2025

Emerging Technologies Brief: Technology Use

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Common Technologies Used in Post-Secondary Education

Many different types of technologies are used in teaching and learning at post-secondary institutions across Canada. Regardless of modality (in-person, online, or hybrid), learning management systems (LMS) are used to support course delivery, video-based technologies are used to connect with students, and a vast number of other technological solutions are available to enhance the learning experience.

The 2025 Emerging Technologies Survey, conducted by the Canadian Digital Learning Research Association (CDLRA), asked respondents a series of questions about technology use in teaching and learning at their institution, and in their courses (if they had taught in the past 12 months).

The findings showed that LMS platforms, one-on-one video meetings, and online polling and quizzes are the most common uses of technology by faculty.

Given that artificial intelligence (AI) has been at the forefront of discussions about technology since the rise of generative artificial intelligence (GenAI) in late 2022, the CDLRA prepared a separate report specific to AI-related findings. That report is available here:
https://cdlra-acrfl.ca/wp-content/uploads/2025/12/2025-Emerging-Technologies-Brief_AI_EN.pdf

This research brief provides an overview of the findings related to non-AI technology use from the 2025 Emerging Technologies Survey.

Since 2023, the CDLRA surveys have asked respondents who taught in the past 12 months to share which technologies they used in their courses during that period.

Please check all the technologies used in any of YOUR courses over the past 12 months, regardless of how your course was delivered (e.g., online, hybrid, in-person).

Type of Technology	% YES		
	2025	2024	2023
Online platform (e.g., learning management system)	99%	90%*	92%*
One-on-one video meetings (e.g., online office hours)	83%	71%	75%
Online polling or quizzes	73%	78%	64%
Recorded lectures for later viewing	60%	52%	52%
On-demand instructional videos	60%	67%	51%
Small group synchronous activities (e.g., Zoom breakout rooms)	51%	64%	45%
Small group asynchronous activities	51%	58%	35%
Full-class video meetings	49%	64%	55%
Student speeches or presentations online	43%	46%	39%
Digital annotation tools	27%	-	-
Online tools to ensure academic integrity	24%	30%	24%
Online labs or simulations	9%	14%	10%
Extended reality (XR) technologies	3%	3%	1%

**In 2023 and 2024, the option for learning management system use was specific to its use to facilitate interaction between faculty and students. In 2025, the question was modified to ask about learning management use more broadly.*

The 2025 survey also asked all respondents to identify the technologies commonly used by faculty at their institution.

What types of technologies are commonly used by faculty at your institution?

Type of Technology	% YES
	2025
Online platform (e.g., learning management system)	98%
One-on-one video meetings (e.g., online office hours)	91%
Online polling or quizzes	88%
Recorded lectures for later viewing	77%
Small group synchronous activities (e.g., Zoom breakout rooms)	72%
On-demand instructional videos	69%
Small group asynchronous activities	67%
Student speeches or presentations online	55%
Online tools to ensure academic integrity	52%
Full-class video meetings	49%
Online labs or simulations	47%
Digital annotation tools	41%
Extended reality (XR) technologies	24%

When comparing the technologies that faculty respondents directly reported using (shown in the first table) with the findings that show observations of commonly used technologies across the institution (shown in the second table), clear patterns emerge. In both tables, LMS platforms, one-on-one video meetings, and online polling and quizzes emerge as the top three most commonly used technologies. On-demand instructional videos and small group activities (synchronous and asynchronous) were also used, or acknowledged as commonly used, by the majority of respondents. Both tables show XR technologies (like virtual or augmented reality) as the least used technology.

The survey asked one open-ended question: Are there any technologies that you would like to see adopted or used to a greater extent at your institution?

The most commonly mentioned technology for which respondents want greater uptake is virtual reality, along with other forms of extended reality (e.g., augmented reality, the metaverse). Respondents also mentioned wanting more guidance, support, and policies surrounding technology use, in general.

Closing Thought:

When analyzing overarching trends related to technology use, it is important to consider what the findings do and do not tell us. For instance, the survey results show that LMS use is very prevalent in post-secondary education; however, the quantitative findings do not tell us the ways or extent to which the LMS is being used in practice. More research and collaboration within the sector is needed to explore how individual technologies can best be leveraged in different learning contexts to enhance the learning experience for students.

> *"I think across the university, everything is used. However, I do not believe that there is consistency in how these things are used and so while some faculty members may use some or most of these technologies, others will bristle at merely having to put a syllabus on the LMS. Therefore, I think a consistency of approach might be a more laudable goal than adoption of more technologies." (Educational developer/instructional designer)*

Acknowledgements

The Canadian Digital Learning Research Association (CDLRA)'s research initiatives are made possible with the support of our sponsors and partners. The primary funding agencies for the 2025 Emerging Technologies Survey were eCampusOntario, Risepoint, BCcampus, and Campus Manitoba. We also thank our partner organizations, Academica Group, Nicole Johnson Research and Consulting, Contact North | Contact Nord, Bay View Analytics, and WCET, for their support.

In addition, we acknowledge the individuals who served on CDLRA's Board of Directors in 2025 (Dr. Evan Cortens, Sam Charles, Dr. Charlene VanLeewen, Éric Martel, and Dr. Roger Pizarro Milian) and the CDLRA Research Steering Committee (Dr. Nicole Johnson, Dr. Stephanie McKeown, Dr. Jeff Seaman, and Dr. George Veletsianos).

The CDLRA recognizes that, as a remote team, we live and work in many different locations on lands taken from Indigenous peoples. As a team, we seek to better understand the ongoing impacts of colonial systems and structures, particularly within the Canadian post-secondary education sector.

We thank the many individuals who have met with our team to discuss potential survey topics, provide feedback on our findings, and share insights from the field. These perspectives have been critical in shaping our research initiatives.

We also thank the CDLRA team members and contractors who perform the tasks that support our day-to-day operations and enable us to conduct our research studies.

Most importantly, we thank our survey respondents.

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The 2025 Emerging Technologies Survey and this report would not be possible without financial support from the following organizations:

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Methodology

Information for this report comes from the 2025 Emerging Technologies Survey, which is part of the CDLRA's Pan-Canadian Digital Learning Survey Project. The project is longitudinal and includes gathering data from two annual surveys. More details about the project and the methodology can be found here: https://cdlra-acrfl.ca/methodology-for-the-pan-canadian-digital-learning-survey-project/

Specific to the 2025 Emerging Technologies Survey:

- The survey was open from August 18 to October 17, 2025.
- 178 participants from 91 unique institutions responded to the survey, representing all provinces and one territory.
- Participant roles included administrators (e.g., senior administrators, deans, and directors), teaching and learning leaders, instructional designers and educational developers, institutional researchers, library services staff, student support staff, and educational technology specialists.

Through this research brief, we have compared some of the 2025 findings with those from previous years. More information about past surveys can be found in the respective annual reports on the publications page of the CDLRA website: www.cdlra-acrfl.ca/publications

Copies of the survey instruments for each year are available upon request.

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