The Centre for Teaching and Learning presents the 8th Annual Celebration of Teaching and Faculty Showcase

Wednesday, April 6, 2016 - IC Building

Teaching With Humanity In A Digital Age
a) Developing Your Teaching Dossier – IC120
Clare Hasenkampf, Director, Centre for Teaching and Learning; Professor, Biological Sciences; Associate Dean - Teaching & Learning, UTSC

A key to becoming an expert teacher is to have a reflective teaching practice. A Teaching Portfolio can assist in developing a reflective teaching practice and is a significant component of tenure, promotion and teaching award files. This event (open to faculty and all levels of career) will consider the purpose of a portfolio and the different components of it. The earlier you start, the easier the process.

b) Fostering Wellness at UTSC: Strategies for building a healthy academic community – IC 200
Sarah King, Coordinator, The Writing Centre; Erin Bradford, Personal Counsellor and Team Leader, Counselling Services, Health & Wellness Centre, Aryel Lutchmie Maharaj and Minds Matter team, Kyrsten Grimes, M.A. Candidate, Clinical Psychology

Come discuss teaching and learning with undergraduate students from Minds Matter magazine and a graduate student from Clinical Psychology. Students will present suggestions for Building a Positive Learning Environment, introduce the new Resource Navigator to help you and your students identify and access appropriate campus supports, and engage us in an informed discussion of navigating the academic side of mental health challenges OR balancing empathy, fairness (equity) and academic rigour. We will also learn about the value of mindfulness meditation and its many applications.

11am - 11:10am – Welcome Remarks – IC130
Clare Hasenkampf, Director, Centre for Teaching and Learning; Professor, Biological Sciences; Associate Dean - Teaching & Learning, UTSC
**11am - 12:30pm – Plenary Session – IC130**

**Student Engagement in a Digital Age - Paul Gries, Associate Professor, Teaching Stream; Acting Vice-Dean, Teaching, Faculty of Arts and Science, St. George Campus; President’s Teaching Award winner.**

Technology has successfully invaded our classrooms and our students are fully connected around the clock. A wave of new pedagogy is enhancing our teaching. With an emphasis on enhancing student engagement, you’ll hear about my journey through online tool development, MOOCs, inverted classrooms, and other technology-enhanced learning, and how these affect and are affected by student use.

**12:30pm - 1:00pm – Lunch – IC Atrium**

**1pm - 2pm – Round Table Sessions**

**Cross-listed courses: A marriage between undergraduate and graduate students – benefits, concerns and tradeoffs. – IC300**

*Tanzina Mohsin, Environmental Science*

Cross-listed courses are offered in most universities in North America, especially if there is a graduate department associated with its undergraduate part. I have taught a cross-listed course at the department of Physical and Environmental Sciences for the past seven years with mostly positive feedbacks from the students. The undergraduate students value the opportunity to mingle with the graduate students and learn from their experiences. As for the graduate students, in most terms they didn’t feel comfortable learning with the undergraduates, and they expressed their aspirations of having it to run as a separate course. Therefore, I propose a roundtable discussion to share experiences and ideas with colleagues who teach cross-listed courses at UTSC or who are thinking of teaching one in future.

**Teaching Sociology of Family through Quantitative and Qualitative Literacy. – IC302**

*Ping-Chun Hsiung, Sociology*

My presentation focuses on the preliminary work of a project intended to/intends to advance the teaching and learning of the Sociology of Family by incorporating quantitative and qualitative literacy. This project, supported by a Teaching Enhancement Grant (UTSC), has three components: (1) gathering statistics, graphs, and other numerical data on the Sociology of Family in Canada; (2) writing a guide to help students read, interpret, and critique the numerical data; (3) developing a digital courseware to present the guide. I will solicit suggestions on how to transform the teaching guide into a digital courseware.
Round Table Sessions continued

Deploying ‘Answer-until-correct’ Multiple-Choice Testing Across Several Disciplines. – IC320
Joanna Heathcote. Dept. of Management, and Ralph Shiell. Dept. of Physics and Astronomy; Trent University

There are many benefits to a testing format that adopts answer-until-correct (AUC) multiple choice (MC) questions, such as a high test reliability, a straightforward allocation of partial credit, rapid grading, and the inclusion of formative assessment into what was previously purely summative testing. We have deployed AUC assessments across a wide range of disciplines; including physics, business, chemistry and nursing. In this roundtable we will relate our experiences from these endeavours, and share with instructors a variety of tips, tricks and traps that can help them to implement this modality. We use scratch-cards called Immediate Feedback Assessment Technique (IF-AT) cards, and we will relate characteristics of these, and also discuss how the AUC format permits an extension to MC testing superstructures called integrated testlets.

“Teaching objectives” or the objective of teaching? Allied practices and collective resistance alongside student partners. – IC120
Kathy Liddle, Sociology, Francisco Villegas, Sociology, and Paloma Villegas, Sociology

In “Becoming an Ally,” Anne Bishop argues that “the concept of ally... is not intended to be an individual, self-defined identity designed to relieve guilt. On the contrary, it refers to a collective process of taking responsibility for privilege, guided by those who are the target of that form of oppression and firmly rooted in a structural analysis.” This session begins with the premise that learning is multi directional and instructors must be co-learners, facilitators and allies. We are interested in beginning a conversation about instances, practices and experiences where instructors attempt to engage in this process as well as the institutional and professional barriers they encounter.

Teaching Tools for a Diverse Classroom – IC300
Tanya (Toni) De Mello, Equity & Diversity Officer and Sheryl Stevenson, TA & Graduate Student Support Coordinator

Come learn techniques to deal with infinitely diverse classrooms--and share your own ideas and teaching tools. We go beyond the black/white, male/female binary notions and talk about sexual orientation, class, mental health, faith and more. Share and learn approaches, methods and tools for creating an inclusive learning environment.

2:15pm -3:30pm – Concurrent Sessions
According to a 2015 Pew research report, 24% of teens claim they are online almost constantly, connected to each other through social media platforms like Facebook, Twitter, YouTube, and Snapchat. These sites play an important role in the personal, social lives of our students. It is where they share experiences, maintain relationships, and create networks. What is the role for these tools in teaching and learning? How have they been successfully integrated into educational contexts? This session explores the research and practice of social media use for online and classroom learning in higher education.

Online tools and course modules can be an important addition to your teaching repertoire. In this session we will discuss best practices for the development of learning modules, and will showcase some online tools & modules that were created (or are being developed) here at UTSC. Bring your ideas to this working session as we model a module design process, discuss the elements of good learning objectives, explore the alignment of resources and resource-based activities with learning objectives, and scaffold online and in-class activities. Finally, we will feature 3 modules “solutions” including Math Instruction modules on calculus and pre-calculus, the Vocabulary Expansion Accelerator (VEA) software integration, and an early look at a Basic Physics Skills modules’ development process.
Lana Mikhaylichenko and Wanda Restivo, Chemistry
*A Novel Peer-Led Team Learning Approach in the Organic Chemistry Laboratory*

The successful application of Peer-Led Team Learning (PLTL) concept through our new initiative – Lab Skills Seminars (LSS) for our large second year Organic Chemistry I and II courses will be described. These seminars occur over the duration of the Organic Chemistry courses to better prepare students for the course laboratory component by making them more comfortable with laboratory concepts, procedures and apparatus. Seminars are prepared and conducted by Peer Leaders who are upper year students and have successfully finished this course before. They are normally taking Service Learning and Outreach course simultaneously and LSS work as their placement for this course. Their responsibilities include preparation of LSS notes and power point presentations for students and communication with the class via Blackboard. Both Peer Leaders and the in-course students benefit significantly from these sessions.

Nirusha Thavarajah, Chemistry
*Creating a Game-Based Learning Platform to Enhance Engagement in Large Class Rooms*

This poster summarizes the applications of creating a game-based learning environment with a free online learning platform called Kahoot. Kahoot allows students to respond to think-pair-activities and answer questions using their phones or laptops for immediate feedback. The advantages and issues with adapting to this new technology to enhance learning in a large introductory undergraduate Chemistry course at University of Toronto Scarborough will be discussed. Qualitative and quantitative responses from students on the usage of Kahoot to create an engaging learning environment will be presented.

Veerpal Bambrar, Allyssa Fernandez, and Jessica Dere, Psychology
*Promoting accurate and appropriate portrayals of mental illness: A collection of resources*

Media reports and depictions of mental illness play a central role in public perceptions and understanding of this topic. Increased awareness of mental illness and efforts to address associated stigma have contributed to the development of various best practice guidelines for the reporting of mental health topics. In the current project, we gathered together existing best practice guidelines into a single resource document. After an iterative search process, we located 24 unique guides; summaries and keywords are provided for each, and the guides are categorized according to target audience, type of author, and primary theme or topic. The objective is to support students who engage with material about media and mental health from various perspectives. It is our intention that this document offers students the opportunity to critically reflect upon representations of mental health in the media; examine ways in which topics they have learned from an academic perspective are translated for a general audience; and become familiar with existing guidelines relevant to the reporting of mental health topics. This document was also designed to help support the integration of Minds Matter Magazine – a student-led mental health magazine – into relevant course curriculum. Recent efforts at such integration will be discussed.
Sohee Kang, Statistics and the Centre for Teaching and Learning
Immediate Feedback with Collaborative Learning Strategies in Statistics Course

Educational research has shown that collaborative learning, or group work often results in a higher level of learning and achievement than individual work. While collaboration and student-centered, active learning are relatively simple ideas, implementing such methods is not, especially in the field of statistics where traditional methods of teaching dominate. To explore how these teaching methods should be translated to the statistics classroom, we tried a new technique in the second part of our Introductory Statistics course. And the Immediate-Feedback Assessment Tools (IF-AT) was adapted to straightforward grading of partial credit for assessment.

Eri Takahashi, Linguistics
Doing experiments because linguistics: Promoting active learning in a large class

This is a report on two projects designed and implemented to promote active learning in a large A-level class. LINA02 ‘Applications of Linguistics’ has traditionally been taught as a survey course, lacking opportunities that allow students to get their hands “dirty” doing research. To provide such an experience, two assignments were designed. In Assignment 1, students participate in a speech perception experiment, formulate hypotheses, and analyze the resultant data. In Assignment 2, they conduct sociolinguistic fieldwork on a new grammatical usage of the word “because” (e.g., I’m late because YouTube) and are responsible for formulating research questions, constructing materials, collecting data (using in-person or online surveys), and interpreting results. The inclusion of these active learning methods permits students to carry out primary research, an experience easily neglected in large A-level courses. Since their implementation, these projects have increased student engagement (and office hours visits) and elicited positive feedback. They have also increased enthusiasm for the subject and encouraged students to more deeply consider the relevant topics and enhance critical their reasoning skills that are difficult to develop via traditional methods.

Brian Harrington, Computer Science
TrAcademic: Experiences With Gamified Practical Sessions for an Intro CS Course

In our “Introduction to Computer Science” course, in the fall of 2015, we introduced the TrAcademic system, which allows instructors and TAs to award points to students in a variety of categories:
- Experience Points: Awarded for participation and engagement with the course.
- Challenge Points: Awarded for completion of more advanced problems, usually requiring a group effort.
- Teaching Points: Awarded for assisting in the educational development of peers.
The points are recorded and displayed on a public leader-board. The accumulated points have no bearing on the mark for the course, they are purely for “bragging rights”. Using this system in practical sessions shows great promise. Gamifying the practical sessions appears to have increased attendance and participation, and improved overall engagement.
Nick Cheng, Brian Harrington, Umair Idris, Tanjid Isla, Computer Sciences

The Code Mangler: Evaluating Coding Ability Without Writing any Code

Marking coding exam questions for introductory computer science courses is notoriously resource-intensive and difficult to perform consistently. Students can be easily led astray by minor misunderstandings in the wording of questions, and graders often find it difficult to decide whether mistakes are attributable to simple misunderstandings, minor memory errors, or major lack of ability/understanding of the core concepts being evaluated. The “Code Mangler” is a fictitious character who manipulates code; removing commenting, changing the order of lines, adding bugs, and otherwise breaking perfectly good code. The role of the student on the exam is then to use the mangled results to reverse engineer the original code. We discuss the benefits of this style of question, and perform an evaluation on a large CS1 course, demonstrating that these questions are less resource-intensive to mark than traditional coding questions, improve the confidence of the graders, and correlate strongly with student ability as assessed in traditional question styles.

Mandy Meriano, Chai Chen, and Tom Meulendyk, Environmental Sciences

Methane gas concentration in soils, Morningside Avenue and Military Trail

The lands located at Morningside Avenue and Military Trail were operated as a sand and gravel pit from the 1930s to the late 1960s. From 1960 to 1967, the former City of Scarborough operated a municipal landfill in the sand and gravel pit area during which time the open pit was in-filled with waste. The refuse impacted the soil and groundwater quality underlying the area with a suite of organic and inorganic contaminants. A specific contaminant of concern in the area is methane gas and its migration through the soil zone to offsite locations. Two EAGLE 2 gas monitor probes were used by students in EESC13 to evaluate the methane gas concentrations in the vacant land located S-SE of the Morningside Landfill and the Pan Am Athletic Centre. The observed data was used to evaluate the feasibility of a hypothetical proposed new daycare facility on the Site and the potential for human risks under current conditions assuming no further remedial actions are conducted. The exercise and its “real world” application proved to be an effective approach to teaching environmental science and exposing students to the challenges of data collection, analysis, interpretation, and making sound professional judgment and recommendation.

Priya Sivathason, Psychology

Academic Integrity Matters Online Module: Studying the Effectiveness of an Academic Integrity Module in Reducing Plagiarism in Introductory Psychology Students

This study examines the effectiveness of an academic integrity module in reducing plagiarism by measuring and comparing the percent originality of assignments written by introductory psychology students across different conditions: (1) no module or in class session, (2) only an in class session as presented by the Academic Integrity Team, (3) only the academic integrity module – while controlling for confounds such as assignment type, method of instruction, and class composition. With enough experimental evidence for the effectiveness of this module, it is hoped that it can be implemented in the near future to reduce cases of academic dishonesty.