LEAF+ Insights: Future of Digital Learning Executive Summary

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Participating Divisional Units
- Faculty of Applied Science and Engineering - Institute for Studies in Transdisciplinary Engineering Education and Practice
- Faculty of Kinesiology and Physical Education - Office of Vice-Dean, Academic Affairs
- University of Toronto Mississauga - Institute for the Study of University Pedagogy (ISUP)
- University of Toronto Scarborough - Centre for Teaching and Learning (CTL)

1. LEAF+ Project Background

The *LEAF+ Insights: Future of Digital Learning* project brought together four divisions of the University of Toronto for a collaborative exploration of post-COVID opportunities for digital learning. The divisions involved were the Faculty of Applied Science and Engineering, Faculty of Kinesiology and Physical Education, University of Toronto Mississauga, and University of Toronto Scarborough. This integrated report summarizes the project outcomes and highlights potential strategic actions to support digital learning. LEAF+ collected quantitative and qualitative data across the 4 divisions, facilitating community engagement through focus groups, interviews, and surveys. As well, the project team engaged in environmental scanning, inclusion and interpretation of internal data collection from other projects (e.g. ETRAC, Accessibility Services), and comparison against national data collection and sources.

2. Shifting Course Delivery Modes

Canadian Digital Learning Research Association forecasts an increase in hybrid courses and programs (67%) and fully online courses and programs (52%) in Canadian higher education.

This trend is reflected in the Office of the **Vice-Provost Academic Programs** data visualizing the delivery mode mix experienced by students before, during, and after the COVID pandemic. The graph below shows that while online offerings expanded during the pandemic (shown in pink), they have since reduced to 1/3 of student experience remaining in online or hybrid mode in winter 2023.

Delivery Mode Mix: **Undergraduate Degree Program Students**
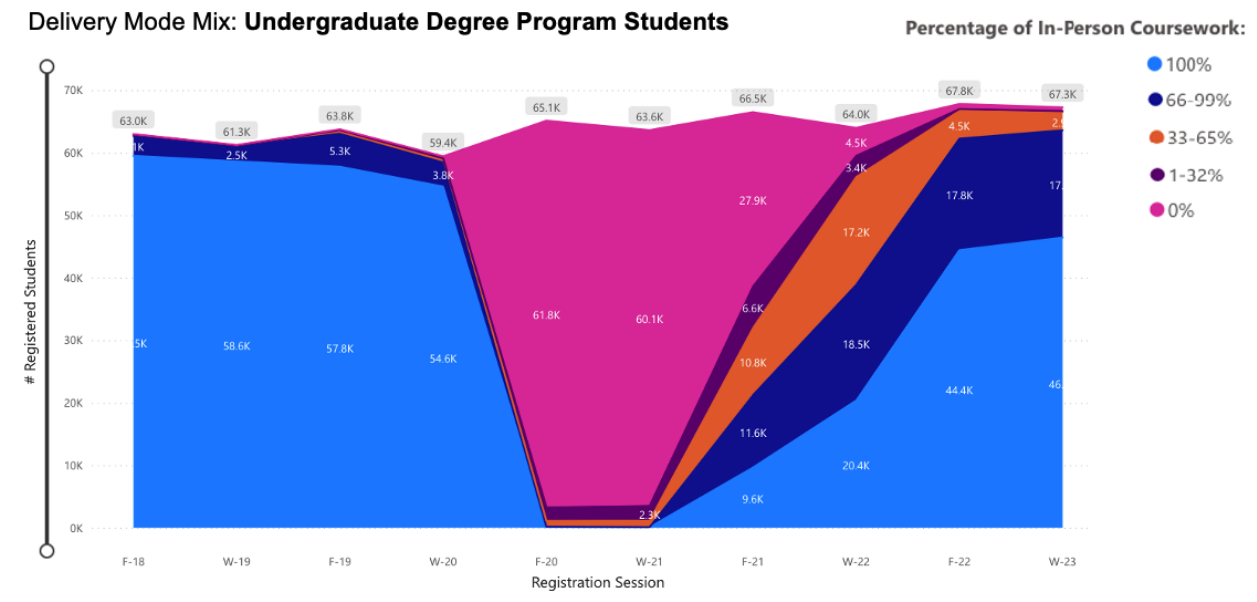
3. Overarching Themes

The trauma of stress and unpredictability over the past three years continues to shape the perceptions of some instructors and students. Survey, interview, and focus group data gathered by LEAF+ participating divisions reflected widely varying viewpoints within stakeholder groups.

Theme 1: Mixed Experiences Informing Future Preferences

Within the survey data collected, perceptions of the effectiveness of various modes of delivery and specific teaching strategies varied widely, with some divisional differentiation. For example, FASE students disproportionately preferred face-to-face learning, while UTSC students showed the highest agreement with the effectiveness of content introduced via online recordings.

Theme 2: Increased Instructor Interest in Online Elements

When asked to reflect on their level of interest in online teaching post-COVID, the majority of instructors indicated an intention to include more online elements in their courses moving forward. Where concerns were raised regarding courses delivered fully online, some responses reflected strong emotions about the challenges of teaching and learning during the pandemic and the difficulty in adapting assessment methods during emergency remote periods.

Theme 3: Valuing of Accessibility and Flexibility

Benefits noted across stakeholder groups included improved access to digital content, convenience and choice, lower anxiety and distraction and work/life balance. During COVID, students with disabilities experienced challenges including a lack of community, screen fatigue, and self-motivation, and benefits including any-pace and any-place learning and easy access to digital content.

Theme 4: Balancing Stakeholder Needs During Transformations

Significant differences are observed between student expectations and instructor perspectives (i.e., in LEAF+ data, students expect flexibility and access to digital resources; instructors note concerns regarding additional workload). Feedback reflected divisional differences in readiness for change and support for governance processes, ranging from anxiety about unplanned evolution of program formats to frustration at lack of interest within departments.

Theme 5: Importance of Effective Course Design

Students shared feedback about the quality of instruction in both in-person and online environments, highlighting the importance of well-supported instructors and proven practices for instructional design. Responses suggest that effective course design, rather than online vs. in-person delivery mode, determines the tone of the class, student engagement, and motivation for students and instructors. Selection of a familiar platform was noted as a key consideration as many students described difficulty navigating multiple new and novel learning applications across courses.

Theme 6: Instructor / Social Presence

Students survey data showed varied perceptions of instructor guidance and support, whether in person or online. LEAF+ qualitative data show that students value interaction with professors and TAs in all modalities.

Theme 7: Faculty Development Preference for Varied Modes

Instructors reported that time and capacity is of the greatest concern. Despite the impact of a prolonged period of stress and the reality of COVID "burnout" among instructors, many faculty noted that the pandemic acted as catalyst to develop skills and engage in a range of professional development activities. Both self-directed and workshop-based activities were valued, as well as professional staff support.

4. Signposts for the Future

Digital Transformation

A recent EDUCAUSE guide highlights critical success factors for digital transformation that can help higher education institutions operate effectively, stay competitive in an increasingly digital world, and prepare learners for the digital workplace. Areas of focus may include: 1) expanding instructional modalities; 2) learner development, 3) organizational policies/planning, and 4) instructor development.

A Hybrid Future

Feedback garnered through the LEAF+ project work signals that the university is currently at an inflection point as we explore options that will leverage the capacity gained through the pandemic experience while retaining valuable aspects of the in-person experience. Community input suggests that an intentional and well-designed balance of in-person and online activities in the form of hybrid learning may serve as common ground in addressing the needs of all stakeholders. It will be important to address confusion regarding hybrid course delivery in the current University of Toronto governance and registrarial practice. Specifically, in U of T governance "hybrid" is a term used to describe a structured replacement of selected in-class activities with online elements, as designed by the instructor. This reduction of in-person class time can provide flexibility and resilience in design, while mitigating concerns regarding increases in teaching workloads. Instructor comments indicated that clarification of the definition of hybrid in the course design context will be important to reduce anxiety, and to differentiate this model from a dual-delivery live-webcasting model, also known as "hyflex."

5. Summary

Based on the input from community members as well as the guidance from current literature, the following have been identified as potential action items to advance success through support of the people, process and technologies that will underpin the future of digital learning at the University of Toronto.

- Explore program options that increase flexibility for students and instructors by alleviating geographic or temporal constraints.
- Mine institutional data to inform and iterate on program planning and collect feedback on the effectiveness of new strategies introduced.
- Support professional development programs that incentivize and recognize instructors who are leaders in pioneering in new digital modalities.
- Maintain focus on the selection and tuning of impactful instructional strategies across modalities and application of evidence-informed principles of effective course design.
- Learn more about students' needs and approaches they believe will enable them to best succeed academically and prepare for their future.
- Expand experiential learning by integrating hybrid learning strategies to provide equitable access to internships, volunteer work, and community program opportunities.
- Encourage research-based or evidence-informed methodologies and frameworks to guide strategic program planning and course design.
- Avoid unnecessarily wide use of novel platforms, instead prioritizing the effective use of institutionally supported tools.

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