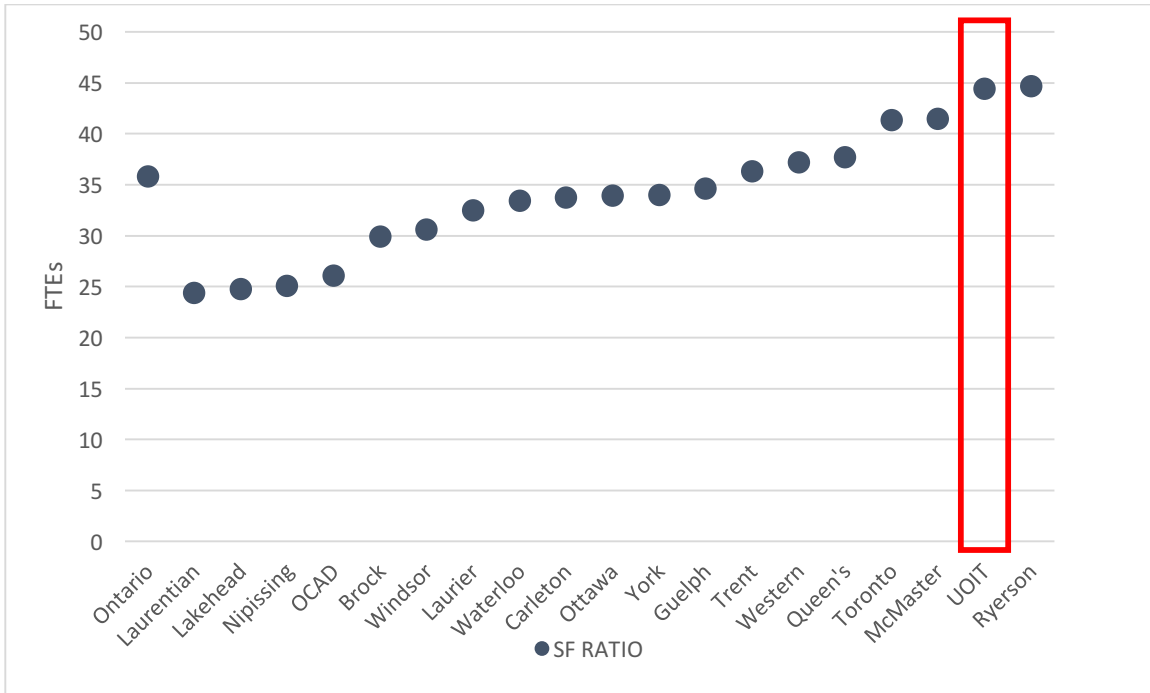
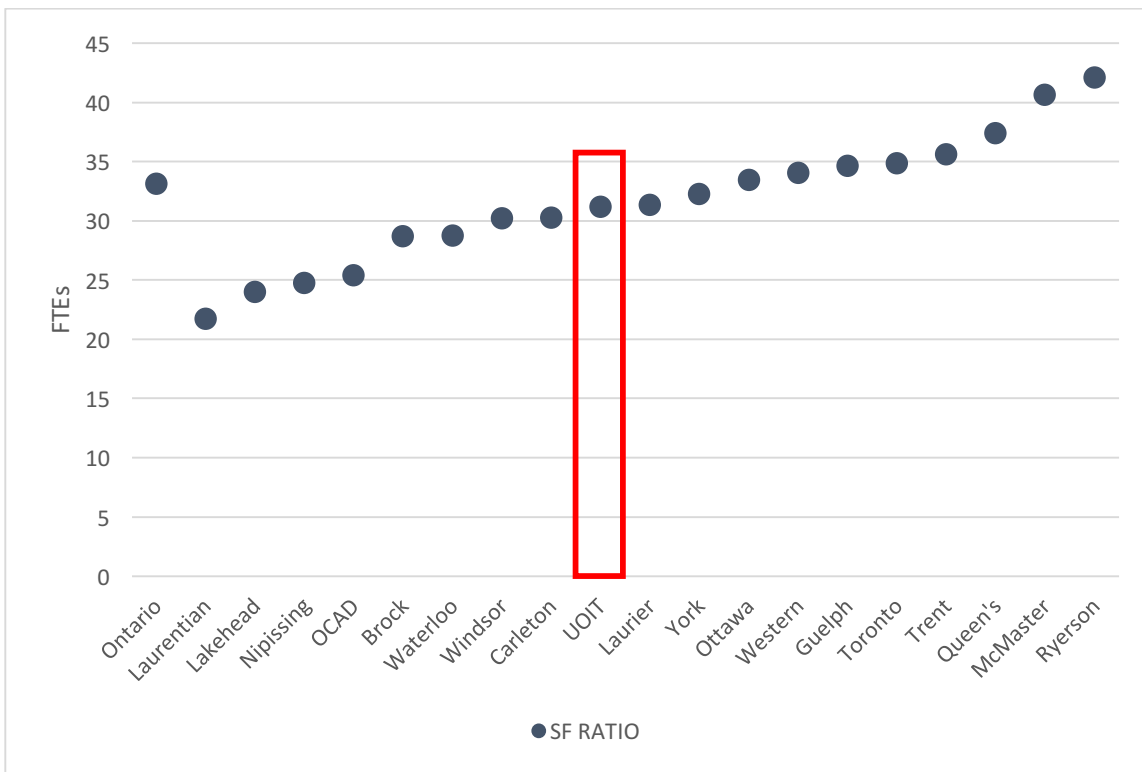


Figure 3: Ontario Student:Faculty Ratios (2015-16), Full-Time Faculty.



Student:Faculty Ratio: Faculties within UOIT

Although potentially informative, two things make it challenging to use and compare the student:faculty metric by Faculty (Table 1). First, all TTT and TF positions approved in the budget are counted in the ratio, but some of these may be unfilled in a given year. Second, students in a program delivered by a Faculty (e.g. Nuclear Engineering) may take several courses in another Faculty (e.g. Science). That is why we report ratios for both “Home” (number of students in programs delivered by the Faculty) and “Taught By” (number of students in courses delivered by the Faculty) student numbers.

Faculties that largely deliver courses to students in their own programs have similar ratios for both metrics (e.g. Education). Faculties that do substantial service teaching have larger ratios for “Taught By” than the “Home” metric (e.g. Science, Social Science & Humanities). Faculties whose students take substantial numbers of courses from other Faculties have larger ratios in the “Home” than “Taught By” metric (e.g. Engineering & Applied Science, Energy Systems & Nuclear Science).

Consistent with goals set in 2011, UOIT has increased the proportion of the budget that directly supports instruction and research. Overall, UOIT has met our internal goal of 31:1 ratio and is now lower (i.e. better) than the Ontario average. In future, we will analyze and report on other factors linked with the quality of each student’s educational experience at UOIT (e.g. program and year-specific course section sizes).

Table 1: UOIT Student:Faculty Ratios²

Tenure and Tenure Stream, SF Ratio	Home Faculty				Taught by Faculty			
	13/14	14/15	15/16	16/17	13/14	14/15	15/16	16/17
Faculty	Total	Total	Total	Total	Total	Total	Total	Total
Business & Information Technology	46:1	45:1	45:1	45:1	44:1	44:1	44:1	44:1
Education	20:1	19:1	16:1	24:1	22:1	20:1	21:1	23:1
Energy Systems & Nuclear Science	37:1	30:1	28:1	28:1	19:1	18:1	18:1	19:1
Engineering & Applied Science	37:1	44:1	46:1	44:1	25:1	26:1	25:1	23:1
Health Sciences	52:1	55:1	55:1	58:1	42:1	43:1	41:1	42:1
Science	36:1	36:1	35:1	34:1	54:1	55:1	55:1	57:1
Social Science and Humanities	52:1	46:1	42:1	39:1	60:1	58:1	57:1	58:1
Grand Total	42:1	42:1	41:1	42:1	41:1	41:1	41:1	41:1
TTT & Teaching Faculty (TF), SF Ratio								
Faculty	Total	Total	Total	Total	Total	Total	Total	Total
Business & Information Technology	34:1	32:1	32:1	31:1	32:1	31:1	31:1	30:1
Education	17:1	17:1	14:1	21:1	18:1	18:1	19:1	21:1
Energy Systems & Nuclear Science	32:1	28:1	26:1	26:1	17:1	17:1	17:1	18:1
Engineering & Applied Science	34:1	36:1	38:1	37:1	23:1	21:1	21:1	19:1
Health Sciences	36:1	34:1	34:1	36:1	29:1	27:1	25:1	26:1
Science	24:1	24:1	23:1	22:1	36:1	37:1	36:1	37:1
Social Science & Humanities	45:1	39:1	36:1	33:1	52:1	49:1	48:1	49:1
Grand Total	33:1	32:1	31:1	31:1	32:1	31:1	31:1	31:1

² Sections “taught by” Trent are not included in the taught by figures; as such, the figures may differ from home figures.

Actual numbers of TTT and TF positions budgeted in each Faculty provide a reasonable sense of both the scale and change over time in Faculty complement in the last few years (Table 2). In special circumstances, contract faculty with commitments over one year (Table 3) have been used to reduce section sizes or deliver courses when TTT or TF faculty are not available. Nevertheless, our emphasis has been and will continue to be on recruiting strong TTT and TF faculty to deliver a quality education in all of our undergraduate and graduate programs. Our commitment to teaching excellence is further evidenced by how many students are taught by a full time faculty member compared to part-time faculty. Course sections at UOIT are mostly taught by full-time faculty (79% in 2015, 70% 3-year average).

Table 2: UOIT Approved TTT and TF by Faculty

Tenure and Tenure Stream	13/14	14/15	15/16	16/17
Faculty				
Business & Information Technology	38.50	38.75	38.75	39.75
Education	16.00	17.50	16.50	15.50
Energy Systems & Nuclear Science	12.50	13.50	13.50	13.50
Engineering & Applied Science	37.75	37.75	38.75	42.75
Health Sciences	30.00	30.00	31.00	31.00
Science	31.25	31.00	31.00	31.00
Social Science and Humanities	37.00	39.00	39.00	40.00
Total	203.00	207.50	208.50	213.50
Teaching Faculty (TF)				
Business & Information Technology	14.00	16.00	16.00	18.00
Education	3.00	2.00	2.00	2.00
Energy Systems & Nuclear Science	2.00	1.00	1.00	1.00
Engineering & Applied Science	4.00	8.00	8.00	9.00
Health Sciences	13.00	18.25	19.00	19.00
Science	15.00	16.00	15.75	16.75
Social Science & Humanities	6.00	7.00	7.00	7.00
Total	57.00	68.25	68.75	72.75
% TF	21.9%	24.8%	24.8%	25.4%

Table 3: UOIT Contract Academic Positions (>1yr) by Faculty

Faculty	2013	2014	2015	2016
Business & Information Technology	1	5	6	4
Education	3	1	0	1
Energy Systems & Nuclear Science	2	2	3	3
Engineering & Applied Science	2	2	4	3
Health Sciences	2	1	1	1
Science	0	1	2	2
Social Science and Humanities	1	1	3	3
Grand Total	11	13	19	17