

# Strengthening Ontario's Centres of Creativity, Innovation, and Knowledge Opportunities for Online Learning in Ontario

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As part of its response to the Ministry of Training, Colleges and Universities June 2012 discussion paper, *Strengthening Ontario's Centres of Creativity, Innovation and Knowledge*, [Contact North | Contact Nord](#) shared its initial thoughts on trends that are transforming post-secondary education and how the ministry could support innovation through online learning in July 2012.<sup>1</sup> We promised to suggest ideas and investments related these trends that the ministry might consider in order to promote *Strengthening's* goal of driving productivity and innovation in the post-secondary education sector.<sup>2</sup>

In the next installment of *Contact North | Contact Nord's* contribution to this dialogue within Ontario's post-secondary sector, we outline three specific opportunities for online learning in Ontario.

We note with pride that Canada has a long tradition of innovation in distance education and educational technology, and that Ontario can rightly claim to be a leader in that tradition. It is now necessary to write the next chapter in the story. As the demands and opportunities of the knowledge economy become ever more important to Ontario's future, online learning is a critical tool for making access to education and training opportunities available to all Ontarians no matter where they live, for building a modern and dynamic workforce, and for keeping our post-secondary education system responsive and innovative.

## Online Learning Today

Online learning has experienced remarkable growth. There is no question that it is now an established part of post-secondary education with a rapidly expanding and diversifying base of students.

In the United States, online learning, with over 6 million enrolments in 2010, experienced a growth rate of ten times that of traditional enrollments. About one-third of American college and university students take at least one online course each year.<sup>3</sup>

Figures are harder to come by for Canada, but there is still evidence of demand. *Contact North | Contact Nord* estimates that there are between 875,000 and 950,000 registered students in Canada (approximately 92,105 – 100,000 full-time students) at college and universities across Canada studying a purely online course at any one time.<sup>4</sup>

1 <http://www.tcu.gov.on.ca/pepg/publications/DiscussionStrengtheningOntarioPSE.pdf>

2 <http://www.contactnorth.ca/newsroom/strengthening-ontario-centres-commentary>

3 I. Elaine Allen and Jeff Seaman, *Going the Distance: Online Education in the United States, 2011*, <http://www.onlinelearningsurvey.com/reports/goingthedistance.pdf>.

4 *Contact North | Contact Nord, Online Learning in Canada at a Tipping Point: A Cross-country Check-up 2012*, [http://www.contactnorth.ca/sites/default/files/pdf/innovation-practices/onlinelearning-incanadareport\\_june\\_12\\_2012.pdf](http://www.contactnorth.ca/sites/default/files/pdf/innovation-practices/onlinelearning-incanadareport_june_12_2012.pdf).

An OECD study in 2005 found that Canadian post-secondary institutions had one of the highest rates of purely online courses among nations studied.<sup>5</sup> In Ontario alone, Contact North | Contact Nord's student [portal](#) lists over 18,000 online courses and over 1,000 online programs offered online by Ontario's 24 public colleges and 20 public universities.

Along with these signs of acceptance, there are other indications that online learning is stimulating innovation and investment.

The credibility of online learning got a major boost from a U.S. Department of Education meta-analysis in 2010 concluding that online students “performed modestly better, on average, than those learning the same material through traditional face-to-face instruction.”<sup>6</sup> Public universities like the [University of Massachusetts](#) and the [University of Maryland](#) run thriving online operations, while state systems in Florida and California, despite severe fiscal constraints, have announced ambitious plans to ramp up their online activity.

New and generously funded startups like [Instructure](#), [LoudCloud](#), and [Lore](#) have shaken up the e-learning technology market, while educational publishers like [Pearson](#) are investing extensively in online content. Online learning has been integral to just about every innovation in post-secondary instruction today – from the “flipped” course to adaptive learning materials, assessment-based outcomes, open educational resources, and academic analytics.

While its status in mainstream post-secondary education is still in flux, online learning may better reflect emerging social and economic trends than its campus-based cousin. Its convenience, often enhanced with modified academic calendars and accelerated study options, fits well with student expectations of quick, always-on, real-time service.

Online learning provides a way to enrol more students and extend the carrying capacity of existing facilities as colleges and universities can reach students whose location or work schedules would otherwise make study impossible. Governments, noting that future job growth will come mainly from skilled professions and industries not yet invented, can look to online learning as a way to prepare a skilled workforce and as a tool for agile educational responsiveness and lifelong learning.

Robust and dynamic as it is, online learning has not fully matured. It still has to confront some stubborn obstacles as well as learn to exploit new opportunities.

The good news is that there are many reasons to believe that online learning is maturing fast and ready to enter a new era of capability. Technological progress means that ever-richer content can be delivered, with more interactivity, greater pedagogical sophistication, and a wider range of delivery options. Limitations that have been a fruitful source of faculty disdain for online courses – their reliance on text, their limited interactivity, their tethering of the student to a computer screen

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5 Cited in Canadian Council on Learning, *State of E-Learning in Canada* (2009), [http://www.ccl-cca.ca/pdfs/E-learning/E-Learning\\_Report\\_FINAL-E.PDF](http://www.ccl-cca.ca/pdfs/E-learning/E-Learning_Report_FINAL-E.PDF).

6 U.S. Department of Education, *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies* (2010), <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>.

– are being addressed.

In a world of mobile devices and e-readers, online study has become more mobile, flexible, and adaptable. Publishers and colleges and universities are producing a new generation of learning materials that can be adopted flexibly into courses, assess how well students are learning and allow progress via a selection of individually appropriate materials. Techniques for organizing lectures into annotated and/or narrated video segments permit lecture material to be used more flexibly and allow students to locate and repeat elements they are struggling with.

What's more, we are beginning to see the first serious efforts to deliver high-quality academic material online at large scale and low cost, a development that could radically change the economics of online learning. Massive open online courses or MOOCs – the name was coined to describe an early example of the genre offered at the University of Manitoba by scholars [Stephen Downes](#) and [George Siemens](#) – have such broad implications for the future of post-secondary education that we address them in a separate contribution.

For now, we note that MOOCs are a potential vehicle for colleges and universities to deliver instruction economically to large audiences, to partner with other organizations either to obtain or to re-sell courses, and to change the cost structure and faculty incentives characteristic of online learning.

## Opportunities for Ontario

Too often, online learning is seen in black and white terms - as the key to either post-secondary education's revitalization or to its ruin. In fact, it is a set of tools and techniques that can serve many different ends. It can be used to expand access, make study more convenient, enrich educational content, and improve student services.

We offer three specific opportunities to foster effective, innovative online learning in Ontario.

### Energizing the Faculty

An expert and passionately committed faculty is the most important asset of any college or university. To ensure the academic integrity – and perceived value – of online learning in Ontario, the Ministry of Training, Colleges and Universities and Ontario's colleges and universities need to consider and respond to faculty concerns.

Key principles for faculty participation in online initiatives include:

- Choice

Teaching online courses should be voluntary rather than required. No faculty member can determine what the entire program is – many have both online and campus-based courses.

- Faculty Control

Academic content and standards, program requirements, admissions guidelines, and appointment of teaching staff for online courses and programs should be subject to the same requirements and processes as all other courses and programs.

- Ownership

Content created by teaching staff for online courses should be subject to the same intellectual property agreements as traditional courses.

- Support

Faculty need to have access to training and expert support in both the technical and the pedagogical skills required for well-designed, student-focused, interactive online environments. Ministry of Training, Colleges and Universities support for such initiatives, whether located within colleges and universities or as a service shared across institutional consortia, would be an effective way to increase the number of instructors qualified and motivated to teach online. Additional support for release time and seed funds for course creation would be a welcome sign that these activities carry professional value.

- Promoting Pedagogical Innovation

Over and above faculty training in online pedagogy, colleges and universities need funds to transform courses, experiment with educational innovation, and research the effectiveness of new techniques. Given the increasing technological intensity of campus-based instruction, these investments may apply with equal value to both the classroom and online environments.

### Recruiting and Supporting Students

Online programs may be aimed at niche markets and non-traditional students, and must be targeted more carefully than traditional programs. They also need to be visible to potential students in a crowded Internet universe, and their success relies on preparing students for the special demands of the environment.

For these reasons, an ecosystem of services and products has grown up to support the specific

needs of online academic programs, and the Ministry of Training, Colleges and Universities could promote online learning in the province by making it easier for colleges and universities to obtain them at the campus level, through collective effort, or in public-private partnerships.

These services include:

- Course Aggregators

These are essentially course and program shopping portals that allow potential students to research and find, and sometimes to enrol in, appropriate online offerings. Such sites are particularly critical for students and prospective students who may not be sophisticated Internet users or knowledgeable about educational opportunities outside their local region. Ontario is served by the extensive student [portal](#) offered by Contact North | Contact Nord, which focuses on programs and courses offered by the province's public education and training providers.

- Recruiting and Enrolment Services

Colleges and universities that are just starting to offer online programs and courses may lack the resources needed to develop marketing strategies and successfully convert interested parties into enrolled students. In recent years, partnerships between colleges and universities and commercial firms that provide such services have become a common, and often highly successful, part of the global e-learning scene.

Firms like [Pearson Learning Solutions](#), [Academic Partnerships](#), [2Tor](#), and [Bisk Education](#) conduct marketing campaigns, contact prospects, and assist individuals with application processes, handing them over to the institution for admission, counseling, and enrolment. In return, the firms typically share a portion of tuition fees. By reducing up-front investment, these services help colleges and universities to minimize risk. Fostering appropriate public-private partnerships within the province through negotiated master contracts and/or discounts would be a valuable Ministry of Training, Colleges and Universities contribution to the growth of online learning. Alternatively, this might be a fruitful area for collaborative ventures among Ontario's colleges and universities.

- Retention Initiatives

Many colleges and universities, recognizing the special demands that online learning places on students, require new students to take an online study skills course. In addition, some colleges and universities proactively contact online students for counseling when they see signs of academic struggle or simply remind them to complete an assignment or

sign up for the next term's courses. Like recruitment and enrolment services, these can be provided by the college or university, run as a collaborative service, or contracted through external providers. Providing support for student success initiatives like these offers the Ministry of Training, Colleges and Universities the opportunity to realize a better return on its educational investments and to address the key retention challenges in online learning.

- Academic services

Access to library resources (including librarian expertise), tutoring assistance of the type offered by campus writing and math centres, exam proctoring, and other academic services can be difficult to deliver to online students. As with other services mentioned here, these lend themselves to collaborative or partnered solutions. Provincial support that helps colleges and universities provide a full range of academic services to back up online courses would contribute to online student success and reduce the gap between the online and on-campus experience.

### Infrastructure, Technology, and Content

Three major trends in educational technology will shape the next generation of online learning:

- A mobile revolution that permits educators to take advantage of portable devices like smartphones, tablets, and e-readers;
- The ongoing shift from premises-based computing to remote cloud services, which introduces new opportunities to share services and reduce costs; and
- Broader use of electronic and “smart” content, from video segments that replace face-to-face lectures to e-books and adaptive learning materials that shape content according to student performance.

Online learning in Ontario can potentially benefit enormously from all of these developments, but they will present challenges in the form of support and transition costs, re-vamped technology policies, and pedagogical adaptation.

The Ministry of Training, Colleges and Universities could assist with the change by:

- Supporting post-secondary sector efforts to create shared IT and educational technology services, including learning management system platforms and help desk services;

- Facilitating and funding the creation of post-secondary sector consortial private clouds that service online learning;
- Supporting institutional initiatives to re-train IT and educational technology staff as they manage the shift from premises-based to cloud computing;
- Supporting infrastructure investments that facilitate the creation, management, and exchange of educational content and services, including lecture capture and segmenting and other video-delivery services, standardized synchronous videoconferencing, and content management systems; and
- Clarifying the regulatory requirements governing the storage and transmission of academic data across provincial and national borders to help colleges and universities take maximum advantage of commercial cloud services. Ontario's Information and Privacy Commissioner's [Privacy by Design](#) framework already makes the province a global leader in this area.

## Looking to the Future

Online learning will continue to grow more quickly than all other modes of post-secondary education, and will increasingly be seen as the leading edge of educational innovation. It offers our best hope of reaching underserved student populations, exploiting new modes of expression, social interaction, and information presentation, and bringing about a change in the economics of instruction.

There is no predetermined path: many more parts of the educational enterprise need to be in motion, many tools need to be examined and assessed, and many lessons need to be learned. Ontario will benefit from diverse, institutionally appropriate approaches to online learning.

Important as institutional freedom of action is, however, it's critical to realize that we are entering an age of educational experimentation which will spill across the boundaries of geography and institutional mission. Colleges and universities that treat their own traditions and culture as inviolable may find that they have conceded the future to others who are more agile and less risk-averse.