

2021 National Report:

Lessons from the COVID-19 pandemic

Report Author:

Dr. Nicole Johnson

Executive Director, Canadian Digital Learning Research Association

Research Team:

Dr. Nicole Johnson

Executive Director, Canadian Digital Learning Research Association

Dr. Jeff Seaman

Director, Bay View Analytics and Director of Analytics, Canadian Digital Learning Research Association



Canadian Digital Learning
Research Association
Association canadienne de
recherche sur la formation en ligne



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EXECUTIVE SUMMARY

After a one-year hiatus due to the challenging nature of 2020, the Canadian Digital Learning Research Association (CDLRA) resumed our *National Survey of Online and Digital Learning* in Spring 2021. Our key research objective was to assess the ongoing impacts of the pandemic on the state of digital learning in Canada.

In 2021, the CDLRA surveyed institutions during the vaccine rollouts, before the rise of the delta variant of the virus. When institutions were completing the survey, it appeared as though the worst of the pandemic could be over by the start of the Fall 2021 semester, with few restrictions needed.

At that time, topics of interest within the Canadian post-secondary landscape included: defining key terms related to modes of course delivery (e.g., online learning, hybrid learning), faculty attitudes toward different aspects of digital learning, student experiences and preferences, strategies implemented to overcome challenges related to the pandemic, anticipated trends in digital learning, and the impact of the pandemic.

The 2021 National Report of Online and Digital Learning shares the findings related to the following topics:

- Strategies implemented to overcome challenges related to the pandemic
- Anticipated trends in digital learning
- The impact of the pandemic

For more 2021 National Survey findings, the CDLRA invites our readers to read our special reports dedicated to the following additional topics:

Evolving Definitions in Digital Learning: A National Framework for Categorizing Commonly Used Terms provides an in-depth discussion about the different ways that Canadian post-secondary institutions are defining keywords in digital learning (e.g., online learning, hybrid learning, remote learning, distance learning, etc.)

The *2021 Special Topics Report: The Growth of Online and Digital Learning Resources in Canadian Post-Secondary Education* discusses the data gathered by the CDLRA on how the proportion of fully online course enrolments has changed over time. The report also provides insight into institutional perspectives on faculty attitudes toward different aspects of digital learning and institutional views on student preferences and expectations. We thank the Canadian Publishers' Council and Pearson Canada for sponsoring the 2021 Special Topics Report.

In addition, the *2021 Ontario Report* and *2021 Québec Report* provide findings on all of the topics covered in the 2021 National Survey of Online and Digital Learning, specific to those provinces. We thank eCampusOntario and the Québec Ministry of Education for sponsoring these reports.

The CDLRA's reports are available via our publications page at: www.cdlra-acrfl.ca/publications.

Key findings for the 2021 National Report:

- There appears to be a strong interest in hybrid learning (a mix of online and in-person learning). Institutions reported that they consider growth in hybrid learning to be likely.
- Institutions are investing in faculty professional development, faculty support, and the necessary infrastructure (e.g., online learning platforms and software) to support expanded online and hybrid course offerings.
- Regardless of learning mode, institutions expect to use more educational technologies and digital resources in their courses.

Student assessment proved challenging during the pandemic as previous, in-person assessment methods often did not work in an online context. Institutions mentioned exploring and using alternative assessments; however, institutions provided few details about the nature of these alternative assessments.



INTRODUCTION

The 2021 National Report on the annual *National Survey of Online and Digital Learning* bridges the challenges institutions have experienced since the onset of the pandemic with their expectations for the near future. The report shares national-level findings from the quantitative and qualitative data collected through the 2021 National Survey.

When asking open-ended questions in all our 2021 research initiatives, we asked institutions whether they would prefer to remain anonymous or whether they would like to be quoted and named in our reports. As a result, the 2021 National Report features direct quotes from institutions that desire to publicly share the work that they are doing to support and advance digital learning. We thank these institutions for their willingness to share their experiences and practices openly with others.

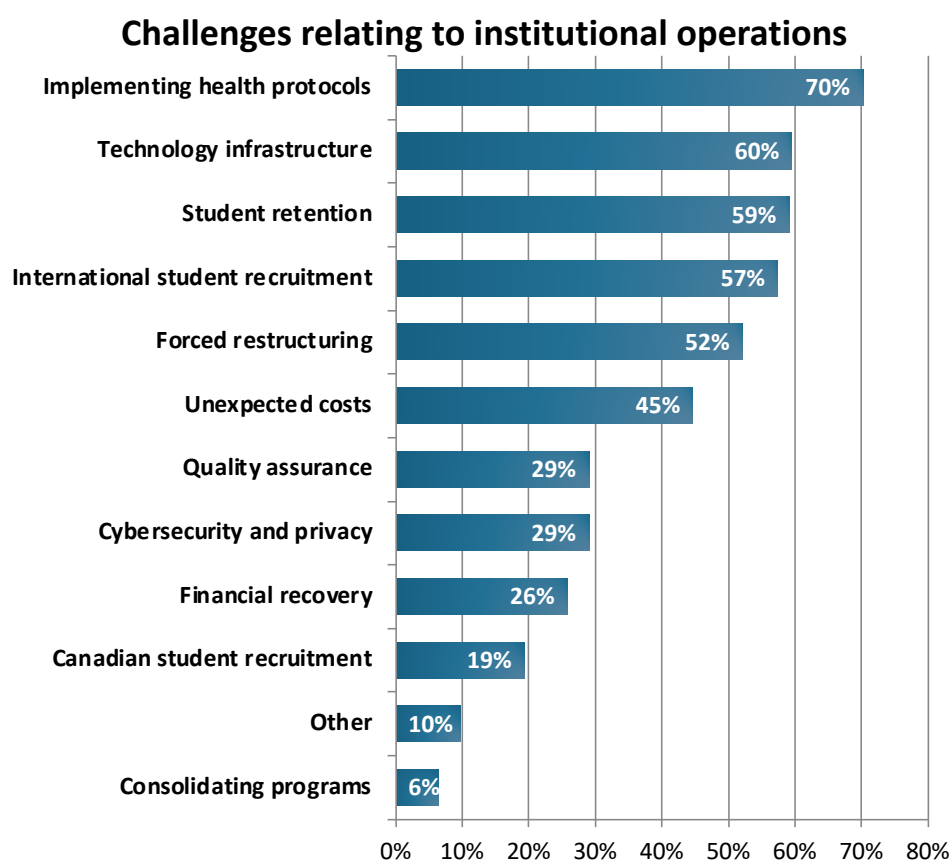
The CDLRA roster of public post-secondary institutions in Canada consists of 234 institutions (colleges, universities, polytechnics, and CEGEPS). In 2021, 121 institutions responded to the 2021 National Survey for a response rate of 52%. The 121 respondents represent 74% of all enrolments among these 234 institutions. Further details about the research methods for the 2021 National Survey are available in the methodology section of this report.



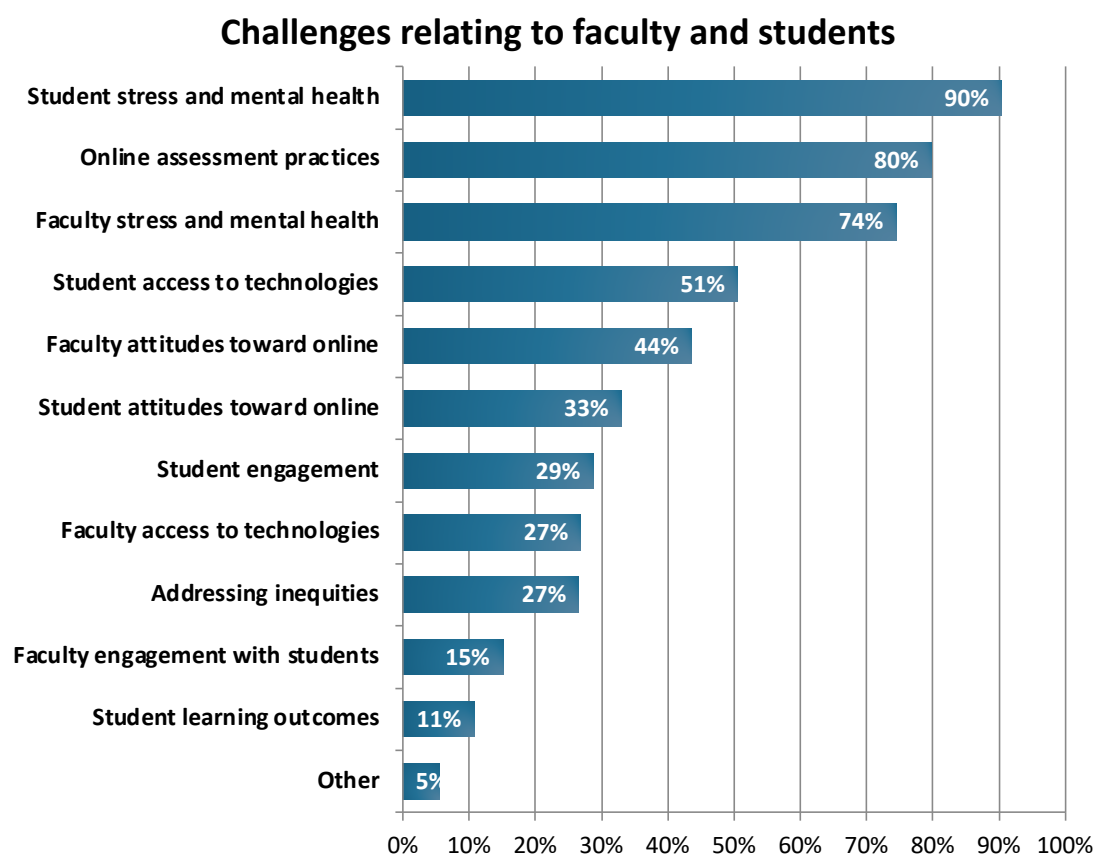
INSTITUTIONAL CHALLENGES DURING THE PANDEMIC

Canadian institutions delivered most courses online in the Fall 2020 and Winter 2021 semesters, and on-campus activities had to adhere to provincial health orders. The survey listed a series of possible challenges to identify the top challenges relating to institutional operations and faculty and students. Participating institutions were asked to select five challenges that they deemed most pressing for each area. The survey also asked respondents to describe strategies they implemented to overcome these challenges.

Regarding institutional operations, more than 50% of institutions identified five challenges as most pressing for them during the first year of the pandemic: implementing health protocols (70%), technology infrastructure (60%), student retention (59%), international student recruitment (57%), and forced restructuring (52%).



When asked about challenges related to faculty and students, over 50% of institutions identified four primary challenges: student stress and mental health (90%), online assessment practices (80%), faculty stress and mental health (74%), and student access to technologies (51%).



To overcome challenges in each area, institutions described implementing strategies that could address a broad range of issues. Some of the strategies described by institutions are as follows:

- Taking a team-based approach by establishing coordinated, cross-disciplinary task forces to address challenges ranging from technology, to health and safety protocols, to teaching, to labour concerns.
- Enhanced domestic marketing and strengthened online options to retain international students.

- Technology upgrades to support quality online learning and to increase capacity for online learning (one Alberta College reported setting minimum quality standards “to determine what every student should expect in an online course”).
- Curriculum development for online courses and faculty professional development.
- Funding new positions related to teaching and learning online.
- Furloughs, staffing cuts, and staff redeployments.

Institutional Spotlight

Two of the institutions that provided the CDLRA with permission to publicly share their strategies for overcoming challenges related to the pandemic were the University of Regina in Saskatchewan and Olds College in Alberta.

“The University has constantly prioritized safety, and has adapted to ongoing pandemic-driven challenges by embracing the primarily remote learning and working environment. New investments have been made to enhance online learning, training and other resources for students and employees. New communication strategies have supported clear and frequent information-sharing. We work in partnership with external parties, including government, to understand and respond to public health directives, including the impact on international student recruitment. We have undertaken a consultative approach with the senior academic and administrative leadership to find short-term solutions to the financial challenges resulting from the pandemic, as well as exploration of actions and initiatives to secure the University's future financial sustainability.” ~ University of Regina

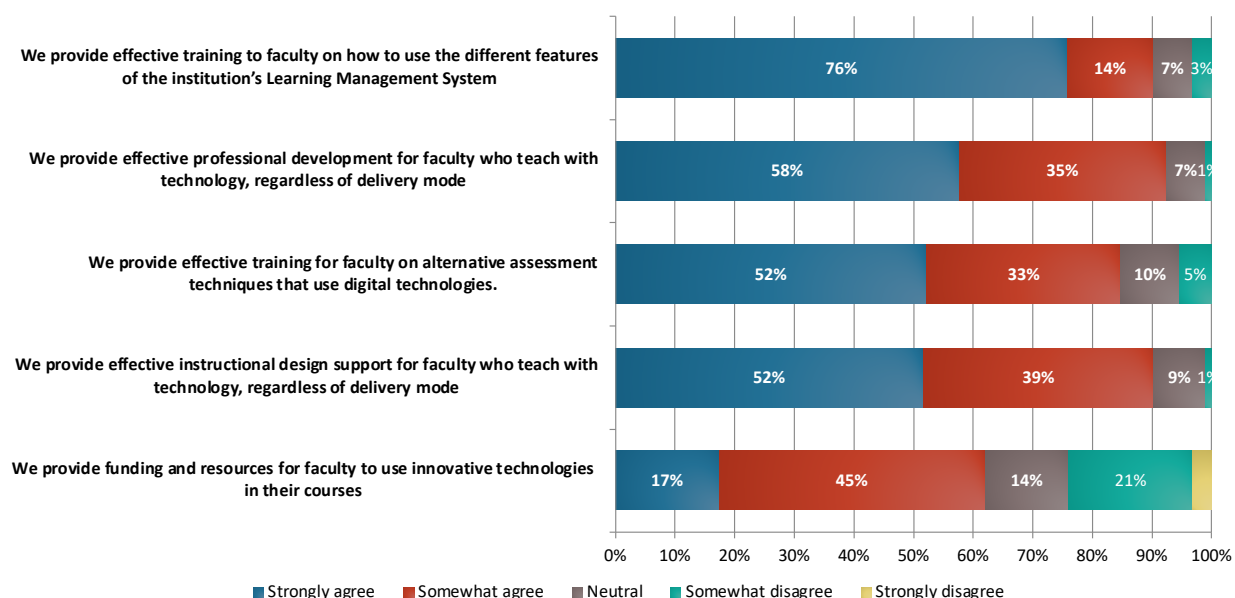
“Consistent engagement with the Teaching and Learning Centre of Innovation for instructional support with new/emerging modes of delivery (including pedagogical considerations and technical requirements)” ~Olds College

Support and Resources for Faculty During the Pandemic

The research studies conducted by the CDLRA in 2020 showed that the need for support and resources for faculty teaching online was an ongoing challenge as the pandemic continued. The 2021 National Survey explored this need further and asked respondents about how their institution provided specific support and resources for faculty one year into the pandemic.

Many institutions (90%) agreed that their institution provides effective training to faculty on using the institution's Learning Management System (LMS), with over three-quarters of these institutions reporting strong agreement. Most institutions also agreed (with over half reporting strong agreement) that they provide effective training for faculty who teach with technology (93%), effective training on alternative assessment techniques that use digital technologies (85%), and instructional design support for faculty who teach with technology (91%).

To what extent do you agree with the following statements about support and resources for faculty at your institution?



In summary, the pandemic has presented ongoing challenges for Canadian post-secondary institutions. Institutions have implemented a wide range of strategies to address their challenges. The majority are providing a variety of supports to improve the teaching and learning experience for faculty and students.

ANTICIPATED TRENDS

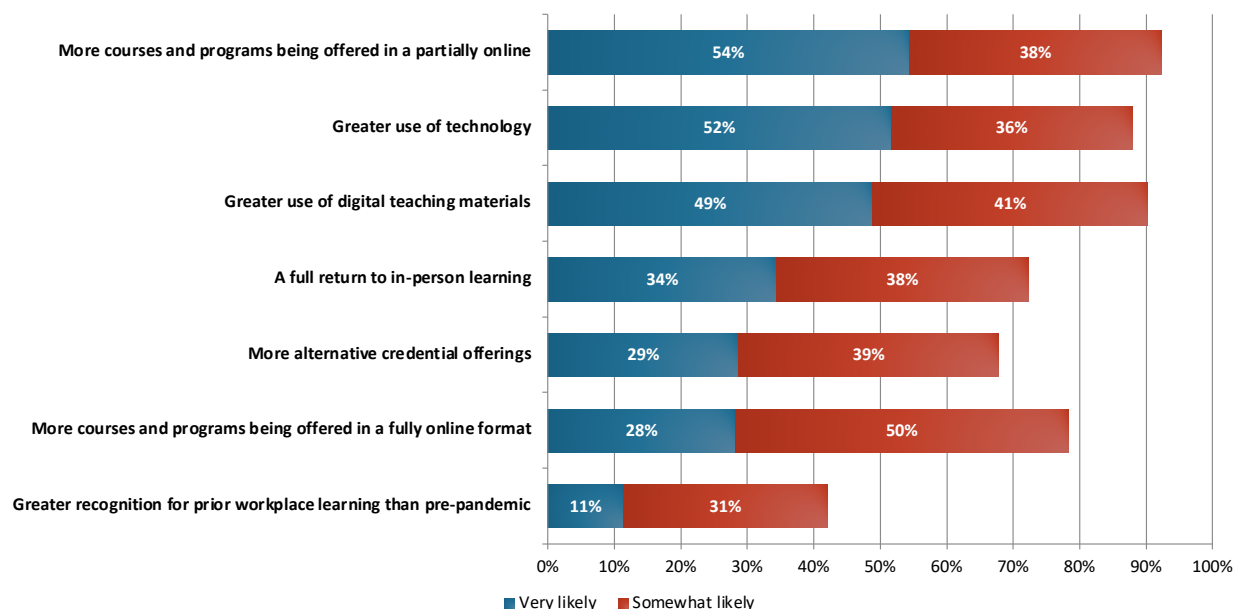
The pandemic enabled nearly all faculty and students to experience online course delivery over an extended time. To investigate the potential long-term impacts of the pandemic, the 2021 National Survey asked institutions to think ahead roughly one year into the future (early 2022) to anticipate trends related to modes of course delivery and other aspects of digital learning.

In terms of modes of delivery, the findings clearly show that nearly all institutions (93%) expected growth in the area of hybrid learning (courses offered in a partially online format) and just over three-quarters of institutions (78%) anticipated growth in fully online learning. Furthermore, 72% of institutions expected a return to in-person learning based on the state of the pandemic at the time of the survey, which indicates that institutions recognize a need for multiple modes of course delivery going forward.

Most institutions also indicated a strong likelihood toward greater use of digital teaching materials (90%) and greater use of technology (88%).

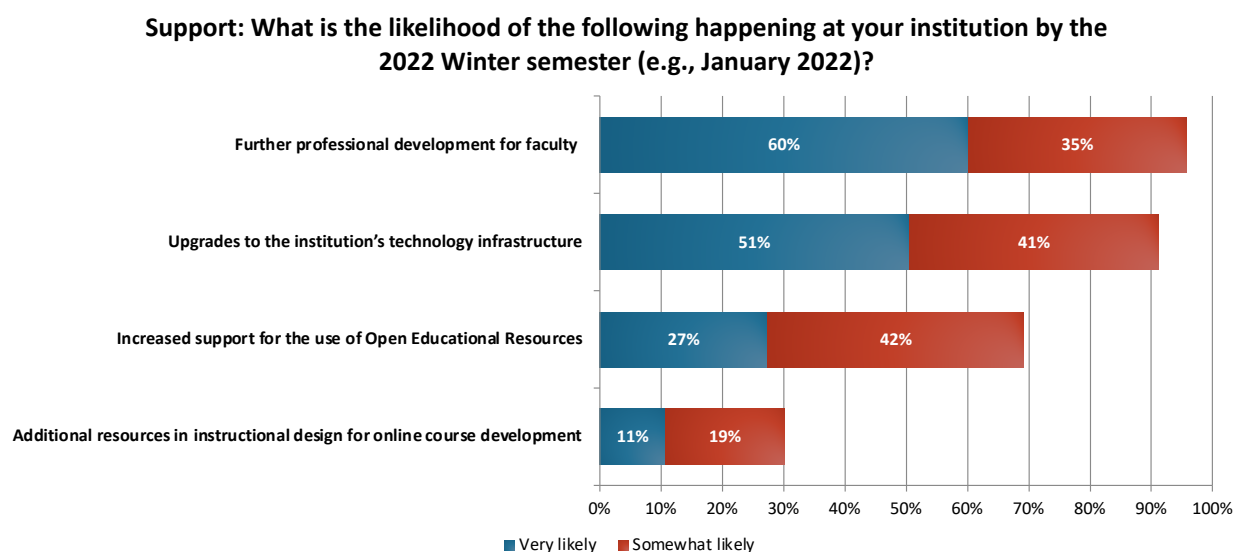
Roughly two-thirds of institutions expected more alternative credential offerings as well.

Offerings: What is the likelihood of the following happening at your institution by the 2022 Winter semester (e.g., January 2022)?



The survey also asked about likely supports to facilitate changes to institutional offerings. Most institutions expected to have further professional support for faculty (95%) and to upgrade the institution's technology infrastructure (92%).

Additionally, 69% of institutions anticipated having increased support for the use of Open Educational Resources (OER).



Feedback from Students and Faculty

The 2021 National Survey also included two open-ended questions that asked institutions to share any feedback from students and faculty related to online learning. The questions were:

- What feedback have you had from students about remote/online course delivery during the pandemic, and how is this feedback impacting your plans for the 2021-22 academic year?
- What feedback have you received about faculty interest in teaching online and/or incorporating the use of digital technologies into their classes?

Students

In response to the question about student feedback about remote/online course delivery, institutions reported the following student desires:

- Consistency (e.g., not having to use too many different tools),
- Clear expectations
- Reliable technologies
- Faculty proficiency with technology
- A sense of community with their peers in online learning environments.

Institutions commonly noted that although some students were eager to return to in-person learning, others preferred the flexibility afforded by online learning. There was an overarching consensus among institutions that students want to have options when it comes to course delivery modes, as illustrated in the quotes below:

“Students are looking for more flexibility. We have fitted up classrooms to support the multi-access delivery mode, although it is the instructor's prerogative as to whether courses are offered in this mode of delivery.” ~ University, Nova Scotia

“Students were mostly “all online” during this past COVID school year, but only about one in five want “all online” in their future. A slightly higher percentage wants all in-person programming. A plurality of students wants some type of blended (online and in-person) instruction.” ~ University, British Columbia

Several institutions noted that access to devices and the Internet is challenging for some students.

In response to the student feedback, institutions mentioned the following plans for the 2021-22 academic year:

- Implementing standardized, consistent practices for faculty.
- Further professional development for faculty to improve online teaching skills and learn how to develop online learning communities.
- Providing more online and hybrid course delivery options.

Faculty

When asked about the feedback they had received from faculty about teaching online and incorporating digital technologies into their classes, institutions reported that the pandemic had been a challenging time (particularly in terms of workload and learning curve). Institutions also noted that faculty held a range of perspectives. Key issues that emerged in the responses included assessment, course delivery modes, and digital learning support.

Institutions mentioned that faculty feedback included concerns about online assessment and academic integrity in exams. Furthermore, institutions frequently commented throughout the survey that issues of online proctoring and alternative assessments were pressing concerns. Further research is needed to understand how assessment practices are changing (and the associated concerns with such changes).

Regarding modes of course delivery, institutions noted that while many faculty have embraced the opportunity to incorporate some digital learning practices and educational technologies into their teaching, others are hoping for a return to pre-COVID education. Conversely, one institution commented that some instructors are pushing back against a return to in-person learning because they now have a strong preference for online teaching. Ultimately, institutions held the overarching notion that the interest in online and hybrid learning going forward varied by faculty (and by program); however, there is consensus that faculty have a greater interest in online and hybrid learning than before the pandemic.

“Faculty have expressed great interest in educational technology with an online presence. This is true at all schools, from Trades to Nursing. Even though the experience has been stressful, many faculty found creative and innovative ways to instruct and connect.” ~ College, Manitoba

“At the beginning of the pandemic, faculty members were overwhelmed by the new challenges of teaching remotely. Currently, they seem to be more comfortable and appreciative of the support that has been made available.” ~University, Saskatchewan



IMPACT OF THE PANDEMIC

The 2021 National Survey asked two open-ended questions to explore the lasting impact of the COVID-19 pandemic. The responses to the two questions were very similar and focused primarily on teaching and learning practices that would continue. Below are the posed questions and a combined summary of the responses received from post-secondary institutions across Canada.

- Assuming the pandemic is under control and institutions are able to return to a more normal way of operating, in what ways will your institution's pandemic experiences impact your practices for the 2021-22 academic year as compared to the Fall of 2019?
- With regard to teaching and learning, what are several practices that your institution will be carrying forward based on your pandemic experiences?

Institutions responded that they expected to offer more hybrid and hyflex courses due to increased demands for flexibility and accessibility. The pandemic created a need for faculty and students to learn how to use technology, which accelerated pre-pandemic plans for increasing online course delivery options (both synchronous and asynchronous). Institutions stated that they would offer a greater variety of course delivery formats and virtual experiential learning. The responses indicate that there will be a stronger emphasis on accessibility and Universal Design for Learning (UDL) and the development of institutional standards for online courses.

To support greater flexibility for online learning options, institutions plan to continue using virtual platforms and improve infrastructure in terms of platforms and software. Institutions spoke of plans to upgrade classroom technology. Several institutions mentioned digital learning materials or resources and the support of Open Educational Resource (OER) creation and use.

Institutions expect that faculty will continue to use tools and instructional practices adopted during the pandemic, even when such tools and practices are no longer necessary from a pandemic perspective. For instance, several institutions remarked that they would provide students with recordings of classes, even when course delivery returns to an in-person format. A planned increase in the use of video for content delivery was evident throughout the responses.

Offering student services virtually (e.g., counselling, education advisors, library services, registrar services, etc.) also proved successful, and multiple institutions intend to continue this practice. One institution said that offering student services online increased accessibility for students and optimized staffing capacity.

Institutions commonly mentioned faculty support in the responses. Institutions remarked that they would be increasing faculty professional development related to digital learning (one institution noted that professional development would continue to be delivered in an online format to make it more accessible for faculty). Other comments made by institutions shared plans to develop or expand teaching and learning centres and create virtual practice communities for instructors. According to institutions, more online and hybrid course options will also facilitate more work-at-home opportunities for faculty. Some institutions are revisiting their workforce policies to support remote working.

Institutions reported that assessment proved challenging during the pandemic. They noted a need for more alternatives to traditional assessments and commented that they would give more attention to alternative assessments going forward. A couple of institutions mentioned online proctored exams, with one institution stating that they would be moving away from online proctored assessment (due to the difficulties and stress it created for faculty and students). The other institution noted that their approach would involve more mindful use of digitally-proctored high-stakes exams. More research is needed to investigate the types of alternative assessments emerging at Canadian post-secondary institutions.



CONCLUSION

The data gathered in the 2021 National Survey indicates that the COVID-19 pandemic will likely have a profound and lasting impact on post-secondary education in Canada. Administrators, faculty, staff, and students have had to develop proficiencies with new technologies quickly. Faculty and students have had to familiarize themselves with effective practices for teaching and learning online. Assessment practices have changed, and a desire for more flexibility in the delivery of post-secondary programming has emerged.

Considering all the disruption and change that has taken place, what are the lessons learned that should guide plans and practices?

Firstly, multiple modes of course delivery are needed. Faculty and students alike hold varying preferences for teaching and learning. Various modes of course delivery foster accessibility as the pandemic has made it clear that online learning breaks down barriers for some students and creates obstacles for others. The same can be said for in-person learning. The feedback that institutions have received from students indicates that the greatest demand is for various forms of hybrid learning (where there is a mix of online and in-person learning).

Secondly, faculty and students will continue to need support as new practices for incorporating educational technologies and digital resources emerge. Institutions noted that educational technologies and digital resources are likely to be used in courses, regardless of the mode of delivery. Institutions should assess the instructional design and teaching and learning support available to faculty. Supports related to accessibility are also a necessity. Both students and faculty may need assistance in obtaining a suitable device (and, in some cases, Internet access) to succeed in their endeavours.

Lastly, online assessment for courses has been a challenging and contentious issue throughout the pandemic. Institutions frequently mentioned moving toward alternative assessment practices but did not provide examples of how they were assessing students differently. Further research is needed to explore emergent and effective assessment practices for different courses, programs, and subject areas.

In summary, the ongoing pandemic has brought online and digital learning issues to the forefront of institutional conversations. The findings from the 2021 National Survey show that most institutions do not intend to return to their pre-pandemic ways as restrictions ease. The changing landscape of Canadian post-secondary education, and the likely shift toward greater online and hybrid offerings, affords the opportunity to conduct in-depth explorations of teaching and assessment practices to develop flexible, accessible, and quality educational experiences for the future, regardless of delivery mode.

METHODOLOGY

The universe of interest for this study is all publicly-funded post-secondary institutions in Canada. Almost all universities in Canada are funded provincially. Institutions that are not included in the roster include Canadian private for-profit universities, most of which are very small and fully private career colleges and institutes.

The 2021 roster includes:

- 82 universities (including Francophone colleges of Anglophone universities)
- 80 colleges outside Québec
- 51 CEGEPs
- 21 private subsidized colleges in Québec

The national-level roster included 152 colleges and 82 universities for a total of 234 institutions.

National Survey and Fall Follow-up Survey

From March through April 2021, a pre-survey was distributed to all institutions on the roster to get feedback on topics of interest for the 2021 reports and better understand what information institutions could provide. The pre-survey also enabled the research team to update the contact information for each institution. The research team modified the questionnaire based on institutional feedback from the presurvey to develop the final version of the National Survey.

The CDLRA collected the National Survey data from June through August 2021. The research team designed the questionnaire based on prior CDLRA surveys from 2017 to 2020. The CDLRA research team invited a primary contact from each institution (typically the Provost/VP Academic, Vice-President Education, or Directeur général) to participate. The outreach email and questionnaire content were identical in both English and French.

The research team distributed the National Survey questionnaire as a fillable PDF file that the primary contact could share among multiple people at the institution. Members of the research team actively followed up with institutions to answer any of their questions and encourage them to participate. Post-secondary educational networks (e.g., Academica Group) and provincial organizations (e.g., BC Campus, Campus Manitoba, eCampusOntario) supported the outreach by notifying their networks that the survey was underway.

The research team designed a Fall Follow-up Survey to reach institutions that did not respond to the National Survey and test whether the ideas and opinions reported in the Spring had changed. The Fall Follow-up Survey used a smaller subset of the questions included in the National Survey. In November 2021, the primary contact for each institution received a link to the Fall Follow-Up Survey. Unlike the Spring survey, respondents completed the Fall questionnaire using an online survey form.

The combined institutional response rate for the National Survey and the Fall Follow-up Survey was 52% for all types of institutions. Responses were highest from universities (72%) and lowest from the Cégeps in Québec (33%). The response rate was lower from the smaller institutions and higher among the larger institutions. Thus, while the questionnaire responders represent just under half of all institutions, they enroll 74% of the student population base.

Overall, especially considering this was a voluntary questionnaire, the responses provide a good, representative sample of colleges and universities across all provinces and all sizes of Canadian publicly-funded post-secondary institutions.

CONTACT

Dr. Nicole Johnson, Research Director, Canadian Digital Learning Research Association

Email: nicole.johnson@cdlra-acrfl.ca

Web: www.cdlra-acrfl.ca

For more information about the CDLRA team, please visit: <http://www.cdlra-acrfl.ca/our-team/>

