Educational Technology Lab
Recommendations and Principles

Introduction

COVID-19 has created transformational change in the post-secondary education system with a rapid shift to remote teaching and a significant increase in educational technologies to deliver curriculum, assessment, and engage with students. The University of Guelph has an opportunity to reimagine its place in this landscape and how it will leverage the advancements made during this unprecedented time to emerge as a leader in teaching and learning. Through the Provost's Pedagogical Innovation Task Force, members of the University community, including faculty, staff, and students, examined various priorities, including cross-disciplinary teaching, alternative forms of assessment, experiential and community-based learning, and diverse learning environments. While it is important to note that these areas are not discrete but instead form a continuum of teaching experiences, they are broad in their reach.

To meet the needs of diverse learners, we expect that teaching and learning experiences will include more intentional and advanced use of technology impacting the future of the classroom--time and space require thinking. While historically, teaching environments were very distinct entities, we can now expect that teaching and learning approaches will span the continuum from entirely face-to-face to fully online and everything in between. Teaching environments will include more blended, hybrid, flipped, hi-flex, and technology-enhanced teaching experiences to meet the needs of diverse learners (Brown *et al.,* 2020, Contact North, 2020).

Students will continue to expect more flexibility in how they engage with the learning, including time and place. Likewise, instructors will continue to expect more flexibility in how they conduct their teaching. Both will expect to see continued use of technology in their courses. Therefore, it will be necessary for faculty to consider the intentional use of technology rather than using technology for the sake of technology (Contact North, 2020). While some faculty may not be comfortable with technology, we must recognize that using technology effectively enables the faculty to create more meaningful ways to deliver their curriculum. For example, conferencing technology can provide students with more meaningful feedback when working independently or in groups rather than at a scheduled time. Instructors will also require flexibility and more disciplinary context-specific support to consider innovative ways to teach in diverse learning environments. While accessible resources are important for just-intime support, instructors will require discipline-specific supports tailored to address the teaching challenges now and in the future.

Equity, diversity, and inclusion are important values we hold as a University of Guelph community. Instructors will be encouraged to consider teaching approaches that allow for

equitable participation and approaches that respect diverse perspectives, all to structurally support the needs of students and the instructors themselves. Pedagogies and technologies will need to intentionally consider traditionally marginalized and underserved students, including students of colour, first-generation students, international students, and students with disabilities. Teaching approaches will align and support the institutional commitments as outlined in the following plans and reports:

- Recommendations of the Indigenous Initiatives Strategy working group for pedagogy and curriculum (Dawson *et al.*, 2021);
- The goals laid out in "Improve life through teaching and learning; University of Guelph's 5-year strategic plan", particularly goals 1 and 4;
- Recommendations of the "Supporting the needs of Black students at the University of Guelph" report.

As we consider more diverse learning environments, we must acknowledge that it will only be as successful as the instructors who lead these environments. Therefore, it is essential to enabling a culture that encourages innovation in teaching and the effective use of educational technologies and continuous support.

Environmental Scan

An initial environmental scan of universities across Ontario indicates that institutions are approaching this differently, with some exploring the development of a teaching lab within faculties and others centralizing and supporting within Educational Technology centres. However, we recognize that a more extensive scan will be important to inform the design of a technology lab. The scan must consider institutions within Canada, including universities and colleges and US-based institutions.

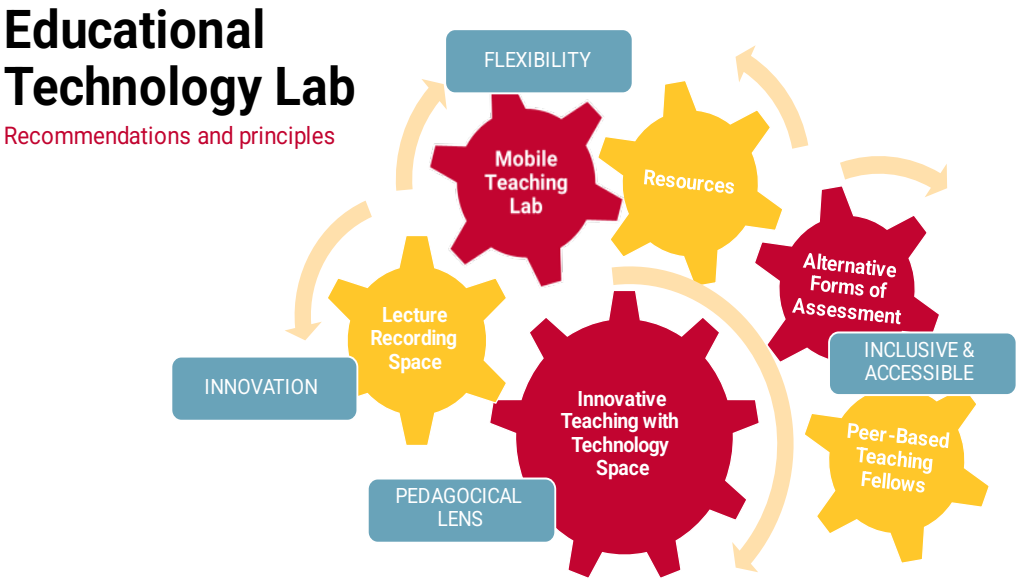
Recommendations

To enable a culture that empowers instructors to consider new and innovative ways of teaching using technology, we need to adopt a hub and spoke model of support, experimentation, and collaboration. We must create the space where instructors are able to explore various technologies and pedagogies and where they are supported, encouraged, and rewarded for their commitment to teaching excellence.

Educational technology can serve as a catalyst for change in a student's understanding, experience, and access, but it is important to note that this cannot happen in isolation. Educational technology must be married with good pedagogy to achieve the desired results. It is also important to note that instructors are disciplinary experts and not necessarily technology experts, so we must create an environment that allows instructors to build skills and confidence while recognizing that instructors have limited time for this experimentation.

The Diverse Learning Environment Working group makes the following recommendations:

1. The University creates an **innovative teaching space** that allows instructors to experiment with advanced technologies. This includes smart boards, light boards, flexible, collaborative digital technology that maximizes the opportunity for engagement between student to student and instructor to student, interactive touch tables and immersive technologies, including projection capabilities.
2. The University provides faculty and teaching staff with access to a dedicated **lecture recording space** equipped with appropriate sound control, visual elements, and support.
3. The University funds the creation of a **mobile teaching lab;** a lab with dedicated expertise on the intersection of educational technologies and pedagogy and equipped with institutionally supported emerging technologies. Employing a hub and spoke model, the mobile lab will leverage the institution's instructional technology expertise and the experiences of the instructor. The Mobile Lab team will engage with faculty and teaching staff at a college level and will consider innovative and effective use of educational technologies through a disciplinary lens.
4. The University establishes an **Educational Technology Teaching Fellows program** working within the Teaching Lab that recognizes educators who are engaged in SoTL and interested in examining the effectiveness of technology in teaching and learning and who are interested in advancing the University of Guelph's strength in teaching excellence.



Principles

The following **principles** will shape the vision of Educational Technology Lab:

- A lab that encourages **innovation** and empowers instructors to be curious about how the technology can enhance the instructor and student experience and experiment in a safe place
- A lab that fosters **inclusive and accessible** principles and practices by design and support
- A lab that inspires authentic approaches to assessment and engagement
- A lab that encourages **interdisciplinary collaboration** but also recognizes the uniqueness within disciplines
- A lab that promotes **flexibility** in course design through the innovative use of technology explored through a **pedagogical lens**
- A lab that allows for instructors to learn from their **peers and experts** in the field of educational technology

Next Steps

We recognize the recommendations provided in this report require broad commitment from various University stakeholders as well as a financial commitment to enable solutions that result in the desired outcomes. Each recommendation will require further analysis and the development of individuals proposals that outline accountability, resources, timelines, and metrics. To inform this work, the committee recommends the following next steps:

1. A review of the recommendations with various stakeholder groups, including the Council of Associate Deans (Academic), Council of Deans, and the Academic Technology Advisory Council
2. A revision of the recommendations based on the feedback gathered
3. Prioritization of the recommendations to enable a focused effort on implementation and support
4. An environmental scan that includes institutions in Canada and the US
5. The development of proposals that include accountability, resourcing, timelines, and metrics

References:

Brown, M., McCormack, M., Reeves, J., Brooks, D.C., & Grajek, S. (2020) *2020 EDUCAUSE horizon report, teaching and learning edition*. EDUCAUSE. https://library.educause.edu/resources/2020/3/2020-educause-horizon-report-teaching-and-learning-edition

Contact North (2020) A new pedagogy is emerging… and online learning is a key contributing factor. https://teachonline.ca/sites/default/files/tools-trends/downloads/a_new_pedagogy_is_emerging.pdf

Dawson M., Ecclestone, M., Husband, B., Lackeyram, D., Luby, B., Martin, B., Perreault, M., Poulin, D., & Roth, R. (January 2021) *Indigenous Initiatives Strategy: Report of the Pedagogy and Curriculum Working Group*. University of Guelph. https://indigenous.uoguelph.ca/system/files/IIS%20Pedagogy%20and%20Curriculum%20Final%20Endorsed.pdf