REPORT OF THE PROVOST'S ADVISORY GROUP ON LIFELONG LEARNING OPPORTUNITIES

JUNE 2021



Table of Contents

Preface and Mandate	3
I. Introduction	4
II. Context	5
III. Lifelong Learning at the University of Toronto	8
a. School of Continuing Studies	9
b. Ontario Institute for Studies in Education (OISE)	11
c. Rotman School of Management (RSM)	12
d. Temerty Faculty of Medicine (TFM)	13
IV. Online Learning	14
V. Micro-credentials	15
VI. Credentialing	17
VII. Insights and Recommendations	18
a. Wayfinding	18
b. Community of Practice	18
c. Taxonomy and Definitions	19
d. Access and Equity	19
e. Credentialing	19
f. Partnerships and Collaborations	20
g. Communications and Marketing	21
h. Alumni and Advancement	21
VIII. Conclusion	22
Bibliography	23
Appendix 1: Summary of Recommendations	25
Appendix 2: Terms of Reference and Advisory Group Membership	26
Appendix 3: Inventory of Lifelong Learning Offerings at U of T	29
Appendix 4: Overview of Comparator Institutions	40
Appendix 5: Overview and Summary of Digital and Micro-Credentialing at U of T	58

Preface and Mandate

As a globally recognized research institution and a leader in post-secondary education, the University of Toronto has long been acknowledged as a significant contributor to the advancement of knowledge at the undergraduate, graduate, and professional levels. Our commitment to education extends to virtually all life stages and across a wide range of sectors. Indeed, U of T's 1992 Statement of Institutional Purpose clearly positions lifelong learning as a key part of its mission, stating:

"The University wishes to encourage learning as a life-long activity, and is committed to:

- 1. Providing to persons in professional practice and to members of the community at large opportunities to study and to use its facilities;
- 2. Helping other institutions, professional organizations and learned societies through the provision of facilities and expertise. 1"

The convergence of several current and local factors – such as a broad-scale shift to and acceptance of online learning, an increased demand for retraining due to the impact of technology on the workplace, government recognition and prioritization of short-course reskilling programs, and the impending retirement of the Dean of the School of Continuing Studies – has contributed to this review of lifelong learning opportunities at the University.

The striking of the Provost's Advisory Group on Lifelong Learning Opportunities was preceded by the University's 2018-19 Budget Model Review (BMR). Part of that review's mandate was to look at ways to ensure that the University will continue to thrive in changing economic conditions while preserving and protecting core University values and standards of excellence. Among the BMR's working groups was the Alternative Funding Sources Advisory Group (AFSAG), which was tasked with examining how the University might broaden its funding sources beyond tuition and government grants to provide it with a strong financial basis going forward. In its findings, the group identified expanding learning opportunities, engaging a broader age cohort, and leveraging technology as holding great potential. More specifically, the AFSAG identified continuing education and skills-upgrading as key areas for University expansion.

This Advisory Group was originally intended to begin its work in the spring of 2020. This start was delayed, along with many other initiatives, due to the onset of the COVID-19 pandemic. As turned out, 2020 brought with it other salient developments, including a heightened awareness and urgency with respect to access, equity, diversity, and inclusion efforts at the University. The work of the AFSAG, in addition to these other drivers, have highlighted the importance of this review of lifelong learning activities at U of T, and the role that such activities may have in the future development of the University's mission.

The Provost's Advisory Group on Lifelong Learning Opportunities was convened to provide strategic advice and recommendations with respect to the current and future offering of continuing education, professional development, skills-upgrading, micro-credentials, and other

¹ From the "Statement of Institutional Purpose, October 15, 1992," accessed June 1, 2021, https://governingcouncil.utoronto.ca/secretariat/policies/institutional-purpose-statement-october-15-1992.

lifelong learning initiatives, both for-credit and not-for-credit, at the University of Toronto. The Advisory Group's general mandate was to:

- 1. Consider the role of lifelong learning in the context of the University's overall mission and mandate:
- 2. Examine existing continuing and executive education offerings across University divisions; and
- 3. Explore delivery models and approaches to lifelong learning employed at comparator institutions.

The Chair and Assessors for this group thank all members (see Appendix 2) for their invaluable contributions to this important discussion and resulting report.

I. Introduction

The consideration of the development of lifelong learning opportunities at the University of Toronto in Fall and Winter of the 2020/21 academic year was strongly marked by the particular moment in time in which the Advisory Group held its discussions.

At the time of this report, the COVID-19 pandemic has shuttered in-person classrooms for over a year making virtual classes the norm; a cloud of uncertainty shrouds the post-COVID future of work and the economy; issues of access, equity, diversity and inclusion are a priority in the face of North America's reckoning with anti-Black racism and the systemic exclusion of Black, Indigenous, and people of colour from opportunities for success; and the Ontario government is prioritizing micro-credentials as a promising development in higher education. At the same time, the provincial tuition framework has just frozen domestic tuition for the second year in a row (following on a 10% cut to tuition in 2019/20) and the percentage of the University's operating budget funded by provincial operating grants is decreasing.

In this climate, the question of how the University should develop and steward lifelong learning opportunities is particularly salient, complex, somewhat muddy, and ripe with possibility. In approaching its mandate, the Advisory Group worked towards making recommendations that would allow the University to move forward in the key areas of coordination and communication. At the same time, it aimed to prepare the ground for sound decisions on the role that lifelong learning can play in future revenue, access, and outreach strategies.

The work of the Advisory Group took the form of focused presentations and discussions on particular aspects of lifelong learning at U of T and beyond. These covered the operations, structure, and offerings of the four divisions with the largest continuing education activities: the School of Continuing Studies (SCS), the Ontario Institute for Studies in Education (OISE), the Rotman School of Management (RSM), and the Temerty Faculty of Medicine (TFM). The group also heard presentations on online learning, micro-credentials, and the local, national, and international comparator landscapes.

Over the course of the Advisory Group's discussions, it became clear that the consideration of lifelong learning at U of T must take into account two primary but not necessarily related aims: to explore lifelong learning activities as potential sources of alternative revenue and to reflect on the

role of lifelong learning in furthering the University's sustainability, access, and equity goals. Both of these goals needed to be approached through the lens of our institutional commitment to academic excellence. In making its recommendations, the Advisory Group was mindful of these factors, as well as the particular constraints that accompany the University's decentralized administrative structure.

II. Context

Lifelong learning is far from a new idea; it has long been acknowledged that a rich and diverse educational territory continues beyond the boundaries of traditional elementary and secondary curricula and undergraduate and graduate degrees. There has been a rich body of research on adult and non-traditional learning in Canada that has contributed to our understanding and development of the landscape to date. Arguably, however, the rapid acquisition and adoption of new technologies across industries and economies has cast a new light on the centrality of lifelong learning and its relation to individual and societal success. Additionally, over the last fifty years, the average life expectancy of Canadians has increased over 14%, from 72.67 in 1971 to 82.66 in 2021². The imminent need to "reskill" and "upskill" the workforce to meet the challenges of increased lifespans and the technological demands of our emerging digital economies has been a focus of numerous government, institutional, and think tank reports in recent years, well before the COVID-19 pandemic swept across the globe.

In 2016, Gary Matkin, then Dean of the University of California, Irvine, coined the term "the 60-year curriculum" to refer the continuing education needs of longer-living humans. Operationally, this can be defined as "the formal higher educational experiences an individual will need over a 60-year (or more) working life. In this environment, the traditional model upon which our educational systems have largely been based is significantly elongated. A college or university degree is no longer the terminal educational achievement that it once was, and people can reasonably expect to change jobs or careers multiple times over the course of their working lives – with bouts of reskilling or upskilling in the process.

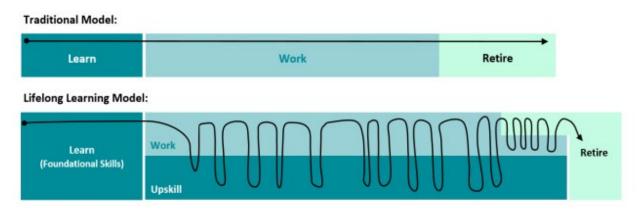
⁻

² Not accounting for the COVID-19 pandemic. Figures taken from UN projection data, accessed June 1, 2021. https://www.macrotrends.net/countries/CAN/canada/life-expectancy.

³ https://ce.uci.edu/about/releases/pr.aspx?id=449

⁴ Rovy Branon, "Learning for a Lifetime," *Inside Higher Ed*, November 16, 2018, https://www.insidehighered.com/views/2018/11/16/why-longer-lives-require-relevant-accessible-curricula-throughout-long-careers.

Figure 1. The Lifelong Learning Model⁵



Just as the 60-year curriculum was being recognized in the higher education sector, economists were calling attention to rapid technological change with significant economic impacts. In 2015, Klaus Schwab, Chairman and Founder of the World Economic Forum, declared the arrival of "the Fourth Industrial Revolution⁶," a period "characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres." This latest revolution brings with it both challenges and opportunities. As Schwab notes, it "has the potential to raise global income levels and improve the quality of life for populations around the world," through unprecedented digital innovation and related gains in efficiency and productivity. At the same time, it raises the possibility of ushering in "greater inequality, particularly in its potential to disrupt labor markets."

The double edge of this sword, sharpened by the economic upheaval of COVID-19, is now beginning to be felt keenly across all aspects of our global economy. While the onset of the pandemic could not have been predicted – at least with respect to its timing – the potential effects of the Fourth Industrial Revolution were foreseeable. Indeed, governments, corporations, and institutions have been urged to prepare for the shift for some time and have been doing so to various degrees.

Singapore has developed perhaps one of the best articulated plans in response to predicted global shifts. In its 2017 report, the nation's Future Economy Council (FEC) delivered a sweeping strategic plan to enable Singapore to "build a value-creating economy that is open and connected to the world. Offering a multitude of opportunities, with sustainable wage growth and meaningful careers for all Singaporeans⁷." Singapore's focus on applicable lifelong learning as a

_

⁵ Source: Jackie Pichette et al., *Lifelong Learning in Ontario: Improved Options for Mid-career, Underserved Learners* (Toronto: Higher Education Quality Council of Ontario, 2019), 10, https://heqco.ca/wp-content/uploads/2020/05/Formatted_Lifelong-Learning-in-Ontario.pdf. Note that a significant portion of lifelong learners are also retirees. This figure serves to demonstrate the shift in formal and/or professional learning needs in our changing economy and should not be understood to negate the robust uptake of lifelong learning opportunities by retired learners.

⁶ Klaus Schwab, "The Fourth Industrial Revolution: What it Means and How to Respond," *Foreign Affairs*, December 12, 2015, https://www.foreignaffairs.com/articles/2015-12-12/fourth-industrial-revolution.

⁷ Future Economy Council, "Report of the Committee on the Future Economy: Pioneers of the Next Generation," 2017. https://www.mti.gov.sg/Flipbook/CFE%20Report/index.html.

key plank in its plan is notable. Advocating for the acquisition and use of "deep skills," the FEC highlighted the need for the country to shift its approach to learning in two ways:

"First, since technologies and jobs are likely to change throughout our lifetimes, we need to go beyond the pursuit of the highest possible academic qualifications early in life to focus on acquiring and using knowledge and skills throughout our lives. Second, as technology replaces routine tasks, our people need to acquire deeper skills to create value, and more importantly ensure that they can utilise their skills effectively on the job." (Future Economy Council, 2017, p. 6).

This twofold strategy – to educate learners beyond what has traditionally been considered the end of formal education (i.e., high school or university) and to make that education readily applicable to the work that people do – neatly summarizes many of the overall recommendations that appear in the literature on lifelong learning over the last five years.

The other consistent observation that characterizes recent discussions of this fourth industrial revolution is the potential for inequality to grow. In its most recent *Future of Jobs Report*, the World Economic Forum (WEF) states that "in the absence of proactive efforts, inequality is likely to be exacerbated by the dual impact of technology and the pandemic recession." According to the WEF, those most likely to be affected by this "double disruption" are lower wage workers, women, and younger workers.

The Canadian context aligns with that of other developed nations, with similar tensions and opportunities. In its November 2020 report, *Canada – A Learning Nation*, the Future Skills Council outlined five key priorities for building "a learning nation" that resonate with those outlined in Singapore's plan, as well as those put forth by the WEF, the UN, and UNESCO. These are:

- 1. Helping Canadians make informed choices
- 2. Equality of opportunity for lifelong learning
- 3. Skills development to support Indigenous self-determination
- 4. New and innovative approaches to skills development and validation
- 5. Skills development for sustainable futures⁹

These priorities complement the UN's sustainable development goals (SDGs), articulated in 2015, that set targets for member countries to meet by 2030. Of particular note is SDG4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all¹⁰, a goal which emphasizes the significance of learning as a lifelong activity as well as the importance of inclusivity and equity in education. It is worth noting that here that the University

⁸ World Economic Forum, *The Future of Jobs Report 2020* (Geneva: World Economic Forum, 2020), 5, https://www.weforum.org/reports/the-future-of-jobs-report-2020.

⁹ Future Skills Council, *Canada – A Learning Nation: A Skilled, Agile Workforce Ready to Shape the Future* (Ottawa: Employment and Social Development Canada, 2020), 4, https://www.canada.ca/content/dam/esdc-edsc/documents/programs/future-skills/report-learning-nation/Future-Skills-Council-Report-EN.pdf.

¹⁰ United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development* (Geneva: United Nations, 2015), https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981.

of Toronto, through the Committee on Environment, Climate Change and Sustainability, has committed to a sustainability agenda that also strives to make progress towards these SDGs. 11

At the provincial level, the Higher Education Quality Council of Ontario (HEQCO) has also identified lifelong learning as an important area of focus for the province as it faces the job loss and change that is predicted to accompany the technological shift of the fourth industrial revolution. "All Ontarians — students, workers, educators and policy-makers — must recognize and embrace a new educational model where lifelong learning is the norm," a recent HEQCO report notes. "We should no longer expect our education system to serve as a linear pipeline to a specific job. Rather, we should expect our postsecondary institutions to provide Ontarians with a foundation of transferable skills, topped up with job-specific skills, which will allow us to adapt and thrive in times of change." 12

It is in this larger context that the University of Toronto operates and offers its lifelong learning opportunities. The next section provides an overview of the University's current approach and offerings with respect to lifelong learning. An overview of the lifelong learning activities of comparator institutions in the US, Canada and in the online space is provided in Appendix 4.

III. Lifelong Learning at the University of Toronto

Lifelong learning at U of T can be defined not only in terms of learning that falls outside of the undergraduate, graduate, professional degree, and post-doctoral student categories, but also in terms of learning that is generally not included in our formal categories of learning. Informal learning comprises a sizeable but uncatalogued portion of educational activity at the University. This type of activity includes public lectures and events, art exhibits, performances, alumni activities, and innovation and entrepreneurship activities that span our divisions.

For example, a great deal of community, student, and industry learning takes place through our innovation hubs, such as UTEST, ICUBE at UTM, Department of Computer Science Innovation Lab (DCSIL), the Rotman School's Creative Destruction Lab (CDL), the Entrepreneurship Hatchery, the Bridge and the Hub at UTSC, the Health Innovation Hub (H2i) at the Temerty Faculty of Medicine, InnovED at OISE, and the Centre for Entrepreneurship at the Faculty of Arts & Science. These hubs provide space, networks, and industry and funding contacts for students and community members that allow them to apply and grow their knowledge to bring products and services to market.

The University's three art galleries¹³ act not only as viewing spaces for visual art for U of T and our extended communities, but also offer mentorship, experiential learning opportunities, and art education programming for emerging and established artists, students, and other interested

¹¹ President's Advisory Committee on the Environment, Climate Change, and Sustainability, *Annual Report 2020: Embedding Sustainability Across U of T*, (Toronto: University of Toronto, 2020), https://www.president.utoronto.ca/secure-content/uploads/2020/12/2020-CECCS-Annual-Report-compressed.pdf.

¹² Pichette et al., *Lifelong Learning in Ontario*, 19.

¹³ Blackwood Gallery (UTM), Doris McCarthy Gallery (UTSC), Art Museum (Justine Barnicke + U of T Art Centre) (UTSG)

parties. Likewise, the Faculty of Music showcases the work of its faculty and visiting artists, as well as its performance and composition students, by holding public concerts, workshops, and other events to deepen and enhance our communities' appreciation for musical arts. Our alumni associations and advancement staff work year-round to plan and hold myriad events to augment the U of T alumni experience – from book clubs to networking socials to film screenings to travel and beyond.

Virtually every department and unit at U of T engages in some form of informal learning that enriches the experiences of our students, faculty, and staff, as well as the residents, businesses, and institutions of the cities in which we operate. These run the gamut from outreach activities to spark interest in particular areas of study and knowledge, to industry-specific or community learning opportunities, to public service education initiatives, to name just a few.

Such activities, while often ephemeral, are the natural offshoots of the more formal learning opportunities we offer to our "core learners" (undergraduate, graduate, and post-doctoral students) and to the rest of our lifelong learners – the youth and adult learners for whom we have structured approaches to teaching that encompass formal learning objectives.

As a top research university, U of T's formal offerings to our core learners are well documented and widely known. Both our undergraduate and graduate degrees are built upon a foundation of academic excellence that prepares students for professional success and equips them with the skills, curiosity, and appetite for lifelong learning. Perhaps less recognized, however, are the many formal opportunities that exist at the University specifically for lifelong learners. These are offered throughout the University, across divisions and campuses, and serve youths and adults at all stages of life. Below, the activities of the four divisions with the largest offerings of continuing education are explored. An inventory of the offerings of other divisions as of January 2021 can be found in Appendix 3. Since the pandemic, all divisions whose courses have been ongoing have offered them online. Prior to the pandemic, most courses were run in person, with digital options offered on a case-by-case basis.

a. School of Continuing Studies

The bulk of the University's lifelong learning opportunities are offered through the University's School of Continuing Studies (SCS), which offers courses and certificates in the Arts & Humanities; Business, Finance & Management; Career Development; Creative Writing; Health & Social Sciences; Information, Technology, Environment & Engineering; Languages & Translation; Learning Design; and Marketing & Communications. It also offers courses on contract, working with individual organizations and companies that are looking for custom training. Additionally, SCS runs an English Language Program (ELP) to meet the academic, professional, and personal English language goals of English-as-an-additional-language students. The Comparative Education Service (CES), a service that assesses international credentials and used to fall under the purview of the Registrar's Office, is now overseen by SCS as well.

Established in 1974, with roots that go back well before that, SCS is self-financing, with an annual revenue of approximately \$32M (2019-20). The School currently offers more than 850 skills-based courses and more than 110 certificates. All courses and certificates offered through SCS are entirely non-credit. The School had an annual pre-COVID enrolment of approximately

32,000 learners and has over 800 instructors. SCS engages a staff complement of 122, of which 32 work with the CES.

SCS instructors are not generally drawn from U of T faculty ranks, but rather are practicing professionals with deep industry or specialty knowledge. Many are longtime instructors with SCS, who are known in their communities and who have developed strong teaching and professional reputations among learners and potential learners in particular areas. SCS students are diverse but generally highly educated; over 82% have a university degree and 38% of those have a graduate degree. Most are mid-career professionals who are looking to upskill or reskill. Internationally educated professionals seeking North American education credentials, individuals seeking to expand their intellectual and cultural knowledge, and international students seeking to experience Toronto and/or to gain conditional acceptance to the University are also among the mix of SCS's learner types. Since 2001, more than 35,000 U of T alumni have taken at least one SCS course. SCS offers every U of T graduate a discount. Currently this is a \$550 credit to be used within five years of graduation.

SCS has established partnerships with several divisions at U of T, developing and offering courses on their behalf in revenue-sharing arrangements that allow the divisions to leverage the School's expertise in course development and delivery as well as its existing back-office operations. SCS currently works with the following divisions and units in delivering continuing education:

- Factor-Inwentash Faculty of Social Work
- Faculty of Applied Science & Engineering
- Faculty of Information
- Faculty of Law
- Faculty of Medicine
- Leslie Dan Faculty of Pharmacy
- Office of the VP Research & Innovation
- School of the Environment
- The Centre for Leadership, Learning & Culture (HRE)
- U of T Alumni Association

Some of these divisions/units offer courses through SCS while also delivering other types of lifelong through their own divisions. For example, the Faculty of Law has partnered with SCS to offer an Introduction to Legal Principles, Thinking & Reasoning course that is designed for aspiring law students and international legal professionals seeking Canadian accreditation. At the same time, Law also delivers its own Career Professional Development events within the Faculty. These qualify for the Career Professional Development hours that are required for practicing lawyers by the Law Society of Ontario. The Faculty of Applied Science & Engineering, by contrast, offers all of its continuing education programming in partnership with SCS, with the exception of its pre-university outreach courses that are targeted towards young learners.

The School of Continuing Studies also has partnerships with 20 professional associations, which contributes to the fact that 47% of SCS learners are seeking a professional designation.

SCS offers a range of individual courses and certificate programs, and recently launched a pilot of "micro courses." These short courses – a form of micro-credential (see Section IV) – are

condensed adaptations of full-length courses that allow learners to quickly develop specific competencies. These micro courses can lead to SCS certificates when stacked together and are priced at a reduced rate that allows learners to better take advantage of the Canada Training Credit¹⁴.

SCS issues its own transcripts and parchments and is not connected to the University Registrar. Historically, certificates have been issued in printed form, but the School is currently investigating digitizing SCS transcripts and certificates. The School is currently launching digital credentials for their micro courses only, through eCampus Ontario.

Fees for SCS courses vary depending on different factors, such as audience, length of course, and area of study. For example, a 36-hour business course generally costs \$769, creative writing courses fall in the \$599-699 range, Arts & Science courses are shorter and cost between \$250 and \$350, and translation courses are typically approximately \$745. Intensive bootcamps range from \$8,000-12,000 (for 12-week full-time or 24-week part-time programs) and ELP programs (either 4 or 12 weeks) are \$2,000 or \$6,000 depending on the length.

The School of Continuing Studies markets its courses, certificates, and programs through a variety of channels, including digital marketing on Google and Facebook, email campaigns, radio ads, social media, and through the School's website, which is linked to the University's Future Students page (albeit not in a very prominent location).

b. Ontario Institute for Studies in Education (OISE)

OISE offers continuing professional development and learning for educators across a number of professional contexts. Through its Continuing and Professional Learning (CPL) division, OISE develops non-credit offerings that are explicitly designed to "prepare and enable the learner to achieve in their professional context¹⁵." The main sectors of education for which CPL delivers courses are PreK – 12 Teaching, Postsecondary Education, Workplace Learning, and Human Services. In organizing and developing its programming, OISE CPL works to align its priorities with the University's institutional priorities. It has also incorporated contributions towards the United Nations' SDG4 (Quality Education) into its strategic planning and key performance indicators.

OISE CPL attracts an international base of learners and enrols approximately 8,000 registrants annually. Their clientele are primarily educators and administrators serving children, youth, and adults; and human services professionals (e.g., psychologists, psychotherapists, health and wellness professionals). Courses and certificates offered by OISE CPL can be applied to various professional licensing or accreditation requirements and capitalize on OISE's internationally recognized research expertise.

The average fee for OISE courses is \$750, but these vary depending on the offering. Hour-long webinars are either free or \$25; workshops, which are structured in blocks of 90-minute units

¹⁴ https://www.canada.ca/en/revenue-agency/programs/about-canada-revenue-agency-cra/federal-government-budgets/budget-2019-investing-middle-class/canada-training-credit.html

¹⁵ Elisabeth Rees-Johnstone, "Continuing and Executive Education Brief," submitted to the Provost's Advisory Group on Lifelong Learning Opportunities, February 9, 2021.

cost between \$99 for a one-unit workshop to \$299 for a four-unit workshop; while Intensive courses, ranging from one, two or four weeks in length, can cost between \$1250-\$5150.

Like the SCS, OISE CPL has courses and programs that are available for open enrolment by individuals, along with custom contract services and organization-limited partnerships. These services, which offered custom-designed programming for domestic and international industry and educational clients, accounted for more than half of OISE CPL revenues prior to the onset of COVID-19. OISE CPL's offerings are detailed on the OISE website, the visibility of which is augmented by search engine optimization and marketing strategies. OISE CPL also engages in social media and email campaigns and captures prospect information through web forms.

Upon completion of course or certificate requirements, OISE CPL learners are recognized through a Record of Achievement or Certificate of Completion, which measure against the established learning objectives. Learner records (credentials) and records of learning (i.e., transcripts) are housed in OISE's enrolment management system. Learners can access and download their own records of learning, but OISE can also send the records to appropriate licensure bodies, such as the Ontario College of Teachers.

c. Rotman School of Management (RSM)

The Rotman School of Management is another division that offers an extensive array of non-credit continuing education through its Executive Programs (EP) department. RSM EP caters primarily to executive and managerial level professionals across a variety of corporate, not-for-profit, and institutional sectors. Its goals align with the primary aim of RSM's academic plan of turning insight to impact. EP contributes to this through its commitment to "deliver engaging and relevant executive education courses to individuals and organizations" and "advance careers, inspire teams and move organizations forward 16 ." RSM EP employs 31 staff and offers over 120 programs annually, which range in duration from 1-15 days. The average tuition for these programs is \$1000-\$2000/day. RSM EP averages approximately 2,600 participants annually.

Like OISE, RSM EP learners are attracted to the programs due to RSM's reputation for cutting edge research and its high rankings, and RSM EP draws most of its instructors from RSM faculty. EP has pre-COVID annual revenues of approximately \$14-15M.

RSM EP offerings can be grouped into six main categories: Governance, Leadership, Innovation and Strategy, Industry/Role-Specific, International, and Programs for Social Impact. As with both SCS and OISE CPL, Rotman offers open enrolment and custom programs. RSM EP learners come from a range of industries, with the top sectors being Financial Services & Banking, Healthcare, and Government.

Upon completion of courses or programs, learners receive a printed or PDF certificate. RSM EP has its own in-house database tracking system that allows the issuing of program completion confirmation and has developed a digital badge that allows learners to share their completion status on LinkedIn.

¹⁶ Stephanie Hodnett, presentation delivered to Provost's Advisory Group on Lifelong Learning Opportunities, February 9, 2021.

d. Temerty Faculty of Medicine (TFM)

Lifelong learning at the Temerty Faculty of Medicine exclusively addresses the continuing professional development (CPD) requirements of the medical professions. CPD in this context encompasses "all activities that doctors [health professionals] undertake, formally and informally, to maintain, update, develop and enhance their knowledge, skills and attitudes in response to the needs of their patients¹⁷." TFM CPD has four strategic priority areas: Leadership. Innovation, Scholarship, and Community.

The bulk of TFM CPD offerings fall under the Leadership priority, the goal of which is to "promote lifelong learning across the continuum of health professional education. 18" TFM has a distributed model of CPD that leverages a broad network of CPD leaders and directors representing the 15 clinical departments of TFM. As a result, there are more than 400 program directors and conference chairs who run programs, including individual conference events, in CPD.

To support this network, there are six CPD office service teams that focus on different organizational areas: academic program development, CPD research and scholarship, accreditation, conference management, marketing and business development, and finance and contract management.

Pre-COVID, TFM CPD accredits nearly 400 programs and attracts 45,000 learners annually. Inperson was the predominant form of program delivery. The reach of CPD programs in 2018-19 was 49% local, 28% provincial, 15% national, and 8% international. Costs for programs vary and can range anywhere from \$25 to several thousands of dollars depending on the length of the program, intensity of the program (e.g., simulation-based), and the type of maintenance of certification credit. The average cost for in-person programming is \$250-350 per day.

TFM CPD maintains its own registration system; for accreditation purposes, the division keeps track of all participants who attend these programs. As an CPD accredited provider, TFM CPD accredits programs on behalf of the College of Family Physicians of Canada and the Royal College of Physicians and Surgeons of Canada. TFM CPD offers certificates of completion for some programs and does not offer formal credentials.

TFM CPD has partnerships with several organizations at local, provincial, national, and international levels, with which it either develops programs for or collaborates with. Unlike other continuing education providers at U of T, TFM CPD also accredits programs and conferences to ensure the development of high-quality programs and conferences, ensure standards and best practices, and protect CPD programs from commercial interest.

TFM CPD's other strategic priorities relate to amplifying the impact of CPD in healthcare through innovation, scholarship, and integration of CPD learnings within vulnerable communities.

¹⁸ Ibid.

¹⁷ Suzan Schneeweiss, presentation delivered to Provost's Advisory Group on Lifelong Learning Opportunities, February 9, 2021.

IV. Online Learning

The spread of COVID-19 and the closure of in-person classes resulted in an increase in both remote delivery of course material and online learning. Where remote delivery entails delivering lectures that would otherwise have been held in-person over the internet, online learning encompasses an approach to teaching and learning that considers the possibilities (and limitations) of online instruction. Online learning employs a number of different tools and pedagogical interventions that are particular to a virtual environment. Even before the onset of the pandemic, which hastened the development and implementation of a variety of online learning initiatives, online learning in higher education was already growing steadily around the world. From 2017 to 2018, Canada saw an estimated 10% increase in online registrations in higher education. Provincially, Ontario saw an increase of 14% to post-secondary education course registrations that were fully online¹⁹. With the pandemic forcing online delivery on institutions that rapidly acquired the technology and skill to meet the challenge, it is likely that these increases in online learning will continue, perhaps at a much-accelerated pace.

To support the discoverability and visibility of online courses in Ontario and to collect search data to guide program planning, in 2015, the Ministry of Colleges and Universities established eCampus Ontario. The online portal²⁰ currently lists over 20,000 online courses offered by Ontario colleges and universities. Of these, only 14 are offered by the University of Toronto. While there have perhaps been historical reasons for courses not to be listed on this portal, the ground is shifting quite rapidly in this space and there may be promotional and reputational gains to be made in listing courses on this platform. Studyonline.ca, formerly Contact North, is another online learning discovery portal with a greater emphasis on continuing education; over 1,000 U of T courses appear on this portal.

Prior to the pandemic, relative to its size and scale of offerings, U of T had few online courses. In the last "normal" year of data (2018-19), the University offered 29 online undergraduate courses with a total enrolment of 7,818, and 115 graduate courses with a total enrolment of 3,742. These courses do not include courses with lecture capture options, or hybrid courses.

¹⁹ Nicole Johnson, *National Survey of Online and Digital Learning 2019 National Report*, (Canadian Digital Learning Research Association, 2019), http://www.cdlra-acrfl.ca/wp-content/uploads/2020/07/2019_national_en.pdf.

²⁰ https://learnonline.ecampusontario.ca/

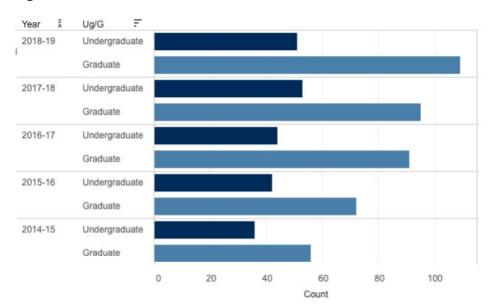


Figure 2: Number of online courses available and online course enrolment

Massive Open Online Courses (MOOCs) continue to be a consideration for higher education. While originally these courses were offered for free in an effort to address unequal access to higher education, fee-based structures now allow providers/institutions to charge for registration and credentialing. Coursera and edX are the main MOOC providers. U of T has limited numbers of courses listed on both platforms.

V. Micro-credentials

In this rapidly shifting terrain, the idea of "micro-credentials" has been prominent in discussions of how higher education institutions and other training bodies can help meet the emerging swell of the population's reskilling and upskilling needs.

For institutions looking to develop micro-credentials that will maximize available funding for both students and providers, defining exactly what a micro-credential is has been crucial. It wasn't until early April 2021 that HEQCO was able to articulate a definition that Ontario universities and colleges could adopt: "A micro-credential is a representation of learning, awarded for completion of a short program that is focused on a discrete set of competencies (i.e., skills, knowledge, attributes), and is sometimes related to other credentials²¹." The main difference between micro-credentials and traditional credentials, such as degrees or diplomas, is the short time required to complete them and their focus on discrete competencies. Micro-credentials may be stackable into a larger course, but this is not a requirement. Micro-credentials should hold independent value, such that "stackability should be a bonus, not the primary goal²²."

_

²¹ Janice Deakin et al., "Micro-credentials: Short focused learning that responds to emerging demands," Higher Education Quality Council of Ontario, accessed May 20, 2021, https://heqco.ca/janice-deakin-julia-colyar-jackie-pichette-micro-credentials-short-focused-learning-that-responds-to-emerging-demands/.

²² Ibid.

Micro-credentials can have a number of applications, as they may serve the needs of different types of learners. The three primary uses for micro-credentials are: to support rapid reskilling in times of work disruption; to augment post-secondary programming and provide alternate access to higher education; and to attract, engage, and maintain talent in the work force²³.

Since 2020, the government of Ontario has dedicated nearly \$60M for a micro-credential strategy, online portal, and public awareness campaign. In March 2021, it announced that Ontario student loans and grants would be expanded to include nearly 600 micro-credential programs²⁴. This investment boosted mechanisms that had already been put in place federally to support lifelong learning (such as the Canada Training Credit²⁵ and the Lifelong Learning Plan²⁶).

In late April 2021, the Ontario government announced that \$15M of the province's \$60M microcredential strategy fund would go towards the Ontario Micro-credentials Challenge Fund, to encourage the development of "new and expanded rapid training programs²⁷." Postsecondary education institutions were given eight weeks to submit proposals to the fund, which tied fundable micro-credentials to employer-educator partnerships: "For the purpose of this call for proposals, micro-credentials offer a flexible and granular form of postsecondary education training of specific skills and competencies that are developed and offered in a partnership between one or more postsecondary institutions and one or more employers, that may be tailored towards a specific need or may be stacked together, with the opportunity to track towards a larger recognized credential or certificate²⁸."

At present, U of T has 55 micro-credentials that are eligible for OSAP loans or grants, according to the Government of Ontario's list of OSAP-approved micro-credentials²⁹. Additional proposals for the Ontario Micro-credentials Challenge Fund have been accepted by the Office of the Vice Provost Academic Programs, and these may qualify for OSAP funding in the future.

The focus on micro-credentials, funded or not, as a key component of lifelong learning activities is significant. In order for the University to respond to the incipient demand for such credentials, it will be necessary to establish a clear system of codification for the future development of micro-credentials, as well as the possible restructuring of existing continuing and executive education courses to meet the definitions of micro-credentials. There is great potential in this

²³ Mary Chaktsritis et al. *Is the Future Micro? Unbundling learning for flexibility and access*, (Toronto: eCampus Ontario, 2021), https://micro.ecampusontario.ca/wp-content/uploads/2021/03/ls the Future Micro-1.pdf.

²⁴ "Ontario Expands Financial Assistance to Include Micro-credentials," Government of Ontario, March 18, 2021, https://news.ontario.ca/en/release/60792/ontario-expands-financial-assistance-to-include-micro-credentials.

https://www.canada.ca/en/revenue-agency/services/child-family-benefits/canada-training-credit.html https://www.canada.ca/en/revenue-agency/services/tax/individuals/topics/rrsps-related-plans/lifelong-learning-plan.html

²⁷ "Ontario Invests in New and Expanded Rapid Training Programs," Government of Ontario, April 23, 2021, https://news.ontario.ca/en/release/61236/ontario-invests-in-new-and-expanded-rapid-training-programs

²⁸ Government of Ontario, *Ontario Micro-credentials Challenge Fund Call for Proposals: Program Guidelines and Requirements*, accessed May 20, 2021, https://files.ontario.ca/mcu-challenge-fund-guidelines-en-2021-05-03.pdf.

²⁹ https://osap.gov.on.ca/SchoolSearchWeb/search/eligible_schools.xhtml (accessed June 28, 2021).

area to attract new learners to the University, but we must ensure that our approval processes and communications are equipped to provide pathways and guidance in this emerging area.

VI. Credentialing

With the rise in online learning, the increased use of online professional networks (such as LinkedIn), and the predicted surge in upskilling and reskilling, there is a greater call for portable verified digital credentials.

One form of such credential is already in use by MOOC platforms, such as edX and Coursera. These platforms use digital credentials that, once awarded, are in the full control of the learner, who determines when and where they wish to share them. Some individual universities, such as Athabasca University, use a form of blockchain non-fungible token (NFT) to verify their credentials, which are then assigned to the learner. In Ontario, eCampus Ontario has engaged BCDiploma, an independent blockchain digital certificate provider that verifies the credential and provisions the now portable verified digital credential to the learner.

The other type of portable verified digital credential is controlled by the issuer and resembles a traditional transcript. These credentials are requested by the learner, verified by the institution, and then transmitted to the receiver specified by the learner. The learner also gains access to a credential profile, where their credentials can be collected and shared digitally on networking sites that allow for the display of verified credentials. The main provider of this type of credential is Parchment, which is used by many higher education institutions, as well as other professional licensing and training organizations.

U of T has recently started using Parchment to provide digital transcripts and parchments for our for-credit offerings. This allows students to order verified digital transcripts online and the University to issue digital diplomas directly to the graduate³⁰. At present, not-for-credit credentials at U of T are generally administered using internal systems (as noted for the RSM and OISE). The School of Continuing Studies has begun using BCDiploma through eCampus Ontario as a credentialling platform for its micro course offerings. SCS's other offerings are credentialed through internal systems. Existing not-for-credit certificates (category 3 in the U of T certificate framework) as well as certificates of completion/attendance are handled at the divisional level. There are rules with respect to the use of the University's marks and logos, but no single institutional platform.

An overview and summary of digital and micro-credentialing activities at U of T can be found in Appendix 5.

³⁰ The University is also following developments with MyCreds, a credential system run by the Association of Registrars of the Universities and Colleges of Canada, which was not yet released at the time U of T signed on with Parchment.

VII. Insights and Recommendations

a. Wayfinding

Due to the University's decentralized and complex structure, it is difficult for would-be learners to easily find complete information on lifelong learning offerings at the U of T. The only continuing education link from top-level University navigation is to the School of Continuing Studies, despite the fact that the University has several other divisions that offer lifelong learning. If a learner does not already know about those offerings, then they are unlikely to find them from the main utoronto.ca site. This could result in low enrolments, misperceptions of the extent of the University's activities in the lifelong learning sphere, and user frustration.

The Advisory Group recommends that the University commit to significantly improving wayfinding for lifelong learning activities. In order to showcase the wealth of activities that the University's divisions offer in this area, a standalone navigation page that is prominently linked to the University's home page or Future Students page should be established. An exemplar of this type of navigation can be found on Harvard University's website. The responsibility to update and maintain this page should be appropriately designated to UTC, ITS or SCS, depending on resources. Contact information for updating the page for internal audiences should be displayed, and divisional communications officers apprised. Additionally, this page might define the types of lifelong learning that are offered at the University (e.g., non-credit, for-credit, pre-university, micro-credential etc.).

Recommendation 1: That the University develop and implement an online institutional wayfinding resource for continuing education and lifelong learning opportunities at the University.

b. Community of Practice

The University of Toronto's unique decentralized structure presents challenges to coordination of lifelong learning activities. Perhaps due to a lack of knowledge of existing offerings (see Recommendation 1), or underutilized communication channels among divisions, there is a risk of duplication of offerings and inefficient use of staff time when developing new lifelong learning initiatives. This could be mitigated, while still allowing divisional independence, by the establishment of a Lifelong Learning Community of Practice (LLCoP). The LLCoP would be an information clearinghouse for lifelong learning activities, best practices, and guidelines, as well as an ongoing hub for discussion and development of new ideas on lifelong learning and related offerings.

Given the rapid pace of developments in this area, the Advisory Group recommends that the LLCoP be established under the auspices of either the Vice-Provost Academic Programs or the School of Continuing Studies. The LLCoP should also coordinate with the Provost's Office to ensure that the discussions and developments on lifelong learning at the University continue in a way that strategically furthers our access, equity, diversity and inclusion aims, as well as our alternative revenues goals in a coordinated manner.

Recommendation 2: That the University establish a formal community of practice for lifelong learning at the University under the auspices of a single office, such as the Vice-Provost Academic Programs or the School of Continuing Studies.

c. Taxonomy and Definitions

As the micro-credential landscape is rapidly shifting, and the University already has a taxonomy for its degrees, diplomas, and certificates, it is vital that there is a common understanding of how various lifelong learning opportunities are offered, approved, and credentialled. The University should examine its current policies and guidelines, particularly the <u>Policy on Certificates (For-Credit and Not-For-Credit)</u>; the <u>Guidelines for Continuing, Professional, and Executive Education</u>; and the <u>Statement of Policy on Continuing Education</u>. At present, existing not-for-credit certificates (Category 3 Certificates in U of T's framework), as well as certificates of attendance or completion, are handled divisionally rather than centrally.

As funding models change, and as the potential to attract new types of learners seeking credentials for various different reasons, it will be important to establish clear definitions, pathways, and reporting measures for new and existing offerings. These could be shared with internal stakeholders through the abovementioned Community of Practice.

Recommendation 3: That the University establish a clear taxonomy of definitions and processes regarding the offering and approval of lifelong learning activities so that there is a common understanding of these internally and externally with respect to credit/non-credit issues, funding for both the institution and its learners, and the offering of credentials.

d. Access and Equity

As we've noted, the rapid emergence of technology is expected to displace many workers. This shift will disproportionately affect already vulnerable populations. Lifelong learning in this context is not a luxury but a necessity that will underpin income security and professional mobility. Given the University's strong commitment to equity, diversity, inclusion, and access, the Advisory Group recommends that attention be paid to supporting equity-deserving groups and individuals in accessing lifelong learning opportunities at the University.

Recommendation 4: That the University work with donors and explore other funding to improve access to lifelong learning opportunities and provide bursaries/scholarships for equity-deserving students.

e. Credentialing

The internal demand for a system to manage the verification and distribution of digital credentials is already evident. The School of Continuing Studies is working with eCampus Ontario to pilot blockchain credentials for some of its offerings. While there may already be a few divisions or units who have selected a credentialing solution for their offerings, an institution-wide credentialing system for lifelong learning courses and certificates, if not also for our traditional degrees and diplomas, would be preferable to many different systems from both a student and brand perspective. Additionally, the implementation of such a system would help make the updating and maintenance of lifelong learning wayfinding (see Recommendation 1) more streamlined and accurate. The adoption of a single system for U of T should not preclude the use of other association or government systems required for professional certification or funding.

Due to the highly technical nature of digital credentialing, exploration of potential systems should be undertaken by technological specialists, in collaboration with divisional users who can appropriately articulate the use case scenarios.

Recommendation 5: That the University explore and identify a framework for possible institutional credentialing of lifelong learning activities.

f. Partnerships and Collaborations

The possibilities inherent in lifelong learning are far-reaching. To keep abreast of emerging needs and capitalize on niche markets in which the University has advantages will require a high degree of communication and collaboration, both internally and externally.

Internally, while being mindful of the autonomy of U of T divisions, the Advisory Group recommends that Deans further explore collaborative opportunities in lifelong learning. There are already many excellent examples of such collaboration between the School of Continuing Studies and many divisions. Other divisions not formally partnered with SCS should be encouraged to develop interdisciplinary and interdivisional offerings to meet upskilling and reskilling needs in particular industries.

Recommendation 6: That divisions explore collaborative possibilities in lifelong learning such that they strengthen ties with each other, develop new markets in interdisciplinary and interdivisional offerings, and minimize competition between and among themselves.

While lifelong learning has always partnered with industry to help workers gain and augment skills that contribute to their professional development or career changes, there is intense interest at this time in the direct involvement of industry in the development and provision of lifelong learning opportunities. This is evident in the requirement for employer involvement in the Ontario Micro-credential Challenge Fund proposals. The University should build on our many existing partnerships with businesses and institutions, and work to develop relationships in new and emerging areas. Doing so will benefit our economy and society as a whole, and help our students and graduates apply their skills and knowledge where it is needed most. Such engagement will attract new learners to our community and allow U of T to expand its focus on knowledge creation and dissemination to include the knowledge application that is ever more critical to our role as an institution not only of learning but also of experience.

Recently, the Faculty of Arts & Science announced its partnership with <u>Palette Skills</u>, a national non-profit dedicated to upskilling diverse and non-traditional workers from disrupted industries and matching them with employers looking for particular skills. There could be tremendous potential for the University in such partnerships, and these should be explored by other divisions, taking into account necessary balances between such partnerships and their impact on revenue generation and program costs.

Additionally, many of our faculty are already involved in lifelong learning activities by providing public lectures or workshops, while others are sharing their expertise with industry and community partners. Some faculty may want to consider ways in which continuing education initiatives might further enhance these important external relationships.

Capacity allowing, leadership on industry-university connections could be provided by the Office of the Vice-President Research and Innovation.

Recommendation 7: That divisions deepen and expand connections with industry and employers, with the assistance of the OVPRI, to identify areas in which existing research and teaching areas align with talent needs and collaborate to develop potential offerings to meet reskilling and upskilling demands.

g. Communications and Marketing

In order to position the University of Toronto as a leader in lifelong learning, both domestically and internationally, our activities in this area should be given more attention in University branding and marketing materials both internally and externally. Internally, the U of T community would benefit from an enhanced awareness of the existing breadth of lifelong learning activities offered and their significance, allowing for a greater appreciation of the potential to contribute to lifelong learning in new and exciting ways. Externally, a heightened awareness of lifelong learning at U of T could encourage new learners, government funders, potential donors, and community builders to better appreciate the University's offerings in this area. Such extended recognition might also support the University's goal of greater global engagement by signalling our activities in this area. At present, the School of Continuing Studies has a strong existing brand and is well-known as a provider of lifelong learning. Likewise, the OISE, the Rotman School, and the Temerty Faculty of Medicine are known to their respective communities for their offerings. However, lifelong learning does not appear to attach itself as readily to the brand of the University as a whole. To demonstrate the University of Toronto's foundations in lifelong learning, its overarching commitment to continuing education as stated in the University's Statement of Institutional Purpose, and its broad spectrum of existing offerings, the Advisory Group recommends heightening the profile of lifelong learning in the University's overall brand messaging.

Recommendation 8: That University of Toronto Communications explore ways to incorporate lifelong learning more centrally in the University's domestic and international brand marketing campaigns.

h. Alumni and Advancement

The School of Continuing Studies offers discounts to U of T alumni on SCS courses, which has had an overall face value of \$1M to the School against a direct cost of \$250K. 30% of alumni who take advantage of SCS's alumni benefit go on to take two or more additional courses³¹. There may be room for further engagement with our alumni community with respect to lifelong learning and its impact on equity and community through enhanced communication and storytelling. This may have the potential to contribute to advancement goals, some of which may dovetail with the University's access and equity priorities. Any such initiatives should be developed in consultation with the Division of University Advancement for both alumni relations and fundraising purposes.

Recommendation 9: That the University capitalize on the community outreach and public good aspects of lifelong learning to highlight to various constituencies the ways the University's lifelong learning activities contribute to alumni and the community.

³¹ Maureen MacDonald, Presentation to the Provost's Advisory Group on Lifelong Learning Opportunities, January 27, 2021.

VIII. Conclusion

The landscape of lifelong learning at this juncture is rapidly shifting due to the confluence of many factors: a technological revolution, a global pandemic with impacts on the economic landscape, and a push for increased sustainability, equity, and access for those who have been historically marginalized. The Advisory Group was extremely impressed with the breadth and depth of lifelong learning activities currently offered at the University and sees enormous potential to increase the University's engagement with external partners and communities in order to expand our initiatives in this important area. The recommendations provide important steps forward on the path to strengthening the University's contributions to lifelong learning, both locally and further afield.

As a result of the discussions in the group, we have not recommended strong institutional coordination or centralization of lifelong learning activities, such that offerings are subject to the approval of an institutional oversight body beyond what is already in place at the University. Much innovation derives from the decentralized nature of our institution and we are hesitant to curtail this by recommending a coordinating body that could prove too rigid. That said, we do believe that it is vitally important that ongoing discussion and collaboration among divisions that offer or intend to offer lifelong learning opportunities be encouraged through the recommendations noted above.

We have also not made recommendations that explicitly recommend the development of particular alternative revenue sources in the realm of lifelong learning. Rather, our focus has been on the University's academic mission for students and non-degree learners alike. Certainly, micro-credentials are an obvious area for expansion and we encourage the University and its divisions to continue to focus on how these may be developed and offered. In considering our comparators in the US particularly, we note that pre-university and alumni-specific offerings are common. These may be areas that the University will wish to explore in the future as possible sources of alternative revenues as well as activities with rich lifelong learning benefits.

Lifelong learning is a natural companion to the University's core activities of research and undergraduate and graduate teaching. The fourth industrial revolution is upon us, and the 60-year curriculum is no longer a theoretical construct. Overall, we commend the University's divisions for their ongoing efforts to include lifelong learning opportunities in their offerings, and we hope that the recommendations provided in this report will help in clarifying a path forward for the benefit of learners and community members.

The Advisory Group thanks the Provost for the opportunity to contribute to this important discussion.

Bibliography

- Branon, Rovy. "Learning for a Lifetime." *Inside Higher Ed*, November 16, 2018. https://www.insidehighered.com/views/2018/11/16/why-longer-lives-require-relevant-accessible-curricula-throughout-long-careers.
- Mary Chaktsritis, Lena Patterson, Karen McCallum, Nirvana Garreffa, Robert Luke, Emma Gooch, and Wendy Cukier. *Is the Future Micro? Unbundling learning for flexibility and access.*Toronto: eCampus Ontario, 2021. https://micro.ecampusontario.ca/wp-content/uploads/2021/03/ls_the_Future_Micro-1.pdf.
- Deakin, Janice, Julia Colyar, and Jackie Pichette. "Micro-credentials: Short focused learning that responds to emerging demands," Toronto: Higher Education Quality Council of Ontario, 2021. https://heqco.ca/janice-deakin-julia-colyar-jackie-pichette-micro-credentials-short-focused-learning-that-responds-to-emerging-demands/.
- Future Economy Council. Report of the Committee on the Future Economy: Pioneers of the Next Generation. Government of Singapore, 2017. https://www.mti.gov.sg/Flipbook/CFE%20Report/index.html.
- Future Skills Council. *Canada A Learning Nation: A Skilled, Agile Workforce Ready to Shape the Future*. Ottawa: Employment and Social Development Canada, 2020. https://www.canada.ca/content/dam/esdc-edsc/documents/programs/future-skills/report-learning-nation/Future-Skills-Council-Report-EN.pdf.
- Government of Ontario. "Ontario Expands Financial Assistance to Include Micro-credentials." March 18, 2021. https://news.ontario.ca/en/release/60792/ontario-expands-financial-assistance-to-include-micro-credentials.
- ----. "Ontario Invests in New and Expanded Rapid Training Programs." April 23, 2021. https://news.ontario.ca/en/release/61236/ontario-invests-in-new-and-expanded-rapid-training-programs
- ----. Ontario Micro-credentials Challenge Fund Call for Proposals: Program Guidelines and Requirements. Toronto: Ministry of Colleges and Universities and Ministry of Labour, Training and Skills Development. April 2021. https://files.ontario.ca/mcu-challenge-fund-guidelines-en-2021-05-03.pdf.
- Hodnett, Stephanie. Presentation to Provost's Advisory Group on Lifelong Learning Opportunities, February 9, 2021.
- Johnson, Nicole. *National Survey of Online and Digital Learning 2019 National Report*. Canadian Digital Learning Research Association, 2019. http://www.cdlra-acrfl.ca/wp-content/uploads/2020/07/2019_national_en.pdf.
- Pichette, Jackie, Rosanna Tamburi, Jess McKeown, Kaitlyn A. W. Blair, and Emily MacKay. Lifelong Learning in Ontario: Improved Options for Mid-career, Underserved Learners. Toronto: Higher Education Quality Council of Ontario, 2019.

- President's Advisory Committee on the Environment, Climate Change, and Sustainability. *Annual Report 2020: Embedding Sustainability Across U of T.* Toronto: University of Toronto, 2020. https://www.president.utoronto.ca/secure-content/uploads/2020/12/2020-CECCS-Annual-Report-compressed.pdf.
- Rees-Johnstone, Elisabeth. "Continuing and Executive Education Brief." Submitted to the Provost's Advisory Group on Lifelong Learning Opportunities, February 9, 2021.
- Schneeweiss, Suzan. Presentation delivered to the Provost's Advisory Group on Lifelong Learning Opportunities, February 9, 2021.
- Schwab, Klaus. "The Fourth Industrial Revolution: What it Means and How to Respond." *Foreign Affairs*, December 12, 2015. https://www.foreignaffairs.com/articles/2015-12-12/fourth-industrial-revolution
- United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development*. Geneva: United Nations, 2015. https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981.
- World Economic Forum. *The Future of Jobs Report 2020*. Geneva: World Economic Forum, 2020. https://www.weforum.org/reports/the-future-of-jobs-report-2020.

Appendix 1: Summary of Recommendations

The Provost's Advisory Group on Lifelong Learning Opportunities met over the course of Winter 2021 and, as a result of its discussions, makes the following recommendations:

Recommendation 1: That the University develop and implement an online institutional wayfinding resource for continuing education and lifelong learning opportunities at the University.

Recommendation 2: That the University establish a formal community of practice for lifelong learning at the University under the auspices of a single office, such as the Vice-Provost Academic Programs or the School of Continuing Studies.

Recommendation 3: That the University establish a clear taxonomy of definitions and processes regarding the offering and approval of lifelong learning activities so that there is a common understanding of these internally and externally with respect to credit/non-credit issues, funding for both the institution and its learners, and the offering of credentials.

Recommendation 4: That the University work with donors and explore other funding to improve access to opportunities and provide bursaries/scholarships for equity-deserving students.

Recommendation 5: That the University explore and identify a framework for institutional credentialing of lifelong learning activities.

Recommendation 6: That divisions explore collaborative possibilities in lifelong learning such that they strengthen ties with each other, develop new markets in interdisciplinary and interdivisional offerings, and minimize competition between and among themselves.

Recommendation 7: That divisions deepen and expand connections with industry and employers, with the assistance of the OVPRI, to identify areas in which existing research and teaching areas align with talent needs and collaborate to develop potential offerings to meet reskilling and upskilling demands.

Recommendation 8: That University of Toronto Communications explore ways to incorporate lifelong learning more centrally in the University's domestic and international brand marketing campaigns.

Recommendation 9: That the University capitalize on the community outreach and public good aspects of lifelong learning to highlight to various constituencies the ways the University's lifelong learning activities contribute to alumni and the community.

Appendix 2: Terms of Reference

Context

The impact of the University of Toronto on lifelong learning over the past century cannot be overstated. As a globally recognized research institution and a leader in post-secondary education, we have long been acknowledged as a significant contributor to the advancement of knowledge at the undergraduate, graduate, and Faculty levels. Our commitment to education extends to virtually all life stages and across a wide range of sectors.

It has been many years since we have had the chance to systematically review our offerings and activities in these additional areas. The convergence of several current and local factors – such as a broad-scale shift to and acceptance of online learning, an increased demand for retraining as technology disrupts and reshapes traditional industries, the robust success of our School of Continuing Studies, and the imminent retirement of its Dean, Dr. Maureen MacDonald – has led us to embark on this examination and consideration of lifelong learning opportunities at the University.

The striking of this Advisory Group was preceded by the University's 2018-19 Budget Model Review (BMR). Part of that review's mandate was to look at ways to ensure that the University will continue to thrive in changing economic conditions while preserving and protecting core University values and standards of excellence. Among the BMR's working groups was the Alternative Funding Sources Advisory Group (AFSAG), which was tasked with examining how the University might broaden its funding sources to provide it with a strong financial basis going forward. In its findings, the group identified expanding learning opportunities, engaging a broader age cohort, and leveraging technology as holding great potential. More specifically, the AFSAG identified continuing education and skills-upgrading as key areas for expansion.

The work of the AFSAG, in addition to the drivers mentioned above have highlighted the urgency of reviewing lifelong learning activities at U of T. Through the School of Continuing Studies, U of T enjoys a strong reputation and an eager audience for courses and certificates that drive career advancement and lifelong learning goals. Across the University's three campuses, several divisions offer executive education and continuing training programs to augment program offerings and deliver vital lifelong learning opportunities to their respective communities. A number of partnerships with community organizations, start-ups and incubators, as well as ongoing learning programs for U of T alumni, also contribute to the multifaceted nature of our lifelong learning activities.

As the labour market shifts and the environment and market for higher education changes, it is time for us to explore how U of T will meet present and future challenges in this area, and continue to influence and contribute to lifelong learning locally, nationally, and globally. The Advisory Group's report will provide a crucial foundation for the University's future direction and work in this area. The Provost envisions a multi-phase initiative to develop a fulsome strategy and implementation plan for the University's lifelong learning programs.

Scope of Mandate

As an outgrowth of the AFSAG's work, the Provost is convening an Advisory Group on Lifelong Learning to provide strategic advice and recommendations with respect to the current and future

offering of continuing education, professional development, skills-upgrading, micro-credentials, and other lifelong learning initiatives, both for-credit and not-for-credit, at the University of Toronto. The Advisory Group's general mandate will be to:

- 1. Consider the role of lifelong learning in the context of the University's overall mission and mandate,
- 2. Examine existing continuing and executive education offerings across University divisions,
- 3. Explore delivery models and approaches to lifelong learning employed at comparator institutions, and
- 4. Provide recommendations for the structure, coordination, enhancement and expansion of U of T's offerings in this area.

More specifically, the Advisory Group will:

- Define and articulate the parameters of lifelong learning at the University of Toronto in order to guide recommendations regarding initiatives and activities that fall within these parameters and uphold the University's mission and values;
- Map existing continuing and executive education offerings at the University to provide a
 high-level inventory that also addresses key considerations such as instruction, metrics,
 governance, brand, and infrastructure and finance;
- Consider possibilities for coordination and streamlining of U of T lifelong learning programming that will improve learner outcomes and options, increase cost efficiencies, and potentially generate new revenue streams;
- Develop an understanding of the funding potential and partnerships that may derive from an expansion of lifelong learning activities at the University;
- Examine lifelong learning models employed by comparator institutions and identify those that are relevant and implementable at the University of Toronto;
- Recommend a limited set of options and strategies for lifelong learning opportunities at the University; and
- Suggest next steps and a viable timeline for further examination and implementation of these recommendations.

Timeline

The Advisory Group on Lifelong Learning will be expected to deliver its report to the Provost in Spring 2021.

Advisory Group

- Professor Glen Jones, Dean, Ontario Institute for the Study of Education (Chair)
- Professor Ken Corts, Interim Dean, Rotman School of Management
- Professor Amrita Daniere, Vice-Principal (Academic) and Dean, UTM
- Laurie Harrison, Director, Online Learning Strategies, Office of the Chief Information Officer
- Professor Suzan Schneeweiss, Associate Dean, Continuing Professional Development, Faculty of Medicine

- Julia Knapp, Executive Director, Alumni Engagement, Division of University Advancement
- Tanya Kreinin, AVP and Head of Institution-wide Brand Strategy and Integrated Marketing, U of T Communications
- Daniella Mallinick, Director, Academic Programs, Planning & Quality Assurance, Office of the Vice-Provost, Academic Programs
- Derek Newton, Assistant Vice-President, Innovation, Partnerships and Entrepreneurship, Office of the Vice-President, Research and Innovation, and Strategic Initiatives
- Forrest Parlee, Director, Government Relations and Public Policy, Government Relations Office
- Trevor Rodgers, Assistant Vice-President, Planning & Budget
- Professor Mary Silcox, Vice-Dean, Graduate and Postdoctoral Studies, UTSC
- Kimberley Tull, Director, Community & Learning Partnerships and Access Pathways, UTSC
- Professor Linda White, Professor and Chair in Economic and Public Policy, Department of Political Science, Faculty of Arts & Science
- Maureen MacDonald, Dean, School of Continuing Studies (Assessor)
- Professor Susan McCahan, Vice-Provost, Academic Programs (Assessor) to December 31, 2020
- Professor Mark Schmuckler, Acting Vice-Provost, Academic Programs (Assessor) from January 1, 2021
- Andrea Kwan, Special Projects Officer, Office of the Vice-President & Provost (Project Manager)

Appendix 3: Inventory of Lifelong Learning Offerings at U of T

Division	Department	Program	Area of offerings	Website	Audience	Paid/Fre
Continuing Studies						
		Arts & Humanities (142)				
			Health, Environment &	https://learn.utoronto.c	., .	Paid
			Science (10)	a/programs-courses/arts		
				and-humanities		
			History (27)		Adult/post-grad	Paid
			Life and Leisure (5)		Adult/post-grad	Paid
			Literature (26)		Adult/post-grad	Paid
			Music (6)		Adult/post-grad	Paid
			Philosophy and Law (14)		Adult/post-grad	Paid
			Religion (8)		Adult/post-grad	Paid
			University Lecture Series		Adult/post-grad	Paid
			(2) Visual Art & Architecture		Adult/post-grad	Paid
			(44)		Addity post-grad	raiu
		Business, Finance &	17			
		Management (171)				
			Accounting (26)	https://learn.utoronto.c	Adult/post-grad	Paid
				a/programs-		
				courses/business-		
				finance-and-		
			B : 4 : (C)	management		n · i
			Business Analysis (6)		Adult/post-grad	Paid
			Finance (8) Management (22)		Adult/post-grad Adult/post-grad	Paid Paid
			Project Management		Adult/post-grad	Paid
			(23)		, radity post Brad	l did
			Risk (9)		Adult/post-grad	Paid
			Leadership (22)		Adult/post-grad	Paid
			Entrepreneurship (11)		Adult/post-grad	Paid
			Innovation (7)		Adult/post-grad	Paid
			Human Resources (14)		Adult/post-grad	Paid
			Occupational Health &		Adult/post-grad	Paid
			Safety (2)		Aduit/ post-grad	Palu
			Test Preparation (6)		Adult/post-grad	Paid
			Process Improvement		Adult/post-grad	Paid
			(13)		., .	
			Law (1)		Adult/post-grad	Paid
		Career Development and				
		Communication Skills				
		(14)				
			Career Development (6)	https://learn.utoronto.c	Adult/post-grad	Paid
				a/programs- courses/career-		
				development-and-		
				communication-skills		
			Workplace		Adult/post-grad	Paid
			Communications (8)			
		Creative Writing (90)				
			Creative Non-Fiction	https://learn.utoronto.c	Adult/post-grad	Paid
			(15)	a/programs-		
				courses/creative-writing		
			Familian Casalian		A	D=1-1
			Escritura Creativa en		Adult/post-grad	Paid
			Espanol (6) Literary Fiction (10)		Adult/post-grad	Paid
	+		Multi-Genre (18)		Adult/post-grad	Paid

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
			Poetry and Songwriting (7)		Adult/post-grad	Paid
			Popular Fiction (10)		Adult/post-grad	Paid
			Stage and Screenwriting		Adult/post-grad	Paid
			(8) U of T Summer Writing		Adult/post-grad	Paid
			School (12)		Addit/post-grad	raiu
			Writing for Children (4)		Adult/post-grad	Paid
		Health & Social Sciences (84)				
			Human Services & Social Work (19)	https://learn.utoronto.c a/programs- courses/health-and- social-sciences	Adult/post-grad	Paid
			Medical Sciences (8)		Adult/post-grad	Paid
			Mindfulness (43)		Adult/post-grad	Paid
			Pharmacy (14)		Adult/post-grad	Paid
		Information, Technology, Environment, and Engineering (124)				
			Information Technology (59)	https://learn.utoronto.c a/programs- courses/information- technology-environment and-engineering		Paid
			Information Management (9)		Adult/post-grad	Paid
			Engineering & Applied Science (21)		Adult/post-grad	Paid
			Building Science & Architecture (15)		Adult/post-grad	Paid
			Environent &		Adult/post-grad	Paid
			Sustainability (19)			
		Languages and Translation (162)				
		Translation (102)	Language Learning (112)	https://learn.utoronto.c a/programs- courses/languages-and- translation	Adult/post-grad	Paid
			Translation (39)		Adult/post-grad	Paid
			Business English for International Professionals (11)		Adult/post-grad	Paid
		Learning Design (4)				
				https://learn.utoronto.c a/programs- courses/learning-design	Adult/post-grad	Paid
		Marketing & Communications (39)				
			Marketing (29)	https://learn.utoronto.c a/programs- courses/marketing-and- communications	Adult/post-grad	Paid
			Communications (7)		Adult/post-grad	Paid
			Public Relations (3)		Adult/post-grad	Paid
		English Language Program				

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
				https://learn.utoronto.c a/english-language- program	Adult/post-grad	Paid
		Corporate and Organizational Training				
				https://learn.utoronto.c a/programs- courses/corporate-and- organizational-training	Adult/post-grad	Paid
Applied Science &						
<u> </u>	Continuing Education offered through SCS					
	Outreach Pre- University Programs	High School Programs				
			Virtual Study Hubs	https://outreach.engine ering.utoronto.ca/	High School	Paid
			Global Engineering Challenge		High School	Paid
			Engineering High School Saturday Program		High School	Paid
			ENGage High School Saturday Program		High School	Paid
			STEM Enrichment Courses		High School	Paid
			DEEP Spring Seminar Series		High School	Paid
			DEEP Summer Academy		High School	Paid
			Blueprint		High School	Free
			DEEP Leadership Camp		High School	Paid
		Elementary Programs				
			Online Junior Programming		Elementary	Paid
			Jr DEEP Saturdays		Elementary	Paid
			Girls' Jr DEEP Saturdays		Elementary	Paid
			Jr DEEP Coding Saturdays		Elementary	Paid
			Jr DEEP		Elementary	Paid
			Jr DEEP Coding		Elementary	Paid
			Girls' Jr DEEP		Elementary	Paid
			ENGage		Elementary	Paid
			Makerspace Destination STEM		Elementary Elementary	Paid Paid
			In-School Workshops		Elementary	Paid
		Other	Engineering in the Classroom		Educators	Paid
			Educator Workshops		Educators	Free
Architecture			+			
		Daniels Summer Academy				

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
			Minecraft Camp	https://www.daniels.uto ronto.ca/outreach/danie ls-summer-academy- summer-camps		Paid
			Digital Design Camp	https://www.daniels.uto ronto.ca/outreach/danie ls-summer-academy- summer-camps		Paid
			Daniels Bootcamp	https://www.daniels.uto ronto.ca/outreach/danie ls-summer-institute		Paid
			Daniels Professional Development	https://www.daniels.uto ronto.ca/outreach/danie ls-professional- development		Paid
Arts & Science						
	Anthropology	Got Anthropology?	Outreach to public	https://gotanthropology	All	Free
	Astronomy &			.com/		
	Astrophysics	Dunlap Institute	Astronomy on Tap T.O.	http://www.dunlap.utor onto.ca/public- outreach/	Adult/post-grad	
			Astrotours	<u>outreachy</u>	All	Free
			Discover the Universe for Educators	https://www.discoverth euniverse.ca/	Educators	Free
			Cosmos from Your Couch	http://www.dunlap.utor onto.ca/public- outreach/couch- cosmos/	All	Free
			Dunlap Institute Summer School	http://www.dunlap.utor onto.ca/summer-school/		Paid
	Computer Science	AI	U of TAI Conference	https://web.cs.toronto.e du/news- events/events/the-u-of-t ai-conference		Paid
		Reskilling	Palette	https://web.cs.toronto.e du/news- events/news/palette- partnership	Adult/post-grad	
	Earth Sciences					
		Outreach	Pre-university education activities	https://www.es.utoront o.ca/news- events/outreach/	Educators	
	School of the					
	Environment	Continuing Education offered through SCS		https://learn.utoronto.c a/programs- courses/partnerships/sc hool-environment	Adult/post-grad	Paid
	French	Outreach	Toronto Universities' French Contest	https://www.french.uto ronto.ca/events/toronto- universities-french- contest	_	Free

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
	Mathematics					
	DI II	Outreach	Math+	http://mathplus.math.ut oronto.ca/	Elementary/High School	Paid
	Philosophy	Outreach	Aristotle Contest	https://philosophy.utoro	High School	Free
		July 603.1	7 Historic dollaces	nto.ca/the-aristotle-a- high-school-philosophy-	THE SOLIDO	
				essay-contest/		
	Physics					
		Outreach	School Visits	https://www.physics.uto ronto.ca/physics-at-	High School	Free
				uoft/outreach/school- visits-students/		
			Science Unlimited Camp	https://summercamp.ph ysics.utoronto.ca/	High School	Paid
			UofT Physics High	https://www.physics.uto	High School	Free
			School CAP Exam Preparation Workshop	ronto.ca/physics-at- uoft/outreach/u-t-		
				physics-high-school-cap-		
				exam-preparation- workshop/		
	Centres, Institutes & Schools					
	Schools	Outreach	Lectures, symposia etc			
Dentistry						
	Continuing Dental Education					
		CDE in-person		https://cde.dentistry.uto ronto.ca/cde	professionals	Paid
		CDE for internationally trained dentists		https://cde.dentistry.uto ronto.ca/international-	Working professionals	Paid
				dentists		
		utooth.ca online	CORE category 1 & 2 courses, RCDSO accredited	https://www.utooth.ca/	Working professionals	Paid
			derealeed			
Education (OISE)	Continuing and Professional Learning					
		Pre-K - 12		https://cpl.oise.utoronto .ca/program_area/pre-k- 12/		Paid
			Internationally Educated	https://cpl.oise.utoronto		Paid
			Teacher Practicum	.ca/program_certificate/		
				internationally-educated teacher-practicum/	-	
			First Nations' Schools	https://cpl.oise.utoronto		Paid
			Principals' Course	.ca/program_certificate/ first-nations-schools- principals-course/		
			OISE Certificate in	https://cpl.oise.utoronto		Paid
			International Education	.ca/program_certificate/		1
			for IB	oise-certificate-in-		
				international-education- for-ib/		

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
			Programming for Environmental Education	https://cpl.oise.utoronto .ca/program_certificate/ programming-for- environmental- education/		Paid
			Programming for Young Children	https://cpl.oise.utoronto .ca/program_certificate/ programming-for-young- children/		Paid
			OISE TEFL Certification	https://cpl.oise.utoronto .ca/program_certificate/ tefl-certification/		Paid
			Teaching in Ontario's Catholic Schools	https://cpl.oise.utoronto .ca/program_certificate/ teaching-in-ontarios- catholic-schools/		Paid
		Additional Qualifications		https://cpl.oise.utoronto .ca/program_area/additi onal-qualitfications/		Paid
			ABQ - Primary and Junior	https://cpl.oise.utoronto .ca/program_certificate/ abq-primary-junior/		Paid
			ABQ - Intermediate	https://cpl.oise.utoronto .ca/program_certificate/ abq-intermediate/		Paid
			ABQ - Senior	https://cpl.oise.utoronto .ca/program_certificate/ abq-senior/		Paid
			One-Session Additional Qualifications	https://cpl.oise.utoronto .ca/program_certificate/ one-session-additional- qualifications/		Paid
			Three-Session Additional Qualifications	https://cpl.oise.utoronto .ca/program_certificate/ three-session-additional- qualifications/		Paid
			Honour Specialist	https://cpl.oise.utoronto .ca/program_certificate/ honour-specialist/		Paid
			Technological Education	https://cpl.oise.utoronto .ca/program certificate/ technological- education/		Paid
			Proficiency Testing	https://cpl.oise.utoronto .ca/program_certificate/ proficiency-testing/		Paid
		Post-Secondary Education		https://cpl.oise.utoronto .ca/program_area/post- secondary-education/		

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
			Serving Students in	https://cpl.oise.utoronto		Paid
			Higher Education	.ca/program_certificate/		
			(Certificate)	serving-students-in-		
			(Certificate)	_		
				higher-education/		
		Workplace Learning and		https://cpl.oise.utoronto		
				1		
		Development		.ca/program_area/work		
				place-learning-and-		
				development/		
			Adult Learning and	https://cpl.oise.utoronto		Paid
			Development	.ca/program_certificate/		
			(Certificate)	adult-learning-and-		
				development/		
			Brief Coaching	https://cpl.oise.utoronto		Paid
			(Certificate)	.ca/program_certificate/		
				brief-coaching/		
			Learning Experience	https://cpl.oise.utoronto		Paid
			Design (Certificate)	.ca/program_certificate/		
			peagn (cerunicate)			
				learning-experience-		
				design/		
		Human Services		https://cpl.oise.utoronto		
				.ca/program_area/huma		
				n-services/		
			Orientation to Human	https://cpl.oise.utoronto		Paid
			Services	.ca/program_certificate/		
				orientation-to-human-		
				services/		
	+		Bereavement Education	https://cpl.oise.utoronto		Paid
			(Certificate)	.ca/program_certificate/		and
			(certificate)			
				bereavement-		
				education/		
			Cognitive Behaviour	https://cpl.oise.utoronto		Paid
			Therapy	.ca/program_certificate/		
				cognitive-behaviour-		
				therapy/		
			Motivational	https://cpl.oise.utoronto		Paid
			Interviewing	.ca/program_certificate/		
				motivational-		
				interviewing/		
			Solution-Focused Brief	https://cpl.oise.utoronto		Paid
				.ca/program_certificate/		i uiu
			(Certificate)	solution-focused-brief-		
				therapy-counselling/		
				1		
		Customized Programs		https://cpl.oise.utoronto	1	Paid
				.ca/customized-		
				programs/		
Information Studies						
	Professional					
	Development					
		Offered through SCS				
		Public Library Leaders		http://plleaders.ca/	Working	Paid
		Fellowship Program			professionals	
		(partnership with				
		Canadian Urban Libraries				
		Council)				
		Council				
Managara 1						
Kinesiology and						
Physical Education						
1	Sport & Rec					

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
			Fitness and Recreation	https://kpe.utoronto.ca/	U of T Community	Paid and
			programs	sport-rec-u-t		Free
			Child and Youth	https://kpe.utoronto.ca/ children-and-youth	Elementary and Secondary	Paid
Law						
Law	Executive Education			https://www.law.utoron to.ca/executive- education	Working Professionals	Paid
		Global Professional Master of Laws (with Rotman)		https://gpllm.law.utoron to.ca/	Working Professionals	Paid
		Continuing Professional Development		https://www.law.utoron to.ca/executive- education/cpd-events	Working Professionals	Paid
Management (Rotman)						
	Professional Development					
		Executive Programs		https://www.rotman.ut oronto.ca/professionald evelopment/Executive- Programs	Working Professionals	Paid
			Leadership & Management (9)		Working Professionals	Paid
			Innovation & Strategy (8)		Working Professionals	Paid
			Finance (8)		Working Professionals	Paid
			Governance (8)		Working Professionals	Paid
			Industry-Specific		Working	Paid
			Programs (5) Coaching & Personal Productivity (4)		Professionals Working Professionals	Paid
			On-Demand (9)		Organizations	Paid
			Custom Programs		Organizations	Paid
		Initiative for Women in Business		https://www.rotman.ut oronto.ca/ProfessionalD evelopment/InitiativeFor WomenInBusiness		
			Career Relaunchers		Adults	Paid
			Early Career to Executive		Working Professionals	Paid
			Programs for EAs & Program Coordinators		Working Professionals	Paid
		Programs for Internationally Educated Professionals		https://www.rotman.ut oronto.ca/ProfessionalD evelopment/Intercultura SkillsLab/BusinessEdgeC ampus	trained professionals	Paid
			Business Edge Campus		Internationally trained professionals	Paid
			Business Edge Digital		Internationally trained professionals	Paid

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
			Intercultural Skills Lab	https://www.rotman.ut oronto.ca/professionald evelopment/intercultura lskillslab/organizations	Organizations	Paid
		Speaker Series		https://www.rotman.ut oronto.ca/ProfessionalD evelopment/Events/Upc omingEvents	_	Paid
Medicine (Temerty)						
	Continuing Professional Development (384)			https://www.cpd.utoron to.ca/	Working professionals	Paid
		Programs Conferences				
Nursing (Bloomberg)	Centre for Professional Development			https://bloomberg.nursi ng.utoronto.ca/pd/	Working Professionals	Paid
		Certificate Programs		https://bloomberg.nursi ng.utoronto.ca/pd/certif icate/		Paid
			Leadership & Management (NFC)			Paid
			Hospital & Acute Care for Nurse Practitioners (NFC)			Paid
			Nursing Education for the Practice Setting (NFC)			Paid
			Palliative Care for Nurse Practitioners (NFC)			Paid
		Exam Prep		https://bloomberg.nursi ng.utoronto.ca/pd/exam preparation/	_	Paid
			Primary Health Care NP Exam Preparation Course NCLEX-RN Exam Prep			Paid
		Global Nursing Scholars Program	Course	https://bloomberg.nursi ng.utoronto.ca/pd/globa l-nursing-scholars/		Paid
		Professional Development Courses (14)		https://bloomberg.nursi ng.utoronto.ca/pd/cours es/		Paid
Pharmacy (Leslie Dan)						
Daily	Continous Professional Development (offered through SCS)			https://learn.utoronto.c a/programs- courses/health-and- social- sciences/pharmacy/cont inuous-professional- development	Professionals	Paid

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
	International Pharmacy Graduate Program			https://www.pharmacy. utoronto.ca/programs/i nternational-pharmacy- graduate-program	Internationally educated professionals	Paid
Public Health (Dalla						
Lana)	Outreach and Access			https://www.dlsph.utor onto.ca/programs/outre ach-access-program/	Secondary students	
		Semester Program			Secondary students	
		Summer Institute			Secondary students	
	Institute of Health Policy, Management and Evaluation					
		Continuing Education		https://ihpme.utoronto.		
			Adaptive Leadership	https://ihpme.utoronto. ca/continuing- ed/adaptive-leadership/	Working professionals	Paid
			Artificial Intelligence	https://ihpme.utoronto. ca/continuing- ed/artificial-intelligence/	Working professionals	Paid
			Environmental Sustainability	https://ihpme.utoronto. ca/continuing- ed/environmental- sustainability/	Working professionals	Paid
			Implementing Integrated Healthcare	https://ihpme.utoronto. ca/continuing- ed/masterclass- implementing- integrated-care/	Working professionals	Paid
		Accessing Centre for				
		Expertise (ACE)	Custom programs and consulting	https://ace.ihpme.utoro nto.ca/	Organizations	
Social Work (Factor- Inwentash)						
	Continuing Education			https://socialwork.utoro nto.ca/programs/con- ed/	Working Professionals	Paid
		Certificate of Continuing Studies		,	Working Professionals	Paid
			Human Services Management & Leadership		Working Professionals	Paid
			Mindfulness		Working Professionals	Paid
		MOOCs (2)			Working Professionals	
итм						
UTIVI	Continuing Education (offered with SCS)					

Division	Department	Program	Area of offerings	Website	Audience	Paid/Free
	Institute for			https://www.utm.utoro	Working	Paid
	Management and			nto.ca/imi-exec-ed/	Professionals	
	Innovation					
		Executive Courses			Working	Paid
					Professionals	
			Big Data Analytics (3)		Working	Paid
					Professionals	
			Blockchain &		Working	Paid
			Cryptocurrencies (2)		Professionals	
			Governance & Ethics (3)		Working	Paid
					Professionals	
			Investments, Analytics &		Working	Paid
			Risk Management (5)		Professionals	
			Marketing (1)		Working	Paid
					Professionals	
			Organizational		Working	Paid
			Behaviour (3)		Professionals	
			Risk Management (2)		Working	Paid
					Professionals	
			Strategic Management		Working	Paid
			for Startups (4)		Professionals	
			Strategy (5)		Working	Paid
					Professionals	
			Sustainability (1)		Working	Paid
					Professionals	
		Executive Certificates			Working	Paid
					Professionals	
			Pharma Challenges &		Working	Paid
			Opportunities		Professionals	
			Effective Leadership for		Working	Paid
			Senior Management		Professionals	
			Data Analysias		MAZ Isi	Paid
			Data Analytics		Working	Palu
			Strategy & Critical		Professionals Working	Paid
			Thinking		Professionals	raiu
			Governance & Ethics		Working	Paid
			Governance & Lines		Professionals	raid
			Investments, Analytics &		Working	Paid
			Risk Management		Professionals	l did
			Misk Management		T TOTE SSIGNAIS	
			Strategy & Innovation		Working	Paid
					Professionals	
		Custom Programs			Organizations	Paid
		, , ,				
UTSC						
	Continuing					
	Education (offered					
	with SCS)					
	Community			https://www.utsc.utoro	Various	
	Partnerships and			nto.ca/partnerships/		
	Outreach					

Appendix 4: Overview of Comparator Institutions

A. American Comparators

A1. Stanford University – Continuing Studies

Areas of offerings:

- Liberal Arts & Sciences
 - Archaeology, Art History, Art Studio, Classics, Cultural Studies, Dance Studies, Design, Film Studies, History, Law, Linguistics, Literature, Music Studies, Music Studio, Philosophy, Psychology, Science, Wellness & Health
- Creative Writing
 - Novel writing (certificate), Creative writing individual courses
- Professional and Personal Development
 Business, Communication, Communication for Non-Native Speakers of English, Design,
 Technology & Data Science

Certificates offered:

• Online certificate program in novel writing

Credits/Grades:

- Learners receive credit in the form of a unit, which differs from credits earned by Stanford undergrad/grad and may not be applied toward any Stanford degree.
- Transferability of Continuing Studies courses to other programs (at other institutions) are subject to the receiving institutions policies.
- 10 hours of instruction = 1 unit
- Learners must choose from 3 grade options upon registration, which may be changed up until the last class meeting
 - o letter grade: final paper or other assigned work is required
 - o credit/no credit: attendance and participation required
 - o no grade requested (NGR): no work required, no credits (units) are received, no proof of attendance can be provided, does not appear on transcript

Credentialing:

- Continuing Studies units appear on a Stanford official transcript
- Stanford transcripts are provided via Parchment
- Individual course completion certificates are not provided

Policies:

No policies pertaining to continuing education found

Tuition:

Cost/unit = \$250 and \$350 USD

Wayfinding:

Centralized at https://www.stanford.edu/list/continuing/

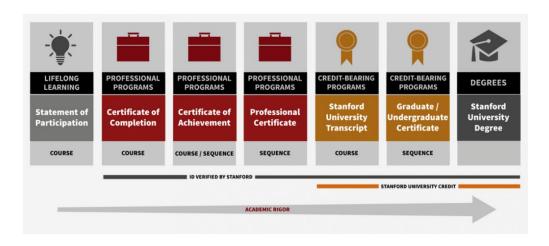
Other Lifelong Learning Activities at Stanford:

Master of Liberal Arts Program

- While not offered by Stanford Continuing Studies, this graduate degree is targeted at post-graduate lifelong learners
- Offered on a part-time, in-person basis
- Accept rate of between 1:2.5 5
- Targeted at professionals wishing to gain a foundation in liberal arts, new grads looking for an entry point to other advanced graduate study, retirees

Stanford Online

- Hub for Stanford's online for-credit offerings
- Offers 5 types of programs
 - Professional Education: Individual courses that can roll up into designated certificates; courses are assessed by completion (Satisfactory) with no letter grades assigned; may also earn continuing education units or continuing medical education units. Students earn a <u>digital record of completion</u> that is signed and digitally certified by Stanford.
 - Graduate Education: courses are for credit and assigned letter grades (unless NFC is opted for); credits are transferable to Stanford masters degrees; courses roll up to graduate certificates, which must be completed within 3 academic years of start date; learners get graduate certificate issued by the relevant academic department
 - Master's Degrees: offered part-time with both in-person and online options (can mix); application is through academic department offering the online degree; students are expected to be employed full-time during the time in which they are enrolled in the part-time online program; must complete degree within 5 years of start date; 45 credit units required; cost per credit = approx. \$1350 USD
 - Custom Programs: created for industry by Stanford Centre for Professional Development, which operates and manages Stanford Online
 - Free Courses: MOOCs, offered through edX, Coursera or individual academic units at Stanford



Stanford Continuing Medical Education

- Develops, accredits, and evaluates activities and initiatives designed to improve the skills, strategy, and performance of providers and healthcare teams and the delivery of patient care
- Offers comprehensive continuing education activities for the healthcare professions
 across the full spectrum of medicine and health, drawing on the interprofessional
 expertise of its institutions and partners. Content is evidence-based, references best
 practices supported by scientific literature and guidelines, and is free of commercial bias.
- Target audience: all members of the healthcare team whose educational needs and specific gaps in practice can be addressed by continuing education initiatives. The Stanford Center for Continuing Medical Education serves international, national, state, and local learners.
- Partnerships: Through collaborations and strong partnerships, Stanford Medicine seeks to increase access to accredited continuing education, to model team-based patient care, and to enhance the impact of research, clinical and teaching expertise of its faculty.

Executive Education Program (Law)

- Business Law Short-term, high cost exec programs offered and managed by Stanford Law and Stanford GSB
 - Directors' College (3 days): executive education program for directors and senior executives of publicly traded firms
 - Tuition: \$5500 \$6500 USD
 - o Directors' Consortium: Partnership with Stanford Graduate School of Business
- International programs select programs for pre-selected individuals in institutional investment and journalism
 - Stanford Institutional Investors Forum
 - o Rock Center Program for Journalists: A Primer in Corporate Governance

Executive Education Stanford Graduate School of Business

- Offers courses for individuals and organizations
- Individual course areas: Accounting, Corporate Governance, Design Thinking, Entrepreneurship, Finance, General Management, Innovation, Marketing, Negotiation, Nonprofit, Organizational Leadership, Personal Leadership, Social Impact, Strategy, and Technology and Operations
 - Offers several programs in both in-person, live online and online self-directed formats
 - Marquis programs: Stanford LEAD (Certificate, PT year-long, online) \$19000
 USD; Stanford Executive Program (Certificate, Flex and FT options) \$78000 USD;
- Organization courses: Custom and Catalyst Programs (2): Diversity & Inclusion for Strategic Impact; Strategic Transformation in Times of Disruption

Online High School

- Offers courses for grades 7–12
- Selective independent school, where dedicated instructors help talented students worldwide pursue their passions in real-time, online seminars

- Small groups of learners, online classrooms enriched by in-person opportunities through regional meetups and residential programs
- Other pre-collegiate offerings also available through <u>Stanford Pre-Collegiate Studies</u>

A2: UCLA Extension

Area of Offerings:

Accounting & Taxation, Architecture & Interior Design, Business & Management,
Design & Arts, Digital Technology, Education, Engineering, Entertainment,
Environmental Studies & Public Policy, Finance & Investments, Health Care &
Counselling, Humanities & Social Sciences, Landscape Architecture & Horticulture,
Languages, Legal, Real Estate, Sciences & Math, Writing & Journalism

Certificates offered:

- Over 100 in all areas EXCEPT Humanities & Social Sciences and Sciences & Math
- Specializations are offered in all areas that have certificates EXCEPT Design & Arts,
 Finance & Investments, Legal, and Real Estate
- Specializations and certificates require an application process by which students establish candidacy
 - Candidacy imparts additional benefits to the learner such as academic advising, career resources (Handshake), alumni benefits, participation in UCLA Extension graduation ceremony

Credits and grades:

- Certain courses qualify for transferrable academic credit towards degree programs at UCLA or other institutions
- Types of credits: Continuing Education Units (CEU), Continuing Professional Education (CPE)
- Credit options offered:
 - For Credit: Letter Grade: For Credit: Passed/Not Passed
 - o Not for Credit: Non-Credit (coursework not evaluated); Not for Credit: CEUs

Credentialling:

- Certificates and awards of completion are posted to a UCLA Extension transcript
- Official transcripts are delivered with <u>Parchment</u>

Policies:

- No policies pertaining to continuing education found
- Graduate certificates are covered under Regulations of the Division, Academic Senate

Tuition:

• \$175 – 300 USD per unit (full quadmester course = 4.0 units)

Wayfinding:

• Wayfinding from UCLA Homepage under Continuing Education

Other Lifelong Learning Activities at UCLA

Osher Lifelong Learning Institute (OLLI)

- Membership-based lifelong learning offerings for adults over 50
 - o Basic membership \$50/year for course enrolment privileges
 - o Plus membership \$295/year for up to 70% of all courses
- 123 such institutes across US, funded by endowment from Osher Foundation

UCLA Anderson School of Management

- Offers open enrollment exec ed non-degree programs through the business school
- Custom offerings also developed
- Partnership with Northwest Executive Education for executive management programs

UCLA Continuing Medical Education

- CME credits/certificates administered through UCLA School of Medicine
- CME students have separate CME portal for courses, registration, materials and credits

UCLA Dentistry

- Courses offered through the School of Dentistry
- Credits are administered by the school in accordance with accreditation bodies

Law

 Continuing education for law is offered through <u>Continuing Education for the Bar</u>, a UC-wide program

School of Theater, Film & Television

 Professional programs offered through the School of Theater, Film & Television are by application and graduate level, but are not for credit

UCLA Summer Sessions

• Offers pre-college and professional courses over the summer months

A3: Harvard Division of Continuing Education

Encompasses four schools/departments focused on non-traditional learning (below).

Policy:

• Each school may have its own policy governing continuing education; no central policy or statement is easily found in governance documents for Harvard University

Wayfinding:

 Division is featured prominently under <u>Professional and Lifelong Learning</u> on Harvard University homepage

i. Harvard Extension School

- Geared to students seeking part-time, online courses and nonresidential programs to advance their career or pursue an academic passion.
- Offers individual courses, certificates and UG and grad degree programs
- Fully accredited Harvard School
- Graduates are members of Harvard alumni community

Areas of study:

- Arts, Literature & Media; Business & Management; Education; Global Studies; Life Sciences; Social Sciences & Cultural Studies; Sustainability & the Environment; Technology
- 22 graduate degree programs offered
- 41 graduate certificates offered
- Bachelor of Liberal Arts Program
- Joint Undergraduate and graduate Program
- 4 undergraduate certificates

Credits and grades:

- Offers undergraduate, graduate and non-credit options
- Non-credit students do not receive academic credit or grade, but course appears on transcript

Credentialing:

- Transcripts available by request through Harvard Extension School's online portal
- Transcripts include all credit and non-credit courses taken at Harvard Extension School and Harvard Summer School
- Degree verification must be requested directly from School

Tuition:

Per 4-credit course: NC \$1500 USD; UG \$1880; Grad \$2900

Wayfinding:

Appears prominently within Harvard's Division of Continuing Education offerings

ii. Harvard Summer School

- Offers college programs for high school students, adult and college courses, and study abroad offerings
- Offers courses in 7-week or two 3-week sessions
- 400+ courses offered annually

Areas of study:

• Courses offered in 71 areas of study across arts, sciences, and business

Credits and grades:

- Offers undergraduate, graduate and non-credit options
- Non-credit students do not receive academic credit or grade, but course appears on transcript

Credentialing:

- Transcripts available by request through Harvard Summer School's online portal
- Transcripts include all credit and non-credit courses taken at Harvard Extension School and Harvard Summer School
- Degree verification must be requested directly from School

Tuition:

• Per 4-credit course: \$3400 USD (all learner categories/levels)

Wayfinding:

Appears prominently within Harvard's Division of Continuing Education offerings

iii. Harvard Professional Development

- Offers intensive core business competency programs for working professionals
- Generally short one-day courses or multiple 1-3 hour weekly or daily courses

Areas of study:

Business Strategy; Marketing; Communication; Innovation; Leadership & Management;
 Negotiation

Credits and grades:

- No grades are assigned and programs cannot count towards a degree
- Certificates of Participation are awarded upon completion and active participation in a program; digital certificates are awarded for web series that verifies attendance

Credentialing:

 Professional development programs do not appear on official Harvard Division of Continuing Education transcripts

Tuition:

• Varies but appears to be approximately \$200 USD per hour of instruction

Wayfinding:

Appears prominently within Harvard's Division of Continuing Education offerings

iv. Harvard Institute for Learning in Retirement

- Targeted at retired professionals
- Peer-to-peer teaching and learning model
- Admission is by application and is limited to local residents

Areas of study:

Varies according to membership, but usually includes Art & Architecture; Biology;
 Economics; Geopolitics; History; Literature; Music; Philosophy; Technology

Credits and grades:

None

Credentialing:

None

Tuition:

• \$500/semester, which covers up to 3 courses per semester

Wayfinding:

Appears prominently within Harvard's Division of Continuing Education offerings

v. Other Lifelong Learning Activities at Harvard

Harvard Business School

- Harvard Business School Executive Education
 - Offers programs for individuals and organizations
 - o Each program has its own admissions processes; most are by application
 - o Offers Certificate of Management Excellence and Corporate Director Certificate
 - Credentialing is unclear
- Harvard Business School Online
 - Offers online courses in Business Essentials, Leadership & Management, Entrepreneurship & Innovation, Strategy, Analytics, Finance & Accounting, Business in Society
 - Certificates of completion are offered for programs and courses (digital certificates for courses as of 2020); Credential of Readiness is awarded following completion of 3 required CORe courses and passing of a final exam
 - CORe can be taken for credit, earning 8 UG credits through Harvard Extension School
- Harvard Business Analytics Program
 - Can lead to Business Analytics Certification

Harvard Medical School

- Postgraduate Medical Education
 - Offers masters, certificates, and continuing education courses through the Medical School
- HMX Online Learning
 - Online education clearinghouse that can partner with other educational institutions to offer courses
 - "Harvard Medical School's online courses offer a unique, flexible complement to your curriculum, backed by the latest in learning science."
 - Also offers individual online courses
- Harvard Medical School Executive Education
 - o Open enrollment courses for business and science/medical professionals
 - o Targeted to biotech and AI healthcare businesses
 - Also develops custom programming
- Harvard Health Publishing
 - Targeted at general population
 - "Trusted advice for a healthier life"
 - o Inexpensive (book-priced) online courses on healthy eating, fitness, back pain, exercise etc.

Harvard Kennedy School

- Executive Education
 - o Programs for public policy leaders and executives
 - Credentialing is unclear
- Public Leadership Credential
 - o Requires 6 courses and capstone
 - Leads to special pathway to Kennedy School's Mid-Career Master in Public Administration
 - Can lead to special pathway to Harvard Extension School's Master of Liberal Arts in Government

Harvard Graduate School of Education

- Offers <u>professional education</u> in Early Childhood, K-12, Higher Education, Custom Programs, and Online Programs
- Professional Education programs do not provide graduate credit. Participants receive a certificate of participation and a letter confirming the amount of clock hours awarded during the program

Harvard Law School

- Harvard Law School Executive Education
 - o Offers online, leadership, master classes, and custom programs
 - HLS exec ed programs are not CLE accredited, but learners may be able to apply independently for credit
 - Certificates of completion are awarded (tracking unclear)
- The Program on Negotiation Executive Education
 - o Online executive courses offered specifically on negotiation
 - Credentialing is unclear

Harvard T.H. Chan School of Public Health

- Offers programs for individuals and organizations
- Credentialing is unclear

Harvard Graduate School of Design

- Offers open enrolment courses, Advanced Management Development Program in Real Estate, and custom programs
- Certificate of Completion from the Harvard Graduate School of Design, Executive
 Education is provided, indicating the title of the course and course dates. Harvard
 Graduate School of Design is a registered provider of continuing education credits for
 members of the American Institute of Architects (AIA), the American Society of
 Landscape Architects (ASLA), and the American Institute of Certified Planners (AICP).
- AMDP completers also receive alumni status in addition to Certificate of Completion.

Harvard School of Dental Medicine

- Offers free online webinars
- Continuing education credit awarded for completion of paid units

Harvard Divinity School

- Harvard Divinity School offers a selection of short seminars and online sessions exploring some of the world's biggest questions with leading HDS scholars and professors of religion
- Programs are by application
- Tuition = \$1600 USD (rate of approx. \$100 USD per hour of instruction)
- Credentialing is unclear

Harvard John A. Paulson School of Engineering and Applied Sciences (SEAS)

 At present only offers joint exec ed with HBS (Business Analytics) and the Kennedy School (AI), along with some HarvardX courses

Harvard Online

- Combination of free and paid online courses (MOOCs)
- Offers courses in Art & Design, Business, Computer Science, Data Science, Education and Teaching, Health and Medicine, Humanities, Mathematics, Programming, Science, and Social Sciences
- Paid courses cost up to \$1600 USD
- HarvardX platform powers Harvard Online, and was developed in parallel with EdX

A4: Columbia University

i. School of Professional Studies

Main provider of continuing education for Columbia. Other areas detailed below and offerings collected under umbrella of "Columbia Online."

Target audience is "high school students, undergraduate and graduate students, and the University's neighbors at every stage of their personal and professional lives."

Types/areas of offerings:

- Offers Master's degrees in "market-responsive" programs: Actuarial science, Applied analytics, Bioethics, Construction administration, Enterprise risk management, Human capital management, Information and knowledge strategy, Insurance management, Narrative medicine, Negotiation and conflict resolution, Nonprofit management, Sports management, Strategic communication, Sustainability management, Sustainability science, Technology management, Wealth management
- Executive education: Bioethics; Financial Planning Teaching Seminar; Strategic Communications
- Certificates: Actuarial Science; Bioethics CPA; Classics, International Relations; Ecology, Evolution & Environmental Biology; Enterprise Risk Management CPA; Human Rights; Narrative Medicine CPA; Psychology; Quantitative Study for Finance; Sustainability Analytics; Sustainable Finance CPA; Sustainable Water Management CPA; United Nations Studies
- Business studies in marketing, finance and leadership
- English Language programs
- Summer programs
- High School/Pre-college: Architecture and Urban Studies; Arts; Biology & Neuroscience; Business, Economics & Entrepreneurship; Core Skills; Creative Writing & Journalism; Law & Conflict Resolution; Marketing, Media & Communications; Math; Philosophy & Humanities; Physical Sciences; Politics, Public Policy & International Affairs; Social Impact and Sustainability; Social Sciences & Psychology; Technology & Computer Programming
- Graduate prep
- Lifelong learning auditing programs

Credits and Grades

Vary by program

Credentialing:

- Students must apply to School for CPA (certification of professional achievement) or Certificate to be conferred; certificates are printed and mailed
 - Columbia is a user of Parchment but it is unclear if the School of Professional Studies also uses this service
- Masters Degrees are conferred by the School of Professional Studies but are governed by Columbia Office of the Registrar

Tuition:

Varies by program

Wayfinding:

- SPS is listed from the <u>Columbia University homepage</u> under Academics > Schools
- It is also featured on <u>Columbia Online</u>, which is not easily findable from the Columbia University homepage, but appears under the umbrella of the Vice Provost for Teaching, Learning & Innovation

ii. Other Lifelong Learning Activities at Columbia

Columbia Fu Foundation School of Engineering and Applied Science

- Offers fully online graduate engineering degrees through the Columbia Video Network
- Executive Education offerings in Cybersecurity, AI, Big Data Management and Security, Construction Management, Engineering Leadership
 - Also custom offerings
 - o Programs offered by application (requires professional qualifications)
- Micromasters MOOCs through EdX phasing out in 2021
 - o Certification for MOOC education through ColumbiaX, not Columbia University

Columbia School of Social Work

- Offers online MSW that is flexible with hybrid possibilities
- Also offers IPR and online <u>continuing education</u> that can count towards social work CE contact hours for licensure

Graduate School of Arts & Sciences

• Offers online hybrid masters program in statistics

Columbia Business School

- Offers IPR, live online and asynchronous online <u>executive education</u> in Leadership, Finance, Marketing, Social Enterprise, and Strategy across different industries
- Programs for individuals and custom programs
- Confers "customizable certificates" in business excellence: requires completion of 18 certificate credits over 4 years

Columbia Earth Institute

- Offers <u>executive education</u> certificates and certification through the School of Professional Studies
- Offers and manages open enrollment <u>professional learning</u> and <u>pre-college training</u> at \$1200 USD per offering

Columbia University Irving Medical Center

- Encompasses College of Physicians and Surgeons, School of Public Health, School of Nursing, College of Dental Medicine
- All except the School of Public Health provide their own continuing education programs for practitioners

Columbia Law School

- Offers an Executive LLM for practicing law professionals
- Offers executive education and non-degree programs on open-enrollment basis
- Manages <u>Continuing Legal Education</u> accreditation for programs hosted by the law school

MOOCs

Columbia offers courses and specializations on Coursera, EdX and Kadenze

B. Canadian Comparators (U15)

B1: University of British Columbia Extended Learning

Areas of offerings:

- Communication; English as an Additional Language; Equity & Inclusion; Indigenous Health; Languages; Law; Liberal Arts & Sciences; Organizational Coaching & Leadership; Technology; University Preparation
- Wayfinding from Extended Learning to UBC Sauder for business courses from homepage
- Links to other lifelong learning at UBC from Student Information > <u>Useful Links for Lifelong Learners</u>
- Offers certificate programs (working professionals 1-3 years of experience) and award of achievement programs (working professionals in field, 3+ years of experience)
- UBC Future Global Leaders summer program for high school students

Credits and grading:

 Some courses/programs are graded but all programs are non-credit (with respect to credit transferability to degree programs at UBC)

Credentialing:

Unclear what system is used for digital credentialing if any

Tuition:

Unclear

Wavfinding

No link from homepage; must search via search box to get to it

Other Lifelong Learning Activities at UBC

School of Architecture and Landscape Architecture

• Offers non-degree programs that support lifelong learning

School of Nursing

Offers <u>International Programs</u> that support lifelong learning

Faculty of Education

- <u>Professional Development and Community Education</u> department offers a number of options for professional educators and those in other professions who are educators as part of their roles
 - o Offers masters programs, diplomas and certificates, and online courses
- Also offers MOOCs

Health Sciences

- Continuing and professional education is offered by the <u>Faculty of Dentistry</u>, <u>Faculty of Medicine</u>, <u>Faculty of Pharmaceutical Sciences</u>, and the <u>School of Population and Public</u>
 Health
- UBC also offers <u>interdisciplinary continuing education programs</u> for health professionals, service providers, policy officials, researchers and the public on a variety of topics

Law

 Continuing professional education in law links to the <u>Continuing Legal Education Society</u> of British Columbia

Sauder School of Business

- <u>Continuing Business Studies</u> offers Certificate Programs, Professional Exam & Test Preparation, and free webinars
 - Certificates offered: Agile Leadership; Behavioural Insights; Business Analysis;
 Change Management; Data & Marketing Analytics; Project Management
 - o All courses are non-credit and non transferrable to UBC degree programs
 - o Courses are graded and pass grade of 60% is required for successful completion
 - Certificates must be completed within 2 years of start of first course
 - o Credential and transcript awarded following approved request to graduate
- Sauder Executive Education
 - o Offers individual programs and certificates and custom programs
 - o Programs award non-credit certificate of completion
- Real Estate Division

MOOCs

UBC offers MOOCs through <u>EdX</u>

B2: McGill University

Areas of offerings:

- Accounting and Finance; Communications and Marketing; Business, Management and Leadership; Education; Healthcare; Writing, Translation and Interpersonal Communication; Computer Science and Information Technology; Government, Law and Public Sector; Agriculture and Food Safety; Music and Performance
- Main continuing studies offerings are from the <u>School of Continuing Studies</u> and the <u>McGill Executive Institute</u>
- McGill Summer Academy for high school students

Credits and Grading:

- Varies according to program
- Certificates of completion through McGill Executive Institute (non-credit)
- Continuing Studies courses have options of graded or non-graded
- Continuing Studies courses are allotted CE units rather than credits, unless otherwise indicated

Credentialling:

- Transcripts are available through McGill's inhouse SIS (Minerva)
- Not using Parchment

Tuition:

Varies

Wayfinding

• All continuing education and lifelong learning, regardless of department of origin, is indexed from McGill's homepage under <u>Certificates</u>, <u>Diplomas</u>, <u>and Continuing Studies</u>

C. Local Comparators

C1: Ryerson University Chang School of Continuing Education

Areas of offerings:

- Arts & Media; Business; Communication & Languages; Community Well-Being & Safety; Design & Architecture; Health & Sciences; Information Technologies & Computer Science; Public & Non-Profit Sectors; Social Sciences & Humanities; Sustainability, Planning & the Environment
- Offers individual courses and certificates
- Some courses/certificates offer a pathway to degree for non-traditional students

Credits and grading:

- Courses that do offer credit are indicated in catalogue as offering degree credit
- Some degree credits can also be transferred to certificate credits

Credentialing:

- Ryerson students have one academic record, which incorporates all courses studied through graduate/undergraduate programs and continuing education
- Non-graded, non-credit courses will not appear on the Ryerson official transcript

Tuition:

Varies

Wayfinding:

• Link to Continuing Studies from Ryerson homepage

Other Lifelong Learning Activities at Ryerson

Ted Rogers School of Management

- Executive and corporate education
- Open enrolment programs in labour relations, leadership, RBC opt-in program
- Offers custom programming

Faculty of Engineering and Architectural Science

Offers programs through the Chang School

Faculty of Community Services

Offers programs through the Chang School

C2: York University School of Continuing Studies

Areas of Offerings:

- Business; Data, Information & Technology; Graduate Preparation Programs; Marketing,
 Communications & Design; Mediation; English Language Teacher Training mostly post-graduate certificates
- English Language Institute
 - Undergraduate Preparation Programs

Credits and Grading:

Unclear

Credentialing:

Unclear

Tuition:

Varies according to program

Wayfinding:

Link to Continuing Studies from YorkU homepage: Study > Continuing Studies

Other Lifelong Learning Activities at York

Faculty of Education

Professional Learning for Educators

Glendon Continuing Education

 Offers Language Training; Bridge Training; Professional Development Courses through Glendon College

Health Leadership & Learning Network (HLLN)

• Offers certificates of completion and non-degree, non-credit programs

School of Engineering

- Lassonde Professional Development Centre
- Certificates verified by Blockchain on Ethereum

Osgoode Hall Law School

- Professional Development Program
- Offers continuing education as well as Professional LLM, International Business Law LLM, and Canadian Common Law LLM

Schulich School of Business

- Schulich Executive Education Centre (SEEC)
- Areas of offerings: Management & Leadership; Business Operations & Finance; Marketing & Sales; Personalized Certificates (Certificate of Professional Excellence customized for learner – 4 courses in three years)

•

D. Online/Digital Providers

D1: EdX

- MOOC offerings (paid and free)
 - Paid upgrades to free courses entail addition of Verified Certificate
- 160 educational institutions offering courses
 - o UBC, McGill, U of T (Charter)
 - o HEC Montreal, Queens, University de Montreal (EdX Members)
- 2800+ courses offered

Program types:

- Masters
 - Variable admission requirements based on program
 - o Fully online
 - Variable costs
 - All Masters programs currently offered are in tech/computer science, business and engineering
- MicroBachelors™
 - o Undergraduate-level, for career advancement or a degree path
 - No application required
 - Credit-bearing: "real, transferable college credit" NB: credit not provided by the institution offering the courses that comprise the MicroBachelors; the credit is assigned by Thomas Edison State University
 - o \$166 USD/credit
- MicroMasters[™]
 - MicroMasters are a series of graduate level courses from designed for career advancement. Provide deep learning in a specific career field and are recognized by employers for their real job relevance. Students may apply to the university offering credit for the MicroMasters program certificate and, if accepted, can pursue an accelerated and less expensive Master's Degree
 - UBC offers MicroMasters in Software Development
 - Cost varies by program
- Professional Certificate
 - Professional Certificate programs are series of courses designed by industry leaders and top universities to build and enhance critical professional skills needed to succeed in today's most in-demand fields
 - Cost varies by certificate as does number of courses/credits required
- XSeries Program
 - A series of courses to develop deep knowledge in interesting and popular subjects
 - Cost varies by program

D2: Coursera

- MOOC offerings (paid and free)
 - Paying upgrades to validated certification
- 233 university and corporate partners
 - McMaster, University of Alberta, and U of T

- 6800+ courses
- Coursera pitching to students, business, campuses, and government
- Subscription-based fees for specializations and professional certificates
- One-off tuition for individual courses
- Degrees have variable fixed costs

Program Types:

- Courses
- Certificates
 - Offered in Data Science, Business, Information Technology, Computer Science, Social Science, Physical Science and Engineering, and Language Learning
 - Professional Certificates
 - MasterTrack™ certificates: A MasterTrack® Certificate is a university-issued online certificate, consisting of thoughtfully selected portions of a top Master's degree programs from top universities. Coursework counts towards the degree should learner be accepted into the full Masters program.
- Degree Programs
 - Offers Masters and Bachelors degrees with varying costs and application procedures

D3: Athabasca University PowerED™

Online, on-demand learning for organizations and individual learners, focused on assisting organizations to develop and deploy their digital learning strategies, building skills and driving results.

Types of offerings:

- Courses
 - short, stackable courses focused on developing competencies with practical application
 - o courses can be bundled into Certificates
 - Embracing Allyship & Inclusion; Leadership; Project Management; Digital Transformation; Accessible Spaces;
 - Microcourses: less than 10-hour courses
- Certificates
 - Leader Development Program; Essential Skills for Leaders; Project Management; Rick Hansen Foundation Accessibility Certification; Digital Transformation Leadership
- Services
 - Custom programs and partnerships targeted to businesses

Credentials:

- PowerED courses are stackable and learners obtain digital badges upon course completion and digital certificates upon certificate completion
- Badges and certificates are shareable and verifiable via URL

Appendix 5: Overview and Summary of Digital and Micro-Credentialing at U of T

Prepared by Laurie Harrison, Director, Online Learning

Current Activities

Parchment Digital Transcripts

- Enterprise platform supports issuing of digital transcripts and related services
- Focus on verification of for-credit records (security and authenticity)
- Interoperable with other member institutions using platform
- Current agreement with the Parchment has provision for additional credential features (cost for each digital diploma issued).
- Linked to Transcript Innovation Initiative project (Enrolment Services, EASI, Convocation Office)

Target learners:

• UofT degree program students

Future Possibilities

• Vendor moving into blockchain verified and portable credentials after recent merger with *Credentials Solutions*

Divisional Continuing Education

- Continuing education departments issue certificates in proprietary format (paper or digital certificates);
- Includes existing not-for-credit certificates (cat 3 in our framework, plus certificates of completion/attendance/etc)
- Policies regarding about use of logo, etc,
- No common institutional platform applications used SCS or Rotman or OISE or Med CPD vary (Example SCS has a student portal that provides access to academic history and grades)

Target Learners

Non-degree continuing education learners

MOOCS

- Currently offering short courses and certificate series with two partners (Coursera and EdX)
- Fee for assessment and verification typically \$50+ US per course)
- Digital certificate with UofT branding issued (noted as not credit-bearing)
- Credential can be shared via digital certificate, URL, or posted as a 'My Learning" on LinkedIn
- Learner is in control of sharing credential, multiple times or contexts.

Target Learners:

- Primarily non-UofT degree program students
- · Alumni programming
- Some interest in components of grad degree programs offered as MOOCs (learners both internal and external to institution.)

Future Possibilities:

- Continued growth in the global continuing education space
- Some interest as pre-degree admission activity
- Coursera has introduced "guided projects" as an even smaller unit of activity.

Opportunities

Portable Microcredentials

- Co-curricular programs, continuing education, local instances of MOOCs could all provide the basis for issuing short-term learning "micro-credentials" from UofT
- Characterized by portability, stackability, skills-based credential learning pathways
- · Learner-controlled sharing and curation of credentials earned
- Institution requires trusted platform to issue blockchain-verified credentials in standards-based digital format (ie <u>BC Diploma</u>, <u>Accredible</u>, <u>Badgr</u>)
- Student receives/collects the credential or badge to share via URL or display on a profile page (ie LinkedIn, <u>CanCred</u> platforms).

Target Learners:

• UofT degree program learners, continuing education

Future Possibilities

• Key pillar of current MCU strategy, as well as eCampusOntario initiatives promoting development and sharing of transferable credentials in partnership with business and community organizations.

Platforms:

- https://www.accredible.com/
- https://info.badgr.com/
- https://passport.cancred.ca/

Digital and Micro-Credentialling Summary Chart

	Target Learners		Key functions	Flexibility	Technology	Opportunity	
	Degree - Credit Learners	Not for Degree- Credit Learners					
Parchment digital transcripts	x		 Enterprise platform supports issuing of digital transcripts and related services Focus on verification of for-credit records (security and authenticity) Sharable among institutions that are members 	Complete document issued; charge for additional copies	Parchment platform	May be expanded to blockchain verified and portable credentials (per diploma fee)	
Continuing Education programs		х	 Continuing education departments issue certificates in proprietary forma (paper or digital certificates); Includes existing not-for-credit certificates (cat 3 in our framework, plus certificates of completion/attendance/etc) 	Digital certificates in transfer in transf	Proprietary divisional platforms		
MOOCs		х	 Currently offering short courses and certificate series with two partners (Coursera and EdX) Fee for assessment and verification – typically \$50+ US per course) 	Stackable; portable for display in select platforms	MOOC platform generates UofT branded certificate/URL	 Continued growth in the global continuing education space Some interest as pre-degree admission activity Coursera has introduced "guided projects" as an even smaller unit of activity. 	
Portable Microcredentials	e X	X	 Co-curricular programs, continuing education, local instances of MOOCs could all provide the basis for issuing short-term learning "microcredentials" from UofT Characterized by portability, stackability, skills-based credentials learning pathways 	Stackable; portable; student may curate what is shared across platforms; standards- based	Institution requires credential issuing platform; Student requires portfolio or wallet for display. Institution: https://www.bcdiploma.com/en https://www.accredible.com/https://info.badgr.com/ Student: https://passport.cancred.ca/	strategy, as well	