OFFICE OF THE VICE-PRINCIPAL ACADEMIC AND DEAN EXPERIENTIAL EDUCATION UNIT

Environmental Scan on Remote Experiential Learning

SUMMARY: The environmental scan found that there is no inherent incompatibility between EL and remote learning. As with in-person EL, the success of remote EL largely depends on informed course design and ensuring that students have the necessary resources to participate effectively in the experience. Remote learning can actually improve access to EL opportunities in some cases, as simulated experiences are not constrained by physical space limitations (i.e., how many students can attend an on-site experience) and students can work towards skills mastery at their own pace. The current COVID-19 situation also reinforces the importance of computer literacy and employee adaptability to web environments, which will only continue to grow in an information-based economy. As such, there is no better moment than the present to begin considering how UTM could develop, integrate, and support more remote EL opportunities across the curriculum.

Due to the unexpected interruption to scheduled courses caused by COVID-19, most universities that offer EL opportunities have been forced to respond in a similar fashion by consulting with community partners to determine whether students can complete their projects or placement hours remotely. This is by far the most common response among post-secondary institutions and is the logical remote solution for moving co-op and internship programs online. Institutions are also encouraging instructors to be prepared for the possibility that their Summer and Fall course offerings may have to be facilitated remotely. In particular, this report wishes to highlight the University of Calgary, Loyola University Chicago, and the University of Portland, who have launched valuable COVID-19 response webpages that aggregate remote EL teaching resources from post-secondary institutions across North America.

MODELS: The environmental scan identified several models for offering EL opportunities remotely, a brief selection of which are provided below. Models are organized according to the following five categories: reflective practices, professional training, community engaged learning, undergraduate research, and simulations (including gamification). The feasibility of implementing these models at UTM will vary by instructor and largely depend on the resources available, which may include curriculum development time and financial support. UTM is encouraged to utilize the EL Development & Innovation Grant (tentative) to support instructors interested in developing high-cost remote EL opportunities for their courses.

Note that this list is not exhaustive, as the High-Impact Practices which underlie EL opportunities can be applied across disciplines and course activities. As such, instructors are encouraged to think about how these models can be adapted to achieve the learning outcomes in their own disciplines. Similarly, the hyperlinked examples serve only to demonstrate how other institutions have implemented the model and interested instructors would be expected to determine the specific resources (e.g., software) that would be required in their own courses.

Reflective Practices

- 1. <u>Self-assessment</u>: Through the EL Bursaries program, the EEU has found that self-assessment and reflection exercises are not consistently implemented in EL courses at UTM. Remote learning may present an opportunity for instructors to integrate more self-assessment into their course activities.
 - The EL Liaison in the RGASC specializes in reflective practices and is available to support instructors with EL course and assessment design.

- 2. <u>ePortfolios</u>: ePortfolios are the newest addition to the High Impact Practices. As product-oriented and process-oriented activities, ePortfolios encourage students to reflect on the learning process and help them draw connections between skills development and real-world applications.
 - The Centre for Teaching Excellence at the University of Waterloo provides examples of ePortfolios that have been created by students across the disciplines.
- 3. <u>COVID-19 Discussion</u>: As a community building exercise, class discussion of the current global health crisis provides students with an opportunity to reflect upon how course content relates to the world around them.
 - The Centre for Education Excellence at Simon Fraser University has published guidelines for Transforming COVID-19 Into a Learning Opportunity for Your Students, which includes sample activities for different disciplines.

Professional Training

- 1. <u>Remote Internships</u>: As explained above, most post-secondary institutions have responded to COVID-19 by working with their community partners to allow students to complete their co-op and internship opportunities remotely. Upcoming Summer and Fall internships should be designed with this capacity in mind, collaborating with community partners to identify industry-relevant tasks that students can complete remotely (e.g., administration, data analysis, communications, etc.) as part of their work placements.
 - Co-operative Education and Work-Integrated Learning Canada (CEWIL) have published student- and supervisor-facing tip sheets for facilitating remote work-integrated learning opportunities.
 - Where remote work is not possible, the University of Georgia recommends that instructors
 use LinkedIn Learning (formerly Lynda.com) to create professional development modules,
 which may include resume building, cover letter writing, personal branding, and watching
 interview skills videos.
- 2. <u>Industry Software</u>: Instructors can consider integrating industry software into coursework. Remote learning offers increased opportunities for students to individually engage and experiment with computer software, building work-ready skills for their future careers.
 - As a most rudimentary example, Adobe Creative Cloud can be easily integrated into course activities and is applicable to administrative roles across a variety of industry sectors.
- 3. <u>Interactive Training Modules</u>: Many industries expect their employees to complete standardized training modules, which typically follow the format of interactive slide decks and/or quizzes that provide immediate feedback. Instructors are encouraged to utilize this format in online courses and build interactive modules around real-world applications of their disciplinary content.
 - Some UTM courses, such as FSC481, already have students complete WHMIS training modules as part of their coursework.
 - While not a university or college, the National Fire Protection Association offers online training programs through interactive slide decks. Multiple free "demos" illustrating this content delivery format are available on their website.

Community Engaged Learning

1. Remote Client-based Projects: Instructors should work closely with client partners to allow students to complete client-based projects remotely. Meetings with clients can be facilitated over Zoom or Microsoft Teams and group work can be enhanced by project management software such as Asana, Trello, Kerika, and more.

- 2. <u>eService Learning</u>: Remote community-based projects (branded as eService Learning) are designed to meet the needs of specific communities. As with client-based projects, students can continue to engage remotely with community partners through the technological supports listed above.
 - Trent University has made community-based research modules available on their website.
 - Campus Compact is a coalition of U.S. colleges and universities committed to promoting
 civic engagement among students. Its chapters, such as Campus Compact Minnesota, have
 posted recommendations and activities for civic engagement amidst the COVID-19 crisis.
- 3. <u>Virtual Volunteering</u>: Many public and not-for-profit organizations offer volunteer opportunities that can be conducted remotely, including opportunities to support the global COVID-19 response.
 - United Nations runs a global volunteering program in which participants can volunteer their services in areas such as the COVID-19 response, administration, research, art & design, writing, technology development, and much more.
 - The University of Portland has compiled a list of virtual volunteer activities by discipline, which instructors can adapt to an Ontario and UTM context.

Undergraduate Research

- 1. <u>Independent Research Projects</u>: Independent research projects such as literature reviews allow students to identify subject areas of interest, expose them to ongoing conversations, and discover how disciplinary skills can be applied to real-world contexts. Undergraduate research and self-studies can be conducted remotely through the electronic archives provided by U of T Libraries.
- 2. <u>Group Research Projects</u>: As mentioned above, remote group projects can be supported through readily available communications and project management software. UTM has already shown its capacity to offer remote research projects through its ROP Summer 2020 projects and the Jackman Scholars-in-Residence 2020 program.

Simulations & Gamification

- 1. <u>Text and Video-based Simulations</u>: Interactive text and pre-recorded video sequences are linked together in a "choose your own adventure" format to simulate participation in real-world scenarios. Students develop critical decision-making skills through a choice-and-consequence approach, providing ample opportunities for self-reflection.
 - The Justice Institute of British Columbia has developed ExPod, a web-based immersive simulation software, to deliver emergency management training to students.
 - The State University of New York, Empire State College integrates Toolwire simulations, which include communications training and virtual internships, into its Business courses.
- 2. <u>Software- and Game-based Simulations</u>: Instructors can integrate game software and/or game structures into course activities to simulate real-world experiences in a controlled environment. Such simulations can be built using existing commercial sandbox game software.
 - The Virtual World Design Centre at Loyalist College has in the past used Second Life to simulate border crossings for students wishing to pursue careers in customs-related fields.
 - Ubisoft offers an educational museum mode ("Discovery Tour") as part of its Assassin's Creed series, which allows players to explore an open-world Ancient Egypt and Greece.
- 3. <u>Virtual Tours</u>: When in-person travel is not possible, instructors can employ a range of technologies (from Google Earth to virtual reality) to simulate field trips and field experiences.
 - The National Museum of Natural History at the Smithsonian offers browser-based virtual tours through its website.

- Google Arts & Culture, run by the Google Cultural Institute, provides virtual access to museums and collections around the world.
- 4. <u>Digital Art Curation</u>: Much like the Google Cultural Institute, many libraries have begun to digitize their cultural heritage artifacts to promote open access for academic institutions. In place of visiting physical archives, students can conduct research through interaction with digital facsimiles.
 - The International Image Interoperability Framework allows high-resolution digital artifacts to be viewed online through browser-based viewers such as <u>Mirador</u>. U of T is a consortium partner to IIIF with Alexandra Gillespie working on <u>digitizing medieval manuscripts</u>.
 - Omeka is a web-based application that allows users to create virtual art exhibits by referencing existing digital artifacts or uploading their own multimedia objects. In fact, Trinity University has used Omeka to create a virtual exhibit showcasing 150 years of EL at their campus.
- 5. <u>Digital Scavenger Hunts</u>: A scavenger hunt is an EL activity in which students go out into the community to identify artifacts that meet specific criteria laid out by the instructor. Similar group activities can be accomplished remotely by having students identify digital artifacts through search engines and even mapping software (i.e., locating real-world objects on Google Maps).
 - In "Online Hunting, Gathering and Sharing: A Return to Experiential Learning in the Digital Age," Maristela Petrovic-Dzerdz and Anne Trépanier describe how this learning model has been applied to the online version of a second-year course in Indigenous and Canadian Studies.

COURSES: Many of the remote EL models detailed above can be applied to existing EL courses at UTM; however, the resources required to implement these models will vary depending on the needs of the course.

CONCLUSIONS: Based on these models and accompanying examples, many current EL approaches that are in place at UTM (e.g., internships, client-based projects, undergraduate research, etc.) can be offered in a remote format without too much disruption to the learning process, providing that instructors take the time to select appropriate community partners and projects. Instructors whose courses place a heavy emphasis on in-person engagement with physical objects and places, such as field trips and lab work, will have to seriously to consider whether simulations can achieve the same learning outcomes in a remote context. Disciplines that require highly specialized simulations (e.g., to simulate lab work or scenario-based training) may require significant time and financial investment to develop.