Digital Learning in Canadian Higher Education in 2020

Ontario Report

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ACKNOWLEDGEMENTS

The National Survey of Online and Digital Learning is made possible with the support of our sponsors. The primary funding agencies for the 2020 CDLRA research initiatives were: eCampusOntario, BCcampus, Campus Manitoba, Contact North, OCAS, Pearson Canada, and D2L.

We thank Dr. George Veletsianos for his work on the Canadian Pulse Project surveys, which contributed to the findings presented in this report.

We also thank the following organizations for their support: Colleges and Institutes Canada (CICAN) and Universities Canada.

In addition, we thank Carole Freynet-Gagné and her team for their translation services that enabled the bilingual production of the 2020 CDLRA reports and presentations. We also thank Rachel Sumner, the eCampusOntario/CDLRA Liaison for her support in arranging interviews with senior administrators in Ontario and for her feedback on the Ontario report.

Most importantly, we thank our survey and interview respondents.





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EXECUTIVE SUMMARY

The Ontario Report is developed under the leadership and support of eCampusOntario and the Government of Ontario.

This report is informed by the collective results of the research studies conducted by the Canadian Digital Learning Research Association (CDLRA) throughout 2020, namely the Canadian Pulse Project and a series of qualitative interviews. The Canadian Pulse Project consisted of two short surveys, one in Spring 2020 and one in Fall 2020, each of which involved an outreach to administrators and faculty at Canadian postsecondary institutions via email mailing lists. In late Fall of 2020, the CDLRA Research Director conducted one-on-one interviews via videoconference with senior administrators (e.g., Provost, VP Academic) at colleges and universities throughout Ontario.

The purpose of these research undertakings was to better understand the impact of the COVID-19 pandemic on the state of digital learning in Canada and this report presents the findings that are specific to the province of Ontario.

- The Spring 2020 Pulse Survey was open from April 24 through May 1, 2020. There were 261 total participants (115 from Ontario).
- The Fall 2020 Pulse Survey was open from August 10 through September 22, 2020. There were 427 total participants (194 from Ontario).
- From the CDLRA roster of 48 publicly funded postsecondary institutions in Ontario, 12 senior administrators participated in a videoconference interview and an additional five senior administrators provided written responses to the research questions as an alternative.

The questions asked in the Pulse Surveys focused on:

- Professional development and faculty preparedness to teach online
- Supporting students and faculty
- Levels of optimism-pessimism for the future of higher education





The questions asked in the interviews with senior administrators, centred on identifying:

- The impact of the COVID-19 pandemic on institutional strategies for digital learning.
- Successes and challenges observed over the past year.
- The most pressing needs of institutions as the pandemic continues.
- Strategies for tracking changes in enrolments over time, particularly enrolments in online and hybrid courses/programs, to assess the long-term impact of COVID-19 on digital learning.

Ontario Objectives and Key Metric Areas

In 2019, the Ontario government introduced a set of performance metrics (Ontario Objectives and Key Metric Areas) to evaluate the outcomes of post-secondary education in the province. Throughout this report, we have featured the areas of our research findings that align with these metrics.





KEY FINDINGS

The primary overarching finding of the research conducted throughout 2020 is that the shift to online course delivery in response to the COVID-19 pandemic will likely have a profound and lasting impact on postsecondary education in Ontario. According to senior administrators, the pandemic forced an accelerated implementation of their strategic plans for online learning, in many cases by years. Further, senior administrators anticipate that once a full return to inperson learning is possible, online and hybrid courses will continue be offered to a much greater extent than before.

The other key findings that emerged when examining the data collectively are as follows:

- The primary concerns at the institutional-level and at the faculty level related to supporting students. Equity, access, and facilitating student engagement were among the top concerns.
- Professional development initiatives to train faculty to teach online were widespread and well-received.
- Faculty attitudes toward teaching online and teaching with technology have shifted. Many faculty are interested in continuing to integrate technology into their teaching practices, which may lead to increased hybrid offerings post-pandemic.
- By the fall semester, the majority of respondents reported feelings of optimism toward the future of higher education.
- The need for developing consistent definitions for terms related to digital learning (e.g. remote learning, online learning, blended/hybrid learning) is imperative for tracking the long-term impact of the pandemic on postsecondary education.





INTRODUCTION

In March of 2020, as the Canadian Digital Learning Research Association (CDLRA) was preparing to launch our annual National Survey of Online and Digital Learning, the World Health Organization declared COVID-19 to be a global pandemic and Canadian higher education moved almost entirely online. The digital learning landscape in Canada was transformed, practically overnight.

Like institutions across the country, the CDLRA pivoted our research plans to capture the transformations that were taking place over the course of the year. We postponed our usual National Survey until 2021 and added new research projects: the Canadian Pulse Project and qualitative interviews with senior administrators at institutions across the country.

The Canadian Pulse Project consisted of two short surveys, one in Spring 2020 and one in Fall 2020. The purpose of these surveys was to gain a sense of the changes and challenges that faculty and administrators experienced as the year unfolded. Recruitment for the Spring survey was done via the Academica Top Ten included 273 higher education faculty and administrators from across Canada with most of the responses coming from Ontario, Alberta, and British Columbia.

With support from eCampusOntario and the Government of Ontario, the 2020 Ontario Report provides the Ontario-specific findings from the Canadian Pulse Project. In addition, the report also includes findings from one-on-one interviews with senior administrators from colleges and universities across Ontario. Together, the findings from these projects provide tremendous insight into how Ontario institutions transformed their practices in response to an unusual year in which the COVID-19 pandemic required that nearly all courses to be delivered online.

At the time of writing this report, the pandemic persists and post-secondary courses in Ontario continue to be delivered primarily through Internet technology.





EVOLVING DEFINITIONS

When students and faculty began the 2020 Winter semester, it was business as usual with classes being held in-person unless a course or program was designed to be taught online. No one expected that the term would end with nearly all courses being delivered remotely, primarily through the use of online platforms.

Online Learning versus Emergency Remote Teaching

Of utmost importance as we discuss teaching and learning online in the pandemic context is the misuse of the term *online learning* to describe the nature of instruction at the onset of the pandemic. Throughout 2020, scholars in the field of digital learning called for use of the term *emergency remote teaching* instead, suggesting that online learning is more than a mode of delivery^{1 2 3}.

This report expands upon the definitions that the CDLRA put forth in the 2019 National Report. Namely, the revised definitions differentiate intentional online course delivery from emergency online course delivery.

Distance Education: No classes are held on campus and all instruction is conducted at a distance.

*Remote learning is the tenet of distance education and it encompasses both online learning and other modes of delivering instruction and course materials at a distance.

Online Learning: A form of distance education where the primary delivery mechanism is via the Internet. Instruction is delivered synchronously or asynchronously and the course and materials are "intentionally designed in advance to be delivered fully online. Faculty use pedagogical

³ Johnson, N., Veletsianos, G., & Seaman, J. (2020). U.S. faculty and administrators' experiences and approaches in the early weeks of the COVID-19 pandemic. Online Learning, 24(2), 6-21. https://doi.org/10.24059/olj.v24i2.228

¹ Bates, T. (2020, April 7). What should we be doing about online learning when social distancing ends? Online Learning and Distance Education Resources. https://www.tonybates.ca/2020/04/07/what-should-we-be-doing-about-online-learning-when-social-distancing-ends/

² Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. Educause Review. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning



strategies for instruction, student engagement, and assessment that are specific to learning in a virtual environment" (Bates, 2020, para. 18).

Emergency Remote Teaching: "A temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances [which] involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated" (Hodges et al, 2020, para. 13). Online course delivery was the primary mode of emergency remote teaching in 2020 and it included synchronous and asynchronous instruction and communication.

Hybrid Learning: Also referred to as blended learning, hybrid courses or programs are intentionally designed to combine both online and in-person instruction.

As the year progressed, it also became apparent that the meanings attached to commonly used terms such as remote learning, online learning, and hybrid learning were becoming increasingly muddied and varied as more people added these terms to their lexicon. The one-to-one interviews conducted with senior administrators in late Fall confirmed that different institutions attach very different meanings to these same terms and it appears that institutional definitions, themselves, have evolved in the pandemic context. Tracking the development of online and hybrid learning (both regionally and nationally) will prove challenging in the years to come unless consistent definitions are adopted nation-wide.

The CDLRA has placed a priority on revisiting how each institution defines its remote, online, and hybrid offerings in 2021. Our objective is to develop a strategy that facilitates consistency in tracking online and hybrid offerings to gain a national-level understanding of the development of online and hybrid learning in Canada.

Ontario Key Reporting Metric:

Improve the collection and analysis of post-secondary online and technology-enabled learning data in Canada.

- Interviews with senior administrators confirmed that definitions for remote, online, and hybrid learning vary considerably from institution to institution and impact the classification of courses for tracking.
- Common definitions, particularly as digital learning grows and evolves, are necessary for analyzing enrolments and learning data at the provincial and national level.



CHALLENGES OF 2020

As one would expect, the sudden shift from the status quo of predominantly in-person learning to delivering nearly all courses online created exceptional challenges for institutions, faculty, and students.

One-on-one interviews with senior administrators in Ontario provided insight into the most pressing challenges that institutions have faced, and continue to face, in the pandemic context.

Institutional Challenges

Institutions found themselves with the formidable task of ensuring that faculty and students had the necessary resources to teach and learn remotely, training faculty to teach online, and managing the unexpected costs associated with the shift to emergency remote teaching.

Access. The primary challenge that many senior administrators mentioned was student and faculty access to the technologies needed to learn remotely. Several administrators noted that they were surprised by the number of students in major urban centres, such as Toronto and Ottawa, who did not have access to reliable high speed Internet or suitable devices for accessing their courses. One administrator discovered that staff and faculty were driving to the parking lots of fast food restaurants to use their wi-fi in order to do their work. Administrators described solutions provided by their institutions such as enabling wi-fi access in campus parking lots, providing Internet sticks to those in need, and purchasing devices in large quantities to loan to students.

Ontario Key Reporting Metric:

Digital divide – What resources exist for students to overcome barriers to accessing online courses?

- Some institutions provided devices and wi-fi access to students
- Issues surrounding access and equity were a major concern for senior administrators.

Several administrators commented that there was a sense of pressure from students and parents to reduce costs. Yet, in many ways, Ontario institutions bore increased costs in 2020 to facilitate access to technologies and in their efforts to provide quality online instruction.



Ontario Key Reporting Metric:

Provide ongoing access and support for free and open resources for use by students and instructors in Ontario institutions.

- Several senior administrators mentioned the use of Open Educational Resources (OER) at their institution.
- Francophone administrators noted that OER tend to be designed for English-speaking students and that there is a need for a greater repository of OER for Francophone students.

Course Quality. Improving the quality of courses delivered online was of paramount importance for senior administrators, particularly as it became apparent that the pandemic would require online course delivery as the primary mode of instruction for an extended period of time. To shift from the state of emergency remote teaching that happened at the onset of the pandemic to quality online course delivery for the Fall, institutions provided professional development opportunities for faculty and expanded their instructional design teams. Administrators commented on the hard work of both faculty and staff in their Centres for Teaching and Learning to improve the quality of online course delivery for the Fall semester, while noting that this continues to be an area of challenge.

One senior administrator at a college remarked:

"Faculty development and facilitating consistent and coordinated approaches to teaching and learning, and curriculum design and delivery, continue to present challenges (as well as opportunities) - especially given the magnitude of the change and impact on teaching and learning."

Hands-On Learning. Despite the efforts of faculty and institutional staff, senior administrators noted that converting courses that have high requirements for hands-on learning experiences to an online format was particularly challenging. Nearly all administrators remarked that they would highly value information on innovative pedagogies that other institutions may be implementing in order to overcome the challenges associated with trying to teach hands-on activities in a virtual setting (e.g., labs, practicums and work placements, and trades-related skills).



Ontario Key Reporting Metric:

Promote innovation in technology-enabled teaching and learning practice; improve quality and drive innovation in online and technology-enabled learning.

- Several senior administrators mentioned the adoption of augmented reality (AR) and virtual reality (VR) to support previously hands-on learning experiences in virtual environments.
- There is an interest, and a need, for further sharing of innovative pedagogies and best practices for teaching with technologies among institutions.

Students Engagement. Lastly, student engagement and expectations presented challenges for institutions. For many institutions, an on-campus experience where students can interact with one another and faculty in a real-time in-person setting is a critical piece.

One senior administrator at a university described how the encouraging the use of pre-existing asynchronous online courses, which had been well-received by online students prior to the pandemic, presented problems for first-year students who would have attended classes inperson, if not for the pandemic. The administrator remarked:

"We have found that many students (especially first-year students who do not have established social circles at the university or experience interacting with professors) have struggled with this approach to delivery as it does not provide the engagement with professors and peers that they want and need and they feel that they are having to teach themselves."





TEACHING AND LEARNING CHALLENGES

Senior administrators acknowledged that faculty and students experienced challenges related to workload associated with online course delivery, assessment, and comfort with technology.

Workload. It was widely recognized among senior administrators that most faculty experienced stress, overwhelm and a steep learning curve over the past year as they adapted to delivering their courses online, many for the first time. One senior administrator at a university explicitly noted a perception among faculty and students that they "feel that the workload [associated with online course delivery] is increased over face-to-face delivery."

The same administrator later added the following remark, highlighting the impact of the transition to online course delivery on faculty and student mental health:

"As we approach the winter semester, we are experiencing significant instructor fatigue due to many factors, including increased workload, teaching in a new environment, personal responsibilities, and concern for well-being. There are also challenges facing students and their mental health. Students are feeling overwhelmed and isolated. Learning remotely reduces the ability to create peer to peer learning communities within the classroom and outside of the classroom. These communities are critical to a student's well-being and overall experience in post-secondary education. This can be incredibly challenging for International students who are engaging in the course at odd hours or have difficulty accessing the online environment due to government restrictions."

Assessment. Senior administrators remarked that student assessment proved challenging in 2020. They heard concerns about online proctoring and academic integrity from faculty and students. With the understanding that assessment is critical to accreditation, institutions and faculty have been working to strike a balance between offering flexibility to accommodate student needs in the pandemic context while maintaining academic integrity.

Regarding concerns about online proctoring, one university administrator stated:

"Students are very resistant to someone watching over their shoulder and they cite privacy concerns . . . although, in most cases, these are AI proctoring, there's not really a person unless they get flagged. So there are a lot of student concerns around that. At the same time, for certain courses, at least, in my opinion, at least, it really is important to have some form of proctoring."

Changes in assessment strategies were also linked to workload. As one senior administrator at a university stated:

"Instructors were encouraged to conduct assessments using more frequent, smaller assignments and quizzes rather than two or three high stakes exams, as this may enhance student learning and decrease anxiety. However, we are learning that the impact of this is experienced as increased workload, particularly if most of a student's courses have weekly or almost weekly assignments/assessments."



Another senior administrator at a university echoed this sentiment:

"I'm hearing more and more complaints from students about the workload. And it's not really clear if it's really the workload. I know a lot of instructors are doing lots of smaller quizzes as they go along to keep students engaged and to maybe take the weight off of this final exam . . . So I'm not sure if that's really more workload or just more scheduled work that they don't like. At the same time, a lot of students are obviously under more stress than usual, maybe have other commitments they wouldn't normally have had at home, things like that. And so it may be that it's the total of all the things going on, that's adding to the workload, but whatever it is, some students are finding themselves under a lot of pressure."

Comfort with Technology. Senior administrators also identified faculty and student comfort with technology as a challenge that arose during the transition to online course delivery. One administrator noted that some faculty did not have the expected level of familiarity with the institution's Learning Management System (LMS), as was required by institutional policy.

Another senior administrator at a college remarked that thinking that millennials naturally have the technological literacy to navigate an online learning experience is a false assumption and made the following statement:

"We assume millennials will all be just at one with the technology. Well, they're at one with the technology they're used to working with. That's not necessarily the technology we have. And they're also at one with technology that doesn't necessarily require meaningful evaluation and input. So yeah, they're used to Facebook. They're used to posting things, they're used to texting. That's not the same as doing an assignment online."





PROFESSIONAL DEVELOPMENT AND FACULTY PREPAREDNESS

Prior to 2020, many faculty had little to no experience with teaching in an online context. With the rapid shift to emergency remote teaching in 2020, many faculty found themselves in the position where they were expected to use online platforms and digital technologies to deliver their courses with no advance preparation using unfamiliar technologies.

In the first few weeks of the pandemic, there was hope that the shift to emergency remote teaching would be short-lived; however, that hope soon faded and it became clear that courses would be delivered online for the foreseeable future. The extension of remote learning from Spring in the Fall gave rise to the need for faculty professional development related to teaching online.

Spring 2020

The Spring Pulse Survey was conducted as faculty and administrators wrapped up the Spring semester, with the understanding that the Fall semester would likely be online. The survey asked faculty about the professional development topics related to teaching online that were of the most interest and their desired professional development methods.

The majority of faculty reported needing professional development in multiple areas related to teaching online. The top three areas where faculty reported needing professional development were assessment strategies for teaching online (85%), pedagogical strategies for teaching online (83%), and strategies for supporting students in learning online (80%). Roughly three-quarters of faculty also reported a need for professional development on how to use specific technologies and how to convert in-person courses to an online format.

Overall, the chart below shows that faculty reported a strong need for professional development that covered many aspects of teaching online.





Ontario: Professional Development Topics Needed

The survey also asked faculty about the delivery of professional development and what methods of delivery would work best for them. An online resource hub with links to different trainings was the most popular response (75%). More faculty were interested in asynchronous professional development than synchronous options, although roughly one-half of faculty expressed a desire for synchronous online professional development.



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Ontario: Desired Professional Development Methods

One senior administrator at a college described the implementation of an intense week professional development training at the onset of the pandemic, stating that pausing classes for one week to train faculty proved to be highly valuable:

"We suspended the semester for a whole week. We closed down, we said to the students, "There's no class for one week."... And we trained every day, the teachers, so that one week was very, very intense... it was like "we're cooling down, we're taking a read, we're going to develop a plan, we're going to train you, and then we're going to restart". That's the best decision we ever made, to close down for one week to be able to train everybody, and to make sure that we were all on the same page. That's the best decision we made."



Fall 2020

The second Pulse Survey took place during the early weeks of the Fall semester. Considering the need for professional development that was expressed by faculty in the Spring, the Fall Pulse Survey asked faculty about the types of professional development that was recommended or provided to them by their institution over the summer months.

Almost all faculty (93%) had live or recorded webinars made available to them and between one-half to two-thirds of faculty had the following types of training recommended or provided: training through an online resource hub (66%), faculty mentoring program (61%), online faculty community (58%), and self-paced training (57%). For obvious reasons, given the pandemic restrictions, only about one-quarter of faculty had in-person training recommended or provided to them.

The number of faculty that had no professional development options (related to teaching online) recommended or provided to them by their institution was miniscule (1%), which suggests that institutions placed high priority on training faculty to teach online over the summer months.



Ontario: Professional Development Recommended and/or Provided



While providing professional development for teaching online was of critical importance, it was also necessary to investigate whether faculty found this professional development to be useful. The Fall Pulse Survey asked faculty about the overall effectiveness of the professional development that was made available to them.

Interestingly, there was little difference between the types of professional development offered that were offered online, with over 90% of faculty reporting that these professional development options were effective. The findings suggest that any type of professional development was highly useful and there wasn't one form of professional development that was significantly better than the others.



Ontario: Effectiveness of Professional Development

Along with investigating the nature and effectiveness of professional development for faculty at the start of the Fall semester, the Fall Pulse Survey also asked about faculty preparedness to teach online. Faculty, themselves, provided responses and administrators were also invited to offer their perceptions of faculty preparedness.



Roughly three-quarters (76%) of faculty agreed that they felt prepared to some extent to teach online in the Fall semester.



Ontario: I feel prepared to teach online this fall

Administrators were more optimistic about faculty preparedness and they all agreed to some extent that the faculty members at their institution were prepared to teach online in the Fall semester.



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Ontario Key Reporting Metric:

Train the next generation of digitally-literate educators; support educators in the advancement of online and technology-enabled pedagogy in Ontario.

- Providing professional development for teaching online to faculty was a priority for institutions in 2020 and considerable resources were put toward this undertaking.
- The professional development that faculty received was useful for them and the majority entered the Fall semester feeling prepared to teach online.



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SUPPORTING STUDENTS AND FACULTY

It is widely recognized that students and faculty faced extraordinary challenges throughout 2020, particularly in the early weeks of the pandemic. The Spring Pulse Survey asked two questions which focused on the supports that institutions were putting in place and the Fall Pulse Survey asked about equity and student communications.

Institutional Supports

The Spring survey asked respondents what their institution provided, or supported, to facilitate emergency remote teaching during the early weeks of the pandemic. The vast majority of respondents (91%) reported having access to online discussion boards and most respondents (85%) reported having access to online polling or quizzes. Roughly three-quarters of respondents reported that their institution supported online alternatives for instruction and student engagement, including having students give speeches or presentations online (79%), having students complete interaction exercises online (75%), small group asynchronous exercises (73%), and small group exercises online (73%).

Hand-on activities (such as lab activities) and providing formal tutoring or peer-to-peer learning were provided to a lesser extent, but still to the majority of respondents.



Ontario: Institution provided or supported



Partnerships

Considering that the Spring Pulse Survey was conducted at the time that institutions were announcing plans for the Fall, the survey asked responding administrators about the value of partnerships as they made preparations to support students and faculty through another semester of online course delivery.

Roughly three-quarters of Ontario administrators reported that partnerships with technology and service providers (77%) and partnerships with other institutions in the province were valuable (72%). Additionally, 70% of administrators reported that partnerships with nationallevel academic organizations were of value. Roughly one-half of administrators noted the value of partnerships with institutions in provinces outside of Ontario and just under one-third of administrators perceived partnerships with Online Program Management (OPM) companies to be valuable.



Ontario: Value of partnerships in preparing for the Fall



Ontario Key Reporting Metric:

To reduce duplication in educational technology purchasing practices through demand, aggregation, and lower costs to institutions.

• Most administrators at Ontario institutions perceived partnerships with technology and service providers, with other Ontario institution, and with national-level academic organizations to be of value.



EQUITY

One of the main concerns noted by senior administrators during the one-to-one interviews was the issue of equity. Great disparities exist among faculty and among students in terms of having the technological resources and a suitable workspace to teach and learn.

In the Fall Pulse Survey, both faculty and administrative respondents were asked whether they were concerned about their capability to deliver equitable learning opportunities when delivering courses online.

One-half of respondents were concerned to some extent about their capability to deliver equitable learning experiences online and roughly one-third were unconcerned to some extent. The remaining 16% of respondents were neutral.



Ontario: Concern about capability to deliver equitable learning opportunities online

Collectively, the survey findings and interview findings highlight a need for further investigating the complexities surrounding these inequities in order to mitigate them or to develop alternatives for students for whom learning in an online environment poses insurmountable challenges.



COMMUNICATIONS WITH STUDENTS

From the onset of the pandemic through to the present state, few faculty have been able to have in-person interactions with their students. The Fall Pulse Survey asked faculty how they have been communicating with students outside of class sessions.

Interactions between faculty and students outside of class has primarily been through email, with almost all faculty (94%) reporting that they use email to communicate with students. Roughly two-thirds of faculty also use the conferences system within their institution's Learning Management System (LMS) to communicate with students. About one-half of faculty reported using videoconferencing, whether it be to communicate with small groups of students or for one-to-one interactions.

A minority of faculty (19%) communicated with students via phone calls and only a few respondents used text messaging (10%) or social media (5%) for student communications.



Ontario: Communicate with students outside of class sessions



OPTIMISM – PESSIMISM FOR THE FUTURE

In the early weeks of the pandemic, there was a collective sense of overwhelm among faculty and administrators as they transitioned to teaching remotely in an online context. To assess how the pandemic and the experience of emergency remote teaching was impacting respondents' feelings toward to future of higher education, the Spring Pulse Survey asked whether respondents felt optimistic or pessimistic about the overall future of higher education over the next two years.

Nearly one-half of respondents (47%) reported feeling optimistic to some extent whereas a sizeable minority (38%) reported feeling pessimistic to some extent.



Ontario: Optimistic or pessimistic about the overall future of higher education over the next 2 years?



To gain a sense of whether faculty and administrators' feelings of optimism and pessimism had shifted as they became more accustomed to an online model of course delivery, the Fall Pulse Survey asked again about feelings toward the future. Respondents were asked whether they felt optimistic or pessimistic about the overall future of higher education.

The findings revealed a significant shift from the levels of optimism and pessimism seen in the Spring: respondents were much more optimistic in the Fall. Over two-thirds of respondents (69%) reported feeling optimistic to some extent about the overall future of higher education and only 15% reported feeling pessimistic. The proportion of respondents who gave a neutral response remained consistent from the Spring (14%) to the Fall (16%).



Ontario: Optimistic or pessimistic about the overall future of higher education



POST-PANDEMIC IMPLICATIONS

The one-on-one interviews with senior administrators provided valuable insights into the potential long-term impact of the COVID-19 pandemic on higher education. There was consensus among interviewees that, even when a return to in-person learning becomes a possibility, institutions will continue to provide considerably more online and hybrid options than they did pre-pandemic. Ultimately, it seems likely that a 'new normal' will emerge post-pandemic, which will be distinctly more digital than the pre-pandemic status quo.

For multiple institutions, the pandemic accelerated the implementation of an alreadydeveloped strategic plan for digital learning. Several senior administrators mentioned that the rapid transition to online course delivery was do-able because they already had a strategic plan at the ready. The challenge was activating a plan that was meant to be rolled out over the course of years in a matter of weeks, if not days.

Despite the stress and overwhelm experienced by administrators, faculty, and students, by the Fall semester many had adapted to a model of online course delivery and some even found this mode of teaching and learning to be preferable. Others, however, experienced inequities or other challenges and found online courses difficult.

Based on the remarks made by senior administrators, it seems likely that our new (postpandemic) normal will emphasize flexibility to better meet student needs. As one university administrator stated:

"In the context in which there are both faculty and students that are very comfortable with, and very uncomfortable with on-line learning, the challenge is to create a university in which both can make choices to access learning within an environment that supports them best."

As illustrated by the remarks from senior administrators below, there will also likely be an increase hybrid courses and technology integration in the classroom.

"My guess is we will be doing almost all hybrid over the next several years. Face-to-face traditional delivery, even when we are back to whatever normal looks like, will be limited and there'll be really special circumstances requiring it. That is where I see us going . . . whatever can be done online will be done online going forward. And that opens a lot of doors, a lot of opportunities for us as an institution. We've always looked beyond our own catchment area for students, but this really brings home to people the fact that we can we can deliver globally, we can do whatever we need to do with a much broader audience." (Senior Administrator, College)



"I think a lot of people didn't really know how to do it [online instruction] before and didn't feel motivated to learn how to do it. But now that they have their content, I think that even if they decide, yes, they want to go back to in person delivery, I think we'll find that a lot of the content will still be in an online format, or at least available in an online format. Going forward longer term, I really do wonder if there's really much reason to be holding those 300 to 500 person first year lectures." (Senior Administrator, University)

It is critical to acknowledge that the potential expansion of online and hybrid offerings will come with a hefty price tag and institutions may need support to equip themselves for such an expansion.

One senior administrator at a university made the following point:

"In the future if we want to do more online learning, we would need more resources to help us with that. That's an important point. And our faculty members also tell us the same thing."

Finally, it is well-understood that the economic ramifications of the pandemic have been considerable and may be long-lasting. Institutions recognize that the flexibility that online learning affords is of value to those who may need skills re-training to change their career path in light of the pandemic.

One university administrator made the following remark about the importance of flexibility for mature students who are already in the workforce.

"I think that for our students, what's becoming fairly clear, just looking at students survey data, is that students would like a blend of online and on-campus, and I'm sure that students will want to continue with that. It creates a lot more flexibility in their lives, especially for anybody who is at all mature was trying to work a second job, as many students are. To be able to take a couple of courses a term asynchronously would be a huge benefit to them. Anyone who's working who's a parent who is learning, and I don't think that will go away. I think that the kind of flexibility that the students at our institution are taking advantage of, I believe will be maintained."

The same administrator also acknowledges the potential role of alternative credentials (specifically microcredentials) within their workforce training:

"I also think we're seeing that we might be able to move into a bit of a workshop model with some of our technologies and techniques. So microcredentials is another difficult conversation at our university. But now that conversation is opening up a bit based on the affordances of packaging courses and the curriculum within those courses' delivery. That hybrid model, I believe, will be here to stay, just what it looks like, whether that's within courses, whether it's over a program course, in a program, year by year, term by term, I'm not sure yet. But it's definitely not going away."



Another senior administrator suggested that expanding online and hybrid courses or alternative credential offerings provides different learning opportunities that will better meet different learner needs.

Overall, the senior administrators echoed similar sentiments about how increased online and hybrid offerings going forward have the potential to meet the needs of learners who may have been previously underserved. They also countered these sentiments with the recognition that, while online learning opportunities break down barriers for some, the online context creates barriers for others. It is important to acknowledge that traditional, in-person learning will still have a significant role in the post-pandemic landscape along with the enhanced use of technologies.

Ontario Key Reporting Metric:

Post-secondary institutions and the economy.

- Course offerings are likely to become more flexible, with greater digital components or digital alternatives to meet the diverse needs of students, particularly those who are already in the workforce.
- New types of offerings, such as alternative credentials, may increase to support workforce training or re-training.





CONCLUSION

Although 2020 was a year of profound challenge, it represented a turning point for the field of online and distance learning. While Spring 2020 carried a sense of despondency and negative sentiments toward teaching online, a shift in attitudes toward online learning appears to have occurred. By the Fall semester, we observed a widespread interest in learning how to teach effectively and engage students in online contexts. Senior administrators reported that many faculty wanted to continue teaching online to some extent and that their institutions would have a considerably greater offering of online and hybrid options going forward, even when a full return to in-person learning was possible.

Notably, the collective findings of our 2020 research studies indicate that faculty uptake of professional development offerings related to online learning was unprecedented. The results of the Pulse Surveys indicate that Ontario institutions, faculty, and students showed remarkable resilience in the face of adversity and put forth extraordinary efforts to overcome the challenges of teaching and learning online. Remarks made by senior administrators during the one-on-one interviews echoed these findings.

As one senior administrator at an Ontario university stated:

"While the pandemic has brought many challenges, it is also a time where instructors have been able to explore various pedagogical approaches using technology. It has allowed instructors to consider how course design can be enhanced by reimagining what activities can be done online more effectively, thus freeing up face-to-face time to promote deeper learning experiences."

Arguably, Canadian faculty are better equipped than ever before to teach online and, according to senior administrators, there is an increased interest among faculty in continuing to teach online even after a return to in-person learning is possible; however, considerable resources are still needed to further faculty training to teach online and to ensure the quality of online offerings.

At the same time, it is important to maintain an awareness that emergency remote teaching and online course delivery has been very challenging for some students and faculty. Some students learn better via in-person instruction and some subjects are more easily taught in online contexts than others. Adding to these challenges are inequities surrounding access to technological devices, broadband Internet, and a quiet workspace in one's home environment. Many institutions incurred significant costs in providing faculty and students with the resources (e.g. loaning devices, providing Internet sticks) necessary to teach and learn from home. Considering the likelihood that online and hybrid courses will be offered to a much greater extent going forward, maintaining a front-of-mind awareness of these inequities is critical.



As we enter 2021, which will hopefully bring a return to gathering together, it is imperative that we re-evaluate our strategy for tracking the status of online and hybrid learning across the country. Prior to the COVID-19 pandemic, the CDLRA reported that all institutions in Ontario had some online offerings and the majority (55%) had a strategic plan for e-learning that was either fully implemented or being implemented (an additional 31% of institutions were developing a strategic plan for e-learning). Several senior administrators remarked that having a plan already in place or under development made the transition to emergency remote teaching much more manageable than it would have otherwise been.

Our interviews with senior administrators revealed that the way Ontario institutions define and track online, remote, and hybrid offerings varies greatly from institution to institution and that the definitions that the CDLRA had used in past surveys did not necessarily fit with how institutions were tracking these offerings internally. Further, the pandemic gave rise to the term emergency remote teaching and many courses that were offered online in 2020 were not intended to be online and should be tracked as emergency remote courses rather than online courses.

In 2021, the CDLRA plans to resume our National Survey and we will put forth a new way of categorizing course offerings. Our recategorization of offerings will account for both institutional differences in tracking online and hybrid offerings, as well as the fact that many courses taught online in 2020 would have been taught in-person had it not been for the pandemic. It is our hope that our new strategy for tracking online and hybrid learning will enable us to measure the long-term impact of the COVID-19 pandemic on the state of digital learning in Canada.





METHODOLOGY

Information for this report comes from two national surveys of higher education administrators and teaching faculty.

Spring Survey

From April 24 through May 1, 2020, the Canadian Digital Learning Research Association (CDLRA) research team surveyed faculty and administrators from across Canada to explore the learning scenarios they anticipated for fall. The survey was a collaborative effort between Nicole Johnson (Canadian Digital Learning Research Association), George Veletsianos (Royal Roads University), Jeff Seaman (Bay View Analytics), and Academica Group.

Respondents included 273 higher education faculty and administrators from across Canada with most of the responses coming from Ontario, Alberta, and British Columbia. Of the total of 14 questions, 10 were displayed to faculty respondents and 13 to administrators. Since many academics have both teaching and administrative responsibilities, respondents were asked to select their primary role and were only presented with questions for that role.

Fall Survey

For the August/September survey the CDLRA research team again surveyed faculty and administrators from across Canada to explore how they were implementing their plans for the Fall. As with the first survey, this was a collaborative effort between Nicole Johnson (Canadian Digital Learning Research Association), George Veletsianos (Royal Roads University), Jeff Seaman (Bay View Analytics), and Academica Group. Contact North was added as a partner for this portion of the project.

Respondents included 427 higher education faculty and administrators from across Canada with most of the responses coming from Ontario, Alberta, and British Columbia. Of the total of 17 questions, 15 were displayed to faculty respondents and 14 to administrators. Since many academics have both teaching and administrative responsibilities, respondents were asked to select their primary role and were only presented with questions for that role.



Fall Interviews with Senior Administrators

In October of 2020, the CDLRA Research Director, Dr. Nicole Johnson, worked collaboratively with the CDLRA eCampusOntario liaison, Rachel Sumner, to reach out to senior administrators (e.g., Provost, VP Academic) across Ontario to schedule semi-structured interviews. The Research Director conducted these one-on-one interviews from October through December via video-conferencing software to better understand how institutions have adapted to a model of primarily online course delivery in the pandemic context.





THE CDLRA TEAM

Administrative Team

Dr. Tricia Donovan is the Executive Director of the CDLRA. She is currently the Principal, eCampus at NSCC. She has over twenty years of experience with online, distance and digital education with colleges, universities and consortia. She was the Executive Director, eCampusAlberta for 15 years and works closely with the eCampus organizations across Canada and in partnership with WCET in the United States. She has experience in working with online and digital learning strategic planning, quality assurance in online learning and consultation.

Dr. Nicole Johnson is the Research Director of the CDLRA and has been involved in the field of educational technology since 2010. She is the primary author for the 2020 CDLRA reports. Outside of her role with the CDLRA, Nicole is also involved in research studies through Bay View Analytics investigating faculty experiences with digital technology and the impact of the COVID-19 pandemic on online learning in the United States. Additionally, Nicole is part of a research team at Royal Roads University that is exploring the future of higher education. She has experience researching changes in academics' online participation over time and informal learning experiences among adults in digital contexts related to competency development.

Dr. Jeff Seaman is the Director of Analytics for the CDLRA. He has worked in education information technology his entire career and currently serves as Director of Bay View Analytics. His experience includes creating and running the Computing Resource Center at the University of Pennsylvania, Chief Technology Officer at HighWired.com, Vice President of Engineering for Vista Associates, and Chief Information Officer for Lesley University. He has taught at multiple institutions and served on numerous academic technology advisory boards including Apple Computer, IBM, and Microsoft. Jeff also serves on the CDLRA Board of Directors.



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Board of Directors

Dr. Tony Bates is currently a Senior Advisor at the Chang School of Continuing Education, Ryerson University. He is also a Research Associate at Contact North | Contact Nord. He has 50 years of experience in using technology for teaching, including teaching online, managing online programs, conducting research into educational technologies, and consulting on digital learning strategies and management. Tony has pioneered the annual CDLRA National Survey and continues to guide the direction of the CDLRA as the organization evolves over time.

Dr. Denis Mayer previously led Continuing Education and Student Affairs Laurentian University and was involved in distance and online learning regionally, provincially and nationally. He chaired the board of the Canadian Virtual University, the board of the Canadian Association for Distance Education and was a board member for the Ontario Council for University Lifelong Learning and Contact North. He now does consulting in distance education and online learning.

Dr. Ross Paul has spent more than 35 years in senior academic administrative positions in Canadian colleges and universities including presidencies at Laurentian University and the University of Windsor. He has written extensively on leadership and management issues and is best known for his books Open Learning and Open Management: Leadership and Integrity in Distance Education (1990) and Leadership Under Fire: The Challenging Role of the Canadian University President (2nd edition, 2015).

eCampusOntario/CDLRA Liaison

Rachel Sumner is passionate about connecting learners with innovative experiences that build employability and has spoken and published on these topics around the world. Alongside her consultancy work, she is currently serving as the Founding Executive Director of Ontario Tech Talent, a wholly owned subsidiary of Ontario Tech University, which is intended to fuel Ontario's talent pipeline with job ready graduates. Possessing a Master's Degree in Education with a focus on Curriculum, Training and the Future of Work, Rachel is a qualified teacher and has served as a faculty member and leader in K-12, post-secondary education and corporate settings. Nominated three times for the RBC Canadian Women Entrepreneur Award, she is also a volunteer mentor for Lean in Canada and is certified by the UK's Institute of Leadership and Management as an Executive Coach and Mentor. Currently pursuing her doctoral studies in Higher Education, Rachel is undertaking a comparative study of experiential learning design in North America, Europe and Asia with a particular interest in education technology.



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