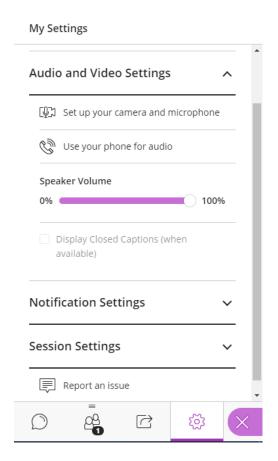
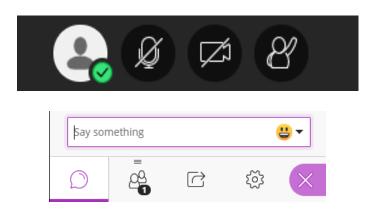
Before we get started...

- 1) Open the Collaborate panel (bottom right of screen)
- 2) Click on the gear icon for settings
- 3) Check your audio& notificationsettings



Controls: Test muting and unmuting, raising your hand, and providing feedback



Chat: Feel free to use the chat to interact with your colleagues and the moderators.



Land Acknowledgement

"I (we) wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and most recently, the Mississaugas of the Credit River. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land."

https://indigenous.utoronto.ca/about/land-acknowledgement/



Adapting Experiential Learning for Remote Delivery – Webinar Series

Session Title	Session Date
1. Effective Partnership Development and Engagement in a Remote Environment	Session slide deck and recording are available on the webinar series website.
2. Community-Engaged Learning	Session slide deck and recording are available on the webinar series website.
3. Field Work Films: Notes on Recording for Remote Teaching	Session slide deck and recording are available on the webinar series website.
4. Field Experiences	Session slide deck and recording are available on the webinar series website.
5. Teaching Research-Intensive Courses Remotely	Friday, July 10 th from 1-2 PM EST
6. Organization-Partnered Projects	Monday, July 13 th from 1-2 PM EST
7. Academic Internships	Wednesday, July 15 th from 2-3 PM EST
8. Designing Remote Activities to Spark Student Engagement	Tuesday, July 21st from 1-2 PM EST



Session 5. Research-Intensive Courses: Recalibrating for Remote Engagement

Adapting Experiential Learning for Remote Delivery Webinar Series

July 10, 2020





Meet your session panelists.

Session Facilitator:

• Laurie Harrison, Director, Online Learning Strategies

Session Speakers:

- Professor Dawn Kilkenny, Associate Professor, Teaching Stream, Institute of Biomedical Engineering, Faculty of Applied Science & Engineering
- <u>Professor Shafique Virani</u>, Associate Professor, Department of Historical Studies, University of Toronto Mississauga



Agenda

- Introduction
- Panelists Share Experiences
 - Dawn Kilkenny
 - Shafique Virani
- Participant Round Table
 - Share your challenges and opportunities
- Resources and References



Introduction

Research-Based Experiential Learning at U of T





Your Interest in This Topic?

Quick Poll – In the chat tool, describe in a few words a course, course component or related initiative that is the source of your interest and participation in this session.





What we heard from you

In the registration form, questions submitted showed interest in:

- High-level research experience design approaches
- Engagement strategies for active learning
- Practical design and course building "how-tos"





Criteria for Quality

Authenticity

 Meaningful, with appropriate levels of student autonomy and responsibility

Learning Support

 Orientation, mentorship, training opportunities, debriefing

Theoretical Grounding

 Intentional design, effective delivery and appropriate assessment RETHINKING HIGHER EDUCATION
CURRICULA:
INCREASING IMPACT THROUGH
EXPERIENTIAL, WORK-INTEGRATED, AND
COMMUNITY-ENGAGED LEARNING

A WHITE PAPER FOR THE UNIVERSITY OF TORONTO



Selected from: Rethinking Higher Education Curricula: Increasing Impact Through Experiential, Work-Integrated, and Community-Engaged Learning: A White Paper for the University of Toronto (2017)



Key Strategies for Student Motivation

- **Social presence is valued.** Synchronous interactions online can help foster the connection among students, mentors, and other researchers.
- Communicate clear objectives and task structure.

 Be intentional and sequence activities clearly,
 varying independent and collaborative work.
- Create a common space for sharing. Documents, draft reports, analysis and other output can be shared for collaboration and review. Consider outputs that can be part of students' "portfolio" of accomplishments.





Dawn Kilkenny

Associate Professor, Teaching Stream, Institute of Biomedical Engineering, Faculty of Applied Science & Engineering



UNDERGRADUATE SUMMER RESEARCH PROGRAM (USRP)

• Description:

 A remote learning community for undergraduate students engaged in summer research with FASE faculty members

• Objectives:

- To <u>support</u> UG students in their (virtual) research experiences
- o To ensure UG student summer research experience is meaningful
- To <u>create</u> an enriched community of UG students from the various disciplines across the Faculty



USRP LEARNING OUTCOMES

- 1. Discuss relevant practices for research success
- 2. Develop skills in accessing relevant resources
- 3. Engage in research dissemination
- 4. Engage in practice of assessment
- 5. Create a new UG learning community



Dutch University Medical Centers

USRP LOGISTICS

Schedule:

- 12 week program (May-August)
- 1-2 sessions/week; 14 sessions total

Platform:

Quercus/Bb Collaborate



Support:

- One graduate TA Office of the Dean
- Initial student outreach by Assistant Director, Student Experience
 & Teaching Development (Office of the Vice Dean, UG)

USRP 2020 COHORT METRICS

- Diverse reflection of units across FASE
- 61 students registered + "Drop-ins"

% Cohort	Discipline of Study	
46.9	Engineering Science	
20.4	Chemical Engineering	
10.2	Undeclared	
8.2	Civil and Industrial Engineering	
6	Other Engineering (Computer, Electrical, Mechanical)	
8	Other (Medical Science, Molecular Genetics, PolySci, Social Science)	

Completed Year of Study	% Cohort
1	27.3
2	31.8
3	18.2
4	22.7

PIVOTING UG RESEARCH PROJECTS ONLINE

Sample Project Topics

- Drosophila embryo wound healing
- Drone landing
- Learning Frameworks and Simulators for Robotics
- Electromechanical design of an EEG
- S.T.E.M. Education
- Psychological Safety in online learning

Creating Online Experiences

- Literature Reviews
- Analysis of pre-acquired data
- Data mining
- Software development
- Database development
- Interviews
- Focus groups
- Theory-based work

Lab communication via MS Teams, Zoom, Slack



PROGRAM "CURRICULUM"

Evaluation

- Individual Research Plans
- Working Efficiently at Home
- Assessing Scientific Presentations

Dissemination

- Academic Databases
- Writing a Scientific Abstract
- Scientific Presentations
- Individual Dissemination

Research Fundamentals

- Research Ethics
- Safety & Ergonomics in the Lab
- Experimental Design in Research

Career Focus

- Graduate Student Panel
- Career Talks
 - Entrepreneurship
 - Social Impact
 - Energy
 - Health & Medicine



STRATEGY: PARTNER WITH EXISTING RESOURCES

Faculty

- FASE Health & Safety Advisor (EH&S)
- Engineering Librarian
- Troost ILEAD FIELD Program
- Engineering Communications Program

Student-led

- Discovery Educational Program
- UnERD planning committee







Administrative

Assistant Director, Student Experience & Teaching Development



UnERD VIRTUAL RESEARCH SYMPOSIUM

Engineering student initiative

Graduate student and faculty judges

Student preparation

- Abstract preparation and submission
- Evaluation by UnERD team
- Creation of scientific presentation (oral or poster)
- Practice audience of incoming engineers

Technology

- Oral presentations via Zoom with break-out rooms
- Poster presentations via Twitter or LinkedIn





CHALLENGES

- Motivating students to participate
- Identifying alternatives given specific lab skills and processes cannot be taught remotely
- Creating a feeling of community and social connection with peers and department
- Communication of project goals to students
- Facilitating 1:1 mentorship and feedback without synchronous communication



SUPERVISOR PERCEPTIONS OF ONLINE TRANSLATION

- "I have found that the work [...] transferred well to online/remote work."
- "Taking advantage of the time to develop skills in data mining."
- "I actually think that <u>productivity might be higher</u> working in this way rather than being in the lab, as there are fewer distractions and people seem to be more focused on outcomes and deliverables."

• "[Using the built in recording option from Zoom] has actually <u>cut down on the complexity</u> of recording these when in in-person sessions."



RECOMMENDATIONS

- Careful scaffolding will allow impactful UG research experiences to occur remotely
- Keep expectations realistic
- Be aware and unafraid to integrate additional resources
- Be conscientious to consistently provide student support
 - Weekly reminders and 'check-ins'
 - Facilitate discussion boards
 - Poll student interests re: upcoming sessions

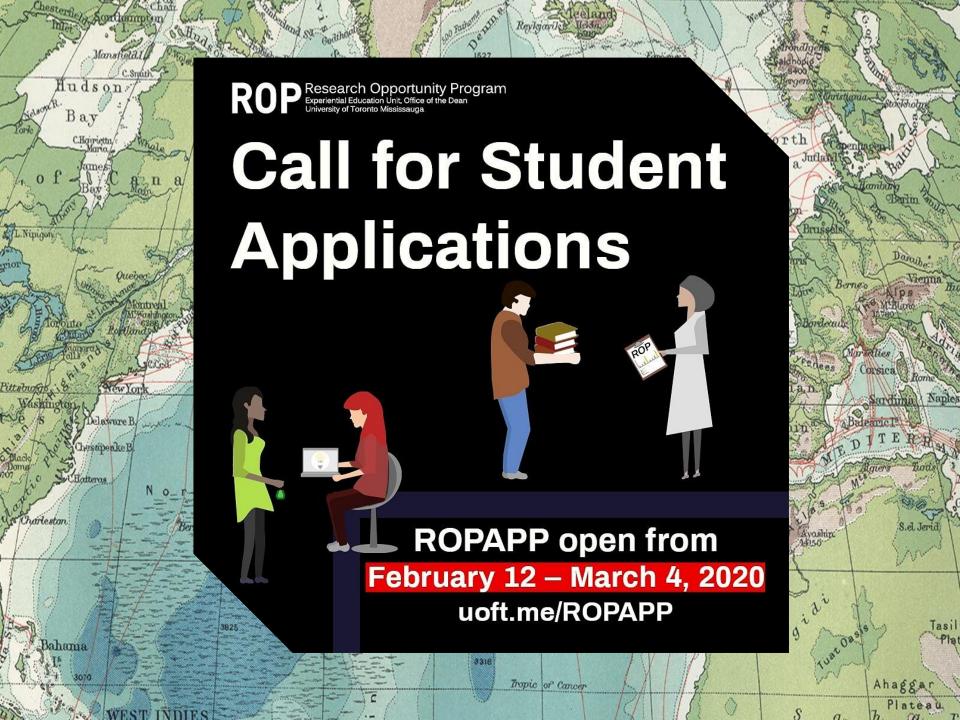




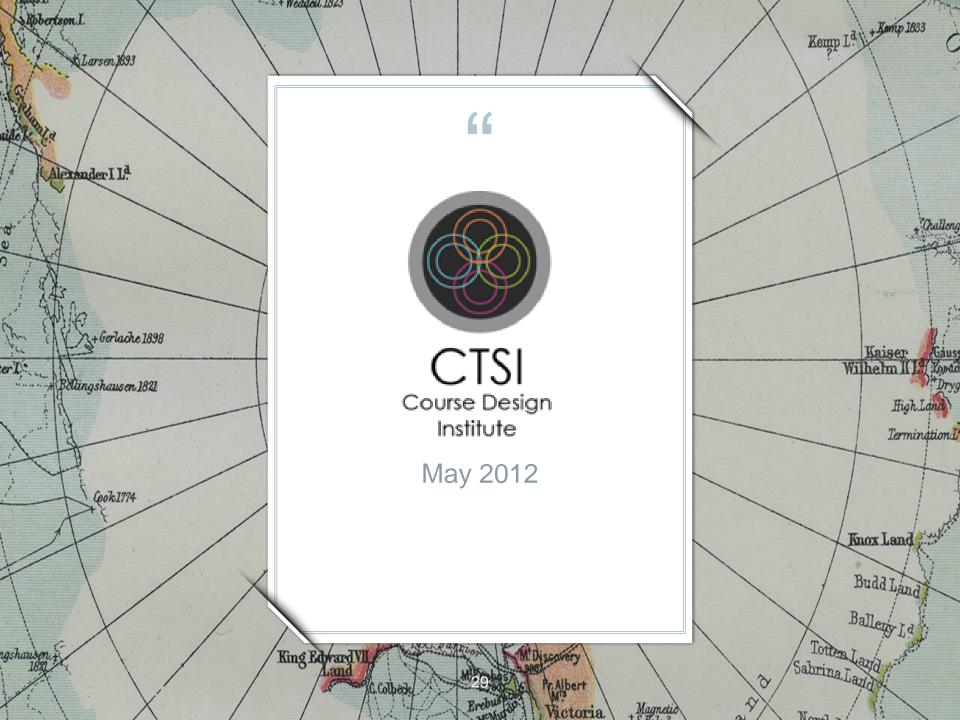
Associate Professor, Department of Historical Studies, University of Toronto Mississauga



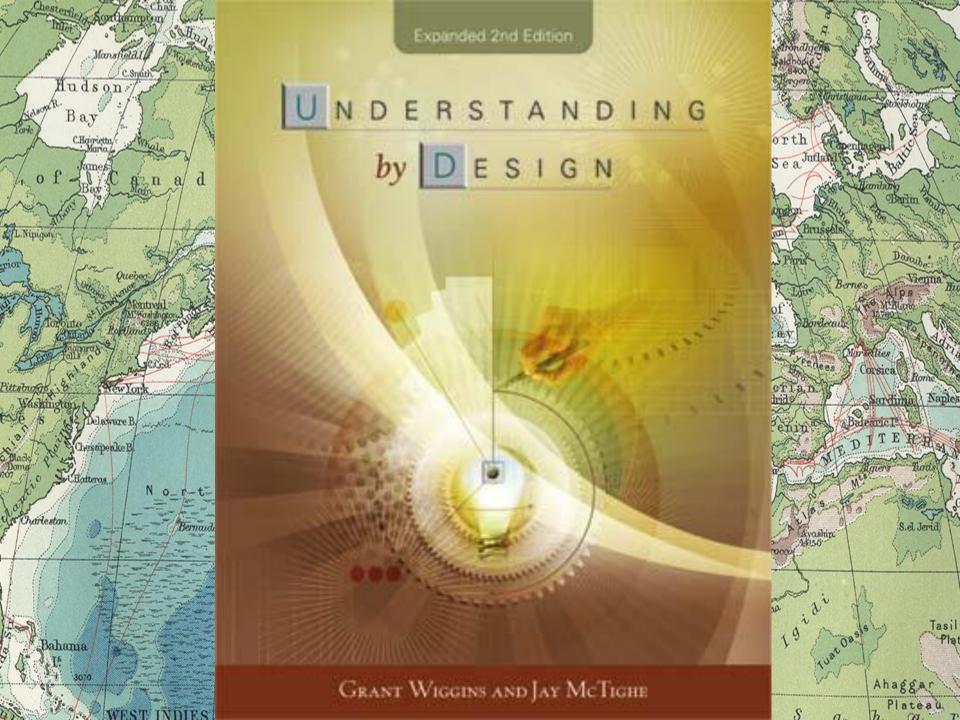


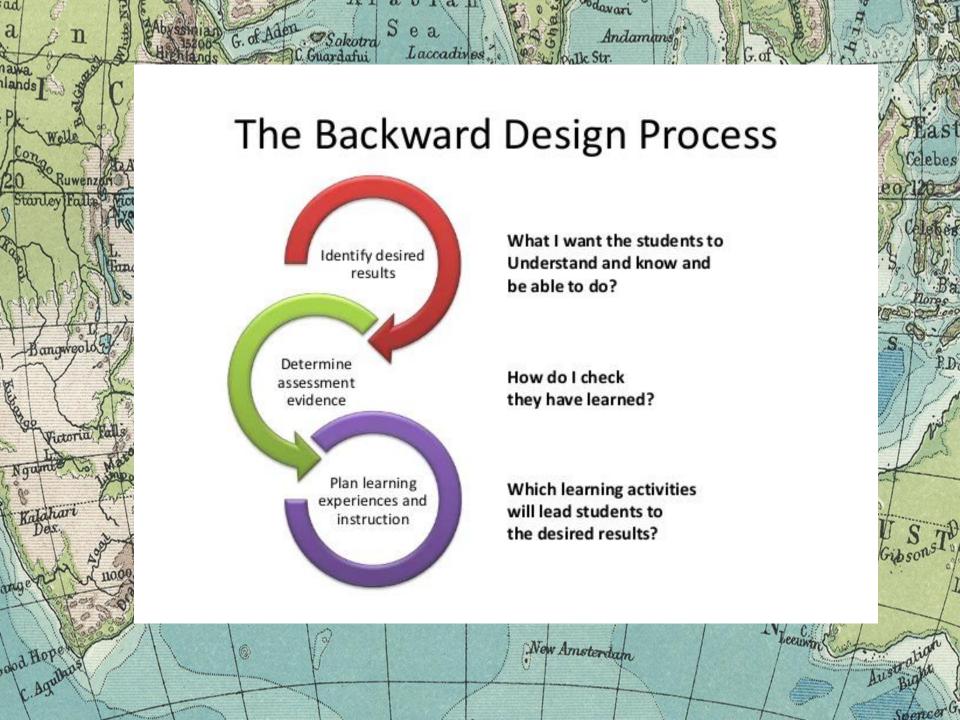




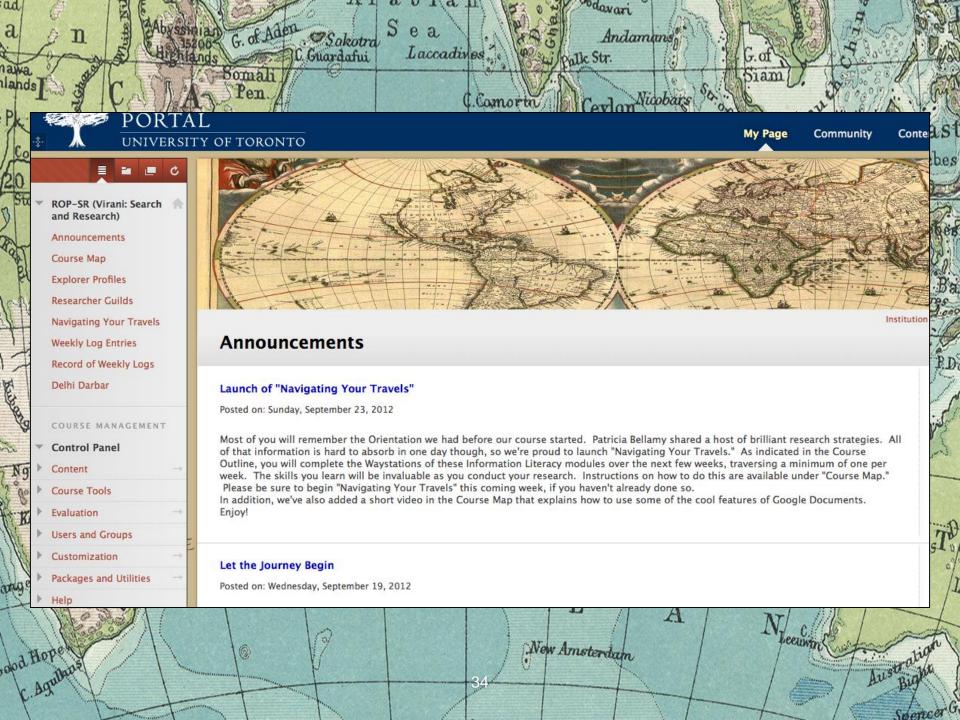




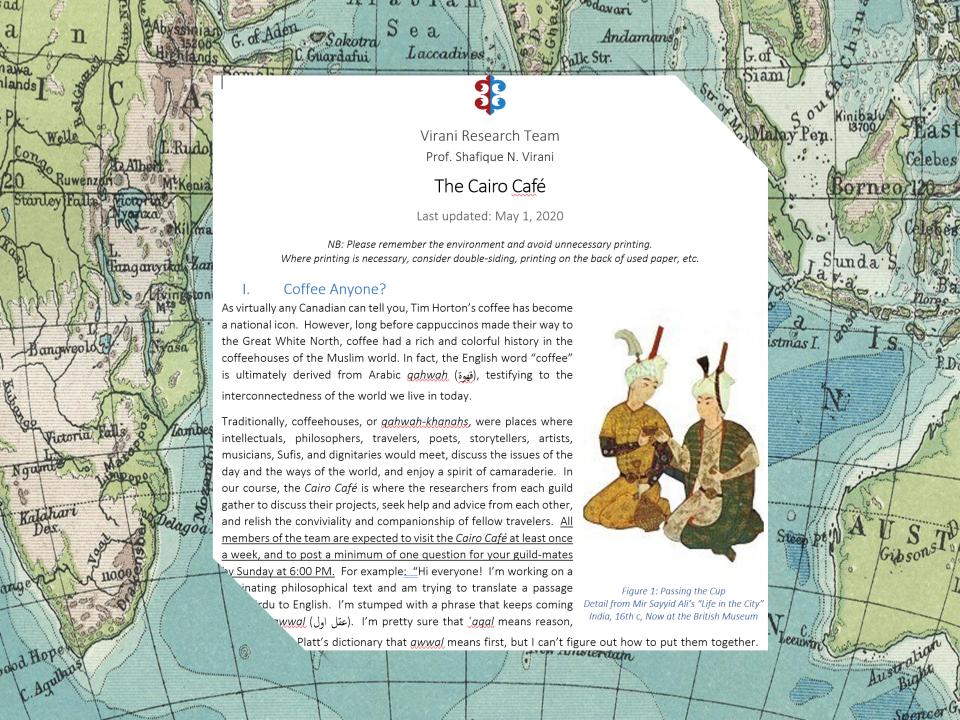












Today was my first day as a part of the Dream-Team! I've spent a lot of time carefully examining all the provided instructions and completed the Driver's Quiz. I enjoyed the narrative style of the instructions: it was the first course outline where I actually carefully read the parts of the syllabus that I usually skip in all other outlines since they're always the same copied and pasted text. From the Cairo Cafe instructions, I found out that in Ukrainian (my second native language after citinsk Russian) the word 'coffee' sounds exactly the same as in Arabic! I couldn't wait to begin doing the actual translation work, so I began as soon as I could. I managed to complete a draft of the translation of the first paragraph. It was a good productive day!



Share your ideas or challenges

- What ideas shared resonate with you for your experiential research-intensive course design plans?
- Challenging issue we can explore?
- Need some advice?
- Advice to share?







ADDITIONAL RESOURCES

Remote Experiential Learning Resources

- Facilitating Synchronous Remote Experiential Learning Events
- Remote Program Facilitation Tools and Strategies

Centre for Teaching Support and Innovation (CTSI)

- Remote Teaching Planning For Next Term
- Engaging Students
- Teaching Online/Remotely Quick Guide



Let's continue the discussion. Please feel free to contact us using the following information:

Session Facilitator:

• Laurie Harrison – <u>laurie.harrison@utoronto.ca</u>

Session Speakers:

- Professor Dawn Kilkenny dawn.kilkenny@utoronto.ca
- Professor Shafique Virani shafique.virani@utoronto.ca



Thank you! Here are some additional resources:

- Remote Experiential Learning Resources For additional resources available to faculty and staff as they design, implement and administer remote experiential learning opportunities, please view the following SharePoint site, available to all UofT faculty and staff https://utoronto.sharepoint.com/sites/dvpp-aelr.
- Remote Experiential Learning Webinar Series To register for additional webinar sessions in this series, please view the following website https://utoronto.sharepoint.com/sites/dvpp-aelr/SitePages/Adapting-EL-for-Remote-Delivery---PD-Series.aspx.
- Experiential Learning at UofT For more information about experiential learning at the University of Toronto, please view the following website https://experientiallearning.utoronto.ca/.
- All Other Questions For all other questions, please email the Office of the Vice-Provost, Innovations in Undergraduate Education at vp.iue@utoronto.ca. We look forward to hearing from you!

