Teaching and Learning

University of Windsor

Introduction

Learning – through education, scholarship, research, creative activity, and engagement – is at the core of the University of Windsor's mission[1]. Creating an environment where students are engaged through instruction and practice motivates learning and inspires students to actively participate in their education. It is important to note that students learn through multiple avenues and different forms of activities, and in a wide range of settings from classrooms and labs to field placements and co-curricular activities. This summary focuses primarily on course-based learning. For more information about co-curricular learning, please see information sheets about undergraduate and graduate student experiences.

Facts and Figures

- The University of Windsor offers 190 undergraduate programs, 70 graduate programs and 6 professional programs across 8 academic faculties.

- In the 2021/22 academic year, the University offered 3799 for-credit courses (excluding labs, Thesis, Dissertation, practicum and clinical placements). Of those courses, 75% were online mostly in response to the pandemic. In comparison, 4% of courses were online in our last pre-pandemic academic year, 2019/20. Responding to COVID-19 required enormous effort and openness to change; and instructors, departments and faculties are continuing to reflect on what these changes mean for future planning.

- Currently, the student-to-faculty ratio is 26:1[2], which, according to Maclean's Magazine, ranks the University 9th among comprehensive universities. Shown in Table 1, the size of classroom sections and subsections[3] at UWindsor are largest for first-year courses, reflecting the number of sections offered and enrolment by year of study.

- The Classroom Database reports 24 hyflex classrooms in buildings across campus. About 60% of the classrooms across campus are outfitted with mobile tables and chairs while 40% offer fixed classroom layouts. Approximately 69% of classrooms across campus are equipped with projectors, 63% have a computer, and 38% have a podium or lectern.

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[1] University of Windsor (2010). Thinking Forward…Taking Action. https://www.uwindsor.ca/vp-research/sites/uwindsor.ca.vp-research/files/takingaction.pdf
[2] University of Windsor. (2021). Fast Facts. https://www.uwindsor.ca/45/fast-facts
[3] Section refers to lecture/classes and Subsection refers to lab/tutorials.

Table 1. Size of Classroom Sections and Subsections

	First Year		Second Year		Third Year		Fourth Year	
Section Class Size	N	%	N	%	N	%	N	%
< 30 students	45	24.1	70	30.4	113	49.1	113	70.6
30-60 students	51	27.3	86	37.4	68	29.6	37	23.1
61-100 students	33	17.6	32	13.9	32	13.9	8	5.0
101-250 students	52	27.8	40	17.4	17	7.4	2	1.3
>250 students	6	3.2	2	0.9	0	0.0	0	0.0
# of Sections	187	100	230	100	230	100	160	100
	First Year		Second Year		Third Year		Fourth Year	
Subsection Class Size	N	%	N	%	N	%	N	%
< 20 students	56	30.4	54	36.2	28	43.8	12	75.0
20-40 students	118	64.1	80	53.7	10	15.6	3	18.8
>40 students	10	5.4	15	10.1	26	40.6	1	6.2
# of Subsections	184	100	149	100	64	100	16	100

Source: CUDO 2020: Undergraduate Class Size by Year, 2019.

- A comprehensive project that encompassed major updates to technologies in several campus classrooms, along with targeted wireless network enhancements was completed during 2020/21 to support the University's return to campus plan for Fall 2021. As part of this project, 19 larger capacity classrooms across campus were updated and 8 mobile carts deployed with hyflex technology to facilitate hybrid delivery of more than 200 courses during Fall 2021 and Winter 2022 terms. Since September 2021, the University has applied for and received MCU grant funding through the "TERF" (Training Equipment and Renewal Fund) program, which will be used to create new active and collaborative learning classrooms, update select hyflex classrooms to extend functionality and enhance audience interaction, and upgrade nursing computing labs to support achievement of accessibility and micro-credentialing requirements. In total since the start of the pandemic, approximately $2 million has been invested in classroom, meeting room and related technology updates, funded through MCU programs ($600,000) and the University ($1.4 million).

- In the past five years, the cost of classroom renovations and renewal has totaled $9.2 million. An established process exists for the prioritization of classrooms for the purpose of renovation. Since the process was launched in 2016, 9 classrooms have been renovated, including brand new technology, through the deferred maintenance strategy funds. The prioritization process includes criteria such as student feedback, accessibility, state of physical classroom and the state of the AV/IT/Wi-Fi in the classroom.

- The National Survey of Student Engagement [(NSSE) 2020](4) reports almost half (48%) of first-year and 82% of final-year respondents participated in at least one high impact practice during their time at the University. The percentage of final-year students who participated in an internship or field experience increased to 48% from 43% in 2017, reflecting a strong and growing emphasis on Experiential Learning (EL).

- NSSE 2020 reports that compared with respondents from Ontario comprehensive institutions, a significantly greater proportion of UWindsor senior students have taken a course that involved service-learning and have conducted research with a faculty member (Table 2).

Table 2. Senior Participation in HIPs at UWindsor and Ontario Comparators

High Impact Practice	UWindsor	Ontario Comparators
Service-learning	55%*	50%
Internship or field experience	48%	49%
Culminating senior experience	34%	36%
Research with faculty	23%*	19%
Learning community	17%	16%
Study abroad	6%	9%

*Indicates significantly higher scores than Ontario comparators.

- Since 2018, UWindsor has been developing a course tagging system to track the proportion of courses that involve Experiential Learning in line with the requirements of Ontario Strategic Mandate Agreement. Each Faculty identifies courses with an EL component involving a substantial time commitment and evaluation; authentic environment; cognitive demands and activities; and reflection on theory, self-assessment and skill transference. Since Fall 2020, the proportion of courses with an EL component in a given semester has ranged from 12.3% to 16.4% with the highest proportion of courses including practicum, co-operative education, community service-learning, and interactive simulation. It should be noted that the development of course tagging is incremental and only includes courses where the experiential component is a permanent part of the course description and learning outcomes.

- The University has a strong cross-faculty tradition of teaching awards recognition, with awards for mentorship, teaching, educational leadership and online learning at the institutional level, and a wide variety of awards at the faculty level. In the last 5 years, faculty members have received 308 provincial, national, and international teaching awards including 4 3M teaching fellowships, 6 Ontario Confederation of University Faculty Associations (OCUFA), A Brightspace

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[4] The University of Windsor, along with every University in Ontario, administers NSSE every three years to first- and final-year undergraduate students. In 2020, the UWindsor overall response rate was approximately 52%. The data points provided by NSSE indicated statistical comparisons between UWindsor and selected Ontario and Canadian comparison groups.

Innovation in Teaching Award, Teaching and Academic Librarianship Awards, and Ministry of Colleges and Universities Awards of Excellence.

- There is limited aggregate student feedback on their learning experiences at the University of Windsor, however, one viable source is NSSE. Table 3 summarizes student perceptions of the frequency with which they interacted with faculty members outside of class. Asterisks indicate that UWindsor had a statistically significant higher mean score than Ontario comparator universities.

Table 3. Student Interactions with Instructors Outside of Class

During the current school year, about how often have you done the following? (1=Never, 4=Very Often)	UWindsor First Year	Ontario Comparators	UWindsor Senior Year	Ontario Comparators
Talked about career plans with a faculty member	1.9*	1.8	2.2*	2.0
Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	1.6	1.6	1.9*	1.7
Discussed course topics, ideas, or concepts with a faculty member outside of class	1.9	1.8	2.1*	2.0
Discussed your academic performance with a faculty member	1.8*	1.7	2.0*	1.9

- Table 4 summarizes student perceptions of key instructional practices. Asterisks indicate statistically significant higher mean scores, suggesting that while the first-year student report of these practices are generally comparable, senior students identify that these practices have not been as common.

Table 4. Instructor Practices

During the current school year, to what extent have your instructors done the following? (1=Very little, 4=Very Much)	UWindsor First Year	Ontario Comparators	UWindsor Senior Year	Ontario Comparators
Clearly explained course goals and requirements	2.9	2.9	2.8	3.0*
Taught course sessions in an organized way	2.9	2.9	2.7	2.9*
Used examples or illustrations to explain difficult points	3.0	2.9	2.8	2.9*
Provided feedback on a draft or work in progress	2.4	2.4	2.3	2.4*
Provided prompt and detailed feedback on tests or completed assignments	2.4	2.4	2.4	2.5*

- Students also reported that their courses challenged them to do their best work at a higher rate than at Ontario comparator schools (5.4* vs. 5.2) in first year, and at a lower rate than at Ontario comparator schools in their final year (5.1 vs. 5.2*; 1=not at all, 7=very much). Students ratings of the quality of their interactions with faculty were comparable in first year and slightly lower than provincial comparators in their final year (4.8 vs. 5.1*; 1=poor, 7=excellent).

Curriculum and New Program Development

Since 2012, the Quality Council of Ontario has approved 17 new University of Windsor programs (undergraduate degrees, professional graduate degrees, research Master's, Ph.D., graduate diplomas, and graduate certificates/credentials). Two-thirds of UWindsor's new programs were professional master's degrees and one-fifth were research PhD programs. One undergraduate degree program was approved. The University of Windsor has also developed 21 undergraduate certificate programs that can be combined with degree credentials to enhance skill and knowledge development, and diversify employment opportunities. There has been significant program renewal during this period, reflected by the 78 major program modifications approved by the University of Windsor Senate during this period.
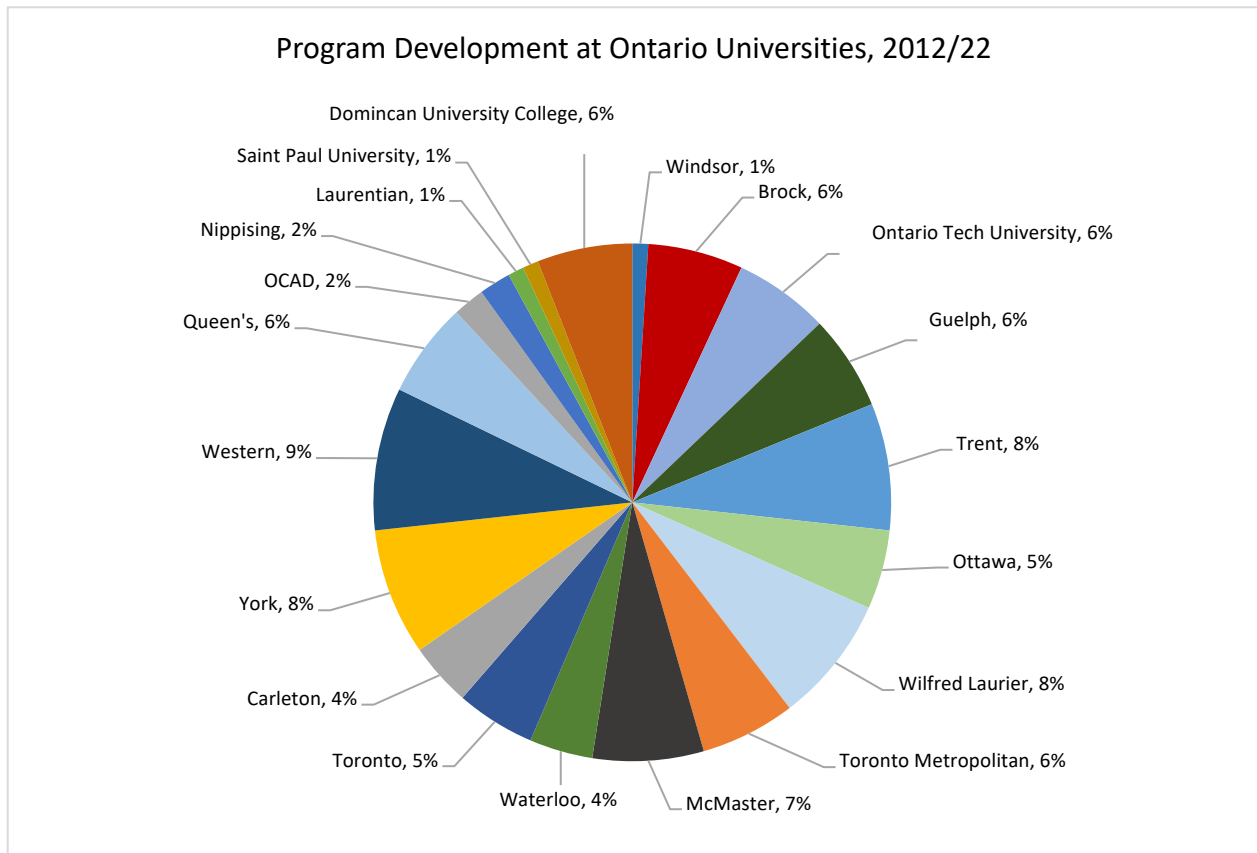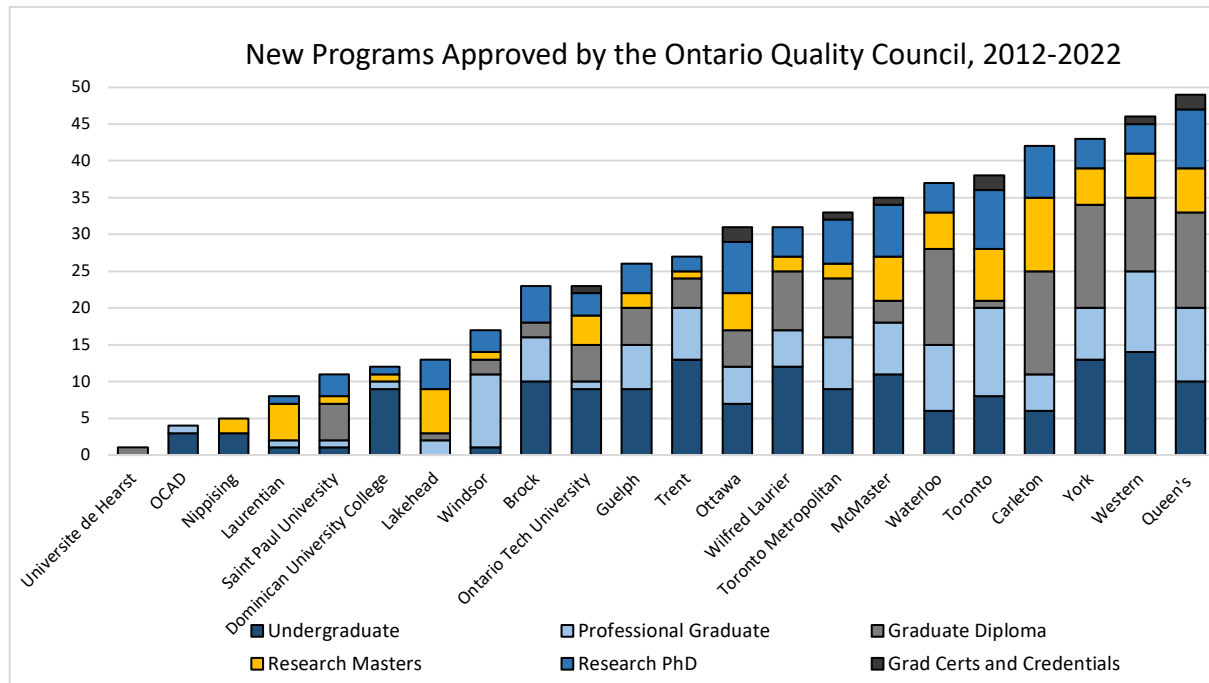

Figure 1

New Programs Approved by the Ontario Quality Council, 2012-2022

Legend: Undergraduate, Professional Graduate, Graduate Diploma, Research Masters, Research PhD, Grad Certs and Credentials

Figure 2

Teaching Improvement Activities

Since 2006, the University's Centre for Teaching and Learning (CTL) has partnered with faculty, staff and students across campus to create a culture of scholarly and effective teaching. The CTL works closely with the Office of Opening Learning (OOL) and Office of Experiential Learning (OEL). The OOL aims to improve students' learning experience by enhancing online teaching and facilitating open networks and communities of practice, while the OEL leads the development and promotion of experiential learning opportunities including work-integrated learning across campus.

- In 2020/21, the CTL hosted more than 5,700 participants in 146 course programs and workshops (1,656 unique individuals)[5] and the OOL hosted 131 workshops to 1309 participants (651 unique individuals).

- Shown in Figures 3 and 4, the number of participants registered in CTL courses and intensive workshops[6] as well as the number of unique individuals who have taken some form of professional development for teaching and learning[7] has increased in 2020/21.

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[5] Centre for Teaching and Learning. (2021). Annual Report. https://www.uwindsor.ca/ctl/sites/uwindsor.ca.ctl/files/ctl-annualreport-2021.pdf
[6] The data refers to registration for courses and extended workshops. Both courses and extended workshops involve 18+ hours of class time as well as homework.
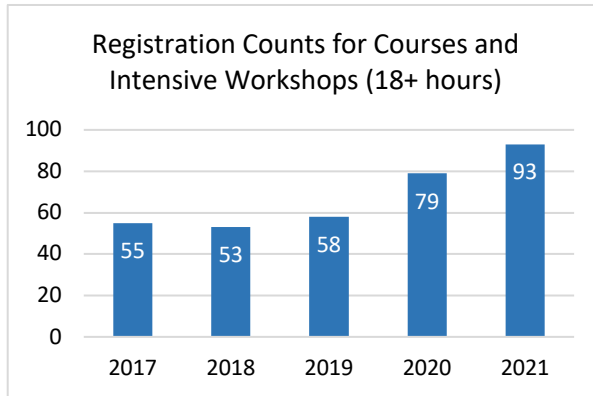[7] The data excludes online support for COVID-19, GA/TA events, and any non-pedagogical offerings from CTL.

Registration Counts for Courses and Intensive Workshops (18+ hours)

Year	Count
2017	55
2018	53
2019	58
2020	79
2021	93

Figure 3

Distinct Individuals Participating in Pedagogical Workshops

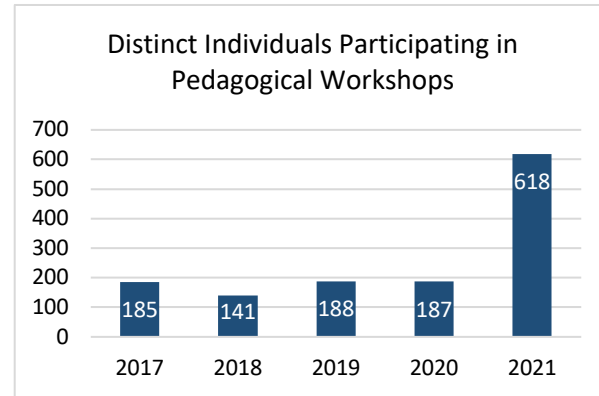| Year	Count
2017	185
2018	141
2019	188
2020	187
2021	618

Figure 4

- A recent focus has been on applying an equity, diversity and inclusion lens to teaching and curriculum, and on Indigenizing the curriculum and teaching practices[5,8]. In 2020/21, the CTL hosted 247 participants at anti-racism workshops including topics of institutional racism, allyship and classroom experiences. Since 2019, the CTL has hosted 547 participants at Indigenization workshops to bring Indigenous knowledges, approaches, medicines and healing practices into classrooms and curricula. Efforts to support the Indigenization and decolonization of curriculum have been supported through a number of internal grants programs, outlined below.

- Support for new and early career faculty is provided to 100% of new faculty through New Faculty Orientation partnered with the Office of the Provost, the Early Career Faculty Support Program, and a Mentoring program (with 91 participants in mentoring since initiated in 2019).

- Through the office of the Vice-President, Equity, Diversity and Inclusion, an Anti-Racism Pedagogies Teaching Leadership Chair was established in 2021. It is believed to be the first of its kind in Canada. Dr. Andrew Allen is the current Chair.

- In 2021, with the support of the OOL, instructors were successfully funded for 19 Virtual Learning Strategy Grants ($1.47 million). Since 2014, the OOL has successfully supported instructors and staff to acquire more than $5 million in project funding from e-Campus Ontario.

- In 2021, the OOL and ITS collaborated to secure provincial funding for a $1.1 million project to refurbish two computer labs, enhance three hyflex classrooms, and build out five active and collaborative learning classrooms to support diverse pedagogies.

- The University offers a number of cross-institution experiential initiatives supporting student learning such as the annual UWill Discover conference where students share their research,

[8] Centre for Teaching and Learning. (2020). Annual Report. https://www.uwindsor.ca/ctl/sites/uwindsor.ca.ctl/files/ctl-annualreport-2020.pdf

scholarship and creative work, and the Ignite Work Study program which funds part-time jobs on campus for students.

- A range of Internal grants support teaching and learning innovation across the institution, including the Centred on Learning Innovation Fund (CLIF) grants (96 since 2008), the Nanadagikenim - Seek to Know Grants (9 since 2020), the Undergraduate Experience Research Grant (63 since 2014), CTL Travel Grants, the Office of Open Learning Digital, Open, and Online Learning Grants (35 since 2013). Anti-Black Racism Teaching and Learning Grants were also launched in 2021.

Teaching and Learning Resources
- The CTL website has a number of best practice resources for effective teaching and learning including: Course Planning and Redesign; Active Learning and Lesson Planning; Lecturing; Mentoring and Advising; Grading and Assessment; and Indigenization Resources.

- The OOL website offers resources for teaching with technology including: Online, Open and Hybrid Teaching; Student-focused and developed resources; Virtual Classrooms; Interactive Learning Objects; and an Open educational practices hub.

- The OEL website offers best practice EL resources including: E-tool-kit for designing, delivering, facilitating and evaluating experiential learning; Literature on the important components of experiential learning; and check-list and project-based examples for remote and online experiential learning.

Thinking Questions
1. What are the key challenges we need to address in order to enhance student learning and success and inspire faculty to continue to develop as teachers?
2. How do programs need to evolve and change to address changing student and societal needs?
3. How should we be thinking about learning technologies and their role in excellent university education?
4. What would help to make program development and renewal easier and more successful?