THE PROBLEM

Inadequate foundations
Students worry about the varying definitions of digital literacy and the inconsistent expectations of digital literacy skills. There is little data coming from institutions on the status of digital literacy at their institutions, and students worry that those transitioning from highschool to post-secondary are not being provided with the adequate foundation they need at the K-12 level, to later succeed in post-secondary education (PSE). Factors such as limited access to proper internet connection contribute to this problem. Students also worry about the additional barriers faced by marginalized groups, which impact digital literacy, and that faculty often require additional support to implement technology into their curriculum.

Outdated digital infrastructure & classroom technology
Students are concerned about the current state of infrastructure at their universities. There are necessary changes universities should make to improve the quality of technology enabled learning (TEL), but rapid changes and increases in the quantity of technological tools, however, can be costly and straining. There is also a lack of support for post-secondary institutions to keep up with technological updates. Rapid technological changes also create an additional layer of difficulty, and students worry that the tools they currently use in PSE will be out of date by the time they enter the workforce. Financial constraints and lack of faculty commitment, as well as capacity, to implement new technology are issues as well. Students also worry about the potential financial and accessibility issues related to TEL. There are also concerns surrounding available learning management platforms, and whether the few Learning Management Systems (LMSs) available to universities meet the unique PSE needs.

Gaps in online learning
While online learning can help improve access to education by providing flexible options for various students, students are concerned about several gaps that exist, including gaps in quality and oversight. Currently, there is no quality assurance framework specific to online courses and many students have expressed dissatisfaction with the quality of online courses. On the other hand, there is also the issue that online courses are automatically perceived to be lower quality, which compromises legitimacy. In addition, students worry about additional costs associated with online learning, such as out of province fees, and how this may actually hinder accessibility.

Underutilized open educational resources
Open Educational Resources (OERs), including open textbooks and quizzes, provide flexibility for instructors and cost-savings for students, yet, they are often left underutilized due to misconceptions and unawareness. Students are excited about the potential of OERs, but worry that eCampus Ontario’s Open Textbook Library is not meeting current demands and that the rising cost of educational materials creates financial barriers. There is also little data available on the use and impact of OERs, with no standardized reporting structure to measure usage. Institutions and the provincial government have also failed to adequately incentivize faculty to develop OERs and provide limited opportunities for training. Students worry that Ontario currently lacks the infrastructure capacity needed to support OERs.
Limited open data & digital tools awareness
Students worry about the lack of availability and access to university data such as research reports and information on student needs. At this time, there is no provincial mandate that would require institutions to release such data publicly. There is also concern that about the limited knowledge and use of tools like “badging”, which could help bridge the gap between students and employers by providing a method to easily and effectively articulate experience and skills.

RECOMMENDATIONS

Strengthen digital literacy
The provincial government should adopt the Brookfield Institute’s definition of digital literacy, collect and report data on the status of digital literacy in PSE, and encourage the use of student assessment programs to evaluate digital competency levels on campuses by their own institutions. The Ministry of Training, Colleges and Universities (MTCU) should also work with the Ministry of Education to integrate concepts of digital literacy in K-12 and early PSE, and in any areas related to preparing students for the workforce. In addition, the provincial government should conduct consultations with marginalized groups and communities when developing resources for TEL workshops and programs, while also introducing targeted programming for these communities. The government should also support faculty by working with groups like eCampus Ontario to create digital literacy resources and training, and provide grants for successful integration of technology in courses.

Develop a digital infrastructure plan & support technology in classrooms
As part of a larger provincial strategy for TEL, provincial committees should be tasked to determine the necessary digital infrastructure for PSE. MTCU should provide funding for institutions without sufficient funding to upgrade existing infrastructure and incentivize all other institutions as well. In partnership with the Ministry of Economic Development, Job Creation, and Trade, MTCU should work with institutions to invest in technology-centric learning methods relevant to current and future industry standards, as well as dedicate funding to subsidize the cost of TEL. The Higher Education Quality Council of Ontario (HEQCO) should also review current classroom technologies to gauge their effectiveness and publish their findings. MTCU should work with eCampus to encourage the use of open-source LMSs at institutions and dedicate resources to ensure the software is conductive to student success.

Maintain affordable & quality online learning
The provincial government should task eCampus Ontario and Contact North to conduct consultations and develop a quality framework for online courses. The Ontario University Council on Quality Assurance should expand IQAPs requirements to include online courses and include online learning in the Final Assessment Report. Dispelling myths around the lack of quality in online learning and eliminating additional administrative fees for online courses taken at a student’s home institution are important actions as well. In partnership with open institutions in Canada, MTCU should work to eliminate additional fees placed on out of province students and work with eCampus Ontario to produce research on emerging practices in online education geared at reducing educational costs for students.

Invest in open educational resources
The provincial government should provide envelope funding to support the expansion of eCampus Ontario’s open textbook library and to work with faculty to review OERs and create a quality assurance process. MTCU should promote OERs through collaborations with the Ontario College and University Library Association and members of Campus Store Canada, and provide faculty with adequate information and provide incentives, developed in collaboration with the Ontario Confederation of University Faculty Associations (OCUFA) and the Council of Ontario Universities, to faculty for successful usage. eCampus Ontario should also collect data and report on institutional and user satisfaction and develop an Ontario specific OER creation toolkit for faculty. OERs should also be included in Ontario’s strategic mandate agreements and MTCU should invest in the development of OERs that can apply to the largest introductory courses. OCUFA should also be tasked with aiding faculty in OER facilitation and development, and grants should be provided to support OER development and use on university campuses.

Expand open data initiatives & utilize badging
MTCU should mandate that universities release data publicly and task HEQCO with expanding their Open Data Inventory database, while providing envelope funding to do so. Additionally, eCampus Ontario should establish a badging framework and develop a centralized platform to house badges achieved by students. MTCU should also work with employers, institutions, and students to develop a platform for badges and communicate the value of skills articulation for employment.