

2021 Special Topics Report:

The Growth of Online Learning and Digital Learning Resources in Canadian Post-Secondary Education

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INTRODUCTION

At the onset of the COVID-19 pandemic, those with online teaching and learning experience were in the minority. Nearly two years later, most faculty and students have become familiar with digital learning contexts and resources. Using data gathered from the *2021 National Survey of Online and Digital Learning*, conducted by the Canadian Digital Learning Research Association (CDLRA), we reflect upon how the pandemic has shaped post-secondary education in Canada and look ahead to the future.

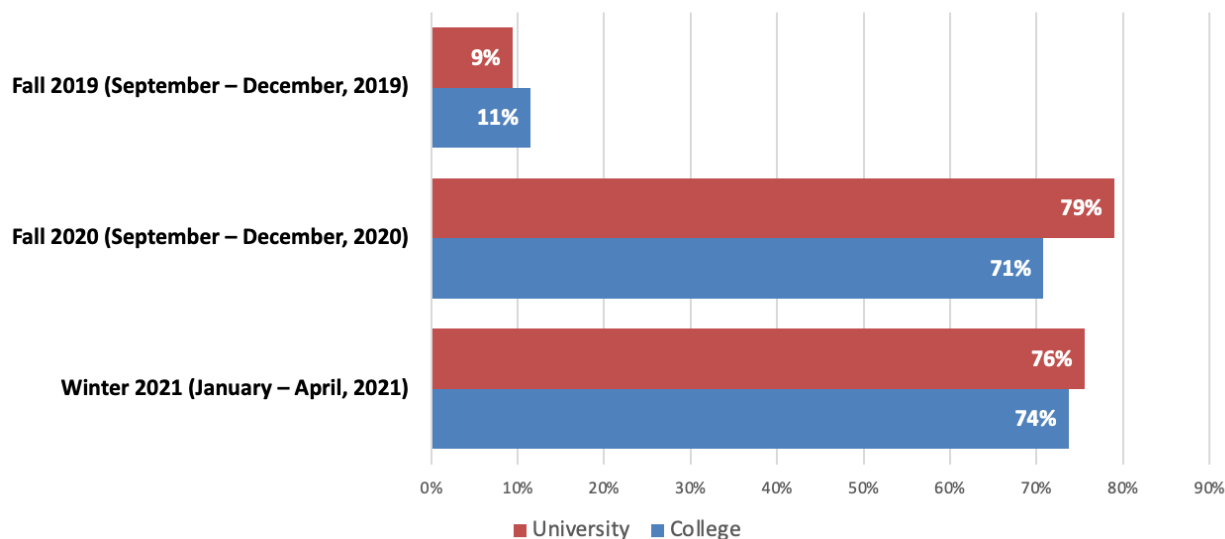
In this Special Topics Report, we discuss the growth of online and hybrid learning, student interest in online learning, and faculty attitudes toward online learning and digital resources. Throughout the report, the findings emphasize that there will likely be a greater preference for online and hybrid course offerings, as well as digital learning materials, going forward. The report concludes with a brief summary of the key findings and the implications for Canadian post-secondary institutions.



THE GROWTH OF ONLINE LEARNING

A primary initiative of the CDLRA is to track year-to-year changes in online enrolments at Canadian post-secondary institutions. Although challenges persist in gathering consistent data, both within and across institutions, a longitudinal analysis of the fully online course enrolments from 2019 through 2021 highlights the magnitude of change brought about by the pandemic. As seen in the chart below, the average institution had 17 times more online course enrolments in the 2020 fall semester compared to the same time in 2019.

Proportion of course enrolments that are of fully online



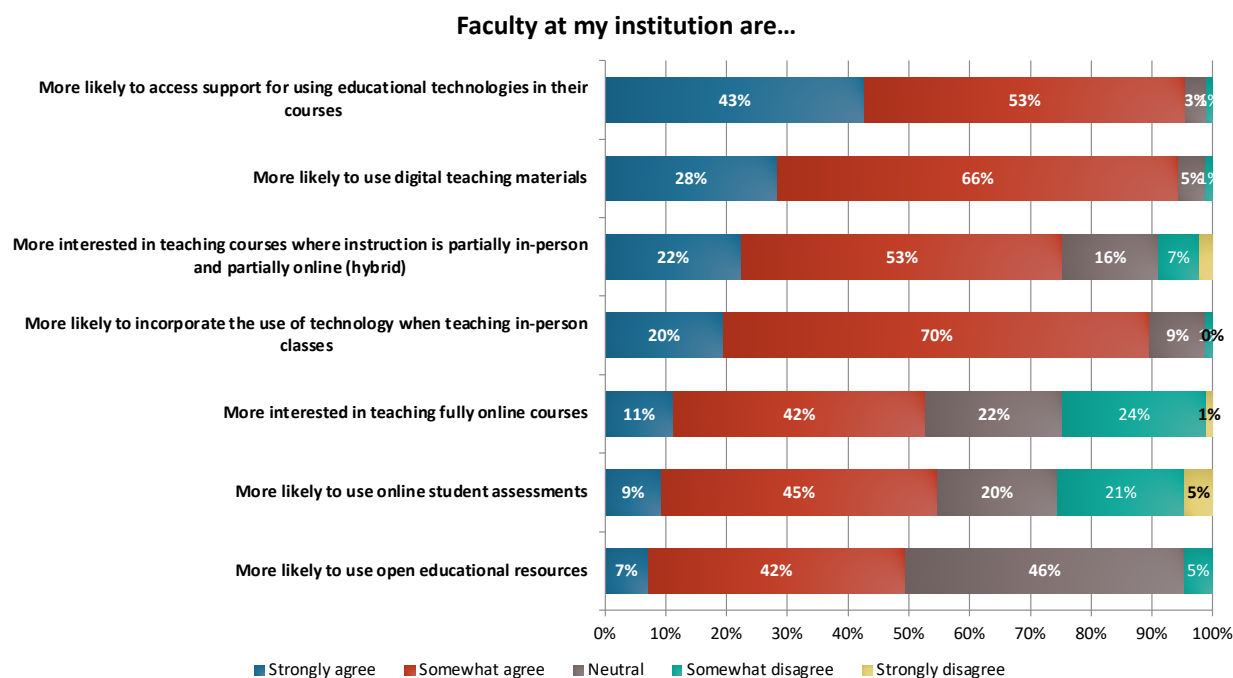
Considering the widespread return to on-campus learning at Canadian post-secondary institutions in September of 2021, it is expected that there will be a drop in the proportion of fully online course enrolments when this same analysis is conducted in a year's time. It is unlikely, however, that fully online course enrolments will drop to the pre-pandemic levels. The data presented in the remainder of this report provides indication of a strong demand for online and hybrid course offerings at present and in the future.

FACULTY ATTITUDES TOWARD ONLINE LEARNING AND DIGITAL RESOURCES

The 2021 National Survey asked institutions about their perceptions of faculty attitudes toward online learning and digital resources.

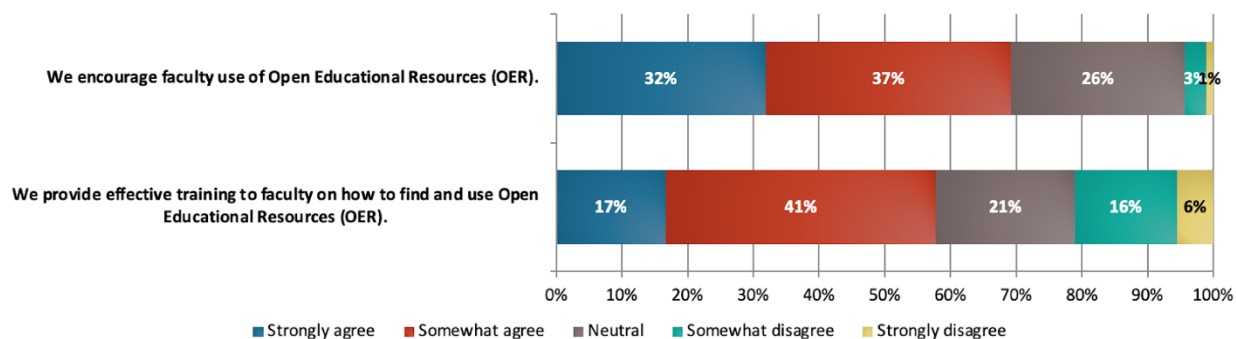
While more than half of institutions (53%) agreed that faculty were more interested in teaching fully online courses, there was a stronger interest among faculty in teaching hybrid (partially online) courses. Three-quarters (75%) of institutions agreed that faculty were more interested in teaching courses where instruction is partially in-person and partially online.

The overwhelming majority of institutions agreed that faculty were more likely to use digital teaching materials (94%); however, far fewer institutions (49%) agreed that faculty were more likely to use open educational resources (OER).



Lower faculty uptake of OER may be related to the amount of training available to faculty at their institutions. For example, although 69% of institutions agree that they encourage faculty to use OER, a smaller proportion (58%) agree that they provide effective training on how to find and use OER.

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



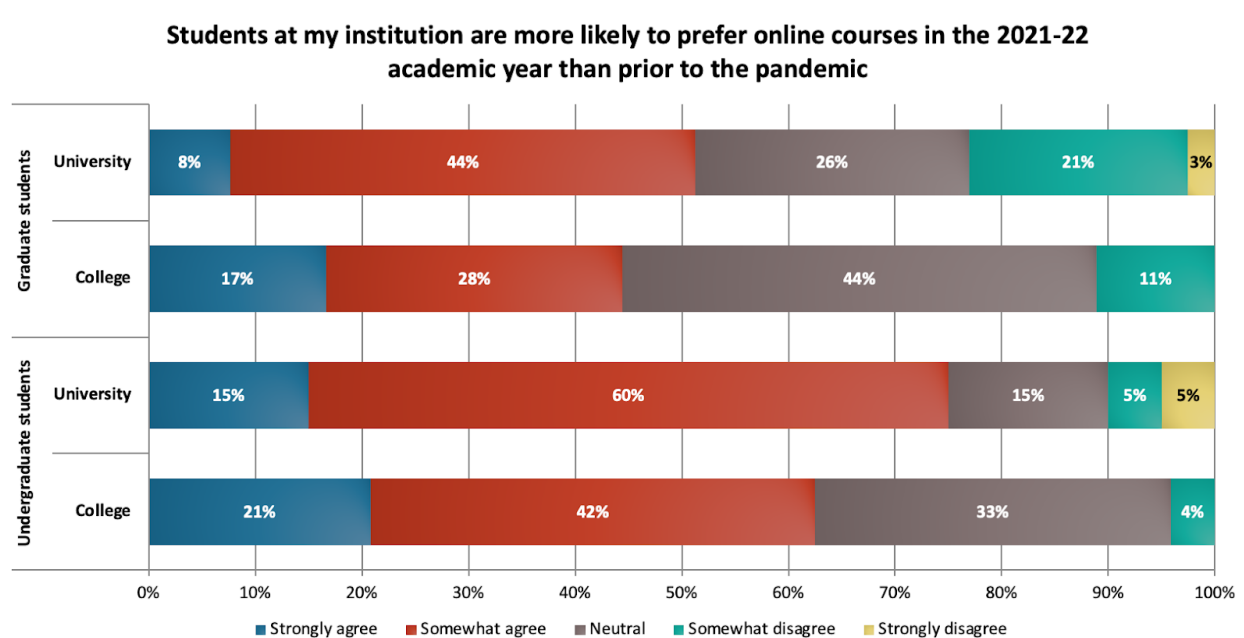
Further research is needed to identify and better understand barriers to OER use among faculty.



STUDENT PREFERENCES AND EXPECTATIONS

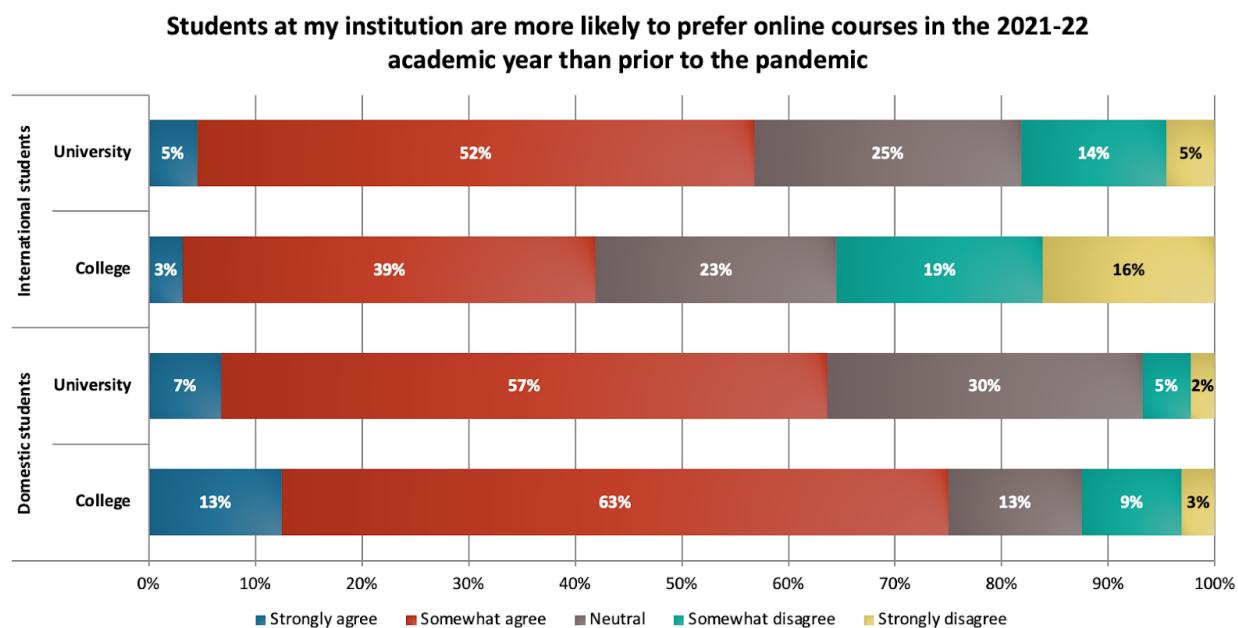
The 2021 National Survey also asked institutions about their perceptions of student preferences and expectations surrounding online learning and the use of digital resources.

When comparing perceptions of student preferences for online learning compared to 2019, 75% of universities and 63% of colleges agreed that undergraduate students would be more likely to prefer online courses. Institutions were less inclined to agree that graduate students would show a preference for online courses: 62% of universities and 45% of colleges agreed that graduate students would be more likely to prefer online courses compared to before the pandemic.



There were also notable differences between institutions' perceptions of international and domestic student preferences. Colleges mostly agreed (76%) that domestic students would be more likely to prefer online courses now compared to pre-pandemic; however, fewer than half (42%) of colleges agreed that international students were more likely to prefer online courses.

The difference between perceptions of domestic and international student preferences was less marked at universities: 64% of universities agreed that domestic students would be more likely to prefer online courses than before the pandemic and 57% of universities held this same perception for international students.

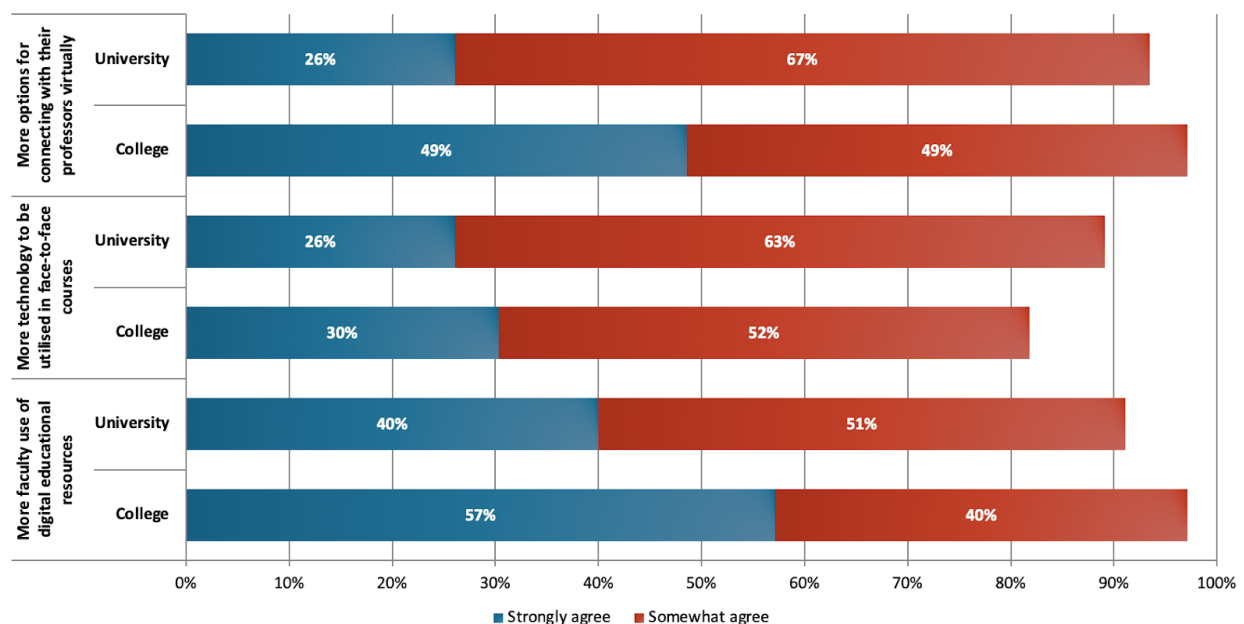




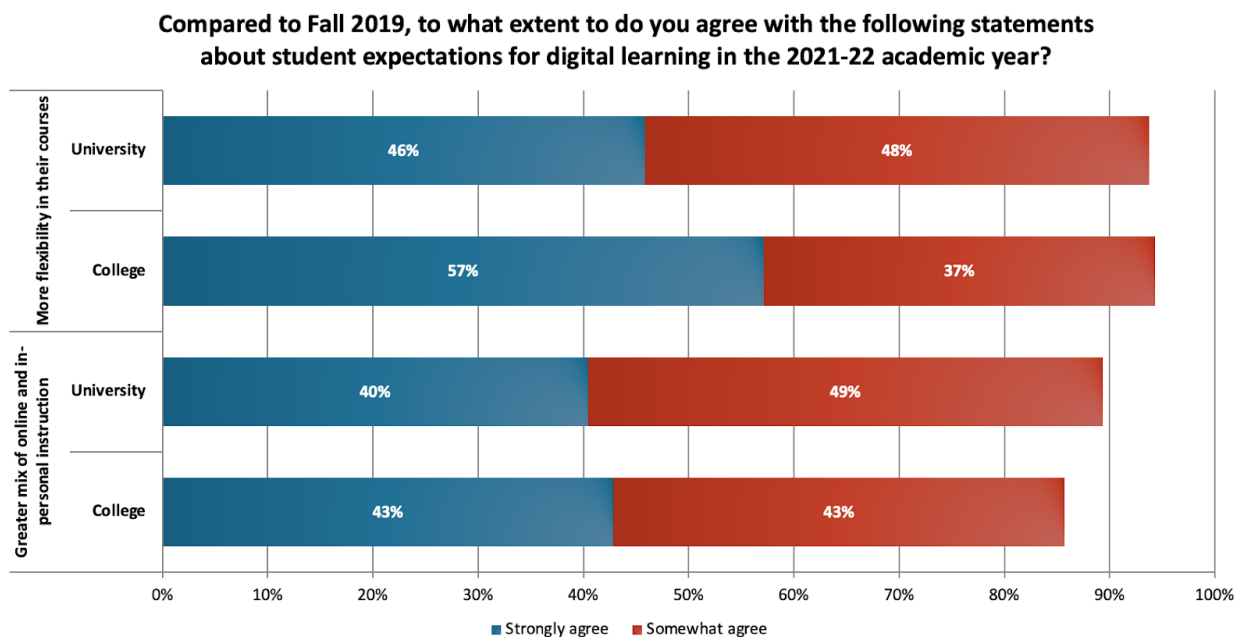
When looking at perceived student expectations for digital learning compared to before the pandemic, there are also differences between colleges and universities. More colleges than universities strongly agreed that students expect more options for faculty use of digital educational resources (57% of colleges compared to 40% of universities) and that students expect more options for connecting virtually with their professors (49% of colleges compared to 26% of universities).

Perceptions of student expectations for more technology to be used in face-to-face courses were similar between colleges and universities: 30% of colleges shared strong agreement compared to 26% of universities; however, slightly more universities somewhat agreed that students expect more technology use in their in-person classes.

Compared to Fall 2019, to what extent do you agree with the following statements about student expectations for digital learning in the 2021-22 academic year?



Both universities and colleges indicated similar levels of overall agreement about student expectations for more flexibility in their courses and a greater mix of online and in-person instruction.





SUMMARY

The findings from the *2021 National Survey of Online and Digital Learning* show that, even with a return to on-campus learning, hybrid and online learning options are desired. Further, the data indicates a shift in preferences among faculty and students toward using more digital learning resources and educational technologies in their classes. Most institutions do not expect to return to a pre-pandemic state of teaching and learning, and online learning and digital resources will likely play a much greater role at Canadian post-secondary institutions going forward.

A growing preference for online learning options and an increased expectation for digital resources will require institutions to rethink their longstanding practices. Ongoing faculty professional development will be critical as technologies, resources, and course delivery modes continue to evolve. In particular, the findings presented in this report show a need for institutions to provide more OER awareness initiatives, as well as training and support for OER use.

There is also a need for further research to better understand varying preferences among different groups of learners (e.g., undergraduate students, graduate students, domestic students, international students, college students, and university students). Institutions hold the perception that some of these groups are more interested than others in online learning, hybrid learning, digital educational resources, technology use, and having flexibility in their courses.

In closing, the pandemic has proved to be a watershed moment for digital learning in Canadian higher education. Going forward, it will be important to track how and to what extent online learning, hybrid learning, and the use of digital resources continues to evolve.



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 CDLRA's roster include Canadian private for-profit universities, most of which are very small, as well as 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.

Of the 234 total institutions, 96 responded to the 2021 National Survey.

From March through April 2021, a pre-survey was distributed to all institutions on the CDLRA's roster to get feedback from the institutions as to topics of interest for the 2021 reports and to 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 National Survey data was collected from June through August 2021. The research team designed the questionnaire design based on prior CDLRA surveys from 2017 to 2020. The Provost/VP Academic or Vice-President Education or Directeur général for each institution on the roster received an email invitation to participate in the National Survey. The outreach email and questionnaire content were identical in both the English and French versions.

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

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



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THE CDLRA TEAM

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