Lessons Learned in Teaching and Learning in Higher Education through Covid-19: Environmental Scan Summary

Prepared by: Kayla Dias, Dr. Alysia Wright, Dr. Corey Flynn
Contributions from: Dr. Leslie Reid, Dr. Natasha Kenny, Dr. Derritt Mason
Contact: Kayla Dias (Research Assistant) - kayla.dias@ucalgary.ca

Fall, 2022

This environmental scan used publicly available information from the U15 Group of Canadian Research Universities to learn of the positive and negative impacts of emergency remote teaching and learning in postsecondary education during the global pandemic starting in spring 2020. Sources of information include university and university related newsletters and blogs, podcasts, surveys, and a report. We also drew on the lessons learned in the international context from published articles and reports to inform gaps and potential opportunities that exist in the Canadian postsecondary context.

This work was conducted as part of the Flanagan Foundation Initiative, a three-year project intended to catalyze blended and online learning at the University of Calgary. The findings from this scan will be used to further the goals of the initiative and inform further discussion and story-gathering related to lessons learned from teaching and learning during the global pandemic.

What We Learned
We identified six key themes related to lessons learned from emergency remote teaching and learning during the global pandemic:
- **Flexibility**: Remote learning had benefits for students such as offering flexible grading, asynchronous modules, open book exams and multiple learning opportunities. Students reported challenges in terms of increased workload, lack of privacy (e.g., when webcams were necessary), accessibility, and mental health impacts associated more generally with the pandemic. Flexible grading options and multiple learning opportunities allowed instructors to be accommodating of individual student's needs.
- **Increased Workload**: Remote teaching was sometimes used as an opportunity for instructors to explore other pedagogical approaches. Some instructors resorted to a more direct transfer of their face-to-face teaching approaches and materials to an online context. Regardless, course instructors reported substantial increases in workload because of the pivot to remote teaching. Students mirrored the feeling of being overworked, especially from an increased number of assignments and assessments.
- **Socio-Economic Factors:** Access to technology was strongly correlated with socio-economic factors which influenced instructors' and students' experience with online teaching and learning.
- **Central Teaching and Learning Supports**: Teaching supports were adjusted at most postsecondary institutions through various workshops, seminars, and Centres for Teaching and

Learning (whose role and mandate was revised to focus on supporting remote and online teaching and learning). Many educators and postsecondary leaders also relied on peer-to-peer supports and participated in round table discussions within teaching networks.

- **Little Systematic Reporting**: Universities across Canada have highlighted success stories, and discussed the positive and negative impacts of Covid-19 on teaching and learning at various meetings, webinars, and conferences. Little systematic documentation exists to capture the lessons learned or the outlook post pandemic – one exception was the [University of British Columbia](#).

- **Focus on Undergraduate Students and Course Instructors:** Sources of information are from surveys, working groups and interviews, published in peer reviewed articles and institutional newsletters that focused primarily on the experiences of faculty and undergraduate students.

What is Missing

We identified four key gaps in the lessons learned data that has been made available within the Canadian teaching and learning context:

- **EDIA and Work/Study Arrangements**: There was little information about what aspects of studying and working that created barriers or required modification, particularly in the context of equity, diversity, inclusion, and accessibility, or pedagogical intentions/goals.

- **Little Mental Health Discussion**: There was little information about mental health in the U15 documents reviewed here. The information that was available about mental health was discussed as a secondary or tertiary aspect of teaching and learning during the pandemic, rather than the primary focus. This absence of ongoing data (after 2020) may indicate that reporting focused on perceived successes and challenges related to teaching and learning broadly, rather than delving into the known impacts of Covid-19 on mental health.

- **Improving Instructional Practices**: There is little information available on how teaching and learning will look when most courses have reverted to face-to-face teaching (I.e., how will institutions build/add/modify their pre-Covid-19 practices to integrate their Covid-19 experiences).

- **Changes in Learning:** Student learning experience, outside of workload and peer interactions, i.e. did student learning change with online delivery in terms of understanding, curiosity, and engagement with the material.

What Might We Look at Moving Forward

We have an opportunity to explore four areas for future growth and sustained change:

- **Teaching and Learning-Focused Inquiry**: It may be helpful to survey other institutions to understand the factors that facilitated or hindered continuity in teaching and learning during the pandemic.

- **Embedding Flexibility in Administration**: How can institutions move forward in embedding flexible teaching and learning options into policies, programs, and infrastructural decisions?

- **Infrastructural Focus**: How do we shift the lens from teacher and student experiences (micro) to institutional policies and infrastructure that supports innovative/resilient and high-quality teaching and learning offerings (macro)?
- **SOAR/SWOT Analysis**: What opportunities exist within our institutional context for broader conversations about the strengths, opportunities, aspirations and results (SOAR) or strengths, weaknesses, opportunities and threats (SWOT) as a result of teaching and learning during the pandemic?

International Context of Emergency Remote Teaching and Learning

We identified an additional five themes in the international context, which are drawn from published articles and the UNESCO, NSSE and Educause reports (linked below).

- **Importance of Infrastructure and Policy:** The ease with which institutions responded to emergency remote teaching was in part, determined by the institution's preparedness to offer distance/online education prior to the pandemic and the availability and access to technology.
- **Shifts in Attitude and Perception:** Course instructors demonstrated an increased willingness to include technology in their teaching practices as a result of the pandemic. Surveys of first-year postsecondary students in Ontario, Canada, also indicated a shift in their preference for the modality of course offerings, with 56% wanting hybrid courses and programs.
- **Making Technology Accessible:** Constraints in accessing technology due to financial and/or infrastructural deficits were alleviated in several countries in Latin America through scholarships, grants and provision of devices including modems.
- **(Re)defining "Normal":** There is a divide between resuming "normal" as pre-pandemic traditional face-to-face teaching that many institutions strived to reinstate in the 2021-2022 academic year, while several institutions are striving to redefine "normal" as having multimodal learning environments that offer greater flexibility, accessibility, inclusivity, and opportunities.
- **Room for Improvement in Student Experience:** Overall, students reported a negative experience with online learning that was attributed to lack of peer-to-peer interaction and connection, gaps in technological literacy, barriers in technological access, learning gaps from prerequisite courses, lacking skills (e.g. time management, organization and communication), and living situations. Additional uncertainties, such as timeline to graduation or other college related plans, job prospects and financial status contributed to poor mental health amongst students. International students faced additional challenges because of different time zones, inability to connect with family/friends in their home country, or the inability to travel to the country where they were enrolled in higher education.

Sources of information: U15 Reports

Block, E. (2021). Teaching plus podcast. *University of Alberta.* https://www.ualberta.ca/centre-for-teaching-and-learning/teaching-support/teaching-plus-podcast.html

Boklaschuk, S. (2020, December 11). USask professors prepare for innovative, engaging online classes in term 2. *University of Saskatchewan.* *https://news.usask.ca/articles/colleges/2020/usask-professors-prepare-for-innovative,-engaging-online-classes-in-term-2.php*

George, N. C. (2020, July 20). Remote delivery experiences and advice: Lessons learned from winter 2020. *Teaching for Learning @ McGill University.* https://teachingblog.mcgill.ca/2020/07/09/remote-delivery-experiences-and-advice-lessons-learned-from-winter-2020/

Joudrey, S. (2021, May 26). Lessons learned: Moving to teaching online. *Focus on University Teaching and Learning.* https://focus.clt.dal.ca/blog/lessons-learned-moving-to-teaching-online

Layne, M. (2020, December 10). Putting students first: Engineering pro takes cues from in-person experiences for pandemic-era classes. *Dal News Dalhousie University.* https://www.dal.ca/news/2020/12/10/putting-students-first--engineering-prof-takes-cues-from-in-pers.html

Learpin, E. (2021, March 16). Teaching and learning remotely: A year in review. *Teaching for Learning @ McGill University.* https://teachingblog.mcgill.ca/2021/03/16/teaching-and-learning-remotely-a-year-in-review/

Napierala, J., Pilla, N., Pichette, J., & Colyar, J. (2022, March 30). Ontario learning during the COVID-19 pandemic: Experiences of Ontario first-year postsecondary students in 2020-21. *Quality Council of Ontario.* https://heqco.ca/pub/ontario-learning-during-the-covid-19-pandemic-experiences-of-ontario-first-year-postsecondary-students-in-2020-21/#:~:text=Students%20overwhelmingly%20felt%20the%20fully,to%20an%20even%20greater%20degree

Samuel, C. (2021, February 2). When pandemic teaching goes well. *Teaching for Learning @ McGill University.* https://teachingblog.mcgill.ca/2021/02/02/when-pandemic-teaching-goes-well/

Samuel, C. (2021, July 13). Promoting student success during a pandemic and beyond. *Teaching for Learning @ McGill University.* https://teachingblog.mcgill.ca/2021/07/13/promoting-student-success-during-a-pandemic-and-beyond/

Sears, S. (2022, July 5). Reducing stress and increasing engagement with "contract grading". *Macpherson Institute.* https://mi.mcmaster.ca/reducing-stress-and-increasing-engagement-with-contract-grading/

Stuart, C. (2022, July 25). Bringing the rocks to the people: The creation of a virtual geological field trip. *Macpherson Institute.* https://mi.mcmaster.ca/bringing-the-rocks-to-the-people-the-creation-of-a-virtual-geological-field-trip/

UBC Centre for Teaching, Learning and Technology. (2022, January 9). *"Beyond COVID": the future of teaching and learning*. https://ctlt.ubc.ca/2022/01/09/edubytes-beyond-covid-the-future-of-teaching-and-learning/

University of Calgary. (2020). *COVID coffee chats*. https://podcasts.apple.com/us/podcast/covid-coffee-chats-ucalgary/id1537249443

University of Ottawa. (2020). *Transition to distance/online teaching and learning: Snapshot of instructor, student and teaching assistant experiences*. https://uottawa.saea-tlss.ca/en/survey-june-2020

Wilson, S. (2021, March 31). 'We've gained the confidence to try new things': Faculty of engineering dean on a year of disruption and change. *Dal News Dalhousie University.* https://www.dal.ca/news/2021/03/31/-we-ve-gained-the-confidence-to-try-new-things---faculty-of-engi.html

Sources of information: International Reports

Abdrasheva, D. Escribens, M., Sazalieva, E., do Nascimento, D. V., & Yerovi, C. (2022). Resuming or reforming? Tracking the global impact of the COVID-19 pandemic on higher education after two years of disruption. *UNESCO*. https://www.iesalc.unesco.org/wp-content/uploads/2022/05/IESALC_COVID-19_Report_ENG.pdf

Houlden, S., & Veletsianos, G. (2022). A synthesis of surveys examining the impacts of COVID-19 and emergency remote learning on students in Canada. *Journal of Computing in Higher Education*, *0*(0). https://doi.org/10.1007/s12528-022-09323-4

Marin, L. F., Valgardson, B. A., Watson, E. (2022). Evaluation in the time of crisis: Evidencing value at a centre for teaching and learning during the Covid-19 pandemic. *International Journal for Academic Development, (ahead of print),* 1-13. https://doi.org/10.1080/1360144X.2022.2082437

Moore, S., Trust, T., Lockee, B., Bond A., & Hodges, C. (2021, November 10). One year later…and counting: Reflections on emergency remote teaching and online learning. *EDUCAUSE Review*. https://er.educause.edu/articles/2021/11/one-year-later-and-counting-reflections-on-emergency-remote-teaching-and-online-learning

NSSE. (n.d.). *The pandemic and student engagement: Trends, disparities, and opportunities*. https://nsse.indiana.edu/research/annual-results/2021/story1.html

Nworie, J. (2021, May 19). Beyond COVID-19: What's next for online teaching and learning in higher education? *EDUCAUSE Review*. https://er.educause.edu/articles/2021/5/beyond-covid-19-whats-next-for-online-teaching-and-learning-in-higher-education