

WEDNESDAY, OCTOBER 11

WEDNESDAY, OCTOBER 11, 7-8:30

Breakfast on your own.

See the “Dining within Walking Distance of the Telus Convention Centre” handout (image right) at the Registration Desk and in the Conference Commons.

WEDNESDAY, OCTOBER 11, 8:30-11:30

Preconference Workshop: "How Learning Works: Seven Research-Based Principles for Smart Teaching" facilitated by Michele DiPietro (Stephen AB in the Hyatt)

See page 21 for information about this workshop. Seating is limited, so attendance is open only to those with confirmed registrations for this session.



Preconference Panel & Workshop: "Incorporating the Mentoring of Undergraduate Research into Your Professional Portfolio": A Panel & Workshop Sponsored by the Council on Undergraduate Research (CUR) facilitated by CUR's Susan Larson, Trent Maurer, Paul Miller, and Brad Wuetherick (Imperial Ballroom 1-3 in the Hyatt)

See pages 22 and 23 for information about this panel and workshop. Seating is limited, so attendance is open only to those with confirmed registrations for this session.

WEDNESDAY, OCTOBER 11, 11:30-1:30

Lunch on your own.

See the “Dining within Walking Distance of the Telus Convention Centre” handout at the Registration Desk and in the Conference Commons.

WEDNESDAY, OCTOBER 11, 1:30-4:30

Preconference Workshop: "Openings and Opportunities: Making a Place for the Scholarship of Teaching and Learning in Your World" facilitated by Pat Hutchings and Peter Felten (Stephen AB in the Hyatt)

See pages 21 and 22 for information about this workshop. Seating is limited, so attendance is open only to those with confirmed registrations for this session.

Preconference Workshop: "Living Within the Circle: Decolonizing Education" facilitated by Jennifer Ward (Imperial Ballroom 1-3 in the Hyatt)

See page 22 for information about this workshop. Seating is limited, so attendance is open only to those with confirmed registrations for this session.

WEDNESDAY, OCTOBER 11, 4:30-5:15

New to ISSOTL Session (Neilson 1 in the Hyatt)

This session is designed as an informal meet and greet where people new to ISSOTL will meet in small groups with ISSOTL leaders. If this is your first ISSOTL conference, we would love to meet you. Please come to this session to introduce yourself, ask questions, and learn more about ISSOTL. Past attendees have said that this session helped them feel much more welcome throughout the entire conference. We hope to see you there!

WEDNESDAY, OCTOBER 11, 5:30-7:00

Opening Plenary (Exhibition Hall D)

"Reaching for New Heights: Who Gets to Reach?" by Gary Poole

See page 16 for information about the opening plenary.

7:00pm End of Wednesday programming

Enjoy dinner on your own!

See the "Dining within Walking Distance of the Telus Convention Centre" handout at the Registration Desk and in the Conference Commons.

THURSDAY, OCTOBER 12

THURSDAY, OCTOBER 12, 7-8:30

Breakfast in Exhibition Hall E

See page 17 for the ISSOTL Committees and Interest Groups meeting at this time.

THURSDAY, OCTOBER 12, 8:30-10:00

Variations on a Theme: Two Versions of a Course Evolve in New Directions Dan Bernstein, Sarah Bunnell

Glen 205

Two psychologists team-taught a senior-level course for four years at a large public university, meeting three times a week in a conventional classroom (but with movable chairs). While achieving new heights in learning with innovations over years of co-instruction, the instructors used structured scoring of student products to evaluate the relative success of those course enhancements. When both instructors changed institutional settings the same course was then taught in two very different contexts, and each version adapted to its new surroundings. In this panel there will be four segments describing the evolution of the course and student learning in each context; one will give an overview of the initial collaboration, two segments will describe the adventure of designing new variations on the course, and a fourth will offer a synthesis of what insights have emerged through this extended collaboration. Each segment will offer evidence from students' work that drove the continuous development of the

course. The course focuses on classic conceptual issues in psychology, including free-will and determinism, the mind-body problem, the influences of nature and nurture, the challenge of introspection as a source of knowledge, the cross-cultural validity of psychological phenomena, and the contrast of evidence and belief-based ways of knowing. It is an elective offering that is available to both majors and non-majors, with minimal pre-requisites to maximize access to the course. While these topics are drawn from the philosophical questions out of which western experimental psychology emerged, the course focuses instead on helping students analyze contemporary social issues using the analytic and conceptual tools made available by addressing those questions. One panelist will describe the course details and how it changed during the period of co-instruction. This period included a transition from essay exams that asked for conceptual and theoretical analysis to essay exams that presented specific problems that asked students to use those analyses to frame an answer. When students found the revised form of examinations very challenging, the next step involved changes in the pre-class learning activities, the use of class time, the ordering of readings, and the redesign of high stakes assignments. An important feature of this transition was shifting from a deductive to an inductive teaching approach-moving the conceptual and theoretical material to the end of each topic, starting instead by having students engage with specific cases using whatever knowledge and ideas they already had. Importantly, many of the changes were the product of collaboration with undergraduate students who had taken the course during a previous semester and shared their own connections with and points of entry to the material. A second panelist will describe how the course was adapted to operate in a seminar format at a small liberal arts institution. There were some ways that the course was easier to operate, and it allowed the development of additional learning activities, both inside and outside face-to-face class time. This course was offered as an upper level capstone course for Psychology majors, which altered the amount of pre-existing knowledge about the concepts that students brought to the entry-point discussions of each topic but did not inherently increase their preparation for engaging with the complex theoretical and conceptual material. In the first offering of the course, students completed verbal integrative interviews with the instructor at the end of the course; in the second offering of the course, these integrative prompts were addressed in written form at the end of the term. The first panelist will describe how the course was adapted to operate in a medium sized class that met once a week for only two hours. More of the activity was shifted to preparation done in asynchronous online learning teams outside of class, despite local expectation that attendance alone would likely be sufficient to pass courses at this campus. Activities during class shifted almost entirely to student-centered conversations in teams, with intermittent plenary consideration of complex problems. Quality frameworks in the style of cognitive apprenticeship (rubrics) were introduced in support of precise feedback to the class on complex written assignments. In the first year the weighting of high stakes writing shifted toward out of class writing assignments and away from in-class essay exams. In the second year, in-class exams were eliminated and all high-stakes writing was done outside of class time. The second panelist will describe the lessons learned from the evidence gathered in all three versions of the course focusing the analysis on the evidence of student learning gathered across each context. The synthesis will include analysis of the trade-off between depth of understanding and the raw amount of content that can be included in the course materials. Participants in the session will be encouraged to share their experiences with similar courses in which complex problem-based assignments are the goals for student understanding. The panelists will answer questions about the particulars of the three offerings, and engage the audience in conversation about the feasibility and sustainability of teaching in the manner described. Participants will be encouraged to reflect on the following questions: 1) What are the implicit and explicit assumptions that we make as instructors when we structure our courses in an inductive or deductive manner? What is gained, or lost, with each approach? 2) How well do effective practices in teaching and learning translate well across teaching contexts? Conversely, how much does university context and students' past learning experience contribute to student learning outcomes? 3) What is gained by examining student learning in the same course across multiple contexts? What questions cannot be addressed through this approach?

Want to search for presenters by name?

Use the Guidebook app, or search the PDF of the program booklet online.

Advocacy and Outreach: Addressing Issues of Our Times

Glen 201

Lauren Scharff, Jennifer Friberg, Allison Meder, Claire Hamshire, Arshad Ahmad

This panel will bring together several members of the ISSOTL Advocacy and Outreach Committee to share perspectives and lead discussion centered on how we (individual ISSOTL members, the Advocacy and Outreach

Committee, and/or ISSOTL at large) might engage in and support appropriate responses to local, state, national, and international issues that relate to or affect SoTL. Thus, this panel will most closely align with the conference theme of New horizons, emerging landscapes, and underexplored territories in SoTL. This panel topic also aligns with the recent statement released by the ISSOTL Board of Directors (13 Feb 2017): As an international organization, ISSOTL is dedicated to open and critical exchanges among and gatherings of scholars from across the globe. In our mission statement, we affirm our commitment to “the collaboration of scholars in different countries and the flow of new findings and applications across national boundaries.” As elected representatives of ISSOTL’s membership, we oppose policies that restrict ISSOTL members from freely acting as scholars of teaching and learning. The Advocacy and Outreach committee’s mission is to foster discussion about the relevance of SoTL for improving education and for policy development within and outside of the Academy. The committee believes that many types of action support their mission: raising awareness of topics and events related to SoTL, providing resources to enable members to more effectively disseminate SoTL work and promote its recognition, and, when appropriate, responding to or providing resources for those responding to current events or policies that might impact SoTL. This latter aspect of our mission will be the focus of this proposed panel. ISSOTL is one of many national and international societies of academics that has and is currently grappling with how to appropriately respond to current events and government policies that affect its members or impact topics related to the society’s mission. In *Taking Political Stands Does Not Sit Well with All Scholarly Groups*, Beth McMurtrie (Chronicle of Higher Education, 2014) contributes a nice summary of how and why a variety of professional organizations react to matters of national or international concern. Her article mentions several aspects of taking a political stand that organizations should consider: What are an organization’s guiding principles to help determine when and if it will take a public stance on an issue? Are there possible negative repercussions such as a threat to funding of research? What process should be used to create and obtain member support for resolutions or statements by the organization? During the presentation part of the panel (max 30 minutes), panelists will set the context (as given above) share real examples of impact of recent policies or government actions from around the globe on SoTL-related activities (e.g., cancellation of international collaborative research efforts due to the U. S. Travel Ban in early 2017, restrictions of academic freedom in Turkey, Russia, etc.) share examples of how academics have responded to recent events and policies (e.g. statements from many organizations, scientists protesting in Boston, etc.) share reflections from a variety of perspectives (senior faculty, junior faculty, student, regional perspectives from USA and non-USA countries). During the discussion part of the panel (30 minutes), the following questions will be shared for discussion. Additional topics and examples are possible, depending upon international events / activities / policy implementations that might occur between now and the time of the conference. How can we most effectively gather new / ongoing examples of events, activities, policies that affect SoTL, and gather examples of the impact of such events, activities and policies? What might be some effective means by which to make public, i.e. raise awareness of, the above gathered events and impact? (“public” possibly meaning ISSOTL members, the broader academic community, and/or those outside the academic community) What types of resources might the Advocacy and Outreach Committee provide to help support the efforts of individuals who want to engage in SoTL advocacy or outreach? Should ISSOTL as an organization speak out on matters of public policy affecting its members around the world? What might be an appropriate process by which to prepare statements or resolutions, and what type of membership approval should be necessary prior to their release? Are there ways that we might better leverage communication tools and social media to support Advocacy and Outreach efforts? Participants will be invited to share relevant case examples as a blog on the ISSOTL website or as part of a collection of resources for the ISSOTL Advocacy and Outreach portion of the website. Depending upon the discussion, times for follow-on conversation at the conference might be planned.

Teaching Practices in Higher Education: An International Study **Andrea Han, Adriana Briseño-Garzón, Gülnur Birol**

Glen 206

There has been a considerable interest in researching effective teaching practices and promoting the use of evidence to inform these practice in higher education (Ambrose et al., 2010; Bain, 2004; Buskist & Groccia, 2012; Nilson, 2010). Despite this, many post-secondary institutions are largely unaware of what teaching practices are employed in the classroom as institutions rarely collect information on faculty teaching practices (Tagg, 2008). Such dearth of information both limits the ability of institutions to measure educational effectiveness and positions teaching and learning support units in a challenging situation, as effective support should ideally be tailored to fit the institutional teaching culture. This study builds on our previous work at [UNIVERSITY] exploring faculty teaching

practices and perceptions (NAME, 2016). In an effort to expand our data set, we collected data from faculty at eight institutions from East Asia, Europe, Oceania and North America. A common survey consisting of two sections and 30 questions, primarily multiple choice and/or Likert scale was used. The survey also included three open-ended questions that explored perceptions around main challenges and enablers of teaching. The study was conducted with institutional ethics approval, and across all institutions and disciplines a total of 2017 faculty completed the survey. Weighted descriptive statistics were generated for all multiple choice and Likert-scale questions. Three researchers independently reviewed open-ended responses and empirically developed coding schemes based on emergent themes. These schemes were then compared and combined to develop a content analysis protocol to determine pervasive issues impacting the ability of faculty to improve teaching practice and student learning. All open-ended responses were analyzed in NVivo using this protocol. In this session we will use the top issues impacting the ability of faculty to improve teaching practice and student learning, derived from the content analysis of open ended responses, as a framework to share quantitative findings on faculty teaching practices and perceptions across institutions. The focus of this session will be the teaching practices employed in large, research intensive institutions, the similarities and differences across institutions, and whether our findings mirror those from studies conducted in other institutions (e.g., Lammers & Murphy, 2002). We will also highlight the breadth of teaching practices employed across the participating institutions and discuss with the audience connections to existing research (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010; Kuh, Kinzie, Schuh, & Whitt, 2005). This study provides a first and necessary step to inform institutional decision making and sheds light into our understanding of faculty teaching practices and perceptions. In this session we will discuss the meanings and implications of our findings on the work as support staff and will encourage participants to think and reflect on their own institutional contexts. We will also invite participants for a discussion around how support units can address identified favoured teaching practices in their context.

Faculty Attitudes towards Reading and Reading Compliance **Karen Manarin**

Glen 206

Theorists of reading argue that the term “reading” denotes various activities which probably involve different “tacit, yet systematic beliefs about the reader’s perceived role as a reader” (Schraw and Bruning, 1999, p. 282). Schraw and Bruning identify two main models: transmission where the reader believes that the text contains the meaning and transaction where the reader believes he or she constructs meaning. Much reading at the post-secondary level requires engagement associated with transactional models. Transmission models of reading do not seem to increase engagement or understanding of difficult text (Dai & Wang, 2007), and may indeed require more effort (Linderholm, 2006). At the same time, however, faculty are concerned with getting post-secondary students to do the required reading at all. Studies have suggested that only 20-30% of undergraduate students have done the reading on any particular day (Burchfield and Sappington, 2000). Arum and Roksa (2011) note that many students select courses to avoid heavy reading requirements while Lei et al. (2010) identify anxiety around student evaluations of instructors as a reason some instructors do not insist students read. This complex dynamic has led to the development and investigation of multiple techniques designed to increase reading compliance without angering students or taking too much class time. This study explores faculty attitudes towards reading and reading compliance. Thirty-two faculty members from different institutions across the globe participated in an online survey; fourteen agreed to be interviewed. Open-ended survey responses and interview transcripts were analysed using generic qualitative methodology; recurring patterns and variation from pattern were noted. These faculty members teach undergraduates and graduate students in very different disciplines, from music and literature through science and business, but they are united in their concern that students do not read effectively. Their attitudes towards reading compliance, however, vary as do their descriptions of what successful reading looks like in their particular contexts. However, most participants do not tell their students what successful reading looks like. In the first half of this presentation, I will illustrate the categories emerging from this research before asking participants to reflect on their own positions in terms of the categories.

**Understanding Contributions and Experiences of Teaching Focused Faculty Members at
Research Intensive Universities: Working Toward Best Practices for Institutions and Departments**
Catherine Rawn, Joanne Fox

Glen 206

The role of the faculty member in higher education is transforming. The traditional expectation that faculty conduct research, teach, and serve rarely aligns with faculty careers (Fairweather, 2002). Facing pressures, institutions have relied increasingly on a temporary workforce, particularly in the United States--a move that many recognize as problematic for institutions, students, and the faculty involved (Kezar & Maxey, 2014; Kezar & Maxey, 2016). A growing number of Canadian institutions are implementing permanent or tenure-track faculty positions specializing in teaching (and may or may not include other forms of scholarship such as conducting original research). Such Teaching Focused Faculty (TFF) positions are raising questions about the relationship between research and teaching, and the nature of scholarship (see Boyer, 1999)--questions that have the potential to transform the professoriate as well as the Scholarship of Teaching and Learning (SoTL). These positions provide opportunity and sometimes a mandate to engage with SoTL; thus future expansion of TFF ranks may fuel rapid growth in SoTL. Debates continue (e.g., Chapnick, 2012) without a scholarly understanding of these positions (c.f., Vajoczki, Fenton, Menard, & Pollon, 2011). Thus, we launched a survey to understand TFF experiences. This talk summarizes our key survey findings, and will invite discussion in light of the mapping and chronicling SoTL conference theme. This study offers the first attempt to capture the experiences of Teaching Focused Faculty (TFF) across Canada. Our top research priorities were to document the productivity of TFF, as well as to improve understanding of TFF experiences, to inform best practices for departments and institutions. Because 67% (n = 165) of the 251 TFF surveyed were employed across Canada's two largest research intensive universities (RIUs), we focused our analyses on TFF at RIUs. Respondents represented a variety of disciplines and experience. Data show that TFF are highly motivated, productive and engaged academic citizens who value their positions. TFF regularly engage in a wide array of scholarly activities that span teaching, service, leadership, pedagogical and/or disciplinary research, and professional development such as conference participation. Of particular note, 62% of respondents reported engaging in SoTL in the past two years (c.f., 46% reported engaging in disciplinary research). TFF value their positions more to the extent that they feel integrated as part of departmental and institutional cultures; in addition, feeling fairly compensated, having clarity regarding promotion and tenure expectations, and participating in mentorship regarding teaching careers also contribute to that sense of value. We recommend that institutions continue to cultivate TFF positions as they offer positive career paths for people who contribute productively to the educational mission of universities. As this path grows, an accompanying surge in SoTL may have implications for journals as well as mentorship, as novice TFFs navigate a field beyond their doctoral training. Our contribution represents an early step toward understanding how best to implement and foster such TFF positions at RIUs, raises questions for mapping the growth of SoTL, and provides a benchmark that will help to contextualize further research into this growing group of university faculty.

The Emerging Landscape of Integrated Scholarship in Program Development
Denise Stockley, Leslie Flynn, Kimberly Sears, Jill Scott

Telus 102

The development of an innovation or program can provide unique opportunities for research and scholarship. Often, however, when new programs are created, time, effort and resources are front-loaded during the development and implementation phases, leaving little to no time left over for scholarship that documents, articulates and theorizes the innovations and outcomes. It is often the case that by the time an innovation or program is sustainable or complete, energy to do scholarship is often waning as well. To combat this initial resource drain, we propose an integrated approach to scholarship that measures processes and outcomes from the initial stages of program development (See Hubball & Clarke, 2010; Zhang & Amundsen, 2015; Marquis, 2015). As educators, scholars and educational developers in higher education, we often provide consultations within the domains of teaching and learning during the development of new programs, or are tasked within our departments to help to develop new courses or programs. However, we sometimes overlook the critical role we can play in lending our expertise to research and grant writing that integrates scholarship. Embedding scholarship during the initial planning stages of new projects can allow us to measure processes and outcomes from the initial stages of program development, through program delivery, to eventual programmatic redesign. We argue that an embedded model of scholarship offers numerous benefits including: improves outcomes and accountability, increases flexibility on

stakeholders, provides real-time feedback for the program, ability to use evaluation data to improve/change program before the next offering-a continuous feedback loop, enables capacity building as an evaluation that focuses on process/use. This approach was initially utilized during the development of the Masters of Sciences Healthcare Quality program at Queen's University. This approach resulted in two presentations, one national and one international, two articles, one in an education journal, and four chapters, each co-authored by a student and experts, in an edited compilation. More recently, we have used this approach within Queen's University for the School of Medicine's transition of all of its specialty postgraduate residency programs to competency-based medical education (CBME). In this presentation, we would like to share our experience of developing an integrated scholarship approach as our residency programs transition to CBME. Using this approach has combined program evaluation and scholarship in ways that has allowed us to build capacity for CBME scholarship across the institution. We will offer practical suggestions for ways to integrate scholarship into new course and program development.

Professional Development and Recognition for Clinical Teachers: Two Proactive Initiatives
Carol Miles, Keith Foggett

Telus 102

Over the past 20 years, universities have provided rich professional development for university teachers in the areas of teaching and assessment (Loucks-Horsley et al, 2009; Fry, Ketteridge & Marshall, 2008; Steinert et al. 2006). This has primarily been directed toward the needs of full-time teaching staff, while clinical staff responsible for workplace-based university teaching have received little or no formal training. In Australia, an increasing amount of university teaching is performed by casual and/or conjoint staff. This is particularly salient for the health professions, as increasing numbers of students entering these programs creates pressure for more clinical placements, and requires more clinicians to take on (unfamiliar) teaching roles (Tai et al., 2016). To this point, however, few institutions have addressed the barriers that exist for the training of staff supervising clinical learning in the workplace (Searle, Thibault & Greenburg, 2011). Many of these clinical supervisors' affiliations with their universities are conjoint in nature (often unpaid, with student supervision a contribution to their profession), yet they have direct impact on student success and effective preparation for practice. Scant attention has been given to the professional development of those clinical teachers for a number of practical reasons (Searle, Thibault and Greenburg, 2011). Many are not located on university campuses, but in geographically diverse locations in hospitals and clinics. With many having no university teaching experience or formal teaching qualifications, these teachers are essentially on their own when assessing, providing feedback, and mentoring students. The skills they require to guide students through the complex path to practice are very different from those of a typical university lecturer, so generic teaching resources (if even accessible), may be of little help. This paper describes in detail the initiatives of a large Australian university providing two primary professional development opportunities for their clinical supervisors working in the field of Medicine: A Professional Certificate in Clinical Teaching and Supervision, and membership in the Academy of Clinical Education. As well as providing practical training for clinical teachers to improve student outcomes, these programs encourage clinical teachers to reflect on their practice in a scholarly manner, creating rich opportunities for SoTL research into the field of clinical teaching. The Professional Certificate in Clinical Teaching and Supervision offers a program that includes structured face-to-face workshops where rich discussion of critical skills and issues in clinical supervision and assessment are demonstrated and discussed in a safe and authentic environment. The Academy for Clinical Educators was established to offer a rich and connected community of practice for the geographically separated cohort of clinical teachers through face-to-face and online opportunities for collaboration. Membership in the Academy is awarded through a number of channels, primarily through attainment of the Certificate in Clinical Teaching and Supervision. This paper will describe the initial findings from evaluation of these two programs, including successes and challenges, and will make recommendations for those wishing to embark on similar initiatives in the field of medicine, nursing, allied health, or other professions who rely on clinical experience for learning.

Early Childhood Education and Care professional learning models have traditionally comprised of “one-off” face-to-face workshops, which are usually facilitated off site and involve one, or perhaps two, educators from an individual centre (Brown et al 2013, Hardy, et al 2010). However, this long-established model is associated with several significant pitfalls, such as ineffective transference of ‘new’ information to other educators in their centres and generalized ‘one-size-fits-all’ information presented to groups of educators (Nitecki 2014) each from their own specific context. Furthermore, attending one day workshops is costly and the reach of these face-to-face workshops is generally limited with few face-to-face professional learning opportunities being facilitated in rural and remote settings (Broadley 2012). The Healthy Online Professional Program for Early Learners (HOPPEL) was developed to overcome these shortcomings. HOPPEL is a 12-week technology mediated professional development model embedding synchronous and asynchronous learning platforms. Following a day-long professional development session face-to-face, educators return to their centres and participate in weekly online blogs and forums, mediated by an educator, and three monthly synchronous chat sessions. The feasibility and acceptability of this online professional learning model has recently been tested in 15 early childhood education and care settings. Early childhood educators successfully participated in a form of professional learning that was; contextually relevant, encouraged reflective practice and offered support. Furthermore, it enabled educators to log on and engage in ongoing synchronous and asynchronous content- specific conversations within a professional community. Built upon a sociocultural theoretical framework (Vygotsky, 1978), this study recognises the importance of the co-construction of knowledge among others in a social environment, specifically a Community of Practice (CoPs) (Christ & Wang 2013, Caudle & Moran 2013). Based on CoPs, this is an innovative form of ongoing professional learning that promotes the formation of professional relationships and collaborations (Lave and Wenger, 1991) in online environments. HOPPEL is the first of its kind internationally and has the potential to transform professional learning in the early childhood sector.

Like many business education disciplines, the field of human resource management (HRM) requires practitioners to not only master extensive theoretical content but to interpret and apply it to ethical practice across diverse contexts and environments. The learning journey to mastery in this discipline necessitates intense and frequent immersion to the theoretical as well as the applied aspects of the profession. To adequately prepare students for success after graduation, we must early equip them with opportunities to evolve their own professional identity and to build practitioner efficacy. A precondition of this is to provide more experiential learning opportunities throughout their business education. Appropriately scaffolding students’ development through increasing levels of both difficulty and complexity may be achieved by employing teaching using community service learning (CSL) as a primary pedagogy. We assert that the education of human resources is an underexplored territory of CSL and advocate that community service learning be embedded both earlier and more deeply HR programs. Upholding our argument is emerging evidence for the importance of delivering HRM curricula through CSL (Bhattacharya & Scheraga, 2015; Christo-Baker, 2010; Madsen, 2004) to enable students to learn by doing, and to gain exposure to their professional practice in a supported way. Real as well as perceived barriers exist to getting a service learning program off the ground: it does require extensive effort on the part of the instructor (Abes, Jackson, & Jones, 2002), some may lack familiarity with CSL or how to design and implement it (Madsen, 2006), and some suggest it can be considered to be a personal risk to undertake as it may create additional uncertainties with regard to teaching evaluations or perceived teaching effectiveness for tenurable or promotion seeking professors (Neilson & McShane, 2016). That said, by designing service learning curricula in an intentional way and through appropriate scaffolding for student participants, we can reduce barriers for professors and students to engage in this high impact teaching and learning practice. We underpin our call with the theoretical framework of transformative learning (Mezirow, 1981, 1994, 2003) to help contextualize as well as champion the need for more service learning and community engagement in HR curricula. Exposing students to experiences which create “disorienting dilemmas” and

necessitate their exploration of new roles and ways of problem solving can enable the required perspective shift to achieve transformative learning (Mezirow, 1981, 1994, 2003). Orchestrating this in an intentional way which allows for eustress though discourages distress though reflection (Tikkamaki, Heikkila, & Ainasoja, 2015), provides for realistic goals and ways of assessing them, and balances autonomy with support for students, can enable transformative learning. Using a recent, proof-of-concept project that involved implementing CSL to a capstone HR course, we present evidence as well as further options for curricula design which extends beyond one capstone to promote and effectively ladder transformative learning across the HR curricula.

Mapping the Information Literacy Skills of First-Year Business Students: A Journey into Lesson Study
Justine Wheeler, Norm Althouse, Peggy Hedges, Zahra Premji

Glen 204

At the Haskayne School of Business, information literacy skills are first introduced to undergraduate students in their mandatory course: Strategic and Global Management (SGMA217). Students in the course are becoming acculturated to the university environment and to business as a professional and academic discipline. Furthermore, students are expected to complete a significant research project. Not surprisingly, academic librarians are often significantly involved in assisting students acquire critical information literacy and research skills (Raish & Rimland, 2016). For SGMA217, librarians have been heavily involved in the creation and delivery of a one-shot session. In the past, this library instruction session was lecture-based and therefore roadblocks to student learning were difficult to perceive. This paper chronicles the implementation of a lesson study project by the instructors and librarians involved in SGMA217. In lesson study research a small team works together to “design, teach, study, and refine a single class lesson” (Cerbin & Kopp, 2006, p.250). Furthermore, in lesson study emphasis is placed on making learning visible, in order to, investigate how students learn (Cerbin & Kopp, 2006, p. 251). For this project investigators decided to use a flipped classroom approach to encourage active learning. A flipped classroom, or inverted lecture technique, is defined as a teaching method that delivers lecture content online prior to class time. Class time is then used to integrate learning into practical application activities (Arnold-Garza, 2014). For our study, online modules were created to introduce students to key concepts. After viewing the modules, higher level activities related to the concepts were conducted during class time. A librarian acted as a guide, leading students through the learning process. Data collection points were set-up throughout the process to make learning visible. Specifically, we collected and analyzed data from online modules, in-class worksheets, in-class feedback forms, observational study, and an online feedback form submitted by students after their research project was complete. This session will take attendees on a journey through our lesson study project. It will highlight the steps involved in: creating a research design that makes student learning visible; practical considerations; and lessons learned. Finally, the findings of the study will be shared along with how we will incorporate our findings into the next iteration of the flipped classroom and lesson study for this course.

Teaching-Only or Teaching-Focused? The Realities of Being a SoTL Practitioner in a Disciplinary World
Anne Tierney

Telus 103

This paper is part of an ongoing study into teaching-focused academics in Life Science university departments. Although UK based, it is an exploration of the anxiety faced by many teaching-focused faculty. Often described as “teaching-only” or “adjunct”, the teaching-focused academic takes on substantial teaching and administrative roles within the university. This in turn allows research-focused colleagues to concentrate more on disciplinary research, which enhances institutional reputation. Teaching-focused academics have embraced their academic role by developing expertise in SoTL, enhancing teaching and learning within institutions, and improving the learning experience of students. However, within this new expertise, there is a price to be paid. Teaching-focused academics may experience anxiety if their ties to disciplinary research are weakened, as they feel distanced from advances in the discipline that they are tasked with teaching. They also may experience anxiety towards their perception of academic identity, as they may no longer feel like a scientist, but also not expert enough to be an educational expert. Using Wenger’s (1998) Communities of Practice as a lens, this study sets out to look at the development of Teaching-focused academics as a distinct community within academia. The study uses narrative interviews (Schütze, 1992) as a method of in-depth inquiry, and follows Lincoln and Guba’s (1985) evaluative criteria

for thematic analysis. What emerges from the study is the complexity of the role performed by teaching-focused academics. This is one which, while vital to the working of the university, is often poorly understood, supported and valued. Teaching-focused academics may often find themselves taken for granted, as their role does not attract the kind of prestige (Blackmore & Kandiko, 2011, 2012) associated with disciplinary research in biological and biomedical fields. Despite the challenges, Teaching-focused academics remain committed to their role within institutions. However, the question remains as to how to best support them through their anxieties. This paper is of interest to teaching-focused practitioners, university administrators and academic developers with responsibility to new and mid career teaching-focused and adjunct faculty.

Navigating the Aspirations and Anxieties of Faculty Development in Post-Colonial Contexts

Telus 103

Jennifer Blaney, Michael Agnew

Recent scholarship has attended to the prevalence of internationalization initiatives in higher education and the motivations that underlie this shift at the institutional level. These motivations can range from the need to recruit international students to increase tuition revenues, offering students international exchange opportunities, to international and multi-institutional research collaborations (Qiang, 2003; Altbach & Knight, 2007; de Wit, 2009; Brandenburg & de Wit, 2015). At McMaster University in Canada, internationalization has been prioritized within the University's academic and research missions. Recently, McMaster has engaged in a five-year international partnership with T.A. Marryshow Community College (TAMCC) in Grenada, a partnership that also involves the country's Ministry of Education and the PETNA Foundation. A central component of this partnership is a faculty development program set to building capacity and teaching skills at TAMCC through the provision of an internationally recognized training and certification program known as the Instructional Skills Workshop (ISW). The ISW is a comprehensive teacher development program that serves to enhance the teaching effectiveness of both new and experienced educators. By November 2017, TAMCC will have 30 of 150 faculty members certified in the ISW program. Moreover, 10 of those 30 faculty members will have dual certification in both the Instructional Skills Workshop (ISW) and the Facilitator Development Workshop (FDW), which will enable them to provide ISW trainings independently and allow for a sustainable faculty development culture to grow at TAMCC. The international partnership developed between TAMCC and McMaster offers a unique opportunity to assess the process of designing and implementing a partnership of this scale. Being in the first year of a five-year partnership, this is a critical time to reflect on the effectiveness of the faculty development programs that are being introduced and their alignment with evidence-based practices in SoTL research. While the goals of this partnership are certainly aspirational, there are two emergent anxieties that activities related to faculty development in international contexts will inevitably be required to address. The first anxiety centers on the applicability of the ISW to contexts of developing higher education systems. Although the ISW presents itself as an international program that is transferrable to a variety of global contexts and institutional settings, the matter of its applicability within international post-secondary systems necessitates further evaluation. This first tension is also amplified by the notable gap in literature on international partnerships within SoTL research (Willis & Strivens, 2015), producing in turn a second emergent anxiety regarding how to ethically negotiate an international partnership in a postcolonial setting where socio-economic, cultural, and pedagogic recovery are underway (Manathunga, 2006; Lee, 2011). Engaging the complexities of faculty development within an international partnership is vital as universities prioritize internationalization in their academic and research missions. This session will provide an overview of the partnership between TAMCC and McMaster, and will invite participants to engage in a facilitated discussion about the potential risks and benefits of international faculty development initiatives. As such, we will engage attendees in exploring ideas connected to the conference thread of aspirations and anxieties for SoTL.

A Blended Approach: Developing an International Community of Practice

Telus 103

Julia Evanovitch, Kris Knorr, Alyson Brown, Jennifer Blaney, Jennifer Faubert

In the spirit of Reaching New Heights, we present the narrative of developing a Community of Practice (CoP), using a blended approach, which encompasses a mix of face-to-face and online meetings that evolved from an international partnership between two institutions. Through the lens of SoTL newcomers, fellow climbers, and guides, we reflect on the benefits and challenges of developing a geographically dispersed CoP, as a tool to foster

conversations regarding teaching and learning. We consider the contextual element of embedding a virtual component to the community, and how this can impact how place is defined within the group, as the use of networked technologies (such as the internet) “becomes the place for the community” (Squire & Johnson, 2000; Johnson, 2001). When developing and coordinating a CoP in a blended format, group norms and relationship building become the foundation on which the community can operate, striving to foster a cohort approach (Hildreth & Kimbel, 2008; Johnson, 2001). During the development phase of an international faculty development program, this CoP emerged from a common interest and desire for a ‘place’ to collaborate, share practice, and discuss issues about their own teaching approaches and methods as a way to build capacity and support within the broader institution (Wegner, 2009; Shultz & O’Brien, 2017). A cohort approach has been a valuable strategy to shape the CoP, as it has encouraged capacity building within the group. In this presentation, we will explore some of the processes embedded in the structure of the blended CoP (Wenger, 2009), the conceptualization, and building of a virtual model that connected to a broader faculty development program in an international context. In particular, the aim of the initial design phase of implementation of the CoP was intended to foster social capital amongst the members, through peer support and capacity building (Shultz & O’Brien, 2017). The purpose of this preliminary qualitative study is to explore how a cohort can develop in this capacity through the lens of Wegner’s (2009) three characteristics of a community of practice (domain, community, and practice). Our current development has been focused on a core group of 10 faculty members from various departments at a postsecondary institution in a small Caribbean nation, and 4 educational developers from a Canadian university. This group meets in a face-to-face context once per year in an intensive workshop-style environment, and approximately once per month in a virtual environment. Shultz and O’Brien (2017) explain that in a virtual capacity it is beneficial to have “at least one primary person driving the processes and activities of a CoP” (p.502). This helped guide some of the early stages of the cohort development, where there is one leading coordinator at each institution who assists with the organization of the community, and together they plan and discuss the activities and processes for the group. In this session, participants will be invited to discuss how the Communities of Practice model applies within or across institutions, and explore some guiding principles that serve to build capacity and foster sustainability.

Structured Controversy: Student Engagement, Active Learning **Beth Archer-Kuhn**

Telus 105

Student engagement has been noted to increase using inquiry-based learning (Taylor & Parsons, 2011; Sunders-Stewart, Gyles & Shore, 2012). Student engagement is a precursor to developing critical thinking skills and critical thinking skills can develop using inquiry-based learning (Hudspith & Jenkins, 2007). Structured controversy is an active learning activity similar to a debate in design, that some relate to inquiry based learning (IBL) (Hudspith & Jenkins, 2007). The research literature acknowledges the benefits of active learning activities including the development of critical thinking skills (Bay & Macfarland, 2011; Biggerstaff, 2005), a primary goal in post-secondary education. To address the development of deep learning and critical thinking skills that are required in many disciplines post-secondary education must facilitate the development of those skills. Student engagement in their learning has become a much more focused topic in the research literature. This in part is due to what Friesen and Scott (2013) discover in their review of the literature on inquiry-based learning; that students today require different skills than those of the more distant past, such as the ability to think critically, to synthesize, analyze, collaborate, and communicate effectively. The increase in technology, giving rise to a more connected global economy, requires employees who are creative and collaborative, to respond to the complexities of today and the future. Wright (2011) suggests that empowering students in their learning means addressing issues of power in the instructor student relationship. This workshop reveals some of the ways in which students and instructor can share power through a learner-centered approach. The objective of this workshop is to provide participants with the knowledge and skills to facilitate a structured controversy in courses from their discipline. The content of the workshop includes instructions for completing the structured controversy, materials required for the activity and student feedback about their learning through mini video clips of student engagement. The format includes a simulation of a structured controversy. A brief power point presentation provides the background knowledge. The following are Goals and Learning Outcomes for this workshop: Goals: to provide participants an understanding of the benefits of structured controversy for enriched student engagement, to demonstrate an active teaching and learning strategy that can also be used as an assessment task, to discuss the transferability of active learning across disciplines Learning Outcomes: Participants will understand the benefits of structured controversy in engaging students. Participants will

be able to implement a structured controversy in their classroom as an activity and as an assessment task. Participants will appreciate the transferability of active learning across disciplines. This workshop simulates a structured controversy so that the participants experience the activity. The benefits for learning in their own discipline are discussed. Additionally, student feedback on their learning are shared through mini video clips illustrating their experience with structured controversy. Kolb's (2012) experiential learning theory of concrete experience, reflection, conceptualization, and active experimentation are apparent. Kolb and Kolb (2008) suggest that deep learning occurs when these four modes of the experiential learning (experiencing, reflection, thinking, acting) are integrated to respond to the learning situation. For the last several years, the author has used an assessment tool, structured controversy, in graduate level courses within their discipline. Experiential teaching activities allow us to observe the integration of teaching and research, the enhancement of student engagement in the course material, and the development of critical thinking skills. Students are excited when they are challenged to engage with the course material. They share their positive learning experiences with others including peers and faculty. I have had students ask other instructors if they can use a structured controversy in their course because they found the learning experience to be rich and enjoyable. I have also had faculty ask to learn how to implement this teaching and learning strategy. When students know that they can join with you and their colleagues in their learning, we all benefit. This workshop has been provided and well-received at a previous multidisciplinary conference and is the subject of a publication. Having aspirations about developing excellence in education has helped me to focus on what is really important; student engagement. While I try to positively influence the classroom environment through active learning experiences, there are many anxieties that arise for both instructor and student when embracing new teaching methods and strategies. This workshop provides a venue for discussion as participants experience and work through some of those anxieties.

Using Cabaret as a Medium to Narrate Researcher Identity and Explore Current Debate in the Field of Teaching Professionalism to Healthcare Students
Juliette Gaunt

Telus 105

This cabaret will discuss my position and identity, and will also challenge the current debate which exists in the field of professionalism, and how we teach professionalism to healthcare students. I will use cabaret to further explore the struggles within a changing position and frame this within the research context. Through this paper, I intend to challenge recognised ways of "doing research and representing others" (Spry, 2001) and use "tenets of autobiography and ethnography to do and write auto ethnography" (Ellis et al, 2011). In approaching the paper this way, I will be able to make sense of myself and others (Adams, 2008; Bochner, 2001, 2002; Fisher, 1984). As a result of this approach, I aim to produce meaningful research which is grounded in personal experiences and recognises the ways in which my own experience and identity influences the research process. Exploring my own identity (Nutbrown, 2011), and the impacting factors on this, through describing and analysing my own experiences becomes important when considering the nature of the research I wish to undertake, around professionalism and health graduates being 'fit for purpose, practice and award'. In following an auto ethnographic approach, I will both "acknowledge and accommodate [my own] influence on research, rather than hiding from these matters or assuming they do not exist" (Ellis et al, 2011). In support of this approach, Adams (2005) and Wood (2009) state that, "auto ethnography expands and opens up a wider lens on the world, eschewing rigid definitions of what constitutes meaningful and useful research; this approach, also helps us understand how the kinds of people we claim or are perceived to be, influences interpretations of what we study, how we study it, and what we say about our topic". Delegates will enjoy a presentation of a 15-minute cabaret in which I construct and challenge the notion of personal identity and the inter-play between this, and how, as teachers, we then model professionalism and the teaching of such to the student population. Through adopting a creative methodology, I explore how we can use cabaret to disseminate knowledge through performative means, and how a performative method can have a lasting effect on a student's learning journey. This paper urges delegates to reach new heights and pushes the thinking which exists about learning and teaching methods. In being creative, this paper takes risks by embracing a performative method of disseminating knowledge which is relatively new in SoTL. Could you disseminate knowledge differently? What impact would this have on your student's ability to retain knowledge and learn new skills? As scholars, are you ready to embrace a creative method in the classroom? This paper sets out to test delegates' perspectives and challenge their comfort zone when thinking out teaching and learning.

Using Narrative Learning to Design Tasks that Support Students' Understanding of Threshold Concepts
Collette Lemieux

Telus 105

Threshold concepts are key ideas in a discipline that, once learned, open up new ways of thinking about and understanding the discipline (Meyer, 2012). Yet students often get stuck at the threshold of these concepts (Meyer & Land, 2005). This presentation will explore how the narrative learning framework can be used to support the learning of threshold concepts. Though narrative learning has previously been used in SoTL research, the emphasis has been on using instructor-written stories to teach concepts (e.g. Backstrom & Cooper, 2014). This presentation will focus on the underexplored territory of using narrative learning to design innovative tasks, whereby students explore threshold concepts through the articulation of their own understanding. An example of such a task required that students write dialogue to explore threshold concepts in our introductory statistics course. The narrative learning framework posits that the learning process is narrative in nature and is “the basic structure through which we make meaning in our lives” (Rossiter & Clark, 2007, p. 12). We narrate experiences by making connections between and among them. We take the disparate pieces of the experience and attempt to knit them together in a way that, to us, makes sense as a whole. This can be done internally or through some form of external expression, such as writing, drawing or talking to others (Rossiter & Clark, 2007). Thus we narrate our experiences (e.g. activities performed or witnessed in the classroom) by connecting them to a theme (e.g. the concept being studied) in order to make a coherent and consistent whole (e.g. ensuring none of the pieces contradict each other). Based on the framework of narrative learning, tasks can be designed that engage students in articulating their understanding to develop their own narrative of threshold concepts. This presentation discusses how the narrative learning framework was used in the design of a series of tasks in a business statistics class to help students navigate the threshold concepts of inferential statistics, sampling distributions (Xu, Zhang, Su, Cui, & Qi, 2014), and variation. For the tasks, students were given a partially completed story that explored a particular statistical problem that required engagement with a threshold concept. To complete the story, the students were required to write dialogue on behalf of the characters to explain why certain steps were taken or what the statistical analysis meant, or to elaborate on the threshold concept. Examples of the tasks and of student dialogue will be provided.

Learning Problems: Assessing Problem-Solving and Knowledge Acquisition in a Problem-Based Learning Criminology Course
Nathan Innocente

Glen 208

A significant challenge in higher education is the development and implementation of instructional practices that integrate domain-specific knowledge with transferable, relevant academic skills. Problem-based learning (PBL) responds to this by embedding students' learning in the context of real open-ended problems, challenging students to become active researchers, problem-solvers, team players, and communicators (Barrows 1996). Questions remain, however, about its results compared to more traditional classroom settings (Strobel and Barneveld 2009). In general, when it comes to student outcomes such as motivation, satisfaction, engagement, clinical performance, contextual understanding, and self-directed learning, empirical findings indicate that a PBL curriculum holds several advantages over traditional lecture-based curriculum (Albanese and Mitchell 1993; Eglitis, Buntman, and Alexander 2016; Vernon and Blake 1993). However, uncertainty remains about its overall efficacy, particularly concerning knowledge acquisition (Moore et al. 1994; Strobel and Barneveld 2009; Tayyed 2013). This is especially true for social sciences, where PBL is less established and where fewer studies have tested its efficacy. This research seeks to compare knowledge acquisition and problem-solving skills among students in traditional lecture and PBL versions of the same course (a fourth-year criminology course, “Identity Crime”). This research advances our understanding of the effectiveness of PBL in social sciences, particularly in criminology where problems are ambiguous and solutions are often difficult to achieve. This study is a quasi-experimental design that compares learning across the same course (taught by the same instructor in the same academic year) but under different pedagogical approaches—a PBL version (September 2016) and a lecture-based version (January 2017). In the PBL version, student groups are randomly assigned to a single problem that they must “solve” over the term. The traditional lecture version includes group work where students must apply their knowledge to one specific identity crime problem. Both versions of the course enroll 50 students with no self-selection. Knowledge acquisition and problem-solving are assessed through multiple strategies. Knowledge acquisition is assessed through a pre/post-test

design via a questionnaire in both versions of the course. A series of closed-ended questions gauge student knowledge about identity theft and identity fraud as well as attitudes toward PBL. Problem-solving is assessed through an analysis of problem-solving reflection journals and through structured observations of group problem-solving discussions. In both courses students complete reflection journals outlining their problem-solving progress, and students participate in group-work to advance their solutions. These occur weekly for the PBL course, and at three points in the term for the lecture-based course. Reflection journals are compared and analysed for the nature, sophistication, and direction of problem-solving. In addition, structured observations of regular in-class group discussion at three points in the semester using a checklist of outcomes designed by the course instructor are conducted in each course. These observations record whether the group has touched on any pre-generated outcomes associated with their problem and makes note of group decisions and knowledge application. The outcomes checklists are then compared across courses to further assess group problem-solving. The presentation will convey the results of this study, which concludes in May 2017.

Challenges Using Problem-Based Learning in First-Year University Courses **Beth Fischer**

Glen 208

Problem-Based Learning (PBL) is a teaching method in which instructors present students with an open-ended problem and students work in small groups to reason their way toward solutions. During the exercise students develop substantive knowledge as well as research, communication, and collaboration skills (Duch, Groh and Allen 2001). PBL originated-appropriately enough, given the location of this conference-in Canada. Dr. Howard S. Barrows developed the method for the McMaster University medical school in Ontario. PBL was then adopted by other medical schools as well as professional programs in engineering, law, nursing, and dentistry. More recently, K-12 educators have adopted PBL (Barrows 1996; Boud and Feletti 1997; Korin and Wilkerson 2011; Ertmer 2015; Savery 2015). Strobel and Van Barneveld (2015) found that PBL was more effective than traditional methods in terms of the long-term retention of knowledge and skill development. But there are challenges when using PBL in First-Year university courses. This presentation will discuss three challenges and will employ Think-Pair-Share techniques to encourage audience engagement regarding solutions. Challenge 1: Lack of a shared knowledge base. Barrett et al (2011) note that the problems used in a PBL exercise should act as a bridge connecting familiar knowledge with new concepts. It can be difficult to identify shared “familiar knowledge” among First-Year students. They come from high schools with a wide variety of curricula and standards. Developing problems that are accessible to everyone can be challenging. Challenge 2: Difficulty with research. Traditional PBL exercises include a research phase. After reading a problem students identify what they need to learn and how they will find the information they seek. Each student then engages in independent research and reports findings to groupmates (Barrows 1996). Such research is often initially beyond the capabilities of First-Years. They have difficulty differentiating between high-quality and less credible sources, and are unfamiliar with complex university library systems. Challenge 3: Effective collaboration. As Hmelo-Silver (2004) notes, most groups need assistance in order to collaborate effectively. A facilitator can help, but oftentimes such resources are limited. In order to address these three challenges I have substituted “jigsaw readings” in place of the traditional research phase of a PBL exercise. A jigsaw reading activity begins with the instructor providing each group member with a different article. Each article expresses a different perspective on the problem at hand. Each student takes notes on her assigned article and then presents it to the others. This is followed by a discussion in which groupmates evaluate the different perspectives in relation to the problem posed in the PBL activity. The provided articles establish a base of common knowledge and eliminate the difficulties surrounding independent research. In addition, the structure of the jigsaw activity promotes effective collaboration. I have run such modified PBL activities for two years with approximately 125 students. In an anonymous survey 89% of respondents reported that the exercises were either “valuable” or “very valuable.” In addition, students reported that the activities improved their comprehension, bolstered their confidence, and were enjoyable.

Conceptualizing the Use of Case Based Learning Across Disciplines **Jean Slick**

Glen 208

The use of cases in teaching has a long history in professional fields of study, including law, business, and medicine; within each of these fields there are recognized signature case-based pedagogies. The motives for development of these signature approaches to the use of cases were common-there was a recognized need to

improve students' learning outcomes (Garvin, 2003). Existing schema for conceptualizing methods of using cases in teaching (e.g., Barrows, 1986; Jonassen, 2010) do not fully distinguish between the types of learning outcomes associated with the use of cases. This presentation will introduce a novel conceptual framework for explaining three different functional approaches to the use of cases in teaching, which are differentiated based on learning outcomes (Author, 2016). The conceptual framework presented in this session was developed as part of a recent study investigating how and why faculty members use cases in their teaching in postsecondary disaster and emergency management (DEM) programs in Canada and the United States (Author, 2016). DEM is new field of post-secondary study and as of yet there do not appear to be any signature case-based teaching methods, as there are in other fields of study. Thus, this study also sought to explore what the distinctive characteristics of the use of cases in the DEM field are and might be. Qualitative case-based research methods were employed to explore faculty members' reasoning for and approach to the use of cases in the DEM field. The orienting theory for this study was activity theory, which is a recognized variant of socio-cultural learning theory. The conceptual frame also drew from literature on the disciplinary and signature characteristics of pedagogy. Data included transcripts from interviews with seven faculty members who have made significant contributions to the development of DEM as a field of study, as well as copies of course syllabi and materials used in their case-based learning activities. A total of 37 different case-based learning activity designs were examined in detail. The type of instructional guidance developed from the study findings was informed by design-based research methods as used in the education field. The findings from the study supported the development of a domain-based outcome theory explaining three distinctive reasons for using cases in teaching in the DEM field, as well as an activity theory based explanation of the function of cases relative to each of these different outcomes. While there are recognized limits to the types of generalizations that can be made when using case-based research methods, the conceptual framework developed for explaining how and why cases are used in DEM postsecondary programs was also found to (a) explain differences between the use of cases in other established programs, including law, business, and medicine; and, (b) extend theoretical explanations about how cases support learning. The focus of this presentation is on sharing this novel conceptualization of how and why cases have and can be used in different fields of study, as well as key instructional design questions that application of this framework in other fields of study.

Exploring the Underexplored Territory of Peer Mentorship in Graduate Education
Diane Lorenzetti, Lorelli Nowell, Michele Jacobsen, Elizabeth Oddone Paolucci,
Liza Lorenzetti, Tracey Clancy, Georgina Freeman

Telus 104

Background: While worldwide enrollment in graduate education continues to increase yearly, many graduate students do not graduate on time, or fail to complete their degrees. Various intrinsic and extrinsic factors including financial support, supervision, motivation, and social connectedness can affect degree completion and time to graduation. Peer mentorship is an experiential developmental experience characterized by mutual learning, and shared expertise, knowledge and support. Peer mentoring relationships can enhance emotional and behavioral resiliency, further skills development, and motivate graduate students to complete their degrees. While prior studies have examined peer mentorship in undergraduate education, the peer mentoring experiences and perspectives of graduate students remains an underexplored territory in the scholarship of teaching and learning. Research Questions: 1) To what extent does peer mentorship impact on the social connectedness, learning experiences, and academic goals of graduate students? 2) What approaches can academic institutions adopt to support the development of these relationships? Methods: We adopted a mixed methods design for this study. Data were collected through Likert-style online surveys, and in-person interviews. Master's and PhD students were recruited from four professional faculties (Education, Medicine, Nursing, and Social Work) at a large Canadian University, using email, newsletters, social media, and word of mouth. Purposeful maximum variation sampling techniques enabled the exploration of common and divergent attitudes, and experiences across disciplines. Descriptive statistics were calculated for survey data. Interview transcripts were coded in duplicate and discrepancies resolved through team consensus. A constant comparative method of pattern identification guided the thematic analysis of interview data. Findings: Early findings from 42 graduate students suggest that most peer mentoring relationships develop organically. Peer mentorship positively affects developmental outcomes across multiple learning domains: academic (acclimatization; critical thinking; procedural and disciplinary knowledge; research and writing skills); social (communication skills; sense of community/shared purpose); psychological (self-confidence; motivation); and career preparation (time management; professional collaborations). Survey data revealed that peer mentorship: 1) reduced

isolation (92.3%), 2) provided essential program information (80.8%), 3) increased understanding of academic culture, research topics, and methodologies (73.1%), 4) improved critical feedback skills (73.1%), 5) enhanced research quality (61.5%), 6) increased self-confidence (65.4%), and 7) reduced academic stress (53.8%). While graduate students can benefit from structured programs, non-traditional learners (part-time and online students) or those with competing personal demands (eg: family caregivers) are often unable to participate in formal initiatives. Stakeholder input appears essential to the success of any formal program. Significance & Implications: This research addresses a key gap in the literature on peer mentorship in graduate education, and can inform future disciplinary and institution-level efforts to ensure graduate students' academic success, and professional and personal development. Future research efforts should focus on engaging traditional and non-traditional graduate students in the design and delivery of peer mentorship initiatives, and assessing the transferability of these findings to other disciplines and academic institutions. Audience Engagement: Attendees will be encouraged to: 1) reflect and share individual peer mentoring experiences, and 2) critically respond to themes derived from study data.

What are they Learning and are they Friends?: Student Ethnographic Research on Team-Based Learning
Jan Newberry, Jeff Meadows

Telus 104

Here, we report on a two-year project to incorporate first Team-Based Learning (TBL) and then student faculty research partnerships in a large introductory Anthropology course to enhance conceptual learning and student retention. In 2015, the Faculty of Arts & Science welcomed its first Global Citizenship cohort of first-year students as a part of innovative curriculum design to support university initiatives on recruitment and retention. The program offers an integrated set of courses to encourage both social connection and a broader introduction to the University's liberal education mission. The first cohort group was a small one of 18. (Author)'s introductory Anthropology course has been part of the program. Taking the cohort mandate seriously, she redesigned her large lecture-based introductory course to use Team-Based Learning (TBL) in an attempt to produce a cohort experience for all 250+ students in the class. Originally, other issues were considered in this redesign too. Could the TBL approach be scaled-up to such a large classroom? Would the fixed-seat classroom allow for the kind of group work imagined? And could the TBL approach to continuous assessment and application work in this introductory course? This final question was a key one for Jan. In the Anthropology major, students move from multiple-choice exams to writing-intensive courses at higher levels. Could the TBL approach help with the kind of conceptual learning as a scaffold for majors? Jeff Meadows joined Jan Newberry in organizing and administering the original pilot. The original offering was an extraordinary learning experience as we improvised to meet unexpected issues, and it was met largely with enthusiasm by the students. But were they learning what they needed to? And were the 6-person teams encouraging the kind of social networking that would help retain first-year students? To answer these questions, a second offering of the course for the cohort program was made in the following year. In a second offering, six undergraduate students were incorporated as ethnographic researchers who each studied two groups. There were several reasons for this. First, we were influenced by the work of Cook-Sather, Bovill and Felton (2014) on student-faculty partnerships in research on teaching. Newberry heard about this approach at the Mount Royal University SoTL conference in 2015. The idea of placing students as researchers inside the classroom also presented a happy convergence with the ethnographic methods at the centre of the discipline of anthropology itself. Finally, although indications were that the first offering was a success, data gathered was fairly anecdotal: standard course evaluations, limited focus group interviews, and the reports of graduate teaching assistants. We had scattered reports that the group dynamic was not always successful. But with 37 groups, it was hard to effectively assess the inner workings of the groups. By using student-ethnographers we hoped to gauge how well the team-based approach was working and to answer the questions identified above: were they learning the concepts of anthropology effectively and were they developing social capital through their team connections? In the presentation, we describe our experience and present some preliminary conclusions.

X Marks the Spot! Assessing Cumulative Learning through a Group Process Map
Katie Reck, Kristina Rouech

Telus 104

As faculty in academia, our quest is to help students Reach New Heights in learning. In doing so, non-traditional methodologies in teaching and student learning are proactively shared to foster faculties' creativity and

success in an ever-diversifying field of academic instruction. This presentation will explore the use of a Group Process Map activity as a means to gauge students' knowledge over 15-week university courses. A Group Process Map is a unique learning tool by which small groups of students identify key concepts and strategies learned during a course. The purpose of this presentation is to demonstrate the effective use of Group Process Maps by faculty from two disciplines who have used this activity in 100 level introductory, 300-400 level undergraduate, and graduate courses. The development of the Group Process Map comes from the basic knowledge of a concept map. A "concept map is a pictorial representation of the group's thinking which displays all of the ideas of the group relative to the topic at hand, shows how these ideas are related to each other and, optionally, shows which ideas are more relevant, important, or appropriate" (Trochim, 1989). A Group Process Map builds on the ideas of a concept map by requiring students to illustrate a meaningful image that connects the ideas and concepts learned in class to each other as well as the objectives of the course. Consequently, students must conceptualize a bigger picture of their learning by demonstrating how the concepts from the course are related to one another. They then must communicate that information to the instructor and other students in the course through visual images. Extant literature suggests a number of benefits for utilizing concept mapping, extended to Group Process Maps, as a means to demonstrate student learning over time. Among these include students' demonstrated ability to build relationships between concepts (Clayton, 2006), allow learning to progress from the known to unknown (Williams, 2004), build on previous knowledge and skills (Clayton, 2006; Reitano & Green, 2012), allow reflection of teaching and learning (Reitano & Green, 2012), develop critical thinking skills, and develop meaningful learning (Clayton, 2006). Furthermore, concept mapping among groups of students provides the additional benefit of encouraging participants to stay on task (Trochim, 1989), allows students to express concepts in their own words (Trochim, 1989), and provides a graphic representation that shows all major concepts at a glance (Trochim, 1989). These benefits speak to the larger goal among instructors and SoTL to foster student engagement and growth. This presentation will demonstrate the use of Group Process Maps by two faculty from different disciplines. The presenters will outline a framework by which Group Processing Maps can be adapted by other instructors, share images of maps created by students, and provide tips for implementing this activity in future instruction. This interactive presentation is consistent with the conference themes of 'Adventures and insights in SoTL' and 'New horizons' in SoTL as we explore different processes by which student learning and engagement can be gained across disciplines.

Fostering Confidence and Competence Through Simulation Among Undergraduate Nursing Students: A Maternal/Child Perspective
Sandra Goldsworthy, Carla Ferreira, Zahra Shajani, Diana Snell

Telus 106

Simulation has become a signature pedagogy in undergraduate nursing education. Simulation-based experiences (SBE) with the help of high tech simulators to mimic real life clinical practice have improved the way learners engage in the teaching and learning process. Nursing students' learning preference is through experiential learning¹. Providing students with experiences grounded in Kolb's² theory such as SBEs aim to improve competency and confidence in a safe learning environment. Undergraduate nursing students must be prepared to practice in a milieu driven by well-informed patients requiring health care services that are convenient and relevant. However, increasing student enrollment in nursing programs, lack of appropriate clinical placements, increasing number of retiring Registered Nurses (RNs) in clinical practice, and faculty shortages prove as challenging. For educators, SBEs offer an alternative instructional method to the traditional didactic approach where learners are actively engaged in their learning. SBEs allows for repetition of skills, aimed at mastery of competencies and building confidence, while also promoting reflective practice. SBEs foster students' competency in various areas such as technical/procedural skills, clinical reasoning/judgment skills, interpersonal skills, reflection, and self-directed learning skills, all of which are foundational to nursing practice. In a recent systematic review that examined SBEs in nursing education, knowledge/skill, critical thinking, and confidence among nurses improved with the use of simulation³. The research also demonstrated that simulation may be advantageous over other teaching methods, depending on the context, method, and whether or not simulation best practices were followed. The objective for this study is to explore the impact of a simulation intervention that includes booster training on development and maintenance of self-efficacy and competence in maternal child nursing practice. This five-phased quasi-experimental, longitudinal research project includes two cross sectional descriptive surveys to provide insight into the preparation of undergraduate nursing students for practice in maternal/child settings, a four-hour SBE intervention among undergraduate students in their second year of the program, a two-hour booster SBE delivered in the students' third year of the program , an

assessment of performance based on a mock National Council Licensure Examination for Registered Nurses (NCLEX-RN) provided during their final year in the program , and lastly, a comparison of NCLEX-RN performance results between students who received the SBEs and those in the control group. This research project demonstrates an emerging landscape of undergraduate nursing education. Preliminary results of this study along with the implications of using simulation education to create an effective experiential teaching and learning environment to enhance student learning outcomes will be presented.

Mapping the SoTL Journey: Chronicling the Development and Adaptation of a Learning Game Paradigm across Time, Context, and Discipline
Kosha Bramesfeld, Andrea Moraes, Arla Good

Telus 106

In 2013, a teaching challenge (struggling to engage students in discussions about poverty) motivated the creation of a privilege and oppression simulation board game that was implemented in a small enrollment sociology course (Bramesfeld & Good, 2015). A year later, the game was adapted so that it could be implemented in large lecture courses in psychology and media studies using a PowerPoint presentation and individual score cards (Bramesfeld & Good, 2016). Two years after that, a new funding opportunity motivated us to create a digital version of the game focused on food insecurity (Moraes & Bramesfeld, 2017). In this talk, we will chronicle our four year journey of turning an initial idea into a series of learning games, which in turn has led to an active program of research focused on game-based learning and design. Our SoTL activities over this period were guided, in part, by a design-based research paradigm that recognizes that educational interventions are developed within practical contexts, and therefore require the use of flexible, multi-method approaches to evaluation that are implemented as part of an iterative cycle of continuously creating, testing, and refining interventions (Anderson & Shattuck, 2012; Brown, 1992; Collins, Joseph, & Bielaczyc, 2004). Consistent with this paradigm, we will highlight how each phase in our journey has presented new challenges and barriers, but also new opportunities to adapt and improve upon our learning-game design. We will also discuss how our SoTL evaluation methods have changed and evolved with each new iteration of the simulation game, as we were mindful of the need to be responsive to unique learning environments and to plan our evaluations accordingly. Finally, we will engage the audience in an active Q & A discussion, in which those in attendance will be encouraged to ask questions and to share their own lessons learned about game-based design and evaluation. This presentation contributes to the theme of “Reaching New Heights: Mapping and Chronicling SoTL” by providing a unique opportunity to map and chronicle the development of a simulation game over time (2013-2017) and to examine how our SoTL efforts have changed and grown as the simulation game has been adapted to new contexts within different disciplines. This opportunity to map and chronicle our SoTL activities is particularly important for understanding game-based learning, as numerous studies have established that learning games can be an effective way to achieve learning outcomes (Clark, Tanner-Smith, & Killingsworth, 2016; Sitzman, 2011; Vogel et al., 2006; Wouters, van Nimwegen, van Oostendorp, & van der Spek, 2013), but very little research has systematically documented the process by which learning games are designed (Ke, 2016). Our efforts to chronicle the SoTL activities of our design process could be used as a map to motivate and guide other practitioners and researchers who wish to continue reaching new heights in the design and evaluation of their own learning games.

On a Quest to Maximize Student Learning
Lisa McKendrick Calder, Cheryl Pollard, Tanya Heuver, Catherine (Kate) Bowman

Telus 106

The educational strategy of gamification is emerging with significant promise in the current day educational literature. Quests have been shown to improve student motivation by engaging them in course content while extending learning outside the classroom. These scaffolded learning activities facilitate the acquisition of knowledge and provide context for integrating and applying this knowledge into students’ existing base. A thorough literature search revealed a plethora of articles and studies on the use of and efficacy of quest based learning, while in many cases replacing traditional classes. There was no literature available looking at the use of quests as learning activities to be utilized for preparation prior to class. We set out to utilize the strategy of gamification in the hopes of having students coming to class better prepared in order to be able to utilize precious class time for higher order cognitive learning. One course concept area was selected to pilot this strategy. Relevant content was strategically and conceptually mapped out. Faculty developed scaffolded learning experiences. A third party game platform was used

and preparatory materials traditionally offered by textbooks and journal articles were provided in a quest-based format. Students had the ability to choose when they would engage with the online learning activities. Students completed quests at their own pace and could repeat them as many times as they chose to. Our hope was that if students engaged in these activities, in class time would then be able to be utilized for higher level learning activities. We had 2 cohort sections each semester over an academic year, one cohort section was exposed to quest based learning and the other was not. Research findings on pretest and posttest scores showed a statistically significant difference between the cohorts with quest based learning compared to the control group. Additionally, a standardized tool was used to assess cognitive level of clinical judgement on participation in case study analysis in class. Students exposed to quest based learning performed at a higher level in a case study analysis than the control group without the quest based learning. Our research findings demonstrate that this strategy is an effective modality to have students come to class prepared. Students had extra time in class to process complex concepts. By moving the traditional “lecture” content, which historically was repeating and explaining the preassigned readings, into quest based learning activities, there was now a significant amount of time available for enhancement of higher levels of student learning. This project has shown that gamification can be an effective pre-learning activity to complement other teaching and learning modalities and allow for a higher level of learning to occur in the classroom.

How Making and Makerspaces Promote Healthy Mindsets for Learning

Michael Vaughn

Glen 202

Significance and Ties to Conference Theme: A makerspace is a space where you make things. It is a physical place where people gain access to tools, supplies, knowledge and support to pursue projects that interest them. In our makerspace we define making as the process of building physical or virtual artifacts that have value. Though Papert (1980) established the underlying pedagogy of making, little research has been conducted to directly examine the impacts of maker education or makerspaces on student learning. This is a missed opportunity in an era that offers students unprecedented access to creative tools, and where makerspaces are becoming increasingly common in institutions of higher education. It is for these reasons that this session connects to the conference thread of New horizons, emerging landscapes, and under explored territories in SoTL. Research indicates standardized testing in K12 negatively impairs student perceptions of what learning is and how it works (NCTE). Stevens and Miretzky’s (2012) work indicates faculty already observe these negative effects on college students’ attitudes toward learning, with students struggling to master challenging work, failing to recognize the link between effort and success, and lacking a willingness to struggle with complicated ideas and theories. Maker education and makerspaces represent one SoTL approach to confront and combat these negative effects of standardized testing. This session will explore the role that maker education and makerspaces can play in helping promote healthy mindsets for learning. Maker education and makerspaces specifically promote: (1) intrinsic motivation by encouraging students to take ownership of their learning, (2) deeper learning by developing self-awareness of what a student does and does not yet know, and (3) creative problem solving by acknowledging the value of failure as an essential element of the learning process. “In short, an educational makerspace is less of a classroom and more of a motivational speech without words” (Kurti et al.). Learning Goals and Outcomes: Participants will: Identify perceptual barriers to learning they observe with their students; Experience a multimedia-supported presentation outlining the concepts of maker education, and the value of a makerspace; Engage in activities that introduce and illustrate elements of maker education; Reflect on their experiences to generate an idea that incorporates maker education into their instruction, and co-develop that idea further with a partner; Plan for Engagement; Interactive Poll to highlight participant perceptions of student attitudes towards SoTL Introduction to maker education, supporting theories and constructs Marshmallow Challenge to engage participants with iterative approaches to design, with a follow-up discussion of successes and failures; LEGO Experience to illustrate a perceptual barrier to SoTL Design activity to collaboratively develop ideas for incorporating maker activities into instructional practice Q&A. Facilitator Experience: The facilitator is an Instructional Technologist, co-founded an interdisciplinary campus makerspace in 2015, and now oversees and co-manages the space with a colleague and eleven student staff. The makerspace hosts approximately 50 classes each semester for orientations, events and trainings. The professional staff collaborate with faculty and staff to design, plan and execute instructional activities and assessments that are related to making.

In their *SoTL Reconsidered* (2011), Pat Hutchings, Mary Huber and Tony Ciccone called on the SoTL community, the global 'Teaching Commons', to bring SoTL into the core of individual and institutional work in teaching and learning—classroom teaching, professional development, institutional assessment, and the recognition and reward of pedagogical work. In doing so, they argued that SoTL work will become even more fully embedded into our institutional priorities of student learning and success, rather than as stand-alone projects or special initiative (Hutchings et al, 2011). The workshop will be based on short, practical presentations related to both the development and findings of a multi-year exploration of first year student success developed in partnership by the co-presenters (representing a mix of newcomers and experienced SoTL Scholars), as well as a discussion of participants' own SoTL projects. The presentations and group discussions will be structured around four key grounding questions: First, to answer a particular SoTL question(s), what is the appropriate scope of the project? In keeping with the principle of ensuring SoTL work is more fully embedded into the institutional goals for student learning, should a project be conducted longitudinally? Across different disciplines? Across years of study? Across different institutions? Second, to answer a particular SoTL question(s), what are other alternative sources of data that might enhance or inform the project? Institutional data, whether from the student information system (like incoming High School grades), from the analytics tools embedded in learning technologies (including the learning management system), or institutional student surveys (including NSSE or CUSC), can all provide powerful lenses to help answer SoTL questions. What data might inform a SoTL project, and what are some of the challenges to access such data? Third, to answer a particular SoTL question(s), what other literatures and existing research tools might inform the work? In the past concerns have been raised that SoTL projects start without a comprehensive grounding in the teaching and learning literature, but there are often existing tools exploring concepts like grit, belongingness, engagement, personality, and study habits (just to name a few) available within the global teaching commons that could be used to connect to the ongoing 'research imaginary' (Gibbs, 2006; Mills, 1959). How can such tools be effectively integrated into a SoTL project? In particular, we will explore two survey based instruments used in our SoTL project: Yorke's (2016) engagement, belongingness & self-confidence survey, and Macaskill and Taylor's (2010) autonomous learning scale. We will also provide guidance and precaution regarding limitations and possible errors with the use of student surveys (Porter, 2011). And fourth, how can the results of a SoTL project influence broader goals around improving student success? In addition to informing their own teaching practices, many SoTL scholars focus on traditional scholarly dissemination paths—conference presentations, peer-reviewed publications—but how else might SoTL projects influence institutional priorities, and change initiatives, around teaching and learning? At each stage of the workshop, participants will work in groups to reflect on their own SoTL projects in the context of our discussions."

SoTL has not been a common term used in nursing education research generally, and Threshold Learning Concepts (TLCs) (Meyer & Land, 2003) have so far not been a focus. Although more recently there has been a small growth in the body of literature on TLCs in the health sciences disciplines, the nature of the discourse and what approaches have proved successful is still unclear (Barradell & Peseta, 2014). So in order to clarify this area, the authors will be examining the literature on TLCs in nurse education, before surveying (through interviews) academics/educators about their views on TLCs and what some may be in relation to Nursing. The paper will thus focus briefly on what is already known about TLCs in Nursing in the literature (Barradell & Peseta, 2014; Martindale, 2015; Martindale, Land, Rattray, & Morris, 2014; McAllister, Oprescu, Downer, Lyons, & Barr, 2015; McKillop, Atherfield, & Lees, 2014); then expand by reporting on interviews which tell us what academics/educators in Nursing think about the concept and what some TLCs may be in this field. This is an integral aspect of mapping and chronicling SoTL, through the review of current approaches within a field and consideration of how they may be engaged with, expanded or adapted. Meyer and Land wrote that 'A threshold concept can be considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress.' (Meyer & Land, 2003, 1). Such transformative ways of thinking and learning are becoming essential for nurses in an

environment that is increasingly uncertain and complex (Margaret McAllister et al., 2015). This research will provide insight into the methods (good and bad) used by Nursing academics/educators to find TLCs; what they have so far defined (rightly or wrongly) as TLCs for Nursing; and how Nursing academic/educator's conceptions of TLCs differ and align with TLC theory. Through this process the authors are effectively mapping and making clear successful approaches to TLCs in Nursing SoTL. The outcomes of this research will inform the broader discussion on SoTL as a concept of importance for nurse academics/educators and will assist scholars through providing a language that they may identify with and use themselves.

Ain't No Mountain High Enough: Exploring New Territories in an Online Teaching and Learning Course with Staff as Students
Briony Supple, Marian McCarthy, Claire Fennell

Glen 209

This paper sets out to examine and critically evaluate quantitative data generated via analytics reports available in Blackboard Learn, and qualitative student input from a fully online Teaching and Learning in Higher Education professional development programme. As facilitators of fully online programmes where the staff are our students, we were interested in exploring the following research questions: What can we as facilitators of the programme learn from 'staff as student' activity and usage of our online professional development programme? What does this data tell us about staff as students and their online behaviour as learners? How can this data inform new horizons, emerging landscapes, and underexplored territories in terms of future iterations of our programme? Can staff apply this information about their learning behaviour to examine their role as students, and what implications might this have for their own teaching? Our investigations focus on the 'transformative' power of SoTL (Hutchings & Shulman, 1999) - underpinning this research is our belief that "learning analytics becomes most impactful when data is used to empower both instructor and student" (Dawson & Hubball, 2014, p. 70); particularly when our 'students' are also educators. This paper employs a mixed methods approach. We collected data from staff as students engaged in the fully online Certificate in Teaching and Learning in Higher Education Qualification. At the end of Semester 2, data was collected via the various reporting tools available in the Learner Management System (LMS): Blackboard. We were particularly interested in the construct of time as a barrier, and how this might influence the way learners and facilitators engaged in the course. Over the course of semester, students are required to participate in 6 discussion forums around various topics, and submit 3 assignments which are part of their teaching portfolio. We extracted reports which gave us statistics around the average number posts in a discussion forum, average time spent on tasks, average number views of texts and videos, ratios of facilitator to student interactions via discussion boards. We then triangulated this data against 20 randomly selected, anonymous, student reflective journals, which detailed their learning as online students, in order to provide a rich picture of their overall experience. Emergent results have indeed indicated a mountainous barrier: time. There is a concern over 'lack of time' for both students and group facilitators which can make it difficult for full engagement in all elements of the course and restricts the creation of a robust online community of practice. The paper will address these issues and focus on interventions for the future development of the programme. In our findings we hope to show that 'there ain't no mountain high enough' to prevent us working towards the professional, scholarly development of staff/faculty, within the constraints of time.

Quantitative Arts: Student Perceptions of Research Methods/Statistics and its Link to Academic Outcomes
Silvia Bartolic, Stephen Zhu, Annie Wang, Nilgoon Zarei

Glen 209

Students in the Faculty of Arts in departments such as Sociology often question the need for research methods and statistics courses as requirements for their degree. Many students fear quantitative methods and try to avoid courses that require any level of math ability. Students also report that methods courses are boring, leading to poor attendance and low achievement in these courses (Onwuegbuzie, 2010). We believe more hands on time with data and data analysis software through individual research projects will increase student learning (Wei, 2005). Further, a fundamental notion of inquiry guided learning in Sociology suggests that students should think and act like Sociologists (Atkinson & Hunt, 2008). This presentation tests in practice the idea that experiential learning and practice increase learning (Tishkovskaya & Lancaster, 2012). We believe this approach will engage students in learning quantitative techniques and will alleviate their fears about such courses. This presentation will report our

'aspirations and anxieties' in alleviating boredom and fear towards methods/statistics courses by undergraduate students in the faculty of Arts through the use of an individual quantitative survey research project. Goals: By the end of this session participants will be able to: list several common concerns Arts students have towards methods/statistics courses, describe how attitudes towards methods/statistics courses impact academic outcomes, and identify how real world practice can affect these attitudes. Data: Data come from a third year research methods course in Sociology (N = 37) and include: a pre concept test, pre reflection data on benefits/concerns, pre attitudes towards statistics/methods survey, midterm grades, post content test, post reflection, post attitude survey, final exam grades, final project grades and (potentially) focus group data assessing difficult components of the course. Preliminary Results: (Only pre data is available at this time). Thirty of 37 students identify as female; 7 as male. Mean age is 21.44 (SD = 1.21) and average GPA is 3.31 (SD = 0.36) (possible range 1.0 to 4.33). Twenty-eight participants completed the pre reflections and attitude scale; 6 felt the course would be boring while 7 believed it was important for their education. Concerns included their ability to use data analysis software (N=15) and conducting the research project (N = 12). Benefits included believing the course would be useful for their career (N = 17) and wanting to learn how to conduct research (N=5). Eighty-six percent saw the course as valuable. The attitude scale was divided into 6 components: Affect (feeling towards statistics) (mean = 4.00; SD = 0.80), Cognitive Competence (Mean = 4.72; SD = 0.86), Value (Mean = 5.23; SD = 0.92), Difficulty (Mean = 3.22; SD = 0.79), Interest (Mean = 4.61; SD = 1.19) and Effort (6.66; SD = 0.39). Higher scores correspond to more positive attitudes. Implications: Use of experiential learning provides an opportunity to increase student learning and engagement with course content and potentially alleviate anxiety towards methods and statistics. By understanding student perspectives, we can develop best practices in the development and teaching of methods/statistics courses to undergraduates in the faculty of Arts.

THURSDAY, OCTOBER 12, 10:00-10:30

Refreshment break outside of the Telus rooms, the Glen rooms, and the Exhibition Halls.

THURSDAY, OCTOBER 12, 10:30-NOON

Excellence in Mentoring Undergraduate Research and Inquiry

Glen 205

Jessie L Moore, Paul Miller, Ruth J Palmer, Jenny Shanahan, Brad Wuetherick, Helen Walkington

When they participate in high-quality undergraduate research (UR) with a faculty mentor, students are actively engaged in real-world, complex problems that can deepen learning, strengthen self-awareness, and broaden perspective-taking abilities, among many other benefits (Brew, 2013; Kuh, 2008; Johnson, Behling, Miller, & Vandermaas-Peeler, 2015). The broad definition of UR includes scientific inquiry, creative activity, and scholarship, with a faculty mentor who provides guidance and "initiates the student into the methods of a discipline" (Kinkead, 2003, p. 6). The Council for Undergraduate Research (CUR) also emphasized the importance of inquiry that "makes an original or creative contribution to the discipline" (Wenzel, 1997, p. 163).

Although there is tremendous consensus that one of the defining characteristics of a UR experience is working closely with a faculty mentor, the majority of extant research has focused on student gains of UR participation, and very little research has examined the processes related to mentoring UR within faculty and institutional contexts (Vandermaas-Peeler, Miller, & Peeples, 2015). Given the increased expectations for mentored UR in higher education, this is a significant omission.

To address this underexplored territory in SoTL, this 90-minute panel shares work from an international, multi-institutional, multi-disciplinary research seminar on *Excellence in Mentoring Undergraduate Research*. This research identified four central issues shared in this panel: student learning and subsequent identity development, the importance of specifically considering the needs of underrepresented students, meaningful connections to curriculum, and practices mentors should be doing as central features of mentored undergraduate research.

Raising the Bar on Assignment and Rubric Design

Glen 201

Natalie Simper, Pat Hutchings

At the heart of the scholarship of teaching and learning is a process of generating, making sense of, and using high-quality evidence to improve the learning that matters most for our students. In this panel we will propose

that an often undervalued source of such evidence is the assignments - papers, presentations, exams, and other tasks - that educators design and require of students as part of the “regular” process of teaching and learning. A focus on assignments as a dimension of the scholarship of teaching and learning has several significant benefits. 1) It addresses issues about where such work can fit into the already busy lives of faculty by treating SoTL not as “something else” but as part of what is entailed in good teaching (Author, 2011). 2) It puts a focus on the importance of well-designed (“transparent”) assignments that have the power to improve student understanding and skills (Winkelmess et al., 2016). And 3) when educators come together to share and improve their assignments, that process creates a powerful “pedagogical trading zone” (to borrow a term often used by our ISSOTL colleague, Mary Taylor Huber). This panel will explore two initiatives that are central to a focus on the effective design and use of assignments. First we will introduce attendees to the work of the National Institute for Learning Outcomes Assessment (NILOA), which, for the past four years, has been bringing together groups of educators from a full range of institutional types and fields to refine their assignments and contribute to an online, searchable “assignment library.” Second, attendees will be introduced to a publicly available rubric-building tool developed as part of the Learning Outcomes Assessment project (AuthorB, 2016) at University X. Recognizing that there is no “one size fits all” approach, this section of our panel will provide a guide for instructors to reflect on and evaluate the effectiveness of teaching and assessing cognitive skills in their courses. As part of this process, the rubric builder (BASICS) provides a workflow for constructing rubrics, which will be demonstrated through responses taken from a volunteer in our audience. BASICS was designed to familiarize instructors with criterion-based assessment and as a mechanism to develop their own rubrics for the evaluation of student cognitive skill performance. Rubrics are a critical element in assignment design (every assignment in the NILOA library also includes a rubric), supporting the assessment of tasks such as analysis and research projects, design projects, investigations or structured inquiries, and group presentations. In turn these kinds of tasks can be a site for work by scholars of teaching and learning seeking to understand the conditions under which significant outcomes can be advanced and elicited. The design of assignments and the criteria by which they are assessed has often been private work, done by educators working in isolation. But developing a new assignment can be time consuming, and “tuning” the assignment to agreed-upon outcomes and assessment rubrics requires significant expertise. We would thus argue that assignment and rubric design is work worth sharing, work that other teachers and scholars of teaching and learning can and should be able to build on. It is critical work because higher education has a responsibility to ensure that there is alignment between teaching and assessment, and unless we build in measures for reflecting on improvement, learning outcomes can remain aspirational statements rather than the effective tools they should be. By the conclusion of this session attendees will be able to: a) Search for assignments in the NILOA assignment library Access the BASICS rubric builder and navigate the selected options to compose an assessment rubric b) Identify scholarly opportunities in everyday teaching practices. One of the goals of the panel is to encourage critical dialogue among participants on the work presented by the two panelists. The final portion of this panel will be organized to invite ideas from attendees and hear suggestions for a SoTL research agenda built around the NILOA Assignment Library, the BASICS Rubric-Builder and the larger set of practices related to assignment and rubric design and use.

Enacting Distributed Models of Leadership: The Role of Teaching Fellowship Initiatives in Fostering an Institutional SoTL Agenda
Jovan Groen, Aline Germain-Rutherford, Alan Wright, Donna Marie Eansor

Glen 206

In Canada, the last two decades have witnessed the creation of multiple Teaching and Learning Fellowships (also known as Teaching Leadership Chairs) in higher education institutions (Eansor, 2012). Often created to enhance teaching innovation and teaching quality within an institution, these Chairships also foster a culture of teaching and learning via the establishment of communities of practice, creating institutional partnerships, as well as undertaking and disseminating scholarship in teaching and learning. Given the nature of the formal and informal networks that Chairs often establish in their roles, it is appropriate to examine these using a distributed (sometimes called distributive or embedded) leadership model. Stemming from the works of Gosling, Bolden and Petrov (2009), distributed leadership outlines the influence of professors who are not necessarily in managerial roles (such as department heads or deans) as leaders of forward thinking and change. MacFarlane (2011) suggests that professors who exercise distributed and less formal types of intellectual leadership often serve as *advocates*, *ambassadors*, *role models* and *mentors*. Appropriately, these are among the qualities that teaching chairs often exhibit in championing and propagating the scholarship of teaching and learning. They are *advocates* and

ambassadors of the notions that underpin SoTL among their disciplinary colleagues and across their institutional networks. They are *role models* of research informed and reflective teaching practices and of SoTL dissemination. Additionally, they serve as *mentors* to scholars new to SoTL, supporting their questioning and thinking and sharing their knowledge and experience. One comprehensive university in Canada undertook an internal environmental scan to understand the roles played by educational leaders and to “establish preliminary mechanisms” designed to help “identify and track gains” stemming from faculty-led initiatives, “assess” whether embedded educational leadership initiatives extend “leadership capacity” at the university, and “establish plans for better support” of embedded leadership capacity. Wright et al. (2014). For such roles to effectively emerge in higher education institutions, how have institutions enabled systems of distributed SoTL leaders? And, what program structures have worked best to foster the conditions for successful Chairships in teaching and learning? This paper presentation will provide an overview of Canadian teaching and learning chair initiatives and highlight the diversity of formats at work across institutions. As part of the overview, a snapshot of two such initiatives will outline the intent, scope, logistics, impact and lessons learned. Following the presentation, using the notion of distributed leadership as a guide, a brief discussion will address the value of Chairship programs in fostering institutional scholarly teaching and SoTL projects as well as strategies designed to enable their success.

Institutional Programs for Elevating Faculty Accountability and Agency in SoTL Research
Ashley Welsh, Meghan Allen, Andrea Webb, Adriana Briseno-Garzon

Glen 206

Engaging scholars from a variety of disciplinary backgrounds with SoTL can be both challenging and rewarding. The interdisciplinary focus of SoTL can lead to rich collaborations that transcend multiple methodological and epistemological frameworks, but these frameworks may also inhibit the communication and vision of a given SoTL project (Hubball & Clarke, 2010; Huber, 2010). In order to alleviate these tensions, various institutions are developing programs that scaffold and sustain faculty engagement with SoTL within and across disciplines (Webb, 2015; Dobbins, 2008). This presentation will highlight how two institutional programs at a large research intensive university in Canada elevate faculty agency and accountability with SoTL activities and research. As participants and program leaders, we will describe how the design and implementation of these programs allow faculty the agency, accountability, and resources to reach new heights in SoTL research alongside their other professional responsibilities. In our presentation, the two program participants will discuss how embedded aspects of a community of practice, guided support and feedback, and formalized reflective reporting held them accountable for their own research projects/timelines. They will also highlight how these programs offered the agency to design and implement the research project within their own field of interest. In addition to the participants’ experiences, the two program leaders will provide insight into how the programs have developed over time to further enrich SoTL engagement and research in higher education.

Unified approach to Continuous Professional Development: Week 7
Melanie Brown

Glen 206

Academic development in higher education continues to evolve, becoming more integrated, moving from periphery to centre as external pressures increase the focus on learning & teaching quality and the quality of the student experience (Dawson, Mighty and Britnell, 2010; Debowski, 2014; Schroeder, 2012). At the same time, the focus of academic development has moved from individuals working alone to teaching teams in order to achieve objectives related to institutional priorities and strategy, the focus being on transforming practice (Gibbs, 2013). It was recognised in an international institution in Vietnam, that professional development tended to be provided in an ad hoc way with little alignment to vision and strategy and little empowerment for academic staff. Holt, Palmer and Challis (2011) identify leverage points for realizing institutional change and outline new paradigms for Learning and Teaching centres through multifaceted approaches both at the local and central level. Alignment with institutional vision and strategy, a strong focus on capacity building and development opportunities consistent across the institution are the objectives. Another leverage point relates to creating opportunities for academic staff to have showcase opportunities in order to recognise achievements, enable collegiality and nurture development. The notion of collegiality and event-based intentional development resonates with Knight, Tait and Yorke’s vision for

professional development (2006). This paper will present an academic development initiative implemented at an Australian offshore campus in Vietnam. During Week 7 each semester, scheduled classes for students are replaced with a range of multimodal delivery options for content and learning activities that are appropriate to the achievement of course learning outcomes. For example content can be delivered via online videos, podcasts and readings and first-hand experiential learning opportunities can be planned and guided. Week 7 allows for extensive professional academic development facilitated by the faculties and central areas. Examples of activities will be shared as well as feedback collected from academic staff through questionnaires about their perception of the value of these activities, benefits and challenges encountered. The benefits of consolidating academic development into this Week 7 includes availability for academic staff, consistent messaging around institutional priorities and increased opportunities to build collegiality. Challenges relate to the amount of professional development organised by the faculties and central areas. This paper fits into the theme 'Aspirations and anxieties for SoTL'. It is about dedicating specific time for professional academic development and enabling digitally enhanced and inquiry-based activities for students.

Climbing Together with SoTL Newcomers: A Toolkit for Joint Faculty and Librarian SoTL Projects
Lauren Hays, Melissa

Telus 102

On many university campuses, librarians serve as experts in information literacy, connecting foundational research and information seeking skills and concepts to students' curricular and co-curricular learning experiences. Similarly, they work across disciplines and see the big picture of teaching and learning. Librarians' unique position allows them to serve as strong partners and independent leaders in SoTL. Yet, librarians are minimally represented in SoTL work (Bradley, 2009; Otto, 2014). This paper will illustrate the importance of partnering with librarians in SoTL projects while providing attendees with practical tools for engaging with the academic library community. Through a series of brainstorming discussions, attendees will review the Association of College and Research Libraries' (ACRL) Framework for Information Literacy for Higher Education in order to explore information literacy concepts most applicable to their course content. The facilitators will encourage attendees to identify potential SoTL collaborators at their own institution, and assist in developing talking points to initiate these collaborations, as well as highlight examples of successful SoTL faculty-librarian partnerships, such as McInnis et al. (2009), Mounce (2010), and Nitay and Heisel (2008). Attendees will be encouraged to connect their SoTL projects with information literacy, critical thinking and research skills, and to identify fellow SoTL climbers, both at their institutions and at the ISSOTL conference. We will also explore un answered questions and new research areas. Attendees will also have the opportunity to create an action plan for incorporating information literacy and librarians into their SoTL work. The learning goals for this workshop are: Participants will recognize expertise librarians bring to the SoTL conversation. Participants will identify SoTL projects that can be completed in partnership with librarians. Participants will connect SoTL projects with information literacy skills. Through the achievement of the learning goals in the form of an action plan, workshop participants will be able to answer the question "How can I partner with academic librarians in my SoTL research?"

Catching My Breath and Enjoying the View: What Made Me Climb the SoTL Mountain?
Graham Scott

Telus 102

I suspect that all educators in Higher Education are driven by a desire to improve their individual teaching practice and to enhance the educational experiences of, and outcomes for their students. However, not all disciplinary research-focused academics choose to actively develop and disseminate their practice as SoTL, and for some such activities might challenge professional identities (Brownell and Tanner, 2012). Throughout my career I have been asked "why do you bother?" in this context (Scott, 2015). In this presentation I share my personal insights and discuss the efforts that I have made to address this question. I have used a process of active personal reflection and conducted structured interviews with colleagues at various career stages. To guide my reflections I have aligned my experiences and those of my interviewees with the multi-dimensional model of SoTL developed by Trigwell et al. (2000). As a result I have identified enablers and disablers that impact the development of individual efforts in SoTL and the means by which they might be overcome. I have also come to realize that there is not a

'one size fits all' story here and that my motivation to start on this path some years ago might not be shared by those about to embark upon their own journey.

New Climbers in SoTL: Early Career International Professors **Eliana Elkhoury**

Telus 102

The Scholarship of Teaching and Learning (SoTL) provides a forum to investigate the teaching and learning itself as well as the relationship to teaching and learning in higher education. We need to understand the relationship to teaching and learning of professors in higher education in order to encourage the adoption and the support of SoTL initiative. On one hand, in Canada, there is a change in the demographics of professors teaching in higher education institutions. The percentage of internationally trained university professors grew from 33 percent in 2006 to 40 percent in 2010-2011 (Universities Canada, 2015). On the other hand, early career is the best stage to instigate transformation in teaching. Although early career professors often feel unprepared (LaRocco & Bruns, 2006; Rudd & Nerad, 2014), this represents the ideal stage to introduce change (Scott & Scott, 2015). For example, at the early career stage professors could be provided with the necessary support to adopt learner-centered teaching or to use technology more effectively. It is during this stage that professors most welcome help and cultivate change (Boice, 1992). Fink (1998) found that providing development on effective teaching, course design and student-teacher interaction attracted early career professors and influenced their teaching. Therefore, studying the relations of international early career professors to teaching and learning presents an opportunity to engage and support more scholars in SoTL. Apart from sessional teaching and teaching assistantships, some professors are experiencing teaching for the first time as the main instructor, and therefore building their relationship to teaching and learning for the first time. Following a transformative learning lens (Mezirow, 2000), this presentation seeks to unpack the relationship of early career international professors to teaching, learning, and consequently, students. Using a qualitative case study (Merriam, 1998), the researcher collected data from five early career international professors across many faculties and departments. To ensure validity, the research used multiple sources of data such as interviews, class observations and artefact analysis. Through the thematic analysis of the data, the research proposes five themes that are relevant to understand the relationship of early career international professors to teaching and learning. The researcher also proposes a framework to support early career international professors to engage in SoTL.

Effecting Sustainable Change in Assessment Practice and Experience (ESCAPE) **Norman Vaughan, Mark Russel, Kayla McGougan**

Glen 204

The purpose of this international and collaborative scholarship of teaching and learning (SoTL) research study was to investigate student assessment practices, from a program perspective, at a university in Abu Dhabi and Canada using the Effecting Sustainable Change in Assessment Practice and Experience (ESCAPE) framework. This framework was developed by the co-investigator, as part of the United Kingdom's Curriculum Design and Delivery through Technology Programme. The focus of ESCAPE is on helping faculty and students design a programmatic perspective to assessment by creating assessment landscapes for each course in the program. The landscapes consist of assessment timelines that visually represent low, medium, and high stakes assessments in a course over a semester. Additionally, the landscapes can be used as an assessment design tool. In that case they help show how the assessments link to each other and better facilitate faculty to develop a more coherent and interconnect assessment experience. The interconnections are captured and represented within courses, across courses and across levels of study. The overarching goal of our collaborative SoTL research study was to utilize the ESCAPE framework to enhance the assessment experience for students and faculty at an Abu Dhabi and Canadian university. Objectives for supporting this goal included: Creating a baseline of current assessment practice in both programs; Establishing the likely learning potential of current assessment practice; Developing and implementing appropriate ICT supported assessment activity; Evaluating the impact of the assessment interventions against dimensions of resource efficiency and educational effectiveness; Engaging in embedding activity to ensure the sustainability of the developments; and Disseminating findings to the Institution and the wider community. Exploring the ways in which formal institutional assessment (and curriculum) design processes can maximize the benefit for the ESCAPE work for other programs. This collaborative SoTL study used an appreciative inquiry (AI) research approach with Undergraduate Student Research Assistants (USRAs) involved in the collection and analysis of the

data. AI is a method of research that purposely looks for the positives in the situation being studied. Hence AI builds upon, and tries to grow, the processes and activities that are perceived as being successful. This is in contrast to a 'traditional', deficit-oriented method of research, where according to Annis-Hammond (2013), "the primary focus is on what is wrong or what is broken" (p. 6). The initial study findings indicate that there is a high concentration of summative (high stakes) assessment activities in the final two weeks of the semester at both universities and that very limited assessment connections exist between courses in a program. Recommendations include providing a greater mix of formative and summative assessment activities in courses throughout the semester and developing intentional program level assessment connections between courses.

A Community of the Flippers: Outcomes of a Colleague Development Program in the Flipped Classroom
Catherine Snelling, Sophie Karanicolas, Tracey Winning, Fizza Sabir

Glen 204

Today's university teachers must contend with challenges such as increased student diversity, a wider range of delivery modes and expectations that graduates are 'work ready'. The flipped classroom is regarded as a pedagogy that alleviates these academic exigencies. It's well documented that students benefit from previewing key concepts before class, using face-to-face time more effectively to actively analyse and apply these concepts. This approach also provides opportunities to facilitate the development of self-regulated learners and work-ready graduates. However, changes in practice don't happen without support, so it's not surprising that researchers have found teachers somewhat reluctant to adopt flipped pedagogy. Many report lacking confidence and 'know how' to translate the concept into real-life practice. This could be the 'weak link' that continues to compromise flipped learning implementation. In 2015, the Australian Office for Learning and Teaching (OLT) funded a two-year research project that focussed on helping university teachers to translate flipped classroom theory into practice. A key methodology of the project was capacity-building activities to help teachers implement the pedagogy into their own classes. At the project's completion, 440 university teachers had participated in 22 workshops including a pre-conference workshop at ISSOTL 2015. From these events, a vibrant collegiality emerged, nurturing an inter-disciplinary and cross-institutional community of practice—a community of flippers. Wenger and Wenger-Trayner point out communities of practice is a recent title for an age-old interaction. However, giving it a name and focus, acknowledges a domain of shared interest, a community where members share knowledge and learn from each other, and a collegial repository of resources. The community of flippers, a significant outcome from the OLT project, possesses all the hallmarks of a successful community of practice. Although the majority of members are academics at the project's lead university, 'satellite' groups have formed at several interstate and international institutions. One comment from a 2016 workshop evaluation was "getting to meet people from different institutions and different faculties has been extremely valuable in giving different perspectives on how to use flipped class design". Furthermore, "I think we have a great opportunity here to develop this (CoP). It's only through collecting our evidence of practice and sharing this with others that we can truly develop the culture, excite people to take risks and try something new-old but different". (email, Senior Educational Designer from an Australian university, 20/2/16) This community of flippers is defined by a vibrant culture of peer review facilitated by face-to-face meetings, the project's website, and an expanding Facebook group with over 50 members from 16 higher education institutions in Australia, New Zealand, Mexico, Canada and the USA. Members regularly share flipping learning successes (and failures), with the website becoming a rich repository for resources and pedagogical research outcomes. The OLT project formally finished in December 2016. However, its major outcome - the community of flippers - continues to flourish, providing the collegiality and support that academics need to sustain their energy and scholarship in teaching and learning.

Designing Blended Courses for Student Success: An Inclusive Model and Framework
Carol Miles, Keith Foggett

Glen 204

A recent increase in blended course delivery worldwide is requiring university teachers to change their teaching methods and implement active learning using authentic activities and assessments in their classrooms (Johnson, Adams Beck & Hall, 2015). This is usually facilitated by the employment of Learning Designers to ensure that the courses are quality offerings, with an emphasis on technology-based learning objects to deliver learner-centred content (Means, Toyama, Murphy & Baki, 2013). Universities are rapidly adopting these instructional

methods and changing students' university experience, often without actively consulting and supporting them through this change (Churchill, King, Webster & Fox, 2013). These developments, especially the reduction in face-to-face teaching hours, places a greater emphasis on the student as curator of their own learning and assigns them greater responsibility for maintaining sufficient involvement in their courses. These learning models have not been experienced by students' parents, older siblings, or other significant people within their lives, leaving them without mentors for achieving success as a student in these new modes. This renders most students of blended learning as 'first-in-family'-a cohort that has been previously acknowledged by universities as requiring special support. Many universities assume that students possess sufficient technological, organisational and study skills to cope with these changes. This workshop will challenge teaching faculty, educational developers and university administrators to consider the impact of this definitive shift from students as consumers of content, to creators of their own knowledge. This interactive workshop will explain a model and detailed framework (Author, 2016) specifying essential contributions from students, university teachers and learning designers as partners in the design, delivery and assessment of learner-centred blended courses. The workshop will allow participants to define the optimal model for their own institutional requirements and will challenge participants to determine the support and development needs of students in their own universities and beyond. Exercises utilising a comprehensive matrix of contributions from, and supports for, all three partners will explore both the requirement to gather information about student needs and the support services required for successful learner-centred course design. As well as considering these learner requirements within the teaching framework of their own institutions, participants will determine optimal contributions to the development and support of university teachers' and learning designers' ability to produce effective blended courses. Participants will leave the session prepared to begin the design of a plan and framework addressing parts of the model that their institution has not yet achieved for the development and support of blended courses, approaching learning design in a scholarly and inclusive manner.

Leadership Immersion: Building and Sustaining a Quality Academic Culture Through Leadership Transformation
Kellie Bassell, Candice Phillips, Laura Fillmore

Telus 103

Nursing must transform education and practice to meet the changing healthcare environment; yet, process steps that lead to desired change remain unknown. Academic leaders are well positioned to initiate change and transform the current academic landscape (Staffileno, Murphy, & Carlson, 2016). However, leaders often advance to leadership positions with little orientation to the role (Söderhjelm, Björklund, Sandahl & Bolander-Laksov, 2016). Moreover, many leaders in academic nursing have expertise as clinicians and organizational administrators, and not as nurse academics (Halcomb, et al., 2015). Therefore, it is incumbent on academic leaders to acquire needed competencies foundational to fulfillment of the academic role. Fundamental to the role of any academic leader is to coach the faculty they lead (Day, Fleenor, Atwater, Sturm, & McKee, 2014). Indeed, academic leaders are called to continually inspire and guide faculty to reach their full potential. Leadership role competencies specific to education require a specialized pedagogical base that integrates the art and science of nursing practice with the teaching and learning process. The purpose of this workshop is to engage participants in a transformative journey through individual and collective critical reflection to challenge assumptions and raise questions about the academic leadership role. Insights will be gained using innovative eLearning interactives. In this workshop, participants will establish a vision of teaching excellence; engage in self-reflective processes to build and sustain a quality academic culture; and venture into innovative e-Learning activities to transform the leadership role. Participants will be engaged through individual and collective dialogic reflection, and participant interaction in an animated eLearning video modeling effective leadership responses to advance faculty teaching and guide future responses and actions in the leadership role. Additionally, a question and answer session will be offered. Presenters of this workshop include the Dean of Curriculum and Instruction and Faculty Development Specialists in the Center for Faculty Excellence (CFE) at a multistate, multiprogram college of nursing. The CFE is a decentralized, national team, who provide comprehensive eLearning resources to guide and support development of beginning and experienced nurse educators in the academic role. A quality improvement project was created and implemented to immerse academic leaders in an in-depth exploration of steps to initiate and sustain change in the teaching and learning process across our nursing program. Three-day regional leadership immersions were developed and implemented to transform academic leaders into stewards of teaching excellence. Self-reported low- and high-level outcomes were analyzed using Kirkpatrick's 4-level Model to evaluate the effectiveness of the immersion in preparing leaders to

build and sustain a quality academic culture. Pre and post-immersion surveys captured data across three levels: satisfaction, knowledge and skill acquisition, and change in behavior. Findings from 73 participants were eligible for levels 1 and 2 analysis of Kirkpatrick's Model, based on completion of pre- and post-immersion surveys. Of these 73 participants eligible for inclusion in the three-month analysis, 30 participants responded culminating in a 41% response rate. Pre- and post-immersion surveys were analyzed using a one-way between subjects ANOVA, where group location served as the factor and score served as the outcome variable. Additionally, pre- and post-surveys were analyzed using a one-tailed, dependent t-test. Further descriptive statistical analysis was performed using a Cohen's d to determine the effect size of the leadership immersion on participants' knowledge, skills, and attitudes. Three month follow-up surveys revealed no significant effect change ($p < 0.05$) in knowledge, skill and attitude. This presentation aligns with the conference thread-Adventures and insights in SoTL, and invites participants to challenge perceptions and gather insights about influences on their role as leaders. The goal is for participants to learn about themselves as leaders, develop expertise in guiding faculty to link how teaching practice connects with student learning, and use the information and resources to improve teaching practice within their organization.

Conceptualizing Educational Leadership: The Teaching Scholars' Perspective
Jacqueline Fields, Natasha Kenny, Robin Mueller, Clark Amistad

Telus 103

Promoting the development of educational leadership across post-secondary institutions is essential to strengthening and sustaining the quality of teaching and learning environments (Bolden et al., 2008). The importance of educational leadership characteristics such as visioning, communicating effectively, and engaging with others to help influence change, cannot be understated (Taylor, 2005). Teaching Scholars programs present a sustainable model for establishing communities of peers that advance educational leadership across the institution by strengthening teaching and learning capacity within and across disciplines. Teaching Scholars Programs provide academic staff with the time and resources necessary to pursue meaningful, relevant, and research-informed initiatives that are designed to have broad disciplinary and/or interdisciplinary impact. Although the purpose of Teaching Scholars programs varies based on institutional context, these programs have been shown to develop educational leaders who foster and guide change, create collaborative communities of inquiry, enhance individual and collective teaching practices, and develop innovative teaching and learning initiatives (Keppell et al, 2010). In 2016, the U of X implemented a pilot Teaching Scholars Program aimed at establishing such a community of peers, each of whom was awarded CAD\$40,000 over a three-year period to implement an initiative that addresses a specific teaching and learning opportunity of shared interest within and/or amongst faculties. While the idea of educational leadership is central to the delivery of Teaching Scholars programs, little is known about how faculty conceptualize educational leadership in a post-secondary context. We developed a case study, where through semi-structured interviews (Creswell, 2007) conducted with the 14 Teaching Scholars at our institution, we gained in-depth insights about their views on educational leadership. The data collected were analyzed thematically to identify and code common ideas that emerged from participants' narratives (Boyatzis, 1998). In this presentation, we discuss the early findings regarding our Teaching Scholars' definitions of educational leadership, their perspectives on how educational leadership is expressed, how they personify educational leadership, and how their own leadership contributes to the strengthening of teaching and learning capacity. By the end of the session, participants will reflect on these findings and will consider how to strengthen educational leadership within their particular institutional contexts. We conclude this presentation with a brief analysis of the potential and limitations of our Teaching Scholars Program as well as recommendations for implementing similar initiatives to help foster educational leadership in post-secondary institutions. We believe that our proposal best fits with the conference theme "New horizons, emerging landscapes, and underexplored territories in SoTL", given that the conceptualization of educational leadership by faculty in a post-secondary context is an emerging and underexplored phenomenon.

New Horizons: Exploring and Effecting Change Through a Non-Traditional Leadership Fellowship Program
Melec Zeadin, Whitney Ross, Nancy Fenton, Julia Evanovitch

Telus 103

In the spirit of "Reaching New Heights", we present preliminary research on the cohort of Leadership in Teaching & Learning Fellows - a non-traditional Fellowship program designed to promote and build capacity through innovation and excellence in teaching leadership. The Leadership in Teaching & Learning Fellowship program is

conceptualized using a socio-cultural framework whereby the relational and contextual aspects of leadership are emphasized, which brings into focus the “close interdependence between individual, group and organizational development” (Bolden et al., 2008, p.370). The Fellowship program is grounded in an evidence-based philosophy that views faculty involvement as key to leading change in teaching & learning to enhance overall students’ learning experiences in higher education. The program is structured to bring cross-disciplinary voices together to strengthen the discourse on teaching and learning. The primary goals of the program are for fellows to: (1) plan a course-level impact project or a program-level change project; (2) disseminate project outcomes; (3) mentor peers; and (4) extend conversations about teaching and learning towards building networks. The preliminary findings presented here build upon Roxå and Mårtensson’s (2009) research investigating the conversational partners that university teachers have and the nature of these conversations. The broader aim of this study, however, is to explore how the Leadership in Teaching & Learning program at one Ontario institution influences the conversational patterns of individual Fellows in the program. In doing so, we bring together a conceptual foundation to explore and assess the value creation through our leadership program by employing two frameworks: the ‘interdependence’ (Little, 1990) and ‘value creation’ (Wegner et al., 2011) frameworks. The ‘interdependence’ framework is used to evaluate the types of interactions that can take place and exist on continuum from independent to interdependent (e.g. storytelling and scanning, aid and assistance, sharing and joint work); while, the ‘value creation’ framework is used to determine the outcome(s) of the collegial interactions that take place (Van Waes et al., 2016). This qualitative research approach will occur in stages with semi-structured interviews taking place over the course of a year. Additional data will be collected through annual progress reports that fellows are expected to submit as part of their fellowship. Roxå et al., (2011) argue that, “Each individual belongs to a smaller and denser network whereby more time is spent with few individuals; and, communication is more emotional and characterized by reciprocal confidence. Utilizing network theory, these relations constitute the individual’s strong links. But the smaller network in turn is situated in a context of many other small networks each connected to the others by weak links lacking the type of emotional characteristics of the strong links” (p. 101). It is only by understanding these conversational pathways that, “culture is constructed, maintained, and possibly changed” (Roxå et al., 2011, p. 101). Other network research highlights the value of interactions for overall student achievement, reform and improvement as well as professional development programs (Van Waes et al., 2016), while at the same time appreciating the delicate balance between fostering network awareness and imposing network building. The aim of this presentation is to highlight the Leadership in Teaching & Learning Fellowship program model, to discuss the research design, and to share early preliminary findings. We will engage participants in a brief discussion to unpack the factors that may be contributing to the culture in the current ‘backstage teaching arena’ (Roxå & Mårtensson, 2009) with the hope that through this discourse, we can, together, begin to identify ways to enrich our significant networks.

Curiosity, Inquiry & SoTL: Using the Question Formulation Technique to Explore and Address Issues in the Student Experience of IBL in Higher Education

Telus 105

Stacey MacKinnon, Sarah-Lynn Boyle, Sarah MacLeod, Brenton Dickieson, Brittany Jakubiec

Convincing professors and students in higher education to embrace inquiry-based learning (IBL) can be challenging, despite research in the K-12 system that suggests IBL is highly engaging (Brown, 2016), increases motivation in learning (Bayram, Oskay, Erdem, Özgür, Şen, 2013; Wang, Wu, Yu & Lin, 2015), and enhances content retention (Richmond, Fleck, Heath, Broussard & Skarda, 2015) while strengthening critical thinking skills (Duran & Dökme, 2016; Hairida, 2016). In our nine semesters of “The Curiosity Project”, we have certainly seen positive personal and academic transformations occur in our students’ lives (MacKinnon, 2016; MacLeod, 2017). In addition to these moments of growth, however, we have also seen students encounter speed bumps and even roadblocks on their IBL-related academic journeys (Boyle, 2015). We designed UPEI 102 Inquiry Studies in part to address some of these issues, creating an inquiry-based intervention earlier in students’ academic careers. In the process of interacting closely with these first-year students over the last four semesters, we came to realize the many incomplete or incorrect assumptions professors make about students’ understanding of the purpose of IBL, their role in and ability to engage in questioning more generally, the likelihood of spontaneous knowledge/skill transfer, and even students’ desire to become independent learners. Based on a detailed discussion of the assumptions we had made and their veracity in our experiences with students, we shifted our focus in first-year inquiry to bridging the gap between our expectations about university students’ abilities and attitudes toward learning. Our aim was to address the realities of meeting students “where they actually are” so we could more effectively guide them towards

more tangible success in higher education. We have designed this presentation to mirror our emphasis on avoiding assumptions and, instead, meeting people “where they are”. We will be using an adaptation of the Question Formulation Technique (QFT; Rothstein & Santana, 2011) that we use in our Inquiry Studies course to engage participants in an active inquiry into their own concerns about and experiences with engaging in IBL in higher education settings. The QFT is built on a platform of microdemocracy and was originally designed to empower people in determining what questions they need to ask in order to meet a particular goal (e.g., what to ask a teacher on parent interview night or what questions to ask your healthcare provider at an appointment). In this case, the goal of the QFT is to determine what assumptions our people are making and to unearth issues they are facing--or foresee as potentially problematic. Once assumptions are understood, we will answer the questions they deem most important in their decision to engage in or continue pursuing the inclusion of IBL-projects in their classrooms. In response to the questions that arise during the QFT, we will share our insights and “lessons learned” during our continuing IBL adventure, discuss approaches we are using to meet these challenges in our courses, and encourage workshop participants to brainstorm other possible avenues for supporting IBL activities in higher education.

Examining SoTL Development in Doctoral Students-Long-Term Effects **Jennifer Löfgreen, Torgny Roxå**

Telus 105

In a recent overview of research on effects from pedagogical courses for academic teachers (Saroyan and Trigwell, 2015), reflection appears consistently as an important element both in higher education teachers' development and in evaluating academic development work. Roxå and Mårtensson (2015) argue that the outcome of such evaluation is dependent on whether the local working context, the microculture, encourages or discourages such scholarly reflection. However, few studies compare individual teachers' ability to reflect in a scholarly way upon teaching and student learning within pedagogical courses (which are supportive contexts) and their working microcultures (which may or may not be supportive), especially over time. This study concerns effects of pedagogical courses on doctoral students, the newest of SoTL newcomers, focusing on their ability to reflect in a scholarly way about teaching and student learning. In the course, participants are required to reflect in a scholarly way upon a teaching and learning situation they have experienced personally; this reflection is handed in as a mandatory written assignment in the course. While previous research (Roxå, accepted) does indicate that course participants are capable of finding, selecting, and using educational literature in a meaningful way when reflecting on and analyzing teaching and learning issues, other work suggests that doctoral students do not necessarily occupy microcultures that support them in engaging in scholarly conversations about teaching and learning (Roxå, 2016). The study reported here follows doctoral students from a pedagogical course into their everyday teaching context and investigates if and how a SoTL capacity developed during the course is recognizable half a year later. An analysis of the individual reflection texts reveals the range of teaching and learning experiences that course participants have and demonstrates the varying degree to which doctoral students are able to engage in scholarly reflection on their own experiences. Interviews with selected participants half a year after they completed the course examine how they approach similar reflections after returning to their microcultures and the extent to which they are able to activate a similar reflective approach to the one they demonstrated in their course paper. The design allows for comparison between the type and degree of one reflection produced inside a pedagogical course and another reflection produced later. It also makes it possible to probe whether this type of reflection is supported or not in the participants' respective microcultures.

Scholarship of Teaching and Learning Perspectives from Council on Libraries and Information Resources Postdoctoral Fellows **John MacLachlan, Jodi Reeves Flores, Christa Williford**

Telus 105

The Council on Libraries and Information Resources (CLIR) Postdoctoral Fellowship Program launched in 2004 with the intention of bringing recent PhDs into academic libraries in order to work on projects that strengthen connections among library collections, educational technologies, and research (Waraksa 2015). This paper will explore both the initiatives CLIR Fellows have developed related to the Scholarship of Teaching and Learning (SoTL) in academic libraries and the value of incorporating the ideas into existing and evolving library goals and services (MacLachlan et al. 2015). The work compiled by the 50 CLIR Fellows was undertaken through the use of a

Collaborative Writing Group (CWG) methodology where the CLIR Fellows, library professionals, faculty members and educational developers with varied backgrounds, are brought together to tackle a specific topic of interest. A 2015 survey of current and former fellows informed the design of this project, pulling together ideas from over 60 individuals associated with the program (representing a 55% response rate). The collection of essays to be explored are from 'The Process of Discovery: The CLIR Postdoctoral Fellowship Program and the Future of the Academy' and a follow-up collection focused on libraries, teaching, and learning scheduled to be published in September 2017. A brief discussion of the process necessary to bring together the writing team will act as a preamble to the more topical discussion. Threaded throughout the essays, common themes begin to emerge: Are old definitions/concepts of what libraries are supposed to be creating roadblocks? ; How should the new movement towards 'Shiny Things' such as Makerspaces and 3D printers be evaluated? Are the currently accepted career directions of PhD students reasonable or antiquated (the 'Atl-Ac' debate). These common themes, among others, will be explored through examples and questions raised within the 12 published essays. Tied to the threads found between the essays are the results of the survey sent to all current and past CLIR Fellows in 2015. Within the survey it became apparent that CLIR Fellows often enjoyed working in a more interdisciplinary environment but occasionally found challenges adapting to the expectations of the non-traditional academic career path. It was clear fellows relished the opportunity to teach and interact with students as was opportunities to develop innovative teaching practices. The broad range of essays generated by the collaboration of a range of individuals who vary in experience, discipline and job title, offer unique thoughts and directions related to SoTL in the post-secondary environment.

Reflecting on Student Engagement: Social Work Education, Group Study Program to the UK **Glen 208** **Beth Archer-Kuhn**

This paper explores student engagement through inquiry-based learning (IBL) in the context of a Group Study Program environment within three cities in Great Britain; Glasgow, Belfast and London. The venue provided opportunity to study multiple areas of pedagogy within an International Studies context. The focus of this study narrows on the inquiry experiences and their influences on social work student engagement. IBL is a "self-directed, question driven, search for understanding" (Hudspith & Jenkins, 2007, p 9) that can help students systematically move to a higher level of understanding (Justice et al, 2007). Student engagement in their learning has become a much more focused topic in the research literature. This in part is due to what Friesen and Scott (2013) discover in their review of the literature on inquiry-based learning; that students today require different skills than those of the more distant past, such as the ability to think critically, to synthesize, analyze, collaborate, and communicate effectively. This teaching and learning strategy is limited in studies specific to social work. This is curious given the high value placed on the development of critical thinking skills and the mandatory acquisition of these skills for the professional role that students will play upon graduation. Dunleavy and Milton (2009) find that students identify three criteria for increasing student engagement in the learning environment: 1) learn from and with each other, and people in their community, 2) connect with experts and expertise, and 3) have more opportunities for dialogue and conversation. These findings are consistent with Windham's (2005) recommendations that learners require new educational curriculum that include interaction, exploration, relevancy, multimedia and instruction, if they are to engage in their learning. The findings suggest a very different focus of teaching, from teacher-centered to learner-centered. This project uses a mixed methods research design comprising both quantitative and qualitative data collection methodologies; specifically, an explanatory mixed methods design. This type of design is used when the results of one data set requires further explanation (Creswell & Clark, 2011). Data collection will focus on the learning experiences of student participants throughout the implementation of this inquiry-based course. We utilized pre-post standardized measures, a focus group, and reflections from students' final papers to reveal the student experience of deep learning. These learnings are used to inform course design, an on-line module, and development of a Group Study Program template. These learnings are then applied in a second Group Study Program to reflect Kolb and Kolb's (2008) deep learning cycle apparent in experiential learning (experiencing, reflection, thinking, acting). This SoTL project encompasses the conference theme of Adventures and insights in SoTL. Creating a Group Study Program is an adventure alone. Adding the creation of inquiry-based learning to this program created rich opportunity to focus on student learning within the context of a global classroom, as well as the implications and inspirations for on campus courses, and has provided multiple opportunities for ways of thinking and writing about SoTL.

Creating Cohorts as Support Structures for Learning

Jeff Meadows, Olu Awosoga, Jan Newberry

Glen 208

There are many reasons to create student support structures within your classroom. As educators, many of us use group work as a method of getting students to not only become active participants in their learning, but also to allow them to discuss and defend their thoughts and ideas about the subject matter that we are teaching. Unfortunately, temporary small groups often do not create the trust and relationships required for students to feel comfortable making statements and exploring their understanding adequately with their peers. Team-Based Learning (TBL) is a teaching strategy that was originally conceived in 1979 by Larry Michaelsen that encourages student engagement through a cycle of readiness activities focusing around structured work within groups. The central motivation for engaging students in TBL is to get them to engage in the material through small-group discussion with a purpose. While many of us can conceive of what this might look like in a small classroom, how does it scale? How would this look in a Statistics classroom versus a Humanities classroom? How would this work in a large fixed seat lecture hall versus a smaller, flexible seat classroom? What must be sacrificed to give students time to deepen their understanding of certain topics within our courses? What are the students' saying about being taught in this way (when they are often used to more traditional approaches)? This session will use data gathered from a number of course sections in two very different disciplines (Statistics and Anthropology), over multiple terms to help answer these (and other) questions about what TBL looks like. Data was collected from students via survey instruments, classroom observations and focus groups to help gain insight into the efficacy and impact of TBL in meeting the outlined goals of the instructors. The presenters will explain their original motivations for trying out TBL as well as whether the data they collected supports their choice.

Group-Based Learning in Nutrition: Evaluating the Impact on Students' Perceived Skills and Experiences

Leandy Riley, Carol Henry, Carolyn Hoessler, Kimberly Matheson

Glen 208

What happens when the career readiness skill of group-based learning is embedded throughout a fourth year course on the cusp of students' practicum experiences in Nutrition? We describe the process of this unexplored territory and emergent approach of Career Integrated Learning within the health profession of Dietetics, and describe the impact on students' learning and experience in their practicums. Objective: Guided by the a theoretical framework that links in-class collaborative teaching and learning experiences to skill development, this study evaluated the impact of group-based learning on dietetic interns' skill development to improve learning in the course and in future professional practice. To bridge the gap between the competencies required for the workplace, i.e., career readiness (Conley, 2012), and the skills and behaviours of the graduates entering the workforce (Michaelsen et al., 2014; David, David, & David, 2011), group-based learning (GBL) is emerging as a practical, student centred approach for tackling with this problem (e.g., Norrell & Holden, 2015). Intervention: In the University of Saskatchewan's BSc. Nutrition program, a required third-year course, Management and Administration of Nutrition Services (NUTR 466), was redesigned from lecture-based into an intensive group-based learning course, with assistance from the Student Employment and Career Centre and the Gwenna Moss Centre for Teaching and Learning. New components aimed at increasing skills, capabilities, and attitudes in teamwork included a flipped classroom, group processes, self-reflection, active learning, and assignments requiring collaboration and higher order integration and extrapolation of concepts Methods: Data collection followed a World Cafe approach to explore students (n=13) skill development experiences. The world cafe method is an appropriate approach for creating a living network of collaborative dialogue where key questions are explored individually and as a group and then shared: What skills have been useful to you in Nutr 531, including in your practicums and how have those skills change over time? How has Nutr 466 contributed to developing your skills and what experiences have helped the most to develop those skills? How has Nutr 531, including your practicums, contributed to developing your skills and what experiences have helped the most to develop those skills? What skills do you want to develop during the rest of Nutr 531, including your practicums? Specifically what collaboration skills have helped you work collaboratively in health care teams and what collaboration skills are you continuing to develop during the rest of our practicums? The world cafe was conducted in December, 2016 after students' first practicum. The study was exempted by Behavioural Research Ethics Board of the University of Saskatchewan. Results and Conclusion: Group-based learning helped students to develop a variety of competencies, which aligned with the career readiness framework:

critical thinking (decision making and problem solving), communication, collaboration, leadership, professionalism, and career management (confidence) among other findings to be discussed. This study contributes to understanding underexplored territories in SoTL for career-integrated learning, intensive group-based learning and the world cafe method as approach to evaluating teaching and learning.

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Risk, Change, and Cognitive Authority: Educational Developers Supporting SoTL
Deandra Little, David Green

Telus 104

When consulting with faculty undertaking new SoTL projects, educational developers act as purveyors of "second-hand knowledge," often encouraging faculty to explore strategies or research questions about student learning using methods unfamiliar to their disciplines. When consulting on SoTL projects, then, it is important that developers be viewed as "cognitive authorities" (Wilson, 1983) sharing ideas and resources that faculty must find credible enough to try. In this paper, we examine the factors that help position developers as credible "cognitive authorities" who can effectively support faculty and communities of practice in developing innovative or transformative SoTL projects. Framework: Developers have long been preoccupied with their credibility and positioning--not surprising given their task to change both individual practices and the educational culture of HE (Handal, 2008). We do this by continuously renegotiating our relationship with faculty (Whitchurch, 2013), constructing authority on an ongoing basis to influence their perceptions and understanding of higher education pedagogies. Engendering trust becomes even more important in SoTL -- an interdisciplinary space where faculty "navigate alien epistemologies, methodologies, and concepts or take on a whole new way of looking at the world" (Simmons et al., 2013, p. 11). Because SoTL focuses on one's own teaching, itself an "intensely personal endeavor" (Hodges, 2013, p. 75), it has "revelatory power in catalyzing change" (p. 72), which means it can feel both risky and

transformational. Moreover, engaging with SoTL often means that “identity scripts” learned through disciplinary socialization no longer function, but need supplementing with different methods, epistemologies, perspectives, and communication strategies (Simmons et al., 2013, p. 11). Doubt, insecurity, or self-questioning (Simmons et al., 2013, p. 13) in this new interdisciplinary space present additional challenges to the faculty-developer relationship. Taking a “learner-centered” approach to supporting faculty undertaking SoTL projects (Hutchings, Huber & Ciccone, 2011 p. 64-65) means building trust and sharing expertise in order to increase a sense of expectancy and support informed risk-taking, as well as applying knowledge about learning to work with faculty who may be exploring new ideas or methods. But which specific factors enable a positive relationship with faculty so that they can trust us to provide well-informed advice? In this paper, we draw from information studies (Hilliglos & Rieh, 2008), ethics (Cohen & Dienhart, 2013), and HE (Whitchurch, 2013) to present a set of interrelated components that we argue will build relationships and engender trust between developers and faculty undertaking new SoTL projects. Demonstrating these components in our interactions with faculty should enable developers to be more effective in pursuing our goal of transforming HE and in supporting risk and change. OUTCOMES/REFLECTION: By the end of this session, participants will have explored different components of “cognitive authority” and their relative merits in the context of educational development. We will scrutinize these components, sharing ideas and experiences of how developers can demonstrate them in practice, and prompting questions about which are already apparent in our work, which are present but hidden, and which we have yet to enact.

The Role of Teaching Centres: A Bridge Between Research and Practice **Linda Price, Heather Kanuka**

Telus 104

Approaches to teaching with technology tend to reflect how teachers were taught, or attempt to replicate face-to-face teaching (Other, Other, & Author, 2016). Thus the use of technology in teaching is often transmissive in style with limited opportunities for engaged learning (van der Sluis & May, 2015). Effective technology use needs to go beyond gut instinct to adopt a scholarly, evidence-informed approach (Other & Author 2013). But how do we do that? Using survey methodology the purpose of this study was to gain further insights on the use of an evidence-informed approach and knowledge transfer. Framework: Given increasing interest in SoTL and concerns about the effectiveness of the use of technology, we enquired whether evidence informs teachers about educational effectiveness. Informing teaching staff about effective technology enabled learning (TEL) research is not an insignificant task. Building on the research that Author and Other (2014) developed, which found practitioners’ preferences are to consult with academic developers, this paper provides further insights on how teaching centres can bridge the gap between research and practice to provide staff with guidance on more effective teaching practices, and in ways that improve student learning. Connecting research to practice can support scholarly approaches to teaching, as well as highlighting an important role that teaching centres provide. Gaining insights on bridging this gap is important because reviews of prior research have revealed that the impact of teaching programs have shown an association between participation in evidence-informed teaching development programs and the tendency to use learning centred instructional methods (Parsons et al. 2012). Relatedly, research has also indicated when academics participate in teaching development, there is a greater possibility of changing conceptions of both teaching and practices (Other & Author, 2014). We used these reviews to frame the survey development for this study. Outcomes, Insights: The survey results (n=241) in this study show that (i) educational developers were valued primarily for their research-informed pedagogical knowledge and (ii) the most valued information focused on how the evidence-based information presented can be applied to everyday classroom practices. Open ended comments indicated that nearly half of all respondents increased their use of web-based course management software in a way that they perceived as: (i) changing to a learning centred pedagogy, (ii) a greater focus on assessing learning outcomes, and (iii) an increased emphasis on student engagement and active learning strategies. Reflective Critique: A problem facing teaching centres is how to capitalize on the research to improve teaching practices. This is particularly pressing in relation to the use of technology (Other & Author, 2016). In this session we critically reflect on the research, and ask why it has had limited impact on everyday practices. Audience Engagement: We will engage the audience through visual illustrations and discussion of the role of teaching centres, including how to mobilise knowledge transfer to everyday practice.

Rationale: Approaches to teaching with technology tend to reflect how teachers were taught, or attempt to replicate face-to-face teaching (Other, Other, & Author, 2016). Thus the use of technology in teaching is often transmissive in style with limited opportunities for engaged learning (van der Sluis & May, 2015). Effective

technology use needs to go beyond gut instinct to adopt a scholarly, evidence-informed approach (Other & Author 2013). But how do we do that? Using survey methodology the purpose of this study was to gain further insights on the use of an evidence-informed approach and knowledge transfer. Framework: Given increasing interest in SoTL and concerns about the effectiveness of the use of technology, we enquired whether evidence informs teachers about educational effectiveness. Informing teaching staff about effective technology enabled learning (TEL) research is not an insignificant task. Building on the research that Author and Other (2014) developed, which found practitioners' preferences are to consult with academic developers, this paper provides further insights on how teaching centres can bridge the gap between research and practice to provide staff with guidance on more effective teaching practices, and in ways that improve student learning. Connecting research to practice can support scholarly approaches to teaching, as well as highlighting an important role that teaching centres provide. Gaining insights on bridging this gap is important because reviews of prior research have revealed that the impact of teaching programs have shown an association between participation in evidence-informed teaching development programs and the tendency to use learning centred instructional methods (Parsons et al. 2012). Relatedly, research has also indicated when academics participate in teaching development, there is a greater possibility of changing conceptions of both teaching and practices (Other & Author, 2014). We used these reviews to frame the survey development for this study. Outcomes, Insights: The survey results (n=241) in this study show that (i) educational developers were valued primarily for their research-informed pedagogical knowledge and (ii) the most valued information focused on how the evidence-based information presented can be applied to everyday classroom practices. Open ended comments indicated that nearly half of all respondents increased their use of web-based course management software in a way that they perceived as: (i) changing to a learning centred pedagogy, (ii) a greater focus on assessing learning outcomes, and (iii) an increased emphasis on student engagement and active learning strategies. Reflective Critique: A problem facing teaching centres is how to capitalize on the research to improve teaching practices. This is particularly pressing in relation to the use of technology (Other & Author, 2016). In this session we critically reflect on the research, and ask why it has had limited impact on everyday practices. Audience Engagement: We will engage the audience through visual illustrations and discussion of the role of teaching centres, including how to mobilise knowledge transfer to everyday practice.

What is the Value of University Teaching Certificates? Analyzing Disciplinary Differences Across Institutions **Erika Smith, Heather Kanuka**

Telus 104

Questions and Rationale: Post-graduate teaching certificates are increasingly being offered within higher education. Over half of all teaching certificates at Canadian universities now focus on both skill development and the scholarship of teaching and learning (Kenny, Watson, & Watton, 2014), showing an evolving relationship between SoTL and post-graduate training. However, when faced with limited time and competing academic demands that often privilege research, it is unclear whether graduate students and faculty across disciplines and institutions believe there is value in completing such programs in university teaching. This study explores doctoral student, postdoctoral fellow, and departmental administrator perceptions of the value of post-graduate certificates in teaching and learning, and the scholarship of teaching and learning. Using a survey distributed across Canadian post-secondary institutions, this research provides an analysis of participants' responses regarding the value, as well as the content, that comprises such certificates. Theoretical Framework and Methodology: Constructivism guides this inquiry, a research framework giving focus to the participants' meanings, views, and perspectives (Creswell, 2014). The study employed a survey methodology (N= 450) to collect participants' views via a cross-sectional survey design, whereby the researchers compared different groups in a macro-level analysis (Cohen, Manion, & Morrison, 2011). Responses were analyzed using statistical procedures via SPSS software. Descriptive analysis was conducted to analyze closed responses, including Likert-type ratings, and open-ended textual responses were analyzed using generic qualitative coding techniques (Merriam, 2009). Data analysis focused any notable differences, relationships, or themes demonstrated in participant views of the content and value of post-graduate certificates in teaching in learning. Outcomes and Insights: Although academics are strongly affiliated with their subject discipline, when preparing to be excellent teachers, considerations for balancing specific disciplinary skills with broader transdisciplinary knowledge are not well understood (Barnett, 1994; Wareing, 2009). Tied to the conference theme of underexplored territory in SoTL, this paper provides an analysis of disciplinary differences regarding post-graduate certificates that often integrate topics embedded in the scholarship of teaching and learning. Results highlight

important disciplinary differences between Health Sciences, Natural Sciences and Engineering, and Humanities and Social Sciences groups, illustrating the importance of disciplinary context for both the content and value of such certificates. Reflective Critique: This research provides new insights into disciplinary context. Presenters will outline implications connecting evidence to practice, including recommendations for how disciplinary and transdisciplinary knowledge and skills could be better addressed within post-graduate teaching certificates. As participation in this study was voluntary, limitations for the research presented include the potential of participant self-selection when choosing to complete the survey. Audience Engagement: Presenters will engage the audience through visual illustrations and discussion of the research, including the use of a digital audience response system to anonymously poll those in the room regarding the values and content within certificates in teaching and learning, and comparing those responses to the results of the survey.

Depictions of Suffering: The Student Experience **Patricia Kostouros**

Telus 106

An emerging topic in teaching and learning is related to depictions of suffering and the use of trigger warnings. As an under researched area for Scholarship of Teaching and Learning (SoTL) it fits with the conference theme of New horizons, emerging landscapes, and underexplored territories in SoTL. With emerging literature on trauma informed care, those who teach courses which include topics of trauma are being thoughtful about how we should deliver this material and reduce the impact for students (Carello & Butler, 2015; Kostouros & Wenzel, 2016). Literature related to Secondary Traumatic Stress (STS), Vicarious Trauma (VT) and Compassion Fatigue (CF) (Figley, 1995; 2002; Pearlman & Saakvitne, 1995) is another growing topic. The notion of distress from having been a secondary witness to suffering is also moving from helper as witness to student as witness (Zurbriggen, 2011) and the relationship to STS and VT that speak to the notion of secondary witness effect of the student population (Carello & Butler, 2014; Graziano, 2001; Shannon, Simmelink-McCleary, Becher, & Crook-Lyon, 2014; Spear, 2014). Therefore, it is possible that depictions of suffering in classes could lead to the student also suffering. The question posed in this SoTL research was: What can students' experiences of encountering the suffering of others, in their course curriculum, tell us about learning and inform teaching practice in relation to using materials that depict suffering? According to Merriam (2002), asking students about their perspectives and collecting this data via interviews matches an interpretive-phenomenological methodology. The primary goal of this qualitative SoTL study was for student participants to inform teaching practice. Fleming, Gaidys, and Robb (2002), stated the purpose in using an interpretive approach is to create deep understanding and "lead to the opening up of possibilities for this understanding" (p. 117). With the permission of the course instructor, we approached students taking this fourth-year Sociology course since the content was entirely focused on disasters. Of the original twenty-five students who agreed to participate in the research, seven of them attended interviews. While seven might seem like a small number of participants, in a qualitative study, particularly interpretive and phenomenological approaches, fewer participants is not questionable. Crouch and McKenzie (2006) suggested that fewer participants in a qualitative study helps a researcher build and maintain a close relationship and thus improve the "open" and "frank" (p. 485) exchange of information. This can help mitigate some of the bias and validity threats inherent in qualitative research. Reactions of students after being exposed disturbing material in their course will be described. Students were interviewed after the course concluded and provided insights on their general experience, including emotional reactions, perspectives on course delivery, and suggestions for instructors who use depictions of suffering in their curriculum. The benefits of using trigger warnings was also explored. Students had personal and emotional responses to the material, which shed light on notions of compassion fatigue and vicarious trauma; which new studies show is also moving from helper as witness to student as witness.

Venturing into the Valley of Mysteries: Going Back and Exploring What Leads to Students' 'Sense of Belonging in Higher Education' **Tom Lowe, Owen Humphrey**

Telus 106

Activity and exploration into the student experience is both rapid and expansive at Winchester, with the development of several new Student Engagement, Students as Partners and Student Experience initiatives. Such schemes as the Winchester Student Journey Project, the Student Fellows Scheme and University-Student Union Partnership have seen the institution conquer new heights and distances which were previously unexplored. From

these heights we look across this gigantic mountain range of activities and seek to go back to the grassroots in the valleys of mysteries to ask the question deemed to be linked to Retention, Wellbeing and Student Satisfaction: What leads students at the University of Winchester to have a 'Sense of Belonging'? This research paper will give an overview of a study that was conducted at the University of Winchester to investigate students and staff members' 'Sense of Belonging' at the Higher Education institution. This research project was influenced by sector policy bringing about a new focus on retention which scholars had linked to belonging and Student Engagement. Such studies had been conducted outlining students would invest greater effort in their learning when they become involved members of the University community (Morgan, 2003) and that positive interaction with peers brings about a sense of belong and increased student satisfaction (Hunter, Clarke, 2012). This study has been conducted in two phases; which began by identifying the factors contributing to and the points in time where a 'Sense of Belonging' was attained. Factors were identified through coding from the student feedback from the feedback exhibition to be further explored. These factors were then rated by students in regards to influence on belonging through the University-wide survey. Example factors used in the survey were; University Degree Processes and Activities, Student Union Activities and A Sense of Place and Safety etc. The data from this research will contribute to our further exploration of Student Engagement in Higher Education. This project has been conducted in partnership by XXX, a Masters student in the Philosophy of Education and XX, Student Engagement Project Manager as part of the Winchester Student Fellows Scheme (Sims, Lowe, Hutber, Barnes, 2014). The colleagues were paired through this Student Engagement activity to create a partnership to work together with mutual targets, direction and input, as the scheme aligns with UK policy and literature surrounding student-staff partnerships (Healy, Flint, Harrington, 2014, NUS, 2012).

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Creating Low Stakes Learning Environments that Address Undergraduate Students' Anxiety Telus 106 **Laura Fairley, Erica Cambly, Jana Lok, Jordana McMurray**

Stress and anxiety are becoming increasingly prevalent in undergraduate student population. In 2016, the American College Health Association published the results of the National College Health Assessment for Canadian post-secondary students. The findings show an increasing number of students struggling with mental health issues across Canada's university and college campuses: 42.2% of respondents reported that stress had negatively affected their academic performance on tests/exams, assignments/papers, and/or practicum work and 32.5% of respondents

reported that anxiety had similar effects (ACHA, 2016). As students struggle to cope with an escalating burden of stress and anxiety, educators must mobilize innovative teaching strategies that mitigate some of its detrimental impacts on student learning. For teachers in professional programs such as nursing, this call for pedagogical innovation is urgent as the impact of diminished student performance most directly impacts patient care (Chernomas & Shapiro, 2013; Melincavage, 2011). In undergraduate nursing programs, students are engaged in a combination of theoretical and practical learning experiences to develop the professional knowledge, skills and clinical judgement required to be a registered nurse. This includes classroom coursework, clinical placements and clinical simulations. Clinical simulations are activities that “mimic the reality of a clinical setting and are used to demonstrate procedures, decision-making and critical thinking through the use of interactive videos, games, manikins, or simulated by patient actors” (Teixeira et. al., 2014: p. 271). Most schools of nursing use clinical simulations as an opportunity to formally evaluate students’ acquisition of nursing knowledge and skills (Sando et. al., 2013; Nielson & Harder, 2013). Our simulation team takes a different pedagogical approach, using many of the clinical simulations as an opportunity for formative assessment of students’ ongoing learning rather than as a summative assessment of their skills and abilities. This presentation will outline how this approach to simulation cultivates a low stakes environment that provides students with an opportunity to encounter unfamiliar patient situations, practice their skills, take calculated risks, make mistakes and have successes and failures in a way that otherwise would not be possible. There will be a discussion regarding the positive impact this can have on decreasing students’ anxiety and increasing their confidence related to their clinical skills and abilities that directly translate to the practice environment.

Navigating the Terrain: Establishing Cross-disciplinary SoTL Research at a Public and Private Liberal Arts Institution
Kristin English, Chavonda Mills, Julia Metzker, Karen Berman, Sandra Godwin

Glen 202

Most institutions of higher education aim to provide students with a depth of knowledge: mastery of learning in a focused area of study. Unique to liberal arts institutions is the goal to provide a liberal education that encompasses both depth and breadth: basic knowledge in a range of disciplines coupled with diverse experiences. In doing so, students are challenged with making broad connections in differing contexts, and faculty are challenged with assessing this transfer of knowledge. Boyer (1990) established that “all forms of scholarship require a broad intellectual foundation,” including scholarship of teaching. Tracing the history of the academic, specifically in the area of scholarship, *Scholarship Reconsidered* provided perspective for higher education and how the scholarship produced by faculty had more than one purpose. Schulman (2000) expanded on Boyer’s ideas through a discussion of three broad rationales of professionalism, pragmatism, and policy related to scholarship. SoTL, the scholarship of teaching and learning, provides an effective mechanism for liberal arts institutions to effectively study these rationales. However, for teaching-focused undergraduate liberal arts institutions, SoTL presents a unique set of successes and challenges. This panel will share both the successes and challenges experienced in implementing SoTL in innovative ways within two teaching-focused undergraduate liberal arts institutions that have come to value high-impact, community-engaged, student-focused scholarly work across disciplines, as well as interdisciplinary work. Our adventures have navigated the terrain of inclusion of undergraduate students in SoTL research, extending to student involvement in teaching analysis and reflection. The four key elements the panelists will explore are (1) establishing systems and patterns of communication, (2) models for leadership, (3) institutional support systems, and (4) what “currency” SoTL plays within the reward system. Sometimes the most difficult part of the process is establishing the systems and patterns of communication. Panelists will explore when to bring people into a project, how to create consensus, what it takes to keep everyone speaking the same language, and structuring workflow. In terms of leadership, panelists will share knowledge related to establishing a leadership structure for SoTL projects. We have found that establishing a horizontal structure with interdisciplinary representatives is crucial to success. These individuals should be assigned roles and responsibilities to maximize their knowledge and experience. A final support and one of the most challenging aspects related to SoTL research can be how to cash in on the currency of SoTL within institutional policies and practices. SoTL is often sold as a mechanism for faculty with high teaching loads to align their teaching with scholarly productivity - yet reward systems and practices frequently de-value SoTL work relative to disciplinary scholarship. The challenges and lessons we have learned will be illustrated using case studies from two liberal arts universities located in the southeastern United States. Georgia College, a public liberal arts college situated in rural Georgia adopted a comprehensive university-wide Quality Enhancement Plan (QEP) in

2014 that has spawned a cross-disciplinary SoTL research group investigating the impact of service learning and community engagement (SLCE) on student identity development. Stetson University is a private liberal arts university where SoTL research is articulated as a value but is still emerging in practice. Recent efforts to seed SoTL work have been initiated through faculty development activities. Both institutions value liberally educating students to prepare them for an increasingly globalized society and meaningful careers but interesting contrasts between the public and private missions emerge in how each approaches and understands the role of SoTL for its faculty and students. The panelists will discuss how their institutions support SoTL work including formalized workshops, mentoring, policy, budget and funding options. Panelists will discuss the ongoing process at their institutions including variations based on discipline, specifically dealing with tenure and promotion policies. The panelists bring diverse experience and expertise, which includes community-engagement practitioners, a faculty developer, a sociologist, two chemists, a theatre artist and a mass communication scholar. These identities add to their experience initiating and leading interdisciplinary communities of practice to advance the SoTL research. This work is anchored in areas of research including the institutionalization of SoTL, variations across disciplines, approaches at liberal arts versus research institutions, as well as SoTL within promotion and tenure policy. Research such as Becker and Andrews (2004), Kreber (2001), Braxton, Luckey, and Helland (2006), McKinney (2003, 2004) analyze the various aspects of SoTL institutionalization. Disciplines vary in their perspectives on SoTL research. The panel will use a foundation of research from Huber and Morreale (2002), Hubball and Clarke (2010), Richlin and Cox (2004), D'Andrea (2006), and Cox (2004). Another area we explore is distinguishing between liberal arts and research institutions. Panelists will use the foundation of research including Becker and Andrews (2004), Dunwoody, Westcott, Drews and Hosler (2012), Hativa and Marincovich (1995), Huber (2004), Peters, Schodt, and Walczak (2008), Henderson and Buchanan (2007), and Felton (2013) to frame their work. The final area of research the panelists build on is that of viewing SoTL within promotion and tenure policies. Boyer (1990) recognized the “faculty reward system does not match the full range of academic functions and that professors are often caught between competing obligations” (p. 1). Other scholars expanded on that idea including O’Meara (2005), O’Meara and Rice (2005), Shapiro (2006), Saltmarsh, Wooding, and McLellan (2014) and O’Meara, Eastman, and Peterson (2015).

SoTL-driven Curriculum Design: Aspirations to a Higher Plane **Jane West, Sherah Carr, Karen Swanson**

Glen 203

In the realm of SoTL, we have seen much attention to instructional practice, generally by individual faculty members or a small group with a common instructional concern. Less attention has been paid to broader matters of curriculum development and program design. This workshop aims to assist participants in shifting their thinking from designing courses in isolation to learner development over the life of a program and eventually aspiring to collaborating with colleagues in using SoTL for thinking deeply about program design that will result in significant learner transformation. Participants in this workshop will understand principles of developing curriculum for adult learners; employ SoTL principles and processes in developing program curricula; apply a cognitive apprenticeship lens to program development; plan for collaborating with colleagues on program design or revision that takes a SoTL approach. In this workshop, presenters will lead participants in thinking through the design of their own academic programs, with cognitive apprenticeship as a learning framework. This process will be informed by Cranton’s (2000) work on curriculum for adult learners and Mezirow’s (2000) theory of adult learner transformation. We will provide a workbook for participants to use as we move through the following stages of the workshop, with a blend of whole-group, small-group, and individual configurations. Participants will connect these activities to the programs in which they teach or lead: 1) Identify typical characteristics of learners in your program; articulate a vision for the knowledge and skills program completers should possess. 2) Using a cognitive apprenticeship framework, map a process for mentoring students through the program so that their development from novice to expert is supported effectively; begin drafting a program (re)design to share with colleagues. 3) Explore potential uses of SoTL work to inform the program design process and develop a plan for working with colleagues across courses. This curriculum design workshop rests on a foundation of curriculum work as scholarship. Our process--informed by SoTL, cognitive apprenticeship, curriculum design for adult learners, and transformative learning--offers a pathway for moving SoTL work to a higher plane of considering learner development over the life of a program. SoTL recognizes that instructional activities, including course design and curricular innovation, can be scholarly pursuits (Boyer, 1990). SoTL can inform not only how curriculum and instruction are planned for individual courses, but also how faculty

members and program leaders collaborate to design entire programs of study. Along with the insight provided by SoTL work, the cognitive apprenticeship model (Collins, 2006; Collins, Brown, & Holum, 1991) serves as a framework for (re)designing academic programs. Like apprenticeship in traditional trades, cognitive apprenticeship involves the apprentices' learning under the supervision of expert mentors, gradually gaining independence and building expertise. Unlike traditional apprenticeship, cognitive apprenticeship involves learning internal processes not naturally visible. Academic programs built on a cognitive apprenticeship framework require intentional design of experiences to make experts' internal work accessible and assist apprentices in contextualizing their learning. Well-designed programs take into account the characteristics and needs of adult learners. Cranton (2000) offers a set of principles for designing curriculum and instruction based on theories of adult education. These principles, such as careful sequencing of experiences and matching materials to learners' needs, dovetail with the framework of cognitive apprenticeship and support the design of programs that nurture students' growth toward thinking like disciplinary experts. A cognitive apprenticeship framework, along with attention to adult learners' needs, can facilitate significant transformation in the learner. The goal of transformative learning is to develop in adult learners "a critical sense of agency and personal responsibility" (Mezirow, 1981, p. 9). Intentionally planned programs can provide layers of experiences that promote critical reflection and self-direction, eventually leading to transformation.

First-Year Student Perspectives on SoTL Ethics Revisited: What Now?

Glen 209

Sophia Abbot, Sarah Bunnell, Peter Felten, Elizabeth Marquis, Kelly Matthews

The topic of ethics in the Scholarship of Teaching and Learning has been pressing for researchers since the inception of SoTL itself. As Pat Hutchings describes in her 2002 introduction to *The Ethics of Inquiry*, the extent to which faculty SoTL scholars are aware of the ethical obligations they have to the research and their students varies widely in large part because of the varying disciplines and points of entry represented in the field. Since then, a number of scholars have taken up ethical questions in SoTL (e.g. Burman & Kleinsasser, 2004; Wilson, 2008; MacLean & Poole, 2010; Healey et al. 2013). These studies and recommendations are important guides to conducting ethically minded SoTL research. While this work richly speaks to the ethical challenges that faculty face when conducting classroom-embedded research, only recently have there been calls for including student perspectives as critical stakeholders in this conversation. In 2013, Peter Felten highlighted best practices in SoTL and included "methodologically sound" and "in partnership with students" as two of his five key aspects of SoTL. Additionally, along with other scholars, he explicitly called for more inclusive engagement of students in SoTL (2013). This is significant because students are the ones whom SoTL research most directly impacts. In no small part in response to this call, in 2016, SoTL scholars, including students, faculty, and staff from five institutions (Ohio Wesleyan University, Elon University, McMaster University, Trinity University, and the University of Queensland) in three countries (Australia, Canada, and the United States) came together to explore student perspectives on ethical questions in the field. Altogether, 53 first year undergraduate students across the institutions participated in focus groups -- led at most institutions by student researchers -- to share their perspectives on five common yet hypothetical ethical scenarios in SoTL research. At ISSOTL 2016, these researchers shared their preliminary findings, noting in particular three themes running through the data: (1) that institutional context matters more in some ethical scenarios than in others, impacting student opinions on things like faculty autonomy; (2) that students are savvy regarding the features that constitute sound research, and this sense was particularly apparent when students spoke about the tensions between what behaviors or decisions might best serve the individual in contrast to those that would constitute good practice in research design; and (3) that grades and assessment deeply complicate student perspectives on ethical SoTL inquiries, especially for those in research-intensive universities and pre-professional programs where grades serve as high-stakes metrics for future professional outcomes. Now, having fully analyzed our findings and delved more deeply into the implications of what we have learned, we propose this panel discussion to explore central questions, areas and directions for additional research related to SoTL ethics, and possible answers for the ever-present question: "What does this mean and why does this matter?" We acknowledge the openness of these topics and therefore hope for this to be an interactive panel. Our panelists, in addition to our chair, represent each of the five institutions from which we collected student perspectives. We will begin our panel by addressing the following questions based on our reading of the data from our institutional contexts: Do first-year students believe they can actually provide free and informed consent to participate in a SoTL project when grades are involved? ; How should we differentially weight students' desire for choice and autonomy with best practices in SoTL research design? ; How might including students as partners in SoTL research shift the way they think about

ethics in the field? The way we conceptualize and conduct SoTL research? ; How should we respond if (or when) students' conceptions of ethical SoTL research do not align with an institution's ethics board requirements for human subjects research? How can we meaningfully engage students' concerns about the ethics of SoTL so that these considerations move beyond paperwork and into larger discussions about ethical responsibilities to all individuals involved? ; What are the most important questions about SoTL ethics and research practices raised by this research? Participants will also be invited to engage with these questions deeply, through small-group and larger conversations and working directly with quotations/data from our focus groups. We expect this panel will generate more questions than it will resolve, so we will conclude with time for participants to think alone and together about next steps they might take to continue to explore both student perceptions of SoTL ethics and ethical research practices in our field.

THURSDAY, OCTOBER 12, 12:00-2:00

Lunch and Thursday Plenary: "Ch-Ch-Ch-Ch-Changes: Using Self-Study to Engage Students in Studying Teaching and Learning" by Rachel Foot, Alicia R. Crowe, Karen Andrus Tollafield, and Chad Everett Allan (Exhibition Hall E)

See page 16 for description of this plenary.

THURSDAY, OCTOBER 12, 2:00-3:30

Experiencing the Decoding the Disciplines Interview: An Interactive Exploration of the Disciplinary Unconscious David Pace, Jennifer Boman, Genevieve Currie, Janice Miller-Young, Michelle Yeo

Glen 205

The Decoding the Discipline approach to learning has provided instructors and faculty developers across the globe with new ways of increasing student learning. But the subtlety and power of the process is difficult to fully capture in verbal descriptions. Therefore, in these sessions we wish to provide a hands-on experience of the process to small groups of 10-12 participants. Much of Decoding rests on the assumption that much of what experts need teach is so deeply buried under years of training and practice that it has become invisible to them. In the ordinary activity in their fields this is an advantage, since it allows many processes to occur automatically, while attention can be focused on the unique challenges posed by a specific problem. When these patterns are transferred to the realm of teaching, however, instructors may unintentionally fail to share crucial aspects of functioning in their discipline, and students may find it impossible to complete necessary tasks. To overcome this problem, Decoding sets out to make explicit the basic mental operations that are essential in a particular field. However, this exploration of the disciplinary unconscious is intellectually demanding, and several strategies have been developed to aid this process, most notably the Decoding interview. In this procedure, an instructor describes a place in a course in which a significant number of students are unable to perform essential tasks, and then a pair of interviewers asks the teacher to explain how he or she would go about responding to the challenge that is so difficult for many novices. Typically, the initial response is incomplete and somewhat superficial, and so the interviewers begin to systematically press the interviewee to describe more completely the steps that experts do automatically, when responding to such a challenge. This process of deconstructing the tacit knowledge of the field can be demanding and may require a good deal of time. But, when it is completed successfully, instructors gain a much clearer idea of what processes they need to model for their students and how to assess whether learning has occurred. No amount of description can fully capture the richness that typically unfolds in these interactions. Therefore, in these sessions we will provide small groups of conference participants the opportunity to directly experience the process. A volunteer from the group will be interviewed by two experienced decoders, and from time to time the exchange will be interrupted to provide commentary on the process and to allow comments and questions from the other participants. Typically, these sessions will include one or two interviews, followed by a general discussion about the method, what has been learned in each interaction, and how this deeper understanding of disciplinary practice might be used to increase student learning. Participants should emerge with a clear vision of how the Decoding process can be used by instructors, by faculty developers, and by those instituting faculty learning communities.

Towards New Heights in Teaching Excellence: Reflections on Recognition
Earle Abrahamson, Duncan Cross, Claire Hamshire, Higgs Bettie

Glen 201

As a multinational group of teaching fellows, we consider the highs and lows of our individual and collective journeys towards teaching excellence. The panel will explore the dynamics and challenges of being recognised for excellence in teaching and learning whilst simultaneously unravelling the difficult spaces we learn to operate in. How excellence is defined and conceptualised frames our discussion. Gunn and Fisk (2013) are clear in their literature review that the concept of excellence in teaching lacks consensus. Though certainly in the UK, governmental stakeholder agenda setting is having an impact on the definitions with the rise of metric based teaching excellence framework. Currently some national and institutional surveys (eg UK National Student Survey (NSS) 2014, Australian Graduate Survey, 2016, USA National Survey of Student Engagement (NSSE) 2016, Irish Survey of Student Engagement (ISSE) 2016) alongside progression data and participation rates. Do these indicators act as drivers and what other performance indicators of excellence exist? Little and Locke (2001, 19) state that "A teaching mission necessarily embraces both a concern for teaching and a concern for the end product of the teaching process that is: the student learning experience" but do we sufficiently take into account of that experience when we are defining excellence and how does it impact on the metrics? As a panel we seek to explore the issues and questions around identifying and recognising markers/signs of excellence across disciplines, countries and cultures, the role and impact of teaching fellows, institutional support for the development of teaching fellows and the aspirations of future teaching fellows as we continue our mission/climb to the peak of our metaphoric mountain range of teaching excellence. We also seek to discuss whether we can ever truly reach the zenith of teaching excellence and stay there! Building on the work of Frame et al (2007) and examining whether teaching fellowships are an award or reward for teaching excellence international scholars and SoTL practitioners will present their stories and reflect upon the journeys travelled so far. The audience will have the opportunity to explore the concept of excellent teaching, engage with dialogue and reflect on international perspectives and recognise the terrain and territories teaching fellows have navigated and are continuing to chart.

Sharing Lived Experience of Fellow Climbers: Influences of SoTL on Academic Trajectories

Glen 206

Eliana Elkhoury, Noha Altowairiki, Yang (Flora) Liu, Christopher Ostrowki, Jennifer Lock

The Scholarship of Teaching and Learning (SoTL) provides a forum to investigate ideas and issues related to designing and facilitating learning in higher education. It offers a way to examine the artistry of designing rich and robust learning experiences that bring disciplinary and pedagogical knowledge together to foster robust student learning. It is within this evidence-informed environment that we need to invite graduate students to engage in developing their knowledge and skills of SoTL. By working with a SoTL mentor, they are able to gain insight into what makes for quality learning and teaching in today's higher education context. Over three years, each of us (five graduate students and one faculty member) have engaged in at least one SoTL project. For example, five of us worked on a two-year Design-Based Research project to redesign the online learning environments of Bachelor of Education Field Experience courses. Using an evidence-informed iterative approach, the environments were refined and we provided technology support for instructors. In another example, two members helped develop an online preparation program for graduate students learning at a distance. Within these SoTL experiences, the graduate students' responsibilities included co-conceptualizing the projects, implementing the designs through development, data collection and analysis, and scholarly knowledge mobilization. Throughout the projects, they actively took part in decision-making and shared leadership, which fostered their evolution as researchers and SoTL practitioners. With our SoTL projects, the graduate students and the faculty member experienced a healthy student-faculty partnership. The focus of our presentation is to unpack the student-faculty partnership in SoTL. It cannot be assumed these unique relationships form without tensions and challenges (Bovill & Felten, 2016). Rather, the relationships form through purposeful planning and intentional scaffolding grounded in "respect, reciprocity, and shared responsibility" so to "take common practice to a much deeper level" (Cook-Sather, Bovill, & Felten, 2014, p. 204). Within the nurturing of this open and respectful collaborative relationship, "all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision-making, implementation, investigation, or analysis" (pp. 6-7). Using a reflective process based on Schön's (1983) reflection-on-

action process, we each have written about our SoTL experiences in relation to partnership. In our writing, each person has described our experiences and explored how SoTL influenced our academic trajectories. To help with the structure of the writing, we used a sociocultural lens that allowed us to untangle such concepts of identity, social structures, and agency. After completing the writing, we reviewed our colleagues' reflections and identified the following five themes that emerged from our exploration of student-faculty partnership relationship: 1) Safe and trusting environment; 2) Increased self-confidence; 3) Fostering collaboration and collegiality; 4) Greater understanding of interdisciplinary; and 5) Growing capacity that impacts academic career trajectory (research). From the analysis of our reflections, we propose four implications to support capacity development of graduate students through SoTL, in preparing their academic trajectory. First, provide time and a safe and trusting environment to nurture the collaborative partnership. Second, create conditions to share the ownership and responsibility for decision-making and leadership. Third, create time to reflect on the partnership process so to inform next steps. Fourth, celebrate the accomplishments and individual's connected success.

Looking for Academic Hope in Crossing Professional Development Thresholds **Peter Felten, Susannah McGowan**

Glen 206

Affective factors including motivation and risk-taking are well-recognized influences on student academic behavior and learning. Much recent scholarly writing on teaching has emphasized strategies to equip students with growth mindsets and a sense of belonging in a class, the major and within the university (e.g., McGuire, 2015; Winkelmes, 2016). Within this literature, a relatively understudied phenomenon is a student's sense of hope, which has been demonstrated to link closely to achievement. Hope appears to act by enhancing a student's sense of agency and contributing to the capacity to envision positive changes in future academic performance (Day, K., et. al., 2010; Rand, Martin & Shea, 2011); conversely, students who are "less hopeful" tend not to ask for help when they struggle, making them more likely to drop out when they encounter difficulties (Rattray, 2016). This paper connects the existing literature on educational development and the emerging literature on academic hope to consider how hope might factor into the professional development of teaching faculty. Both scholarship of academic identities (Simmons et al., 2013) and the recent Tracer study in the U.S. (Condon et. al., 2016) demonstrate that affective factors play a significant role in professional development. In our paper, we ask: Are hopeful faculty more likely and more capable than their peers to make positive changes in their teaching? What are the characteristics of academic hope that are particularly salient for teaching faculty? Our analysis is based on a sample of more than 250 faculty from more than 20 U.S. institutions engaged in a course redesign program in 2016 and 2017. This program aims to improve student learning and success in large enrollment gateway courses. Gateway courses introduce students to essential disciplinary content and, too often, also have high student failure and withdrawal rates. Because of this, these courses disproportionately affect student persistence, timely graduation, and sense of belonging-particularly for underrepresented students. These courses also are notoriously difficult to teach because students often have varied (and sometimes extremely limited) academic preparation for rigorous study in the discipline. Due to the complexity of the task and the significance of these courses for student success, Evenbeck and Jackson (2005) argue that redesigning gateway courses "is often the ideal context for transforming faculty culture" from one that is teaching-centered to one that promotes SoTL's values and practices of inquiry and critical reflection-and that contributes to enhanced learning for all students. In our study, we use pre-and post surveys as well as email interviews to evaluate the role of hope in faculty experiences with the course design process. We identify factors that tend to lead faculty to be more or less hopeful about their teaching in gateway courses. We will use this preliminary analysis to engage our ISSOTL colleagues in a conversation about both (a) strategies to cultivate academic hope in teaching faculty and (b) implications of this work for SoTL practices and identities.

Giving SoTL Research Some Legs: A Walking Reflection on Applying SoTL Findings to Curriculum Design **Julie Mooney, Shannon Kell**

Glen 206

This concurrent workshop aligns with the conference theme "Adventures and insights in SoTL." The workshop facilitators, an experienced faculty member and an experienced educational developer, seek to support and encourage new insights into applying SoTL research in postsecondary curriculum design. We aim to facilitate

this process by inviting workshop participants to listen to a short podcast episode as a prompt for reflection, while immersed in an outdoor experiential learning activity. An academic conference is a helpful venue for prompting reflective practice, as the conference suspends our daily routines, and exposes us to new ideas and approaches. However, as conference delegates, we spend a significant part of our convention days seated indoors. Stanford University researchers Oppezzo and Schwartz found that creative thinking improved while walking, compared to sitting; and that even after walking, once seated again, creativity remained higher compared to participants who had not walked at all (2014). Applying these results to the reflection phase of Kolb's (1984) Cycle of Experiential Learning, we know that to improve our SoTL scholarship, our curriculum development work, and our teaching and learning practices, we need to take time for creative reflection on our actions and new understandings. Furthermore, even one hour dedicated to reflection in an outdoor natural setting, such as a park, can reduce stress and create space for deeper contemplation about personal and professional aspects of our lives (Kell, 2016). Recognizing the need "for support for the continuum of scholarly work on teaching and learning," (Timmermans & Ellis, 2016) this session will take delegates to an urban natural setting, creating space, time, and optimal conditions for professional and scholarly reflective practice. In this experiential learning workshop, conference delegates will be invited to experience the power of a walking reflection. We will meet in the conference venue, set up our mobile devices to listen to a special episode of a podcast series (www.teachingstrides.ca) featuring a panel discussion on "Applying SoTL findings to curriculum design." Participants will listen to the podcast on their personal media players, while walking to the Bow River (approximately 15 minutes' walk from the Telus Convention Centre in downtown Calgary). Upon arrival at the river, participants may either stop to sit by the river or continue walking along the river's pedestrian pathway. During this portion of the workshop, participants will be invited to tap into their heightening creative thinking (Oppezzo & Schwartz, 2014) by reflecting on their SoTL research and its applications to curriculum development. A 2016 meta-study of SoTL scholars revealed that the impact of their SoTL work on their teaching practices was "perhaps unanticipated" (Miller-Young, et. al, p. 61). This activity offers the time and process for prompting reflection on the - perhaps unanticipated - impacts the participants' own SoTL findings may have on their curriculum design practices. The workshop will close with a whole group discussion of our reflections and action plans for applying SoTL findings to improve tertiary curricula. This debriefing may include queries such as: What impact does your SoTL research have on your curriculum design practices? (adapted from Miller-Young, et. al., 2016) If you have not yet experienced any impact of your SoTL work on your curriculum design practices, what insight did this reflective activity yield into such possibilities? What actions, separately or in synergy, do you plan to take at the micro, meso, macro, (Simmons, 2009) and mega levels of postsecondary education as a result of your reflections during this experiential learning workshop? Workshop learning goals and outcomes Harness the benefits of walking to improve creative reflection on the curricular applications of SoTL research; Engage in an urban outdoor experiential learning process to enhance professional learning; Develop action plans for curricular improvements as a result of creative reflection process. The special episode of the podcast series will be recorded and produced for release prior to the iSSoTL 2017 conference, as a celebration of this international gathering of SoTL researchers and postsecondary educators. The podcast episode will be freely available to all (with internet access) whether or not they are able to attend this workshop. N.B. Prior to the workshop, registered participants will receive information on suitable clothing, mobile devices, and any personal items needed for this session.

Reaching New Heights: Creating Leaders in Our Community

Miriam Carey

Telus 102

In 2016-17, I started to deliver an unusual leadership course in our university: Being A Leader and The Effective Exercise of Leadership: an ontological / phenomenological model (see beingaleader.net for more information on public offerings of the course). It is not a traditional university course, where the focus is on expanding epistemological understanding or skill sets (knowledge). Rather, this course has been developed over the last two decades with an ontological, rather than and epistemological, outcome as its aim (having to do with being). The promise of the course is that participants will leave the course being leaders and exercising leadership effectively as their natural self-expression. Naturally, I wanted to design a SoTL inquiry to approach the impact of this course on student participants. Aligning with research already underway in the public deliveries of this leadership course, I produced a pre- and post-course questionnaire in which students defined leadership, assessed themselves as leaders or not, and then self-assessed their leadership in four distinct areas of their lives using a likert scale: academics, relationships, avocation/creativity, and self. In addition, the students consenting to participate in

my study made all their written data available to me for perusal and analysis (assignments, exams, ad hoc submissions, and emails). I delivered three sections of the course in academic year 2016-17, with a maximum enrolment of 35 students in each section (one in the fall term and two in the winter term). The initial results gleaned from analyzing the fall data were astonishing, and I quickly discovered that the theoretical framework I had hoped to use in my analysis, Mezirow's transformative learning (still homed within the realm of epistemological knowledge transfer and acquisition), did not speak to the ontological changes which students were self-reporting. As a consequence, I (along with three other colleagues from our university) have embarked on an inquiry into the new territory of ontology in educational theory. Join me in a brief presentation of the results of the SoTL project, both in terms of data and relating to the potential development of a new theoretical framework in which ontological transformation is understood as an essential (and oft-neglected) aspect of teaching and learning. Delivering this course, and trying to understand its impact on students through the SoTL study, has been not only an adventure into an emerging landscape in leadership development and its relevance to students (ie. the exploration of leadership development for those outside the territory of academic leadership), but an exploratory journey in an unfamiliar territory-the world of ontology. This paper not only addresses my adventures and insights in SoTL, but exposes new horizons, emerging landscapes, and underexplored territories in SoTL.

A Novel Card Sort Activity to Measure Interdisciplinary Thinking **Christopher Addison, James Charbonneau**

Telus 102

The Science One Program is a unique first-year interdisciplinary science experience offered to 75 students each year at the University of British Columbia. This program encompasses first year biology, chemistry, mathematics and physics and aims to provide an experience that presents "big picture" scientific concepts in an integrated and interdisciplinary format. The National Academy of Sciences (2005) identified interdisciplinary thinking as "rapidly becoming an integral feature of research" due to "the inherent complexity of nature and society and the need to solve societal problems". However, they also found that "Social-science research has not yet fully elucidated the complex social and intellectual processes that make for successful [Interdisciplinary research]". Unfortunately, there is a distinct lack of research in areas of interdisciplinary learning, making the evaluation of interdisciplinary learning difficult. This truly represents an underexplored territory of SoTL. Card sorting has previously been used to distinguish expert and novice thinking in physics (Chi, 1981), biology (Smith, 2013) and chemistry (Krieter, 2016). We have extended this work to develop a novel card sorting tool that measures interdisciplinary thinking based on the manner in which problem cards are sorted. Following initial development and focus group testing, our card sorting instrument has now been offered to over 500 participants in a traditional first-year science experience and in our interdisciplinary program. Students are asked to sort nine disciplinary problems (3 each from biology, chemistry and physics) using an online interface. From these nine questions there are two hypothesized sorts: A sort based on surface features (based on disciplines from which the question were derived), and deep features (based on underlying interdisciplinary topics). During the activity, students complete four different sorts involving the same nine problems: Two sorts that are unframed (minimal constraints) and the last two are framed sorts. The framed sorts ask students to sort problems based on underlying disciplinary features and interdisciplinary linkages. Participant sorts were assessed using a number of statistical measures (percent common pairings, pairing accuracy and edit distance). Based on the results, participating in an interdisciplinary science program showed a statistically significant greater ability to identify the underlying interdisciplinary linkages between these problems, suggesting enhanced interdisciplinary cognition relative to students educated in a general first-year science experience.

Is the Sense of Community the Same in a Flexible Class as in a Face to Face Class? **Phaedra Burke, Kari Grain**

Telus 102

Flexible learning is becoming an increasingly popular pedagogy in higher education institutions. Using a combination of online activities, readings, and discussion, in tandem with face-to-face classes, flexible learning aims to integrate the benefits of both pedagogies for an optimal learning experience. However, critiques of flexible learning suggest that less class time may decrease student engagement and stifle the development of a classroom community. This research uses surveys to determine how students in a flexible learning commerce course perceived flexible learning in relation to engagement and community. A few years ago, the President of our university asked each Faculty to implement flexible learning into their course offerings. Our Faculty, the School of Business, chose to

offer one section of each course in their Commerce Minor program in a flexible format. This format was a 3 hour evening block that met once a week, either in person or online. Each faculty member assigned to this section was able to design the course as they thought appropriate in consultation with our Learning Services department. This SoTL research project has been conducted by the faculty member delivering the introductory marketing course after she found that the relationship/environment among the students in this section was different than in her purely face to face classes. This project engaged these particular students to determine their perceptions of flexible learning in relation to community and engagement. Each semester, the Marketing Division offers up to 3% bonus credits for all marketing students who participate in research studies. For each study the students participate in they are given 1%. For the purpose of this study the faculty member was given permission to offer 1% of the bonus credits to her students to participate in her research study. Using a pre-survey in the first two weeks of class, and a post-survey in the final two weeks of class, this research aimed to strengthen our understanding of the ways in which students come to feel engaged with their learning, and how they understand community to play a role in this. In addition the Faculty member used the data to adjust her teaching in the next semester to see if there was a difference and she also noted her experience. The initial research was conducted in one class from January to April 2016. The project was then extended to the September to December 2016 semester when the faculty member was assigned to teach both the flexible section as well as the face to face section of the same course thereby allowing the researcher to compare similar populations; commerce minor students. Our aim in sharing our experience and research outcomes is to contribute to our understanding of ways in which flexible learning professors and administration may strengthen this pedagogy's ability to develop in students a sense of a class community and engagement. Particularly, within a diverse population of students who have a common academic goal, seeking the same minor, but are not necessarily engaged in the same major.

Engaging Students and Faculty in a Summer Institute on Students as Partners

Glen 204

Beth Marquis, Rachel Guitman, Christine Black, Mick Healey, Kelly Matthews, Sam Lucie Dvorakova

'Students as partners (SaP)' has become a hot topic in higher education in the last five years. Perhaps unsurprisingly the term is often used loosely and its meaning is contested. Here we refer to student-staff partnership as "a collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision-making, implementation, investigation, or analysis" (Cook-Sather, Bovill and Felten, 2014, p.6-7). This paper explores an international research project investigating the experience of students and staff participating in the first 'International Summer Institute on SaP in Learning and Teaching in Higher Education', held at McMaster University in May 2016. The aim of the summer institute (SI) was to build the capacity and understanding of staff and students to develop, design and implement initiatives to promote the practice of students as partners in learning and teaching in higher education. Over 100 delegates participated from seven countries in roughly equal numbers of students and staff. Participants engaged either in one or two 2-day workshops or in a 3-day Change Institute, at which seven teams of staff and students were supported to plan the implementation of a SaP initiative. The SI was facilitated by students and staff from Australia, Canada, UK and USA. Following the SI, we analysed the challenges participants ascribed to student-staff partnership, and the features of the SI they thought particularly useful in helping them to navigate them (Authors, in press). The findings point to potential features that may be helpful for supporting the development of approaches that engage SaP in research, curriculum design, and other teaching and learning initiatives. In this paper, we will report on follow-up research conducted approximately 9 months to 1 year after the SI to understand if, and how, participants' experiences of partnership and their perceptions of features necessary to support it have developed. This research will explore the following research questions: How do 2016 SI participants currently understand and experience partnership, and how (if at all) has this changed since the SI? To what extent do they perceive their participation in the 2016 SI as supporting their ongoing partnership work in their home contexts? Particular emphasis will be placed on learning more about the extent to which the international component of the SI is perceived by participants to support their partnership work. A mixture of Skype and face-to-face semi-structured interviews will be undertaken to explore these questions in Spring 2017. These will be conducted by student co-researchers, working in partnership with staff from three countries. We will also draw on research into the experience of participants in the 2017 SI to see how that differs from those participating the previous year.

Developing a Guiding Framework for Student-Faculty/Staff SoTL Partnerships

Glen 204

Victoria Chen, Meghan Allen, Brett McCollum, Roselynn Verwoord, Anita Acai, Bree Akesson, Clarke Mathany, Jennifer Spencer

Within higher education, there is a growing movement to invite students to contribute to the Scholarship of Teaching and Learning (SoTL), as their unique perspectives provide faculty and teaching staff with new lenses through which to view teaching and learning. In particular, the inclusion of students in SoTL partnerships is seen as one of the defining elements of “good SoTL practice” (Felten, 2013). Despite calls for student involvement in SoTL, engaging in student-faculty/staff SoTL partnerships can be challenging. Issues including a lack of participant buy-in; a lack of clarity regarding roles, goals, and expectations; and challenges navigating traditional roles can often emerge in partnerships (see Bovill, Cook-Sather, Felten, Millard, and Moore-Cherry, 2015; Marquis et al., 2016). As such, we ask: How can faculty/staff and students develop meaningful and successful SoTL partnerships? To answer this question, the authors, consisting of faculty, educational developers, and graduate students from seven post-secondary institutions across Canada developed a set of guiding questions for initiating such partnerships as part of a collaborative writing group initiative (Acai et al., 2017). We will present our guiding questions and compare and contrast them with existing frameworks and guidelines (e.g., Bovill et al. 2015; Healey et al., 2014; MIIETL by Cockcroft et al., 2016; Woolmer et al., 2016) for supporting student-faculty/staff SoTL partnerships. There are substantial benefits to fostering student-faculty/staff SoTL partnerships, but challenges can emerge when there is misalignment between what each partner views as “success” in a partnership. We conducted a thematic analysis of our self-reflections on past and current student-faculty/staff SoTL partnerships to identify: 1) the characteristics that are common to successful partnerships, and 2) the preparatory elements that can lead toward more successful partnerships. The first part of our presentation will provide attendees with the main themes that emerged from our thematic analysis including: motivations to participate, challenges, power, and definitions of success. We will also share how these themes were used to formulate our set of guiding questions for future SoTL partnerships. The second part of our presentation provides a comparison between our guiding questions and existing frameworks and guidelines for supporting student-faculty/staff SoTL partnerships (e.g., Bovill et al. 2015; Healey et al., 2014; MIIETL program by Cockcroft, et al., 2016; Woolmer et al., 2016). We will highlight the context in which each was developed and describe the similarities and differences among them. Attendees, both newcomers and fellow climbers, will be given a summary comparison chart of these frameworks and guidelines and will be asked to think about their own particular context to decide which guideline(s) would be helpful in their unique situation. Through brief small group discussions, attendees will have the opportunity to share their thoughts on using their selected guideline(s). At the end of the presentation, attendees will have identified a personalized set of guidelines that they can take away and use in their existing or future student-faculty/staff SoTL partnerships.

Students as Partners: Theory, Practice, and Beyond

Glen 204

John VanMaaren, Kyle Ansilio, Arshad Ahmad

This paper presents an intrinsic case study (Stake, 1995) of student and staff experience as reciprocal partners on a SoTL research project, known as the Students’ Perceptions of Teaching (SPOT) project. The concept of researchers working with students is nothing new. However, researchers working with students as partners (SaP) in reciprocal relationships has only recently gained widespread recognition as a catalyst for enhanced research quality, and for transformed student and staff approaches to teaching and learning (Cook-Sather, Bovill & Felten, 2014). Because institutional-level SaP initiatives remain embryonic, any systematic evaluation or impact study remains premature. In these early stages of SaP initiatives, reflections of student and staff experience in SaP provide the primary data for further refining SaP programs (Marquis et al., 2016). This case study contributes to SoTL research by further refining staff-student partnership roles between SoTL newcomers, fellow climbers, and guides. We offer this case study to address five issues relating to putting SaP theory into practice: inclusivity and scale, power relations, reward and recognition, transition and sustainability, and identity. These issues were identified by Healey, Flint and Harrington’s (2014) model of student engagement through partnership which was used to implement the SaP program at McMaster University. In our discussion we compare student and staff experience with these five issues and indicate aspects of our experience that go beyond the model, suggesting further ways to refine the implementation of SaP programs. In our discussion we highlight two undertheorized areas: the unique contributions of SaP models for specifically SoTL research projects, and the challenges and benefits of bringing together persons

of diverse academic backgrounds and levels of training. First, SoTL research projects stand to gain in unique ways from the SaP model. Whereas traditional SoTL research may engage student voices only at strategic moments in the research project, the SaP model advocates for student perspectives to contribute throughout the process, especially with regard to scholarly discussion on research direction and dissemination of results. Second, the SPOT research project provides an excellent case study on the challenges and benefits of bringing together persons of diverse perspectives and skill sets. The project is now in its third year. The original team consisted of two undergraduates; now graduate students in Medical Science and Clinical Psychology at two different universities. A fifth-year undergraduate student in Engineering Physics and a fourth-year Ph.D. student in Religious Studies joined last semester. The staff partners include two emeritus professors known internationally, one for his scholarship in Neuroscience and Biostatistics and another for his illustrious career in Higher Education, the project lead who is a senior administrator with a background in Business and Education, and two career educational developers who provided their own specialized expertise. The research team's diverse backgrounds compelled all partners to confront perspectives outside their discipline, influenced project direction, and at times led to a seeming impasse. Through the lens of each partner, we offer insights that have evolved over the same period as the SaP program and thereby test its ecological validity.

Students Reach New Learning Heights When Engaged in the Development of Their Learning Philosophy
Neil Haave, Kelly Keus, Tonya Simpson

Telus 103

Metacognition positively impacts student learning outcomes. Students are often unaware of how they learn and do not consider the efficacy of their learning strategies, failing to move beyond simply earning credits to developing skills which meet their life goals. To improve student learning outcomes, first, second, and fourth-year biology students were given the option of developing their learning philosophy (LP). Students submitted a draft before their midterm exam which was subsequently revised in response to our feedback and resubmitted before their final exam. Students' exam results and cognitive complexity index (CCI) were analyzed to determine the impact of the LP assignment on student learning outcomes. In addition, the texts of students' LP were qualitatively assessed to determine the extent to which students were considering their learning process. First-year students experienced a decrease in CCI by the end of their term which was prevented by the development of their LP. Second-year students, in contrast, had an increased CCI over the term when they developed their LP. In addition, second-year students had a typical decrease in exam result from the midterm to the final exam which was avoided by those students who developed their LP. Fourth-year students' CCI was unaffected by an LP assignment. It appears that the development of an LP does impact students' intellectual development in their initial years of university but the impact disappears for experienced students. This confirms previous studies indicating that metacognitive prompts have a lesser impact on students with greater expertise and is similar to the impact of undergraduate research. Thus, prompting students' regarding their learning may positively impact students when they are learning how to learn, but less so when students are experienced learners.

Out of the Silent Seminar
Tansy Jessop

Telus 103

Many academics report that students are reluctant readers, with the result that seminar conversations fizzle out like damp firecrackers. This paper explores the value of blogging on academic texts in the public domain as a way of engendering a culture of reading, building a community of writers and prompting deeper discussion in seminars. Academic reading and writing predict significant learning gains (Arum and Roksa 2011). My research on blogging began with a class of aspiring final year undergraduate teachers and a frustrated lecturer. The plan involved setting weekly readings with blogging tasks, followed by small group discussion. Blogs were required but not marked. Students were required to blog and to comment on a few of each other's posts each week. A colleague and I collected data from six students at three intervals in the semester, using 'think aloud' protocols with students talking about how they wrote posts, their learning and their feelings about blogging, while scrolling through their blogs. We analysed the data using thematic analysis. After initial reluctance at the thought of extra workload (for no extra grades!), students reported that blogging resulted in deeper understanding and richer engagement in academic readings. Producing writing which could be read by peers meant that students felt encouraged to write well for an

external readership. At the same time, the blogging format provided an informal and conversational space for writing. Students found the exercise of blogging personally meaningful, and engaged in a process of refining their thoughts through reading one another's posts. Seminar discussions came alive because of participants' deeper grasp of concepts in the texts. Writing comments and developing threads proved more challenging for students though. Subsequent to this small research pilot, I have incorporated blogging on all my new lecturer courses to powerful effect. New lecturers usually undertake these courses with reluctance because they are obligatory in the UK, and come at a time when lecturers, new to the game, are hanging on by their very fingertips. Blogging develops community, and provides the opportunity for gallows humour at a time of intense pressure. It also acculturates lecturers to the rich literature of SoTL in informal and lively conversations generated by the lecturers themselves.

Teaching Students to Speak Up **Carolyn Oliver**

Telus 103

This presentation chronicles a completed SoTL study examining how to teach the courage to speak up about difficult truths (Author, 2017). Courses on advocacy and ethical decision-making typically cover what to say and how to say it. But in our undergraduate practicum seminars, social work students often spoke of being silenced by their own fears and instinctive response patterns when trying to apply that classroom learning in real-life situations. Knowing that speaking honestly contributes to professional resilience, effective advocacy and collaboration, we sought learning activities that would help them to be brave. This is underexplored and somewhat dangerous SoTL terrain. Encouraging students to speak out without giving them the tools to understand or prepare for the risks leaves them vulnerable. To practice working with the discomfort these 'difficult conversations' raised, students needed to feel that the conversations carried authentic risks. This could not be achieved in the safety of roleplay or classroom practice. Our solution was to build learning around the naturally occurring 'difficult conversations' faced by students beyond the classroom. We drew on literature related to embodied learning (Wagner & Shahjahan, 2015) and the pedagogy of discomfort (Boler, 1999; Zembylas & McGlynn, 2012) to address the need both for safety and for these anxiety-provoking difficult conversations to be experienced as 'real'. We were inspired by curriculum in which students learned the skills of dissent through activism (Huish, 2013). We navigated the terrain hand-in-hand with students who co-developed, and participated in delivering, the learning activities. Then, in a small mixed methods study, we asked students to tell us what they thought. Data was collected through online surveys, interviews and focus groups. It was analysed using descriptive statistics and qualitative description (Sandelowski, 2000). The study resulted in a model to help students assess the risks of, safely engage in, and experience success with, these difficult conversations. This model will be shared, as will the learning activities that were deemed effective in helping students to apply the model in real-life situations of high emotional arousal. We will discuss the value of peer storytelling and activities building safety and community. Finally, we will address the need for students to assess the difficulty and success of the conversation in relation to their own power, and to recognise their success even when conversations did not achieve their desired ends.

Peaks and Valleys of University Curriculum Development **Susan Bens, Andrea Han, Klodiana Kolomitro**

Telus 105

Seeking to create or change a system of teaching and learning experiences requires a view of the mountain range rather than a focus on a single peak. Often university faculty focus available time for teaching and learning on the individual courses they teach (their own mountains), paying limited attention to how those courses relate to other courses within an academic program (the shared mountain range). In the Canadian context, support provided through teaching and learning centres generally reflects this same focus on course level activities. Likewise, SoTL research also generally focuses on individual peaks (courses) rather than ranges (programs). It is limiting in universities when curriculum development and renewal is perceived as onerous, when opportunities are missed to adopt SoTL-informed practices, when progress is sporadic, derailed, or ground to a halt (the valleys). It is encouraging when curriculum development is experienced as manageable and even invigorating, when promising pedagogies are adopted, when progress is well paced and goals are achieved (the peaks). To examine the peaks and valleys of curriculum development and renewal, and to apply SoTL practice to program development, representatives from three Canadian universities (Queen's University, University of British Columbia, and University

of Saskatchewan) which form the Bay View Alliance Research Action Cluster 2, met for a two-day reflective session to explore factors encouraging or limiting curriculum development and renewal efforts in university contexts. Taking up Bamber and Stefani's (2015) call for educational developers to evidence value using a triangulation of evidence attending to context, judgment and experience, our group generated factors that we then distilled into a framework consisting of four themes: Contexts and Cultures: What characterizes faculty participation? Structures and Resources: How is the work organized? Attention and Focus: What gets discussed? Educational Developer Contributions: How can EDs support the process? These themes and the accompanying factors were shared at a Bay View Alliance meeting of member organizations and received further refinements. This framework fits within Boud and Brew's (2013) assertion that faculty practices depend on the circumstances, the environment, the constraints and challenges within which faculty operate. Further the framework is structured within a definition of curriculum development as being fluid with plans that shift and adapt to emergent concerns and conditions (Trowler, Saunders & Knight, 2003). This collaborative, multi institutional work has placed us in a better position to identify new horizons, emerging landscapes, and unexplored territories so that we may both build capacity for curriculum change and embed change into normal organization functioning (Tsoukas & Chia, 2002). In this session we will share the framework, themes and factors that have emerged from this 2-year project as a means of helping faculty, educational developers, and others in universities in the important work implementing successful curriculum development and renewal.

Reaching New Heights through Immersive Inquiry-Based Learning in an Interdisciplinary Telus 105 First-Year Course **Robin Mueller**

Inquiry-based learning is conceptualized as a learner-centered and student driven approach to educational delivery, where students are actively involved in shaping and enacting the learning process (Aditomo, Goodyear, Bliuc, & Ellis, 2013). Inquiry-based learning is typically characterized as being highly collaborative, and involving the instructor as a facilitator rather than a “teacher.” Often, inquiry-based learning also features a collective exploration of a big, difficult, or “messy” challenge that requires more than one viable solution. Although inquiry-based learning has only recently emerged on the higher education landscape as a viable pedagogical approach, the University of Calgary has recognized its potential and has made a substantial institutional commitment to the adoption of inquiry-based learning strategies. As such, the University of Calgary's College of Discovery, Creativity, and Innovation has piloted a *Global Challenges Inquiry* course, which is designed to engage interdisciplinary groups of first-year undergraduate students in the process of exploring a complex world challenge by way of immersive inquiry-based learning.

Through the process of implementing the *Global Challenges Inquiries* course we realized that, despite emerging research about quantitatively-assessed learning gains for students who participate in inquiry-based education (Lazonder & Harmsen, 2016), the phenomenon of inquiry-based learning has not been well characterized in terms of its practical application—especially in interdisciplinary undergraduate contexts. This is particularly important because immersive inquiry-based learning is often considered a “high-risk” active learning strategy (Watson, 2013); that is, both instructors and students can experience challenge and uncertainty when engaging in the low-structure, spontaneous, and highly interactive classroom activities that are a part of inquiry-based education. We were startled to discover that evidence-based resources and applied strategies for instructors and students who are preparing to engage in inquiry-based learning are scarce. We have initiated a case-study research project designed to explore the phenomenon of inquiry-based learning in the *Global Challenges Inquiry* course, with the intended outcome of using our learning to develop a suite of evidence-based, broadly accessible resources for students and teachers who are engaging in inquiry-based approaches in higher education. In this presentation, we will summarize the evidence supporting inquiry-based learning, describe the evolution of (and responses to) our *Global Challenges Inquiry* course, and share the purpose and methods that are driving our research efforts. Participants will then have the opportunity to engage in interactive discussion, and to explore the kinds of resources that would be helpful for both instructors and learners in an immersive inquiry-based learning environment.

Although interprofessional learning is deemed an important curriculum component for health care disciplines, making it happen is often extremely difficult. Frequently cited impediments include risk-averse departmental cultures, cost, timetabling constraints, disciplinary differences in assessment and professional accreditation, and reference to multiple educational theories. The aim of this study was to identify and propose ways of breaking through this impasse using a theoretical perspective in which these barriers and contradictions may actually hold the key to successful change. Data was collected by interview with purposive sampling and qualitative analysis. A first round of interviews included twelve profession faculty staff. The second round included ten health practitioners. In addition to offering a comparison group to the first cohort, the second round also permitted deeper exploration and testing of initial themes. A total of 18 interviews with 22 participants were conducted. Five themes were identified in relation to the challenges facing universities seeking to embed interprofessional learning within the core curriculum: the lack of a workable definition; tensions around optimal learning activities; the leadership hot potato; big expectations of interprofessional learning; and, resisting cultural change. The lack of a workable definition that can be operationalised into specific learning outcomes, together with a lack of agreement regarding optimal learning and teaching activities, creates a fundamentally unstable basis for curriculum development, delivery or evaluation. It is hard to champion something that has unclear objectives. This structural instability is further maintained with the ongoing debates around leadership. Without effective leadership, it is unclear who makes key decisions and importantly, who is responsible and accountable for delivery of interprofessional learning within the curriculum. Activity theory (Engstrom & Sannino 2010) considers the various activities people engage in to achieve a particular purpose, the 'tools' that are used and the factors that act as facilitators of change. Together these comprise an activity system. Within any activity system, unchallenged, unresolved tensions and barriers to change work to maintain the status quo. From the perspective of activity theory and expansive learning though it is exactly these tensions that can give energy to processes that propose and test new solutions and models. It can be argued that logistic barriers to interprofessional learning should be embraced and the most troublesome contradictions sought. Rather than enumerating the many barriers as reasons to covertly maintain the (disciplinary) status quo, the most problematic barriers should be identified. Time and energy should then be devoted to exploring and testing new solutions and ways of thinking with the ultimate goal of transforming the object or purpose of the learning activity from primarily a disciplinary, to an interdisciplinary endeavour. Importantly, such explorations should be associated with novel thinking about timetabling, about interdisciplinary relationships and the role of the patient or client.

Teacher Candidates' Experiences Teaching Diverse Students
Anete Vasquez

Glen 208

A recent National Center for Educational Statistics (NCES) (2012) report revealed that students of color are now the majority of students in K-12 public schools in the United States. The teaching workforce, however, has remained relatively unchanged. Literature on how to prepare teacher candidates (TCs) to work with diverse learners calls for teacher preparation programs to include knowledge and skill development on issues of diversity and makes recommendation about best practices; however, detailed investigations into how teacher candidates make sense of working with culturally and linguistically diverse students is absent (Ball & Tyson, 2011). A review of the research on teacher candidates' perception of working with diverse learners indicates shortcomings. Many studies take snapshot looks at multiple participants' experiences in short field experiences and offer slim details about the placement sites. There is rarely discussion of how TCs' own backgrounds and identities intersect with their experiences of working with diverse learners. The literature also remains silent on high-stakes testing and accountability and the role they play in TCs' sense making process. Finally, studies often cast this complex issue in rather simplistic terms. The purpose of this study is to examine how TCs completing their clinical practice in Title I middle schools experience teaching culturally and linguistically diverse students in relation to the instructional cycle of planning, instruction, and assessment. Of particular interest is TCs reflections upon how having a deep knowledge of their K-12 students might impact their teaching. Research questions are as follows: How do TCs describe working with K-12 students who are culturally and linguistically diverse? What aspects of the teacher preparation program do TCs find helpful, useful, lacking, harmful in preparing them to work with students who are culturally and linguistically

diverse? In what ways has the move from theory (coursework) to practice (clinical experience) influenced TCs' understanding of meeting the needs of students who are culturally and linguistically diverse? This study will rely on participatory action research. The participants/co-researchers are TCs who will complete their yearlong clinical teaching experience in May of 2017. All of the TCs have been in Title-1 schools comprised of middle grades students who are culturally and linguistically diverse. Participant researchers and I will analyze the following: interview data; data from recordings of pre- and post-observation conferences; TCs' written weekly reflections; our own personal narratives of teaching culturally and linguistically diverse students; and TCs' written commentaries from their Education Teacher Performance Assessment (edTPA) which are aligned with the instructional cycle. Teacher candidates must also justify how their understandings of their students' prior academic learning, and personal, cultural, community, and developmental assets guided TCs' choice or adaptation of learning tasks and materials and why their instructional strategies are appropriate. By gathering data from various sources and analyzing it with the participants, we hope to gain a greater understanding of how TCs experience teaching culturally and linguistically diverse students in relation to the instructional cycle.

The Theory and Practices of Mediated Learning Experience

Glen 208

Krishna Bishwokarma, Til Kumal, Shiva Adhikari, Kripa Ghimire, Bhavishya Sunar, Bharat Gautam

Mediated Learning Experience is a central organizing concept while dealing with modifiability of children in general and in the development of children with special needs in particular. All three terms -mediation, learning and experience, are important to the concept. Learning with the MLE indicates that mediation by an intentioned adult is not just a process of transmission but refers to an area of activity that becomes the content of the interaction. Experience in MLE is the reciprocal, emotional, affective and motivational aspect of the interaction that melds the activity into a meaningful and structural whole. Leading to self- awareness, structural change and cognitive development, as such mediated learning experience is an extremely powerful tool in sharing a child existence. Our goal as parents, educators and caregivers, is to help the child to learn and develop his learning potential, thereby facilitating his integration into his family and society and his functioning in the best possible way. Theoretical framework: Nepal is one of the poorest countries with regard to education, health, transportation sector. Nepal is the country where there are 12% disabled people. Among them around 5% of people are developmental delays. The trend of children with developmental delay is increasing day by day due to the lack of education and health facilities to the children as well as the conceived mother. So the developmental delay, mental retarded, CP of children has been one of the challenges for Nepal. Methodology of Research design: The research related on Mediated Learning Experience is done through different trainings, seminars, field visits to the people working in these sectors. Also different organizations helped a lot by conducting trainings and programmes in different levels of the work. Findings of the Research: Our team has found out the improvement of Disabled children and people in the world. There are identified aspects of mediated learning experience: Mediation of the Feeling of belonging Mediation for Intentionality and Reciprocity. Mediation for Transcendence. Mediation of Meaning. Mediation of Feeling of Competence. Mediation of Regulation and Control of Behaviour Mediation of Sharing Behaviour Mediation of Individuation and Psychological Differentiation Mediation of Goal Seeking, Goal Setting and Goal Achieving Behaviour Mediation of Challenge: The Search of Novelty and Complexity Mediation of an Awareness of the Human Being as a Changing Entity Mediation of the Search for an Optimistic Alternative Mediated learning experience is a social activity which can occur only in a social environment. As we human beings live in groups such as families or clans, we learn in groups and mediate to each other and to our children. The classroom is another place where children learn and develop skills and values and, as such, it is a central place of mediated learning activities. Conclusions: Our research and special education methodology seems to be so much useful in International Society for the Scholarship of Teaching and Learning (ISSOTL). Those children and people who are CP, Mental retarded, Developmental Delay, and other disability can be highly benefited by this teaching and learning methods. Among this the Society also improve their leaving standard through this teaching and learning tools and technique. Moving from Diagnosis to Practical Strategies, Rights, Education and Research and can be the active citizen of the country. They can add their support for the nation building and expose their inborn talent and qualities to serve the nation. The method which is used in the above research is most benefit in this conference 2017 in Canada.

The term Universal Design for Learning (UDL) has been defined in US legislation as “A scientifically valid framework for guiding educational practice that provides flexibility in the ways information is provided, in the ways students respond or demonstrate knowledge and skills and in the ways students are engaged. UDL reduces barriers in instruction, provides appropriate accommodations and challenges, and maintains high achievement expectations for all students, including students with disabilities” (Higher Education Opportunity Act, 2008, Sec.103, Additional Definitions). Accredited programmes run by the Centre for the Integration of Research, Teaching and Learning (CIRTL) at University College Cork, Ireland, use a UDL approach as one lens to enable faculty to scaffold and critique courses and curricula they choose to research. We are influenced by the work of Ann Meyer and David Rose (2000, 2005) and CAST’s approach to UDL (www.cast.org) and by the three principles of UDL emerging from their work: In order to teach well and optimise student learning we need to provide (i) Multiple Forms of Representation, (ii) Multiple Forms of Action and Expression and (iii) Multiple Forms of Engagement. The Association for Higher Education Access and Disability (www.ahead.ie) which complements and extends the work of CAST is also a key influence on our work. Along with the Teaching for Understanding (TfU) approach (Wiske, 1998, 2005; Gardner, 2006) which we have previously explored in SoTL conferences, UDL provides a grammar of how to scaffold learning and a language with which to discuss it. Being explicit and naming the parts of teaching and learning are key building blocks in reaching new heights in SoTL. This paper sets out to track that journey by reviewing faculty’s insights into UDL and their challenges with making learning flexible and student- centred. The paper will examine the work of faculty in a series of course portfolio (Hutchings, 1998) entries in module TL6006 Diversity in Student Learning in an online Postgraduate Diploma in Teaching and Learning in Higher Education. Faculty are invited to use the Hutchings model to revisit a course which they are teaching and to critique its Design, its Teaching (Enactment) and its Results (Student Learning). UDL provides a powerful lens in helping faculty to scaffold their critique and to take student learning to new heights. The paper will triangulate its evidence by examining the Discussion Forum contributions of a selection of participants, along with their portfolio entries. Faculty are presented with a rubric to guide their portfolio entries, which will also be intrinsic to the paper. For example, the rubric for the Design entry asks that faculty provide the course context and history and a map of its TfU and UDL pathways and that they share these with their peers and critical friends in their discussion groups. Findings indicate that faculty from across the disciplines find UDL a productive way of critiquing curriculum design to capture and enhance student learning in its many forms, mapping and chronicling SoTL to reveal new heights and vistas.

The purpose of this project is to better understand the key attributes, as perceived by students, of transformative interactions, relationships, and opportunities. Student transformations are taking place on college and university campuses every day. Numerous opportunities for students to construct their own senses of self and relationships with the world are presented during a student’s undergraduate career. Students have the potential to be transformed through engagement with faculty and peers in the classroom setting, their experiences living with peers in residence halls, collaboration on athletic teams, study abroad, and other curricular and co-curricular experiences. As such, a variety of individuals, including faculty, staff, family, and friends, have the potential to play an important role in a student’s transformation. While student transformations are deeply personal and, as Johansson and Felton (2014) suggest, somewhat serendipitous, there are still common practices that aid a student’s transformation (Taylor, 1988). For example, learning conditions that instill feelings of safety, openness, and trust, activities that promote exploration, and the presence of trusting and caring teachers can facilitate transformative learning. However, what is less clear is how students recognize and respond to these transformative learning opportunities and conditions. Information from Centre College’s Honor Walk ceremony offer an opportunity to better understand the relationships and interactions, from a student’s perspective, which are deeply valued. Every year, graduating students at Centre College have the opportunity to honor one or two individuals who have played important roles in their undergraduate careers. Using archival data, such as Honor Walk programs, past emails from

the college to students, and documents detailing the origins of the program, and survey data collected from the college's alumni, the purpose of this study is to shed light on the relationships, interactions, and opportunities, from a student's perspective, that transform their undergraduate experiences. Furthermore, we hope to understand how the presence or absence of transformative experiences and relationships influences a student's future engagement with the college. Although the study is still in the data collection phase, initial results suggest that the majority of respondents (62 percent) honored a parent or family member. The most common reasons for doing so included: family paid for college, making the experience possible; daily support throughout all of college's ups and downs; and obligation. Approximately 28 percent of respondents honored a faculty or staff member. Respondents indicated that these individuals fed their confidence as learners, listened, and provided honest and gentle guidance. The remaining 10 percent honored a friend, mentor, or community member. Data collection will conclude in Spring 2017 with data analysis beginning in Summer 2017. It is hoped that the outcomes of this study will help inform the individuals who have the potential to play important roles in the development of our students, including faculty, staff, family, and friends, of the key elements of meaningful mentoring relationships

Caring About Student Self-Care
Deb Bennett, Patricia Kostouros

Telus 104

Effective teaching and learning in the post-secondary context requires teachers to concern themselves with more than academic expectations. As students enter the university system, it is easy for them to become overwhelmed and taxed. Student wellness and its impact on academic success requires attention. It is possible that the burdens associated with academic achievement in undergraduate studies can trigger or aggravate mental health difficulties. However, students can engage in meaningful ways and experience better mental health when we attend to, and provide tools for managing stress. Keyes (2010) describes that we need to find strategies for students as some may fall into languishing rather than flourishing if their self-care is not bolstered. The National College Health Assessment survey, for our university, showed that students expressed high levels of stress and mental health concerns. For example, 40% stated their stress was affecting their health which was impacting their academic achievement. In addition, 30% stated they were experiencing anxiety and 28% stated sleep difficulties. Students expressed that these health concerns impacted the following academic areas: received a lower grade on an exam or an important project, received a lower grade in the course, received an incomplete or dropped the course, or experienced a significant disruption in thesis, research or practicum work. Hysenbegasi, Hass & Rowland (2005) suggest that intervention can serve as a protective factor against the negative effects on grade point average. As members of the educative community who were already concerned about student wellness, we saw an opportunity to use an existing stress reduction and resilience building tool as a part of our course curriculum. The Breathing Room™ is an award winning mental health program developed by the Canadian Institute for Natural and Integrative Medicine that was adopted by our university and is available on the Wellness Services webpage. According to the Mental Health Commission of Canada (2014), the use of technology as an option for managing mental health is increasing in Canada. Our SoTL study originates from our desire to explore the impact of the Breathing Room™ when used as a teaching and learning tool. There is limited discussion about using self-care as a pedagogical tool in scholarship of teaching and learning literature. Attendees will have the opportunity to discuss the experiences that were shared by students during our SoTL project. Themes that emerged from our qualitative study which utilized an interpretive approach will be described. Qualitative research allows an increased understanding of student experiences as it seeks to make sense of personal stories (Cohen, Khan & Steeves, 2000). The classes that were involved in the research were quite different in nature and structure, however each course had two sections where students engaged with the Breathing Room™. Reflective journals and post-course interviews provided data for the research. Students described the Breathing Room™'s impact on their stress, wellness and mental health. The presentation will conclude with a description of our experiences as researchers. By sharing what we learned from students we hope to contribute to a dialogue about student wellness and pedagogical choices.

Honouring Indigenous Student Knowledges and Voices: A Community-based Collaborative Action Approach to Indigenizing Curricula
Sheri Fabian, Tamara O'Doherty

Telus 104

In keeping with Canadian post-secondary institutions efforts to Indigenize curricula in response to the Truth

and Reconciliation Commission's recommendations, we undertook a project to help us better understand the needs and experiences of post-secondary Indigenous students. A community-based collaborative action approach, as advocated for by Tobias et al. (2013), allows us to learn more about what Indigenous students experience in various classroom environments. In our classes, we frequently discuss the influence of Indigenous and Canadian history including residential schools, colonization, intergenerational trauma, and the over-representation of Indigenous peoples in all aspects of the Canadian criminal justice system. Indigenous students told us that not all faculty address these issues in ways that they perceive as meaningful, respectful and accurate reflections of their lived realities. Moreover, Indigenous Student Center staff explain that their students often feel embattled, even spiritually broken, through their university degrees; enduring misrepresentation and silencing of Indigenous histories and colonization negatively impacts student experiences. Therefore, we sought to create an opportunity for students to "talk back" to the institution and faculty members. To do so, we adapt Indigenous ways of knowing and methodologies (see Smith, 2012; Wilson, 2008); we deliberately set aside time at the study's outset to ensure that the project featured solid groundwork and relationship-building. This pre-research phase, too often neglected in academe, was crucial to ensuring a truly participant-driven model (see Bowen & O'Doherty, 2014) that allows students to take ownership over the project. We believe the pre-research phase is central to reaching the "emancipatory potential" of community-based collaborative research (Hubbard, 1999). As white settler faculty members, we acknowledge that Indigenous students must take the helm of research that purports to address their needs. To facilitate their participation and to value their contributions, we designated funds to ensure that students could receive compensation for their contributions. This approach serves the dual role of ensuring that funding related to Indigenous studies directly benefits Indigenous communities, while honouring the individual student contributions. After several months of planning and initial outreach, we developed a loosely framed structure to allow students to participate with the level of commitment that best reflected their desires. Students could take part as Collaborators, involved in all aspects of the project (creating research instruments; participation in data collection, transcription, and data analysis; and disseminating findings); as Consultants, guiding the project by attending monthly meetings and providing feedback in group settings; and as Participants, sharing their stories and forming the content/data for the project (Wexler (2011) used a similar methodology). In our interactive session, we will report on our experiences working with our Indigenous student research collaborators, consultants and participants including lessons learned and the challenges we encountered in undertaking this work. We will encourage audience members to share their challenges and suggestions for engaging in the development of respectful and empowering research processes that can meet academic and teaching needs of Indigenous students. We see our project as one which is uncovering "new horizons and emerging landscapes," and offers insights into "underexplored territories in SoTL."

Using SoTL to Enhance Institutional Programs: The Case of an Undergraduate Research Program
Carol Johnson, Lynn Taylor

Telus 106

Undergraduate research experiences (UREs) in diverse contexts can provide "high impact" learning experiences (Kuh & Associates, 2008). Significant learning outcomes of effective UREs often include deeper conceptual understanding, learning how to critically assess existing literature, and acquiring research design and data analysis methods. Intellectual skill development outcomes include critical, creative and independent thinking, problem solving, and gains in communication and collaboration skills (Craney, et al., 2011; Lopatto, 2006; Lopatto & Tobias, 2010). To better understand and improve learning experiences in an immersive summer URE program in a large Canadian university, we investigated students' and mentors' perceptions of the impact of this URE on students' development of academic and research skills. The proposed paper will report the impacts of this program and will illustrate how SoTL can be used to enhance institutional programs that cross disciplines. URE student participants from 2014-2016 (N=205) were invited to participate in three surveys that captured snapshots of perceived learning at entry, midpoint and exit from the URE program. Respondents created a unique code that protected anonymity while allowing their coded responses to be tracked across the study, and 36 students completed two or more surveys to create individual student cases. Student focus groups were also held at the end of each URE cycle. Mentors' (N=139) perspectives were collected through an online survey conducted at the end of the URE experience for the 2015 (n = 23) and 2016 (n= 27) mentor cohorts. Research findings demonstrate that this URE had the strongest perceived impact on the development of problem solving, organizational skills, collaboration, research

skills, and independent learning. Results also revealed that specific skills develop at different rates. Detailed analysis will be presented. Mentors perceived that the URE had the highest level of impact on problem solving and learning independently, followed by conceptual knowledge development, writing, communication, and organizational skills. Faculty mentors perceived the URE as having a higher impact on students' learning than students' survey-based self-assessments. The results also suggest areas for improvement. Generally, student survey results show a flattening of the learning curve from the midpoint to the end of the URE. This was particularly true for research skills, collaboration, organization and critical thinking, suggesting that the level of challenge in the second half of some URE experiences should be examined.

Achieving Evidence-based Curriculum Design and Delivery: The Curriculum Evaluation and Research Framework Telus 106
Andrea Carr, Jo Anne Kelder

A conceptual framework and practical approach for embedding evaluation into course (program of study) curricula is presented. The Curriculum Evaluation and Research (CER) framework establishes a scholarly regime for routine collection of natural data generated through curriculum and teaching activities so that they are available for quality assuring curricula as well as for research purposes. Natural data is the data generated by students in the course of undertaking their studies and by staff in the process of developing and delivering curricula and assessing student learning (e.g. assessment tasks, feedback, peer review). Further, we outline a range of practical resources for use by teaching teams to address sector, institutional and personal expectations of evidence-based teaching practice and curriculum quality improvement. The CER framework affords teaching staff a practical and efficient method for coordinating activities and integrating individual and collective outputs related to quality improvement (QI), quality assurance (QA) and scholarship (SoTL). It also guides data analysis to align with the life cycle of curricula: the cyclical nature and inter-connectedness of QI, QA and SoTL activities and the concept of leveraging outcomes of routine QI activities into QA and SoTL activities is a key consideration. The initial phases of developing and implementing the CER framework are reported alongside outlining enabling resources that have been developed. The range of natural data produced during the process of curriculum delivery are described. The CER framework has demonstrated capacity to ensure that scholarship informs and underpins course design alongside routine, planned evaluation that assures the ongoing development of learning activities and assessment. A design-based approach to curriculum evaluation and research (Anderson & Shattuck, 2011; Phillips, McNaught, & Kennedy, 2012) simplifies data collection and analysis, by ensuring alignment of educational research questions with questions asked by external accreditation agents and questions asked by teachers of their units and the courses in which they teach. This paper addresses the Aspirations and Anxieties conference thread through articulating the complex challenges inherent in expectations of evidence-based curriculum design and delivery that is required to meet external standards and is underpinned by scholarship. We argue the relevance of the CER framework in the higher education sector providing a sustainable and effective approach to engage teachers in a collaborative endeavour of ongoing curriculum evaluation and evidence-based scholarly teaching practice. Our vision is to enable academics collaborate purposefully and work towards designing and developing curriculum that is transformative for students. Through the CER framework, we aspire to support evidence-based design decisions and a culture of continuous review and quality improvement; the ability to demonstrate impacts on student learning outcomes and experiences, and; to facilitate the collection of a wide range of data for broad and deep analysis capability.

Course Transformation: Measuring Improvements in Student Learning
Daniel Guberman, Erica Layow, Emily Bonem

Telus 106

Does faculty development improve student learning? This question is central to encouraging and supporting work in SoTL, but it remains incredibly complex, with answers emerging slowly in a variety of contexts. Recently, the Tracer study (Condon, et. al. 2015) provided evidence drawing on two schools that a variety of development activities could improve student work in broad categories (i.e., critical thinking, qualitative reasoning, and writing), but what about course-level learning outcomes or objectives? In this presentation, the presenters will share their ongoing efforts to measure the effects of autonomy-supportive course transformations in a large-scale course redesign program, reaching over 250 courses and instructors since its inception in 2011. In the context of

course redesign, connections to student learning can be especially elusive in measurement for a number of reasons:

1. The resultant courses can take a wide range of forms. Instructors typically redesign courses in three ways: a) Retaining lecturing, but adding more student-centered activities and formative assessments to their lectures; b) Refining or improving their classroom pedagogies as they have courses that already have projects or team-based learning; or c) Recreating the course seemingly from scratch.
2. As the redesign program focuses on aligning learning outcomes, assessments, and activities, almost all participants complete the program with different outcomes, assessments, and activities than when they began. Due to this variation, there is no clear correlation between learning in previous iterations and redesigned courses. Furthermore, when overall grades rise, the question remains of whether the results are showing improvements in student learning or simply grade inflation. Based on these challenges, we will share our recent efforts to redesign our approach to evaluating student learning. In our presentation, we will share a variety of experimental designs including multiple approaches to creating control-group sections, and a number of different methods for mapping assessments to learning outcomes and objectives using quizzes, exams, and assignment rubrics. As a component of participating in our program, instructors agree to share their gradebooks, assessment maps, and other data they gathered with us after teaching the redesigned course, allowing us and them to examine student performance at a more granular level, directly linked to course-level learning outcomes. Finally, we will share several case studies of instructors who have used their own data to tell individual stories about their courses, as well as the types of improvements in student learning they perceive and value.

Building Institutional Capability: Our SoTL Journey

Glen 202

Huang Hoon Chng, Huang Hoon Chng, Johan Geertsema, Siew Mei Wu, Peter Pang

Over the past two years, our institution has embarked on a journey to effect institutional change by means of the scholarship of teaching and learning. As Ginsberg and Bernstein (2011) have argued, three types of change agents are critical. These are faculty members with expertise in and across the disciplines, middle management (e.g. a Director of T&L), and senior management (e.g. institutional leaders in the Provost's Office). This panel focuses on our efforts to build capacity in SoTL from these three perspectives and aims to use an institutional case study for generating a conversation about SoTL leadership and culture change. Supporting educational leadership is crucial for educational change (Grunefeld et al., 2015). Such leadership geared towards fostering SoTL needs to function on multiple levels. In the case of front-line academic teachers and newcomers to SoTL, the journey entails learning about being more scholarly and evidence-driven in how one approaches teaching, and also how to take local leadership by sharing results through going public. In the case of academic developers, the journey is characterised by mentoring and supporting faculty on their SoTL journey, while themselves taking a more scholarly approach to academic development (Felten et al., 2007). In the case of academic leaders and policy makers, as well as the academic developers who need to support implementation, this SoTL journey is about capacity building and growing an institutional teaching and learning culture that values teaching as serious scholarly work. Examples of this capacity building effort have included forming special interest groups, creating a journal for developing and sharing SoTL work (i.e. 'going public'), and deepening capacity in academic development. While we conduct all these activities at different institutional levels, what we have in common is a shared desire to reach new heights in learning and teaching. We further share the understanding that while SoTL has the potential to move the institution forward (and upward), this will require sensitivity to the local contexts--the micro cultures--in which we work so as to facilitate thorough-going culture change (Mårtensson et al., 2011). We are all newcomers to this terrain as we seek new horizons and ways to develop teaching and learning so students and academic teachers can have a more meaningful learning experience. This panel reflects on the multiple perspectives, at policy and implementation levels as well as at ground/department level, of leading culture change and asserting leadership in the new SoTL terrain in our university. It details the impetus for taking a more scholarly approach via SoTL; the challenges we have encountered in our institutional capacity-building project; and the experiences, outcomes, and lessons learnt from this collective effort in building and asserting SoTL leadership.

**Feminist, Anti-racist and Anti-colonial Scholarship of Teaching and Learning?:
Creating Sites and Spaces for Critical Engagement in Teaching and Learning Work,
Research and Culture**

Glen 203

Marie Vander Kloet, Stephen Bloch-Schulman, Nancy Chick, Lee Easton, Kelly Hewson, Kathy Takayama

This panel aims to surface multiple questions about the possibilities of feminist, anti-racist and anti-colonial scholarship(s) of teaching and learning. While there is a substantial archive of critical studies scholars who engage deeply with the work of teaching and learning, education, and schooling (e.g. Biesta, 2006; Britzman, 1998; Freire, 1968; Giroux, 1991; hooks, 1994), rarely are the theories and methods of this rich field explored in SoTL. The exceptions (e.g. Chick, 2013; Hoon & Looker, 2013; Manathunga, 2006) are few. At the margins, then, critical studies work remains primarily a discussion amongst peers with shared politics and scholarly histories rather than a force shaping SoTL. To generate discussions about why engagement between these fields is limited despite their overlapping focus on teaching, learning and higher education, we ask: Why is critical, politically engaged theory and discourse on the periphery of SoTL? What questions cannot be answered in the current SoTL literature as a result? Who is silenced or excluded? Who embodies and is able to take up the role of SoTL researcher? What would feminist, anti-racist, and anti-colonial research open up? This panel, which includes three projects below, seeks to 1) interrogate the relationship between critical studies and SoTL; 2) create space for panelists to share projects (at all stages of completion) that, in some fashion, unfold in the overlap between critical studies and SoTL; 3) through panelists and participants' interactions alike, examine a future for critical studies scholarship and the scholarship of teaching and learning; 4) ask not what the future of critical studies is in SoTL, but what futures might be desirable (and by whom)?

Respectable academic subjects: whiteness and academic development (AD). Some academic developers engage in dialogue about the meaning of their work, positioning of self and the operations of power in the academy (Holmes et al, 2012; Land, 2004). This work includes tempered discussions of access to power and how we shape the neoliberal university. What is sparse in this analysis is how AD is racialized and gendered. This project theorizes that AD in Canada more broadly, and in Ontario specifically, is a project of whiteness and respectability (Dyer, 1997; Fellows & Razack, 1998) through which academic developers are able to access power in the academy. Opening up this analysis is an uncomfortable project - it risks destabilizing the presumed goodness of the academic developer subject and who is able to access and embody this position.

Epistemologies of Ignorance, Power and Education: Re-conceptualizing the fundamental structures of knowledge and ignorance in the scholarship of teaching and learning. In this panel, my goal is to introduce a new lens through which scholars of teaching and learning might re-consider the nature of ignorance and thus to, from the ground up, stake a new and more politically aware epistemological stance. Specifically, I will critique a traditional understanding of the ignorance-knowledge dichotomy in which-- for example, in Plato's allegory of the cave--ignorance is conceptualized as a literally amorphous given and where the epistemic and ethical task is to move from ignorance up the "rough, steep upward way" (Plato, 1991, 515e) to knowledge through the application of significant effort. I will, instead, advocate for the use of epistemologies of ignorance as the core epistemic lens for SoTL, an epistemic view that emerged out of feminism (see, for example, Tuana and Sullivan, 2006) and critical race theory (see, for example, Sullivan and Tuana, 2007), which highlights how and in what ways ignorance itself is often the purpose of education and effort. In shifting our fundamental epistemic focus, we come to see the systematic means for actively producing ignorance and what is at stake in such production.

Exploring the Structuring Metaphors of SoTL: What do we not want to know? Feminist, anti-racist, and anti-colonial research foregrounds issues of power, complicity and identity, hence surfacing what Britzman (1998) calls "difficult knowledge" --knowledge that SoTL itself prefers to remain ignorant of. We contend that the metaphors figuring forth SoTL--the big tent, the family table-- are in part responsible for SoTL's resistance to self-scrutiny. Chick's (2003) recuperation of Gloria Anzaldua's "borderlands" metaphor at least hints at SoTL's whiteness and adds a critical element to the SoTL spectrum. Extending Chick's work, along with ample assistance from our re-encounter with Anzaldua (2012), and our SoTL research on film students' relationships to the Canada-US border, we aim to sketch out what a radical SoTL might look like, and argue for its inclusion on the aforementioned spectrum. Participants can expect multiple opportunities to join, challenge and steer the conversations provoked by the panelists. Panelists and participants alike are encouraged to be critically reflexive about their histories, identities and

subjectivities as we engage in this discussion. This panel seeks to carve out a space for critical studies work in order to deepen SoTL; critique and questioning are welcome and crucial.

Trouble on the Horizon: SoTL in the Era of Big Data - A Counter Discourse to Learning Analytics

Glen 209

John P Egan, Noel Elizabeth Currie

The teaching and learning enterprise has long been somewhat marginalized in the context of the research-intensive university. External forces such as third party national and pan-national institutional rankings have, somewhat paradoxically, shone a light on institutional strategic deficiencies around the undergraduate and postgraduate student experiences. As academics our instinct is perhaps to discount or reject such forces: in fact, we can, in specific ways, leverage them to highlight the importance of high quality teaching and effective, transformational learning at our universities, which serve the interests of the research enterprise itself. A decade ago a key question for such universities was the role of online learning within the research-intensive teaching enterprise. Whilst traditional face-to-face offerings remain the norm--and, in some instances, the only practicable way to teach--most universities now offer a range of face-to-face, online and blended (mix of online and face-to-face) courses and programmes. From a discourse of hyperenrolment ("there is no classroom; we can enrol hundreds or thousands in our course"), most institutions have learned that online offerings are a distinct element of university teaching operating with their own capacity constraints. In particular, merely digitizing lectures and focusing on student-content interactivity (Anderson, 2008) often is ineffective in terms of learning design. Particular students, disciplines and subjects are well suited to online delivery. In pedagogical terms, online specific ways of teaching work better than merely digitising face-to-face content for online: thus online and blended learning have become innovation spaces, highlighting the benefits of flexibility, collaborative learning, and differentiated instruction. These experiences are beginning to gain prominence in the scholarship of teaching and learning as a discipline: data of the experiences of students and instructional staff and the data generated from blended and online learning can offer rich data from which to garner a nuanced, robust sense of what works well online. One latest teaching fetish in higher education is the advent of the massive online open (enrolment) course, or MOOC. These university extension-like online courses defy much of what we learned in the first generation of online courses: hyperenrolment, focus on consumption of digitized content, and a dearth of student-instructor or student-student interactivity are common MOOC features. Concomitantly, we see the advent of learning analytics: the analysis of "big data" gleaned from learning management system (LMS) using sophisticated statistical methods via tools such as R. Despite their relatively marginal role in university teaching and learning, their arguably antiquated, ineffective learning design, and remarkably poor completion rates (of 10% or less), data from MOOCs feature prominently in the learning analytics literature. In an era where "evidence-based" policy is increasingly the norm, this literature is informing university policies around teaching and learning--broadly, rather than specifically regarding MOOCs. SoTL is perhaps the best positioned discipline to critique these trends, though they remain an unexplored SoTL territory for the most part. This paper highlights the dangers of data gleaned from narrowly specific forms of non-degree teaching being used to drive institutional teaching and learning policy. Big data are not better data: how we can leverage SoTL to underscore this is the next question.

Cross-Border Disciplinary Dialogue Between Peers

Glen 209

Brett McCollum, Layne Morsch, Darlene Skagen, Brandon Shokoples, Monika Birschard

Class ends, and immediately after your students put away their notebook they put on their headphones. In one study, 87% of learners reported self-imposed isolation through the use of headphones to avoid talking to others (Lever, 2007). One of the benefits of a physical campus is the opportunity for social interactions, as compared to the challenges faced by distance-based learners (Haythornthwaite, 2000), yet many students at commuter campuses do not avail themselves of this opportunity (Lever, 2007). Faculty can facilitate the development of relationships within the classroom (AUTHOR, 2016), and technology-supported innovations have proven useful for facilitating learning experiences not possible on a single campus (AUTHOR, 2017). To promote development of disciplinary language skills, and also foster international relationships between learners, second-year students at two universities (one in Western Canada and the other in central USA) completed a series of collaborative homework assignments. Students were randomly assigned a partner from the other university. Learners were each given half

the assignment and prompted to collaborate through online video chat software, such as Skype. Online meetings were monitored for authentic collaboration. A SoTL study of this innovative practice was approved for human research ethics at both campuses. Using a phenomenographic framework (Marton, 1981; Booth, 2008), thematic analysis (Braun & Clarke, 2006; Saldana, 2009) of student interviews yielded a set of emergent themes, including: collaborative techniques employed by the learners; challenges and benefits; the impact on professional identity. Empirical and self-reported quantitative metrics were compared to the themes, prompting revisions to the learning approach to resolve student-reported barriers. In this session, we will present the results of our mixed methods study, exploring a new horizon for SoTL: the use of international peer video-conferencing for professional development and training with a unified disciplinary language. Through brief small group discussions, participants will consider potential benefits of cross-border collaborative learning in their discipline, possible solutions to identified challenges, as well as first-steps for initiating such an endeavor.

Will This Work: Problem-Based Learning in the University Writing Classroom
Brenda Refaei, Rita Kumar

Glen 209

Convinced of the power of PBL to promote students' critical thinking as demonstrated by its application across disciplines, we designed a series of problems for students in a second year university writing course. However, we were concerned whether putting students in charge of their learning would hinder their writing development. To determine the influence of PBL on students' critical thinking about writing, we collected samples of their writing before and after implementation of PBL. Using a simple pre-/post design, we collected samples of student writing before they engaged in problem-based learning activities and a writing sample after engaging in PBL based writing activities. Analysis of the rubric scores with a Wilcoxon Signed-Rank Test and a paired-sample t-test indicate that students' writing did improve after PBL engagement. Although PBL pedagogy alone may not account for the improvement in student writing, it is an indication that PBL does not hinder students' learning, and may, in fact, lead to greater engagement. Our findings suggest that students' critical thinking about writing improved with the use of PBL pedagogy. PBL helps student writing by forcing students to attend to audience and purpose in each writing situation. Students developed critical thinking skills relevant to writers when they began evaluating their audience's needs and developing a purpose for their writing projects. Each problem set up different audiences and purposes for writing--often requiring students to write in a new genre. For instance, in problem two, students wrote both a letter and a White paper on the same topic. Switching the genre, audience, and purpose forced students to work through how to evaluate the writing situation to create the most appropriate text. Our findings are similar to Rosinski and Peebles (2012) who found that "PBL activities did indeed have the advantage of inviting students to behave more like 'real' and what we have come to call 'successful' writers, based on an interactionist model of writing." Likewise, our students were developing thinking about writing that grew out of their immersion in problems that caused them to examine the rhetorical situation and develop an approach to meet the exigencies of the situation, which led to better writing. The one area where students need more support in developing their writing according to our results is in establishing the importance of the topic they are writing about. Establishing the significance of a topic is essential to any writer, so we need to explore ways to help students see why it is important and ways to help them show readers the importance of a topic. Smart, Hicks, and Melton (2012, p.75) suggested that "Fundamental to effective communication, writers must develop an awareness of both the situation and the audience to craft an appropriate message give the context and purpose of the communication to that audience." Although our students were able to "craft an appropriate message," they were not able to more fully articulate why that message should matter to their readers in a way we were hoping to see in their writing. Our findings suggest that PBL pedagogy has a positive influence on students' critical thinking and needs to be explored further in a writing classroom.

THURSDAY, OCTOBER 12, 3:30-4:00

Refreshment break outside of the Telus rooms, the Glen rooms, and the Exhibition Halls.

THURSDAY, OCTOBER 12, 4:00-5:30

Exploring (in) the Studio: Teaching and Learning in Studio Courses Across the Curriculum
Sherry Linkon, Maggie Debelius, Phillip Motley, Kathy Takayama

Glen 205

Studio-based pedagogies adapt approaches rooted in the visual arts and architecture to foster student engagement, critical inquiry, creativity, independent and collaborative learning, and iterative practice in a growing range of fields. Studios emphasize hands-on projects that involve problem defining as well as problem solving; exploratory learning as students test and evaluate approaches to their projects; on-going peer, faculty, and expert critiques; and opportunities for iteration and revision (Crowther, 2013; Dannels et al. 2008). They also reserve significant amounts of class time for project work and encourage frequent peer consultation by inviting students to work outside of class time in the studio space. In many cases, they also involve iterative design thinking and multimedia production, often aimed at engaging specific audiences and promoting solutions to authentic, real world problems. Scholars of studio learning argue that these methods offer students opportunities for deep engagement, intellectual and personal growth, collaborative and autonomous agency, enhanced relationships with peers and faculty, and the development of both creative and professional dispositions. Studio pedagogy is well-established in some fields, including not only the arts and design, but also engineering, computer science, and natural sciences. However, although a number of scholars have examined and evaluated its effects on student learning in the arts and some areas of science, much work remains to be done on the value and adaptations of studio methods, especially as they migrate into the humanities and social sciences. Some of these adaptations reflect “studio-ish” approaches, while others embrace the studio with minimal adaptations. As faculty and students increasingly engage with design thinking, we can expect to see growing attention to studio-based learning. But how-and how well-do studio methods travel? Elizabeth Boling and Kenan M. Smith argue that studios “should not be adopted (or adapted to) instructional design classrooms uncritically. This signature pedagogy should be utilized only with a clear-eyed view of its shortcomings in other settings, and implementations should be studied rigorously so as to fine-tune adaptations in ways that maximize potential benefits and minimize potential problems” (Boling and Smith). So what happens when they are adapted for varied disciplines and levels of students? How well do the learning benefits of studio pedagogy translate to “studio-ish” approaches? This panel brings together four faculty who have used and adapted studio pedagogies for different contexts-in the sciences, in communications, and in first-year writing, at U.S. and Australian universities. Each panelist will discuss the rationales and learning theories that led them to use studio approaches, identify key elements of studio pedagogy that facilitated conceptual/experiential/applied learning in their discipline, , describe their uses of studio methods, analyze student learning in the course, and offer comments and questions for further discussion. The panel will then identify common themes and challenges and suggest some core questions and SoTL methods for further exploration. Much of the research on studio-based pedagogy focuses on describing its elements and/or particular examples, with some analysis of how these elements work but less attention to evidence of student learning. In “Exploring (in) the Studio,” we will consider not only what studios can bring to our students and programs but also what SoTL can bring to studio pedagogy.

Innovations in Humanities Teaching and Learning: Collaboration and Inquiry
Dan Bernstein, Deandra Little, Renee Michael, Amy Rossomondo, Kathy Wise

Glen 201

This panel reports on a three year project that helped take instruction in humanities to new heights in instructional design, in scholarly inquiry into learning, and in scope of collaboration. Two dozen humanities faculty members from four universities participated in a shared adventure in course redesign that has resulted in a number of key insights about improving student understanding, disciplinary ways of knowing, the benefits of face-to-face collaboration, and formats for representing and sharing excellent scholarship of teaching and learning. Faculty participants worked individually on their own courses, shared their work regularly with local colleagues, and met with all other participating faculty members in four face-to-face gatherings. Individual faculty members in the project added a variety of innovations, including in-class interactive learning, pre-class online writing and discussions, revised integrative assignments, team learning projects, reflective and metacognitive writing, scaffolded writing assignments, guided rubrics for feedback, digital projects, and other innovations to their individual courses. Faculty members examined the impact of their course enhancements through close reading of student work, often using the same assignment over three years to track improved understanding. Reflecting on the changes in student

work resulted in iterative adjustments in course procedures across three or more offerings. Each faculty member's work is visible as a course portfolio on the project website. The projects were undertaken as systematic inquiry rather than as educational research; the designs were not experimental and the conclusions are not intended to provide new generalized theory. The work is designed to provide feedback to an instructor during the course of ongoing course delivery so that student learning may improve over time. In that sense it is an example of reflective practice, but it becomes public scholarship so that colleagues can use what is learned, build upon those practices, and critique the reflective analysis. The work is built upon models of faculty collaboration pioneered by the American Association for Higher Education project on peer review of teaching. Books by Pat Hutchings and Lee Shulman report that work: *Making Teaching Community Property: A Menu for Peer Collaboration and Peer Review*; *The Course Portfolio: How Faculty Can Examine Their Teaching to Advance Practices and Improve Student Learning*. Additional work done through the Carnegie Academy for the Scholarship of Teaching and Learning is reported in a book by Pat Hutchings and Mary Huber: *The Advancement of Learning: Building the Teaching Commons*. The analysis of scholarship on which the model was based comes from a book by Charles Glassick, Mary Huber, and Gene Maeroff: *Scholarship Assessed*. The project leader will serve as the moderator of the session, and he will also provide an introductory overview and a synthesizing summary.

OVERALL VISION OF THE PROJECT: The project leader will provide a brief introduction to the project and participants, describing how the campuses were organized individually and collectively. The leader will also describe the overall forms of innovation and shared representation through course portfolios.

COLLABORATIVE ACTIVITY ON EACH CAMPUS: Two leaders of campus teams will describe their experiences in working with their local colleagues on the project activities. Regular meetings on each campus kept the redesign process going, and these leaders will describe the innovations they saw among their colleagues. In one case, two campuses in the same city also had inter-campus meetings to provide additional connection with a shared agenda of innovation and close reading of student work.

NARRATIVE EXPERIENCE OF A PARTICIPANT: One faculty member from the project will describe her own project, including the innovation and the ways that she examined student understanding to know how well the innovation was working. She will also talk about and share her representation of the work through an online course portfolio, as well as describe the process of preparing the reflective portfolio.

AUDIENCE CONSIDERATION OF ADDITIONAL INDIVIDUAL EXAMPLES: We will demonstrate the project website, including the gallery of e-portfolios created by the participating faculty members. One or two examples of portfolios will be examined on the screen, while members of the audience can also go live to the project website and explore other examples as well. The second half of this interval will be for audience commentary on what they see and what questions they have about the work (both the teaching per se and the creation of the portfolios).

KNOWING THE IMPACT OF THE COLLABORATION: There were two external evaluators who tracked the work on all four campuses and attended three of the four all-project meetings. They spent time interviewing individual participants and the campus leaders, and they also had access to survey data on teaching practices and attitudes of the participating faculty members. One of the evaluators will share the lessons learned from the project, including their findings on the creation and maintenance of community among the scholars in the project, both within and between campuses.

SYNTHESIS AND INSIGHTS: The project leader will summarize the work of the project and describe what we see as our take-away insights. These include: the value of close reading of text as a tool to provide evidence of successful innovation; the role of sharing written accounts of teaching and written commentary in the development of a community of scholars; the importance of face-to-face collaboration in the maintenance of community for teaching scholarship; the value of on-line course portfolios as public representations of scholarly work in teaching; the value of this work as scholarship of teaching and learning that is not research in education; the role of local conveners in sustaining collaboration and leadership in scholarship of teaching and learning.

GENERAL DISCUSSION (Q&A): Session Participants are encouraged to offer their own examples of similar work and to inquire about any aspects of the project or its resulting artifacts. Additional discussion of the project website that documents all the portfolios and provides background on the activities of the project over three years. Audience members will be urged to regard the website as a long-term resource.

SoTL from the Students' Perspectives: Perceptions of Good Teaching
Eliana Elkhoury, Leslie Reid, Glenn Dolphin

Glen 206

Influenced by “active and constructive processes” (Ritchhart, Ron; Church, Mark; Morrison, 2011) higher education has been witnessing a call for a shift in the last few decades to foster better engagement and better student learning. Along with the emphasis towards student engagement and deep learning has been a shift for faculty to engage in scholarly teaching that supports these elements (Trigwell, Martin, Benjamin, & Prosser, M, 2000). Concerns about recognition and support for changing teaching practices have been a focus (Chalmers, 2011), as faculty and student support and buy-in to new teaching and learning strategies is imperative for success. Ironically, with the shift to more active learning in the post-secondary classroom, there is a “pushback” from a significant portion of the student population who express concern over the more open-ended activities in comparison to the surety of taking notes in a more structured and predictable classroom setting. This has shown up in negative comments and evaluation scores of instructors implementing such novel activities. In our study, we aim to examine the existence of a disconnect between evidence-based student-centered teaching methods and instructor-centered teaching methods from the students’ perspective. In case we find a disconnect, we aim at understanding the students’ ideas about good teaching and poor teaching, and how that relates to the higher education trends of active and collaborative learning, inquiry-based learning and student engagement. We also want to understand how would students who prefer instructor-centered approach evaluate a student-centered course. This study was designed as an exploratory case study (Yin, 2002) aimed at understanding how students perceive good teaching and how their understanding of their own learning relates to their definition of good teaching. In addition, this research aimed to compare students’ ideas about teaching and learning to previous findings. The participants chosen for this research were senior students in the Faculty of Science in one western university because they are expected to have developed an understanding of teaching and of their own learning. We chose to use interviews as our method of data collection. Interviews were designed to allow us to tap into the experiences and perceptions of students about teaching. Data analysis was performed using thematic analysis. Themes were compared to literature on learner-centered teaching and student learning to examine congruence or disconnect. Findings from this research will be used to get a better understanding of the students’ experiences in the faculty of sciences, guide the students’ preparation to succeed in the faculty of science, and finally guide the instructors’ preparation of courses.

“I Didn’t Know it was That Serious”: Students as Partners - Perspectives on Academic Integrity and Awareness Raising Resources
Joanne Ramsbotham, Karen Theobald, Heather Alexander

Glen 206

Academic integrity (AI) breaches contravene higher education and nursing standards of ethical behaviour and betray the profession’s core values of honesty, trust, fairness and responsibility. Importantly, do Bachelor of Nursing students understand AI concepts, organisational guidance, problem behaviours and breach consequences, within assessment of their learning? In 2016 a culturally and linguistically diverse (CALD) student-as-partners group of seven nursing students and four staff collectively investigated academic integrity, using an iterative series of workshops and asynchronous online activities to unpack and explore values, experiences and perspectives. Impetus for the project came from wider use of text matching resources which identified frequent AI breaches among CALD students. Within higher education, students from CALD backgrounds and non-standard course entry pathways breach AI boundaries more frequently, likely due to different cultural views of what teachers and education value or limited understanding of academic literacy and AI expectations, infringement maybe inadvertent, related to assessment timeframe pressure or complexity of assessment instructions. Within nursing education, students are expected to demonstrate clinical reasoning and justify decisions using scientific evidence in written assessments. While this is a valued and widely employed authentic assessment approach, it is also the main setting for plagiarism and academic integrity breaches. Academic dishonesty in the education context and unethical behaviour in the workplace are a concern within nursing as these behaviours are correlated and present a substantial moral threat to the integrity of the profession. Staff led three workshops and online interactions, guiding the group toward deliverables, informed by the Framework for Partnership in Learning and Teaching in Higher Education. Focus was given to facilitating collaborative interactions with a move away from hierarchical teacher/student roles, students were challenged to disregard traditional passive feedback roles, share control and expertise in articulating

perspectives and co-create solutions. As AI may be a contentious topic partnerships that accommodate multiple views and seek connections were essential. Findings revealed new perceptions and AI as a topical issue that generated enthusiastic debate. Students recognise their AI responsibilities and want clear guidance-‘a single version of the truth; what to do and not do’. Interestingly in workshop activities students consistently underrated the seriousness of AI breaches. Further, the consequences of AI breaches were largely unspoken and concealed from students revealing a clear mismatch between messages received, organisational intention, and perceived deterrent. Staff had anticipated that students would be aware of myth or folklore around AI breaches however this was not found. A notable outcome was group recommendations for future authentic assessment design that may enhance learning and clinical reasoning capability, while maximising AI and improving student experience of assessment. Additionally, three student-facing AI resources that highlight problem behaviours and consequences were designed. These resources are embedded into 2017 learning environments within new curricula implementation. Outcomes have implications for university policy, academic practice; specifically how academic literacy is taught and AI managed within authentic assessment. Outcomes illustrate the value of bridging traditional staff-student divides, disregarding customary notions of control and truly engaging in collaborative students-as-partners community activities to enrich learning in higher education.

Adventures in Promoting Student Engagement in an Online Doctoral Participatory Research Methodology Course: Possibilities for the Scholarship of Teaching and Learning
Michele Jacobsen, Marlon Simmons, Gale Parchoma, Dorothea Nelson, Shaily Bhola

Glen 206

Student engagement has been an active concern of Scholarship of Teaching and Learning and educational research. A range of literature suggests student engagement is enriched by active pedagogical practices involving inquiry, collaborative tasks and problem based forms of learning (Boyer 1998; Friesen, 2009; Kuh 2001, 2009; Carini, Kuh & Klien 2006; Reid 2012; Nomme & Birol, 2014; NSSE, 2015). Our virtual ethnographic inquiry was bounded by the question, “How can purposefully designed cycles of less formal, synchronous, auditory discussions, and more formal, asynchronous, text-based discussions support enhanced student engagement and learning?” In this paper, we share evidence and insights from our adventures in promoting student engagement in a redesigned online doctoral research methodology course. For too long, some argue, asynchronous, text-based communications have been a primary modus operandi in online, higher education learning environments (Bell, 2015; Garrison, 2011; McConnell, 2006). One goal in our redesigned course was to engage doctoral students in reflexive inquiry concerning personal values, perspectives, beliefs, experiences, and understandings about educational research as they prepared to undertake research themselves. Thus, we needed a design that provided multiple means and opportunities for active engagement in deep learning to develop research expertise. In the doctoral seminar, students engaged with the instructor and peers using weekly synchronous seminars and ongoing asynchronous text-based discussion forums within a learning management system. Methods & Evidence In this two-year study, we analyzed student perceptions of relationships among purposefully designed cycles of both instructor-led and student-led synchronous auditory discussions, along with ongoing asynchronous text-based discussions, and the impacts of these designs on student engagement. Iterative and thematic analyses of archived auditory and text-based data from student interactions with learning resources, with peers, and with the instructor, as well as student feedback in focus group and individual interviews, helped us to examine the relationships and impacts. Doctoral students reported that the less formal learning opportunities encouraged sustained engagement and resulted in quasi-embodied learning experiences. Our findings include emergent evidence that purposefully designed online courses that include both synchronous audio discussions and asynchronous text-based discussions can positively impact student engagement. To date, our findings do not fully affirm Jones, Aseno, and Goodyear’s (2011) delineations of synchronous and asynchronous communication modes as serving specific learning needs. Rather we found evidence that student-participants reflected upon and made connections among conversations across different modes of communication. Implications for teaching suggest revisiting categorizations of specific modes of communications for specific learning tasks within learning designs. Implications for learning include emergent evidence supporting the need for online learners to have multiple modes of communication to individually and collaboratively develop working knowledge. Conclusions: The significance of this work is found in research informed design principles that can support instructors in course development, as well as evidence-based insights on pedagogical practices for active inquiry and the promotion of students’ active engagement in developing research

expertise in online courses. For the “Adventures and Insights in SoTL” thread, we will provide several pause-points for audience discussion, as well as demonstrate effective pedagogical practices for online learning.

Addressing Plagiarism in a Faculty of Education: Practice vs. Policy **Sarah Elaine Eaton**

Telus 102

This paper shares the results of a SoTL research project in a faculty of education that digs deep into post-secondary educators’ understanding of plagiarism including how they address suspected or actual cases of plagiarism, how they incorporate “teachable moments” into their response to plagiarism and the complexities that emerge when individual educator responses differ from established (and often more punitive) policies. Since a faculty of education prepares pre-service and in-service teachers for professional practice as educators, the topic of plagiarism is particularly important to understand as it may have long-standing ripple effects into pre- and in-service teachers’ professional practice, not only for themselves, but also for the learners whom they teach and influence. Academic dishonesty continues to present a major problem in higher education (Altbach, 2015; Colella-Sandercock & Alahmadi, 2015; Leonard, Schwieder, Buhler, Beaubien Bennett, & Royster, 2015). No longer is institutional and instructor focus on plagiarism strictly on detection and imposing punitive consequences, but rather it has evolved to include learning and support around what academic integrity is, taking a preventative approach, rather than a punitive one (Busch & Bilgin, 2014; Carroll & Duggan, 2005). This includes developing a culture of academic integrity in which both students and educators are clear on the expectations and processes involved (Groark, Oblinger, & Choa, 2001). This study is framed as qualitative action research (Fichtman Dana, 2013; Hendricks, 2016; McNiff, 2010; 2013, 2014 & 2016). Fichtman Dana (2013) points out that action research “has no beginning and no end.. Rather...is a continual cycle” (p. 82). This study was designed to contribute to the ongoing cultivation of academic integrity in the faculty of education. Data were collected through focus groups and interviews, using qualitative coding (Saldana, 2009) to analyze results. This study revealed that instructors in a faculty of education deal with plagiarism in a variety of ways including (1) using occurrences of plagiarism as a “teachable moment” to help students learn how to do better, because they do not know what the institutional policies are; (2) addressing the issue directly with the student and then reporting it to the administration and (3) following institutional policies by reporting the instance to the administration without discussing the case further with the student. Each of these responses to student plagiarism stem from different motivations (e.g. a desire to help students learn; a desire to follow established policies, etc.) The result is an inconsistent approach to how instructors in a faculty of education address suspected or actual cases of plagiarism. There is a disconnect between teaching and learning practices and institutional policies. Evidence from this project applies only to one faculty of education at one university, but it is not unreasonable to think that such disconnects may exist in other faculties and more broadly, across institutions. There is a need to connect the practices with of teaching and learning with institutional policies in a way that is productive and focused on student learning and growth.

Student Ratings of Instruction (SRI): Mediating the Process, Maximizing Interpretive Power, and Magnifying SoTL Possibilities **Carol Rolheiser, Gregory Hum, Megan Burnett, Beverley Hamilton, Phil Graniero**

Telus 102

Teaching evaluation serves numerous and sometimes counteracting purposes in post-secondary institutions: teaching and program improvement, performance review, and external accountability reporting (Wright et al., 2014). Student feedback on teaching can be a catalyst for SoTL and promote more effective teaching, but diverse stakeholders’ mixed objectives can create anxieties and tensions. Consequently, despite more than 17,000 published studies on innovations in teaching evaluation, the path to establishing improvement-oriented teaching evaluation at post-secondary institutions remains “slippery” at best (Hénard & Roseveare, 2012; Raffoul & Hamilton, 2016). Student ratings of instruction (SRIs) are only one facet of effective teaching evaluation (Arreola, 2007; Berk, 2009, 2014; Buller, 2012). However, their ubiquity, coupled with institutional reliance on these data for decision-making, have made them a contested focal point of institutional change initiatives.

Increasingly, institutions across Canada are working to change SRI design, implementation, promotion, interpretation, and use (Hamilton, 2015; eXplorance, 2014; 2015; Wright et al., 2014). Effective SRI redesign and implementation requires collaboration across units with competing mandates, complex data management and visualization, technological innovation, and cultural change at multiple institutional levels. The evaluative role of SRI

informs how instructors understand, position themselves, and are positioned within institutions. How institutions mediate this with instructors affects individual and institutional capacity to learn and evolve.

This paper reports on experiences from multi-faceted initiatives at two Canadian post-secondary institutions to improve collection and use of SRIs to support and align teaching improvement, institutional decision-making, and SoTL. Two main methods are highlighted: 1) Active community engagement in question selection and design. SRIs provide the university community at multiple levels of the institution with opportunities to actively examine and articulate teaching and learning priorities. Involving teaching staff, individually or collectively, in aligning SRI questions with teaching goals, cultures, and contexts drastically reduces anxieties, promoting a developmental view of teaching and greater engagement with SRI data. Indeed, as interest in and engagement with SRIs increases, so does reflection, inquiry, and research into teaching, at many institutional levels. We describe how a formalized consultative process for developing and organizing SRI questions supports this process; 2) Emphasis on contextualization and better data representation to invite inquiry and agency. Using and interpreting SRI-related data, in valid ways for formative and summative purposes, creates both opportunities and anxieties. Common reporting relies on statistical approaches which erase meaningful variations in data distribution and disregard the complexity of articulating and interpreting data about teaching and learning experiences. Interpretive guides, interactive data visualizations, and consultations can promote active reflection, inquiry, and instructor autonomy. This approach can foster holistic, developmental, and nuanced engagement with SRI data, shaping questions and teaching initiatives, and informing more sophisticated SoTL work within our institutions.

In this session we describe experiences and evidence demonstrating how these two methods can leverage SRIs to promote SoTL within institutions by encouraging and guiding faculty and other stakeholders towards deeper reflection and inquiry into teaching and learning-related issues. Recognizing the limitations of the conclusions that can be drawn from SRI data, we also emphasize appropriate methods of reporting, interpretation, and corroboration that improve but don't over-stretch the richness of SRI data.

Can SoTL Reach New Heights through Policy Implementation? Hiking in the Under-Explored Territory at the Organisational Meso-Level
Katarina Mårtensson, Johanna Bergqvist-Rydén, Torgny Roxå

Telus 102

A multitude of case-studies describe implementation of assessment criteria, but few longitudinal studies observe an implementation process over time; the same goes for studies investigating the impact on teaching and student learning (Black & McCormick, 2010). This longitudinal research project investigates the effects of the implementation of a policy about written assessment criteria at an entire university faculty, with an aim to promote scholarly underpinned assessment practices. Experiences from students, academic faculty members and local level leaders are explored through surveys and semi-structured interviews. A few years ago, one faculty in our university decided that all their courses (modules) should have written assessment criteria. Our research investigates longitudinally how students, teachers (faculty), and local level leaders respond to this policy and how they experience developing and working with assessment criteria. As SoTL gradually becomes more embedded in institutional policies (Fanghanel et al., 2016; Vital, 2016) it seems crucial to hike into hitherto underexplored territory of what happens as a consequence of such policies within the organisational meso-level (Roxå, 2014). This presentation will focus on the experiences from teachers and local level leaders, in other words people who largely inhabit the organisational meso-level. How do they perceive and relate to the policy (cf Barman, 2014)? How do leaders and teachers develop assessment criteria? What characterises the communication between colleagues? Does it differ between academic microcultures (Roxå & Mårtensson, 2015)? Our results indicate an intriguingly complex and far from linear relation between intention and outcome. Clearly there are variations between different local contexts. Some faculty members, as well as leaders, are convinced of the benefits and therefore engage willingly in writing and using criteria. Others are fundamentally sceptic and therefore, consequently, more reluctant. Local level leaders, who are set to lead the implementation processes at their respective departments, irrespective of their personal convictions, deal delicately with the process of engaging colleagues. The results further indicate that this is a ripening process that takes longer time than estimated (cf Senge, 2006). Also, the very idea of "implementation" needs to be problematised-what does it mean? Is a policy implemented when there are documents with written assessment criteria for all courses (as intended), or when these are actively and dynamically used in communication with students, in assessment and grading practices and in course redesign? Or when there is SoTL-based evidence of its use? How important is the continuous communication of the agenda from faculty

leadership for the outcome and long term success? In our data some meso level leaders experience a lack of interest from the faculty leadership once the policy was launched, making the issue of implementation further complex. Our presentation therefore aims to hike into an underexplored SoTL-territory and encourage conversations regarding if and how policies can help SoTL reaching new heights? A full list of references is available upon request and will be part of the presentation should it be accepted.

Seeking to Promote Equity & Inclusion through Student-Faculty Partnership: New Horizons & Underexplored Terrain
Elizabeth Marquis, Alison Cook-Sather, Srikrupa Krishna Prasad

Glen 204

Student-faculty partnership is increasingly seen as a fundamental part of the future of teaching, learning and SoTL (Healey, Flint, & Harrington, 2016). Partnership has been positioned as a principle of good practice in teaching and learning inquiry (Felten, 2013), and research about the benefits and challenges of such work has proliferated (e.g., Cook-Sather, Bovill, & Felten, 2014; Werder, Pope-Ruark & Verwoord, 2016). Amongst other things, scholars have demonstrated that pedagogical partnerships can contribute to transforming higher education institutions into more egalitarian learning communities (Matthews, Cook-Sather, & Healey, 2017) by destabilizing existing hierarchies and increasing students' sense of belonging to institutions and disciplinary arenas (Moore-Cherry et al., 2015; Cook-Sather & Luz, 2015). Although some concerns have been raised about the inclusiveness of partnership programs (Bovill et al., 2016; Felten et al., 2013), partnership thus has particular potential to support efforts to enhance equity and inclusion on university campuses. Against this backdrop, the present project seeks to explore the ways in which participating in faculty-student partnership is experienced by students who identify as members of equity-seeking groups in two different contexts. Both Bryn Mawr and Haverford Colleges and McMaster University have established programs that engage students and faculty/staff as partners in educational development and/or teaching and learning research. The program at Bryn Mawr and Haverford supports students from equity-seeking groups and their allies working in semester-long partnerships focused on pedagogical practices as faculty are teaching their courses (Cook-Sather & Agu, 2013; Cook-Sather & Des Ogugua, in preparation). While questions of equity have not yet been a sustained focus of the Student Partners Program at McMaster University (Marquis et al., 2016), a wide range of students have participated, and a new stream (to be launched in 2018) will invite students who identify as members of equity-seeking groups to partner with faculty who are interested in working to enhance the inclusiveness of one of their courses. The present research will contribute to the growing literature on partnership and inclusion, and inform this new program stream at McMaster by exploring the following questions: 1. How do students who identify as members of equity-seeking groups experience participating in the programs? 2. How, if at all, do such programs contribute to the development of more egalitarian and inclusive learning communities on campus? Drawing on critical race theory and other formulations that argue for the need to centre the experiences of members of marginalized groups (e.g., Solórzano & Yosso, 2002), we explored these research questions by conducting interviews with current and past student partners from both programs who self-identify as members of equity-seeking groups. This presentation will share findings from these interviews, considering the extent to which they corroborate the claim that partnership can enhance equity and inclusion by positioning traditionally marginalized students as "holders and creators of knowledge" (Delgado-Bernal, 2002, p.106). The session will thus connect tightly to the conference theme of 'reaching new heights,' both by adding to understanding of student-faculty partnership—a compelling emerging landscape for SoTL—and by foregrounding the voices of students who are often excluded in teaching, learning, and research.

Assessing Intercultural Competence in Student Writing: A Multi-Institutional Study
Jodi Malmgern, Melanie Rathburn, Ashley Brenner

Glen 204

As study-abroad educators look for ways to determine the efficacy of the proliferating number of short-term study abroad programs, many have come to focus on intercultural competence as a desirable set of goals with several methods for assessment (e.g., Deardorff 2006, 2008, 2009; McTighe, 2006, Savicki 2008, Vande Berg et al. 2012). New studies appear every year alongside an ongoing discussion of the nature and the key aspects of behavioral changes that we associate with intercultural development (Anderson et al. 2006, Wang et al. 2009, Andeson et al. 2016). Our research joins this growing literature by highlighting a few ways we have identified several forms of intercultural competence development across six study-abroad programs at six institutions in

Canada and the US during the 2015-16 academic year. Insofar as we see our research as deepening a growing field of inquiry, we fit with the “adventures and insights” conference theme. The programs in our study had varying amounts and types of predeparture preparation and post-return processing, as well as different lengths of stay in-country. Guelph University (Ontario), India Semester Abroad Program, 12 weeks in-country Mt. Royal University (Alberta), Science in a Global Context (Honduras), 5 weeks in-country St. Olaf College (Minnesota), Peruvian Medical Experience, 3 weeks in-country Elon University (North Carolina), Inquiry in Italy, 3 weeks in-country Community Colleges of Philadelphia (Pennsylvania), International Fellowships Program (Tanzania), 2 weeks in-country Wabash College (Indiana), Peru Global Health, 2 week in-country These programs had 8-20 students each and we collected a total of 257 written reflections that responded to prompts provided at four different times before, during, and after the travel experience for each program. Our data comes from these coded student reflections. The writing prompts were designed to have students describe intercultural experiences and we coded the writing for a wide variety of factors, including several pertaining to intercultural competence. The students were first prompted to write at the very beginning of the program before any sort of content-teaching or cultural training occurred. The second writing prompt was administered to all programs on the eve of departure after varying amounts of cultural training (0-10 hours). Cultural training included various exercises that highlight ways that one’s cultural perspective shapes perceptions. In some cases, cultural training also included a formal debriefing session on the survey results from the Intercultural Development Inventory (IDI), which engaged discussions on how certain kinds of responses to interculturally challenging situations fall on the IDI spectrum. The third writing prompt was administered immediately after the return from abroad, and the fourth was administered after any post-return activity (such as a re-entry class), or in the case of those programs without post-return activity, 3-4 weeks after the third prompt. In identifying intercultural competence, we follow the work of Darla Deardorff, Mick Vande Berg, and others in identifying key intercultural characteristics. Specifically, we adapted to our study the following list of intercultural skills from Vande Berg (2016): (1) cultural self-awareness, (2) cultural awareness of others within and outside one’s culture, (3) ability to manage emotions in culturally ambiguous situations, and (4) the ability to bridge cultural gaps by shifting perspectives to that of another culture and to adapt behavior to other cultural contexts. Our presentation will focus on the results and analysis of these coding categories. The four presenters, part of the six-person research team, will discuss results of our study from all the programs, which show identifiable intercultural development with aggregate ranges that correlate to specific program features. After a general introduction to the study, each presenter will discuss a range of student writing that we coded in one of the four categories of intercultural competence mentioned above. Our panel will present our aggregated evidence for this growth as well as several specific examples of student writing that show how we identified intercultural perspectives. Overall we see significant gains in student writing that indicate possible growth in the intercultural categories of “shifting perspectives” and “managing emotions.” We also see small but steady gains in indications of students’ “cultural awareness of others” and “adapting behavior.” Where there is variance among the participants by program, we correlate higher amounts of predeparture preparation with higher frequency of writing that indicates “shifting perspectives” and “adapting behavior.” Several other factors, besides amount of pre-departure preparation, seem to have affected the amount and types of growth we see in the data. For example, some programs utilized a “debrief” session that analyzes group results from the Intercultural Development Index (IDI) survey that all participants completed pre-departure. We see those debriefings as a form of intervention that correlate to greater gains in intercultural competence as identified in the reflection-writing. Another factor that may have an impact on “shifting perspective,” “managing emotions,” and “adapting behavior” is the nature of the study-abroad course itself: some programs had a major service-learning component that afforded many more kinds of intercultural interaction that afforded more experiences that students may have grown from.

Creating a Culture of Respect: Delivering Gender and Sexual Diversity Curriculum to Glen 204 Post Secondary Students in the Helping Professions
Brent Oliver, Becky Van Tassel, Roseline Carter, Marva Feguson, Kaitlyn O’Brien, Mohamed Toufic El Hussein, Catherine Pearl

Strengthening the ability of helping professionals and care networks to offer culturally sensitive care is an important objective related to higher education and the helping professions. Across North America university student’s in professional programs are not receiving adequate pre-service training to separate personal and professional values about sexuality and to create increased awareness of sexual and gender variance (Barr et al,

2014). Unfortunately when these professionals are insufficiently prepared or uncomfortable with gay, lesbian, bisexual and transgender (GLBT) clients they cannot provide culturally-sensitive services or offer the programs and referrals required to meet the needs of these communities (Washington State Department of Health, 2009). Additionally, social work students and working professionals frequently express discomfort speaking about sexuality and tend to problematize any group that fails to fit within the cultural construction of “normal” sexuality (Jeyasignham, 2013; Trotter, Brogatzki, Duggan, Foster, and Levie, 2006). Incorporating sexual and gender diversity training in post-secondary professional education curricula is a well-supported means to improving the delivery of competent care for GLBT populations (Mayer, 2012). Providing such training can assist emerging health service professionals to become aware of the unique issues facing GLBT communities and help to ensure the delivery of non-judgmental support, accurate information, and appropriate services (Wolitski, 2011). This paper will describe and discuss findings from a SoTL collaboration between the Department of Child Studies and Social Work at Mount Royal University (Calgary, AB), and the Calgary Sexual Health Centre. The objectives of this project were to evaluate the effectiveness of the “Creating a Culture of Respect” workshop curriculum and to assess its impact on students’ learning and approach to working with GLBT populations. Mount Royal University students enrolled in social work, nursing, midwifery and child and youth studies programs participated in a 90 minute in class workshop on sexual and gender diversity. Students were recruited to complete pre-workshop and post workshop evaluation questionnaires and were invited to attend a focus group discussing their perspective on the curriculum. The study evaluated to what extent students report a measured change in their knowledge, skill, and comfort level related to communicating about sexuality with clients as a result of participating in the workshop and what learning, if any, students were able to apply in their professional work with clients in the field. The paper will explore preliminary findings from the study and discuss implications for future training of allied health professionals.

Agents for Change: How a Community of Educational Designers is Changing Educational Practice in a Large University

Telus 103

Barbara Macfarlan, Josephine Hook, Jamie Fulcher, Sheryl Maher-Sturgess, Deb McCormick, Tammy R Smith

The call for the ‘radical reconstruction’ of higher education by the Boyer Commission in 1998 challenged the same notions of knowledge and teaching that remain nearly twenty years later (Boyer, 1998). While the literature broadly recognises that a student-focused approach to teaching results in deep learning within a cultural context and tradition, much of the teaching and learning occurring in universities today is founded in a traditional teacher-led paradigm (Brew, 2012). Now is a critical time in education: there is a high demand for a more student-centred approach to learning; and increasingly time-poor academics facing new challenges and demands in teaching. To address this challenge, Monash University has implemented the Better Teaching, Better Learning (BTBL) agenda, a vision for change that demonstrates a commitment to education excellence, and recognises the unexplored territories of twenty-first century teaching and learning. Embedding Educational Designers in the faculties, rather than a centrally-based model, was one of the most successful BTBL initiatives. In the faculties, Educational Designers are key catalysts for change, interpreting the BTBL agenda for the particular culture of their faculty while keeping the University-wide perspective in sight. The Educational Designers realise the BTBL agenda through the implementation of the Unit Enhancement initiative. Unit Enhancement focuses on four areas of teaching and learning we consider to be critical to the successful transformation of traditional university teaching into an active learning experience underpinned by learning theories and well-articulated pedagogic practice (Biggs, 2007; Vygotsky, 1978; Freire, 1970; Kolb, 2015 ; Schon, 1983 & 1987; Boud 2000 & 2007). These are constructive alignment, pre-class activities, active learning, and formative assessment and feedback. It is through the Unit Enhancement process that Educational Designers partner with faculty to challenge educators’ approaches to teaching and learning; to reconsider how they assess their learning outcomes; and to format their content for delivery across a variety of modes (for instance, face-to-face, online, blended or industry). Unit Enhancement encompasses the “the complex process of planning, decision-making, design, and creativity in [the] facilitation of student learning” (Laurillard et al., 2013), fundamentally changing the landscape of teaching and learning across Monash University. While each Faculty has its own pedagogical nuances, the establishment of an Educational Designer Community of Practice (CoP) has proven vital to the institutional success of the BTBL agenda. Each Educational Designer brings with them diverse experience in the higher education arena. Rather than a fragmented or siloed practice, participation in the CoP ensures a reflective, consistent and university-wide approach to Unit

Enhancement. The dual concept of 'participation and reification' (Wenger, 2004 p.62) is critical for aligning the activities of the group with the BTBL agenda. Our paper showcases a number of case studies of Unit Enhancement in the faculties to examine the 'peaks and troughs' of effecting cultural change across a large university. We argue that the model of embedding Educational Designers in faculties has already effected sustainable and scaleable change, expanding the horizons of teaching and learning in our University that can be adapted and applied to other educational contexts.

The Usual Suspects? Using a Change Density Index to Explore the Impact of Multiple Change Initiatives

Telus 103

Caroline Bennett, Andrea Greenhoot

Change efforts in postsecondary education have proliferated in North America over the last decade, aiming to promote wider adoption of teaching methods that align with research on how people learn. Change efforts are occurring at multiple levels: individual faculty efforts (e.g., faculty engaged in SoTL or DBER), institutional initiatives (e.g., university strategic initiatives), and cross-institution networks for transformation (e.g., AAU STEM Initiative, Bay View Alliance). Within a single institution there are often multiple change strategies being implemented, and they cannot be completely isolated or controlled; indeed, their effects are likely interactive. This complex environment makes evaluation of faculty engagement in change efforts and their impact on teaching practice challenging. Furthermore, whereas some faculty engage with multiple initiatives, others may only connect with one or two, and still others with none at all. Yet it is widely recognized that generating scalable and sustainable change at an institutional level involves going beyond the "usual suspects" who are already engaged in the change process. To understand the impact of multiple institutional transformation strategies we need to be able to map the breadth and density of faculty involvement. The goals of this session are (1) to introduce a method- a change density index- for examining and mapping faculty involvement in multiple change initiatives, and (2) to illustrate how it has enhanced our understanding of the utility of change strategies being implemented at the University of Kansas (KU). In this session, we will describe the activities and outcomes of a multi-dimensional course transformation initiative in STEM departments at KU. The KU Center for Teaching Excellence, collaborating with several academic and support units on campus, has coordinated a set of progressively expanding initiatives from 2011 through the present, including a series of faculty seminars, a program of department-embedded pedagogy experts who catalyze and guide course transformation, small grants, department and cross-department community-building, and campus-wide signature events. Quantification of the distribution of these strategies within individuals and across departments will help us examine the effectiveness of the various initiatives in producing change. With the goal to reach beyond the usual suspects, we also aim to systematically evaluate whether the same faculty are involved in all of the initiatives (see Department A, Figure 1) or whether activities are more broadly distributed (Department B, Figure 1). We have developed a method for examining faculty engagement in multiple initiatives by computing and mapping department involvement density. We focus on the department as the optimal unit for change because this is the unit for faculty evaluation and academic organization, and the unit in which faculty see themselves as having the highest level of influence (Tagg, 2012). We will use this method to describe changes in faculty engagement in the progressive and cumulative change initiatives at KU. Discussion will focus on how this method has served as useful lens through which we can develop a nuanced understanding of the impact of these change factors on faculty engagement in each department.

Is it Time to Engage in Guerrilla Leadership?

Telus 103

Jessica Riddell, Heather Smith

Conversations about a crisis in higher education have been growing in the past two decades. We are faced with processes that commodify students, dichotomize teaching and research, and divide administrators and faculty. So how do we enact change within our institutions and beyond? In the scholarship around educational leadership, there are multiple models, including instructional leadership, distributed leadership, transformational leadership, and social justice leadership. We propose a new model: guerrilla-style leadership. Guerrilla leadership is agile, mobile, responsive, tenacious, grassroots, and supported from local populations. This approach can be particularly effective in shifting conversations in ways that challenge dichotomies in order to advocate on behalf of and partner with students, stand as allies across traditional boundaries, and promote holistic, student-centred

practices and processes. This model offers us a different lens by which to consider how we approach our work in teaching and learning and as members of the academy more generally. Conversations about a crisis in higher education have been growing in the past two decades. The neo-liberal model of a corporate university threatens to undermine academic freedom, the size and integrity of the professoriate, and research foci. We are also faced with processes that commodify students, dichotomize teaching and research, and divide administrators and faculty. So how do we enact change within our institutions and beyond? We assert that a guerrilla-style approach to leadership can be particularly effective in shifting conversations in ways that challenge dichotomies in order to advocate on behalf of and partner with students, stand as allies across traditional boundaries, and promote holistic, student-centred teaching and learning practices and processes. In the scholarship around educational leadership, there are endless taxonomies of styles, such as instructional leadership, distributed leadership, transformational leadership, and social justice leadership (Bottery, 2016; Jones, Harvey, Lefoe & Ryland, 2014; Juntrasook, 2014; Martin, Trigwell, Prosser & Ramsden, 2003). We would like to theorize a new model of educational leadership: the guerrilla-style leadership. Guerrilla leadership operates effectively within the micro-levels of the institutional culture. This form of leadership is agile, mobile, responsive, tenacious, grassroots, and supported from local populations. Actions available in this approach include strategic activism, with repetitive and dispersed incursions on multiple fronts to shift conversations, disrupt centres of power, and create meaningful institutional change. Guerrilla leaders are attuned to the politics of their context, build alliances in ways to achieve common goals, and acknowledge their efforts often face resistance. The principles that underline this approach are most closely aligned with social justice and the various situational roles of advocate, champion, or ally. This model borrows from many approaches, and offers us a different lens by which to consider how we approach our work in teaching and learning and as members of the academy more generally. The proposed session relates to the conference theme because it challenges us to consider where we are now given the state of higher education and the session provides a provocative model of teaching and learning leadership. Elements of Engagement: Using multiple methods of engagement, this interactive session will provide participants with an introduction to some of the literature on educational leadership and an overview of some of the most prevalent models. The session leaders will describe the origins of their discussion of guerrilla leadership, propose a theoretical model of guerrilla leadership with values, principles, and actions, and discuss why this model differs from other types of educational leadership styles. In the discussion period we will facilitate ways participants can identify 1) the barriers to change in their own institutions and the 2) trends in higher education that shape their local work. Finally, participants will be given resources to develop individualized plans for engaging in guerrilla leadership in their own institutional contexts.

Skepticism or Empathy: Critical Thinking in Humanities and Science Students **Bradley Lewis, Henderikus Stam**

Telus 105

This paper reports on a qualitative study of undergraduate students' constructions of critical thinking. Critical thinking is one of the purported outcomes of a post-secondary education. It has been viewed both as a general skill regardless of discipline, or a discipline specific task that students must learn. Furthermore, there are incompatible and diverse definitions of critical thinking in the literature. Such definitions include a "reflective and reasonable thinking that is focused on deciding what to believe or do" (Ennis, 1985, p. 45). Alternatively, critical thinking has been defined as a "disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought" (Paul, 1992, p.9). In addition to this definition Paul (1992) argues that critical thinking in one domain can transfer to another. However, McPeck (1990) argues that "there are almost as many different kinds of critical thinking as there are different kinds of things to think about" (p.10). These are examples of the generalist and specialist debate on critical thinking. Following from this debate is a disagreement over the training of critical thinking, either through infusing it into an existing curriculum (McPeck, 1990) or through its own distinct course (Ennis, 1989). Another topic of contention is disagreement about the existence of dispositional features presumably constituting a critical thinker (Ennis, 1985, Missimer, 1990). Despite these incompatibilities, it is apparent that this has not made critical thinking any less popular or less of a concern for universities as is made evident by its idealized position within education programs and post-secondary course syllabuses. To grasp how critical thinking is taken up in the talk of students, this study used the theoretical perspective and methodology of discourse analysis (Potter & Wetherell, 1987). Students majoring in scientific or humanities disciplines were invited to participate. Participants were interviewed or included in focus groups. For our students, critical thinking appeared fuzzy, and they had difficulty grasping its relevance to their own lives. Students did not demonstrate definitive

understandings of critical thinking but they did offer various ways in which it was taken up in their talk. This included, using critical thinking (a) as a way to counter superficiality, (b) to remain open to new knowledge, and (c) to create an empathetic stance. Science students however were more likely to equate critical thinking with skepticism. Critical thinking was associated with challenging one's personal preconceptions for humanities students. We discuss students' indefinite understandings of critical thinking and suggest further research on the unusual topic of empathy as a foundation for critical thinking.

It's About Time to Start Fostering Interdisciplinary Science Habits of Mind in Science Students

Telus 105

Hagar Labouta, Rui Li, Leslie Reid, Natasha Kenny, David Cramb

Collaboration of scientists from different disciplines represents the norm of a current scientific research practice. But, do we foster these interdisciplinary habits in our science students to avoid students locking themselves into disciplinary habits of mind? To date, there is no identified type of teaching that foster those interdisciplinary science habits of mind, heart and hands, i.e., there is no "signature pedagogy" to teaching interdisciplinary science fields, such as nanoscience. The learning strategy adopted within this Nanoscience program at University of Calgary is "learning-science-by-doing-science" (LSDS), wherein students across science disciplines undertake real research projects for solving a problem they choose. The students engage in scientific conversations to choose the right research question, make a hypothesis and design and conduct an experiment. "[Coming from different backgrounds], the students start to understand their limitations and start appreciating what the others can bring to the table", describes an instructor in the Nanoscience Program. This study attempted to answer a main inquiry; how do authentic interdisciplinary science research experiences within an LSDS model influence the development of interdisciplinary science habits in students? We investigated how the learning activities and assessment tools embedded within the LSDS model scaffold the development of interdisciplinary science habits in students. A mixed-methods-design was adopted for data collection from all stakeholders; the director, the instructors and teaching assistants and the students and Alumni, through questionnaires, focus groups and interviews. Inclusion of the Alumni's perspectives is of utmost significance to get a better understanding of how an authentic interdisciplinary science experience helped them with their professional science careers. Quantitative (calculation of frequencies and modes) and qualitative (content analysis) data analyses were used. In conclusion, our study indicates that an interdisciplinary science learning environment within the LSDS model helps the students explain, interpret and analyze scientific issues across the spectrum of different science disciplines and integrate knowledge and skills from different science fields. This study helped identify the gaps and strengths of the LSDS model to further improve student learning for better preparation of future scientists. A long-term goal of a larger research project, in which this research project is situated, is to arrive to signature pedagogies to teaching interdisciplinary sciences.

Demystifying Statistics: Alternative Strategies for Statistics Pedagogy

Telus 105

Ashley Akenson, Randall Williams

The modern field of statistics can be traced back to the late 19th and early 20th centuries and the work of pioneering statisticians such as Sir Francis Galton, Karl Pearson, and Ronald Fisher. The work of these statisticians and their peers gave us statistical concepts such as standard deviation, confidence intervals, p-values, and z distributions. Concepts such as these are among the most intimidating for statistics students. Statistics has been taught using a standard, fixed pedagogy since the 1930s. Students are introduced to statistical concepts and equations and are expected to learn the material in artificially constructed blocks of time (e.g., semesters). Countless students, particularly in higher education, come to the statistics classroom with preconceived notions of their ability, typically surrounding lack of experience and facility (e.g., "I'm not a math person"). These create additional hurdles to the successful understanding of statistical concepts as they move through traditional statistics instruction and do students a great disservice. Very little statistics-focused SoTL has looked at alternative pedagogical strategies to increase statistical literacy and comprehension. Watson (1997) identified three components of basic statistical literacy: the basic understanding of statistical terminology, the understanding of statistical language and concepts embedded in a context of wider social discussion, and the development of a questioning attitude which can apply more sophisticated concepts to contradict claims that are made without a proper statistical foundation. Statistical literacy strategies could be used to overcome most quantitative learning difficulties by teaching statistical concepts

in manners that negate the deleterious effects of psychological and temporal constraints. The process we refer to as “demystification” takes into account Watson’s fundamental components of statistical literacy as part of an overall pedagogical effort to remove the more esoteric and mysterious elements of learning the quantitative language of statistics. We must be the magicians that demystify the shrouded world of statistics to ensure that students gain sufficient understanding of foundational concepts and are no longer mystified by statistics. There are many areas of daily life that can be viewed through a statistical lens. To a large degree, statistical (quantitative) literacy requires equipping students with this very lens in order to see and explore statistical concepts. By using real world applications and taking the power of mystery away from the study of statistics, we replace outmoded pedagogies with a transparent and engaging learning process employing non-sectarian elements of mindfulness and awareness, open discourse, student strengths, cross-disciplinary methods, peer response (Sun, Harris, Walther, & Biaocchi, 2015), creative interpretations of statistical information (Field, 2013), real-world use of statistics (Field, 2013), transformative learning (Mezirow, 2008), innovation pedagogical strategies (Kettunen, Kairisto-Metanen, & Penttillä, 2013) and other appropriate SoTL strategies. We will share examples of these strategies and engage participants in both practical applications of these strategies and encourage thoughtful discussion of them.

Changing the Assessment Landscape through an Ecological Approach **Tansy Jessop**

Glen 208

This paper reflects on principles of sustainable educational change through the lens of an enduring and widely-used research and change approach. ‘Transforming the Experience of Students through Assessment’ (TESTA) has been used to enhance assessment and feedback practices in more than 50 UK higher education institutions and internationally in Australia and India. TESTA questions the impact of modular assessment on deep approaches to learning. Modular assessment and feedback constrains learning within 12 week blocks, with often tenuous links between the learning on one module and another. TESTA’s research broadens the horizon from modular learning to the entire ecology of the whole programme of study, in order to build connections, integrate concepts, challenge students more, and deepen the learning experience (Jessop and Tomas 2016; Jessop, El Hakim and Gibbs 2014). In this paper, I will briefly describe the TESTA research methodology. I will then explore six principles within the TESTA change process which have made it compelling (Jessop 2016). These are that it: addresses a burning question for both academics and students; uses rigorous research; builds on the scholarship of teaching and learning; engages whole teams in a relational and participatory process; provides practical strategies; engages with wider institutional systems. Assessment and feedback is often the locus of student and staff discontentment. Many individually focused change initiatives have failed to make sustainable progress. TESTA’s whole programme approach, which is both scholarly and evidence-informed, has started to make transformative shifts. It builds on strong theoretical foundations in the SoTL literature (eg. Gibbs and Simpson 2004; Harland et al. 2015). Collegiate conversations over data support evidence-informed changes (Jessop 2016). Drawing on Gibbs (2013) I will argue that TESTA goes beyond ‘change tactics’ by demonstrating the characteristics of complex, integrated, systemic change. The focus on ecological change moves beyond changing individual teachers’ practice to changing whole teams, and further, to influencing institutional systems and processes. Finally, TESTA provides a model for educational developers to act as change agents, leading to holistic and large-scale transformation.

Student Peer Feedback and Review: Student Perceptions **Silvia Bartolic**

Glen 208

Student peer feedback and review is a reciprocal process whereby students provide feedback on the work of peers and receive feedback from peers on their own work. Benefits of using peers for giving and/or receiving feedback are many. It is a skill valued by employers (Jacques, 2000), improves learning (Falchikov, 2001; Hamer et al., 2014), develops appreciation for what counts as high-quality work in a discipline (Nicol & MacFarlane-Dick, 2006), increases learning through teaching (Liu & Carless, 2006), is more immediate (Gibbs, 1999), tends to be of greater volume (Gibbs, 1999; Nicol et al., 2013) and may sensitize students to different reader’s perspectives (Nicol et al., 2013). Further, student peer feedback and review may be a useful assessment strategy for instructors who wish to incorporate more learner-centered teaching practices. This presentation will report our ‘adventures and insights’ into student perspectives on the use of peer feedback and review. Example data from three family sociology courses will be discussed. Participants will be asked to reflect on why they would use peer feedback or review and

how to effectively incorporate it into course design. Session Goals: By the end of the session, participants should be able to: list several benefits of using student peer feedback and review, describe potential pitfalls of using peer feedback and review and how to avoid them, and decide on next steps for incorporating student peer feedback and review in their own teaching. Student Perspective Data: Data from three courses in family sociology examine use of individual peer review (summative), group peer review (summative), and group peer feedback (formative). The instructor's intent was to share student projects among peers and foster skill development and peer collaboration. Preliminary Results: Students were surveyed at the end of each course. (Only data relating to the use of individual peer review has been analyzed and briefly described). Fifty-four of 64 students in a third year undergraduate course in relationship development completed a survey. The mean age of the participants was 22 years (SD 3.15). Eighty-seven percent were female. Average peer grades equaled 81.35% while average instructor grades equaled 76.75%. Overall, students valued peer review as a learning activity (Mean = 3.37, SD = .977), believed it improved their ability to critically assess other's work (Mean = 3.70, SD = .911), believed being able to critically assess other's work is a skill needed in their future careers (Mean = 4.21, SD = .906) and believed group work was a skill they needed in their future careers (Mean = 4.38, SD = 7.13). Positive themes included the opportunity to learn new material, gaining additional feedback, insight into quality work and acquiring knowledge for future work. Challenges included comfort providing feedback, adequacy of training and use of peer review as an assessment. Implications: Use of peer feedback and review provides an opportunity to increase student learning and engagement with course content and with teamwork skills. By understanding student perspectives, we can develop best practices in the administration and use of this learning tool.

Taking Risks and Navigating New Routes: Implementing Peer Assessment in a Hyper-Competitive Cohort
Nirma Samarawickrema, Gayani Samarawickrema, Elizabeth Davis

Glen 208

Widening participation and increasing class sizes in the current higher education context have made it necessary to implement innovative and efficient assessment approaches while also equipping graduates with 21st century skills and in particular, the abilities to make evaluative judgements, demonstrate critical thinking, collaboration and self-direction. The current study is a report on navigating this route and the associated risk-taking that was involved in building these capabilities in a large undergraduate cohort and especially to utilise peer assessment to facilitate deep learning, develop evaluative skills and its capabilities in giving and receiving feedback. This study was carried out in a research intensive, large Australian university. A class of 387 students from the final year Bachelor of Biomedical Science course, mentored by 13 tutors in 20 small groups, participated in a summative assessment activity that included peer, self and tutor assessment, feedback and marks. The activity was designed as 'a fundamentally collaborative activity' to develop students' metacognitive and evaluative judgement. Their activity emulated the peer review process that takes place when publishing in journals. In order to automate the administrative logistics and streamline the process, Moodle Workshop module was used to submit the disease topics created by each three-four member group, manage anonymity, randomise distribution, peer assess, return feedback and make marks available. The two-stage study first scoped the student and tutor perspectives on peer review and assessment before commencing the activity and in the second stage explored student and tutor experiences of peer review and assessment through the activity. This second stage adopting a mixed-methods approach confirmed the positive aspects of peer assessment such as the opportunity to learn from others, be critically evaluative, receive feedback on one's work, benchmarking one's work against others and being exposed to others' work. It also revealed the complexity and the negative behaviours encouraged by anonymity. Trust, fairness and confidence were challenged by some highly driven cohort of students who were competing for a limited number of places available for Graduate Entry Medicine (the Bachelor of Medical Science and Doctor of Medicine) course at the university. Our risk-taking delivered us the peaks and the unexpected valleys confirming the collaborative pedagogical potential of peer review and assessment was constrained in a higher education sector that promotes competition.

Adventures in Introducing First-Year Students to SoTL
Theda Thomas

Telus 104

First year students are often worried about coming to university and need to develop a sense of belonging

both academically and socially (Engstrom & Tinto, 2008). It is important for the classroom teacher to help students navigate a new way of learning and facilitate their transition to university and the study of the discipline (Engstrom & Tinto, 2008; Gail & Parker, 2014; Hughes & Smail, 2015). Many of us who teach at first year read the SoTL literature and implement the ideas we find there, but do we explain to students why we are doing these things or show them the research about how to learn at university and in the first year? What do we wish that our students knew about the Scholarship of Teaching and Learning (SoTL) literature that would help them learn? This paper describes an attempt to engage students with SoTL literature and research in a first-year core Communications subject in the Secondary Teaching course at a university in Australia. The subject is called Interpreting and Communicating Ideas and it combines learning how to read, interpret and communicate numbers and statistics with reading, interpreting and communicating text. Students learn how to use Excel to analyse quantitative data and present the analysis using graphs and tables. Students also learn how to undertake a literature study, evaluate different types of sources, find good quality evidence and reference. The three assessment tasks are online quizzes; an in-class test where they must read and interpret numerical data, graphs and text from newspapers and academic journals; and an academic research project and poster presentation. SoTL is included in two ways, Firstly, I included SoTL literature to teach students how to read and analyse articles. Secondly, the research project and poster presentation are designed to include SoTL and demonstrate their learning. Action research methods were used and two cycles have been completed. Student feedback was analysed to identify what worked and what did not. The adventure of introducing first-year students to SoTL had mixed results in the first iteration of the subject. An analysis of student feedback was undertaken and we revised the way we designed the assignment for the second iteration which showed a definite improvement but the adventure continues.

The Impacts of SoTL on the First-Year Experience: Successes and Disappointments **Shevell Thibou, Hoku Rivera**

Telus 104

Gale (2016) shares the purpose of education is agency; providing students with the resources and assistance needed to manage their own learning and “realize their place and potential in an ever-changing and never-finished environment, society, planet, space, and time” (pp. 20-21). For the past few years, the seminar portion of Western Washington University’s (WWU) First-Year Interest Groups (FIGs) have participated in the Teaching-Learning Academy (TLA) as a way to inspire agency, develop inquiry, and facilitate collaboration. The TLA is a central forum at WWU grounded in the scholarship of teaching and learning (SoTL). Each quarter, 50-100 students, faculty, staff, and community members participate in the program as co-inquirers. During the 2016-2017 academic year, a student-staff research group conducted a study to determine the impact of student engagement in SoTL at WWU. The researchers and authors of this paper posed the following question at the start of their study: To what extent does participation in the Teaching-Learning Academy influence the first-year experience? Recent studies have shown that a student is more likely to drop out of college during their first year based on their experience; this is also a critical year to their overall success during their academic career. One approach that post-secondary education administration uses to address first-year retention rates are learning communities, which have been prominent since the 1960s. Learning communities provide collaborative environments focused on introducing students to support related resources and services, as well as peer-to-peer dialogue on specific academic goals (Kellogg, 1999). The TLA and FIGs serve as learning communities for WWU first-year students. Using a convenience sampling, a focus group was conducted and included students who participated in the TLA as part of their FIG requirement. The focus group session was recorded, transcribed, and the data was analyzed by the student-staff research team. Five quarters of self-reflections submitted by first-year students who participated in the TLA were also reviewed by researchers. Richards and Morse (2007) recognize this technique as purposeful sampling; the goal was to gather data from participants with specific characteristics based on their time and willingness to reflect on the phenomena related to this study. Several themes were discovered, some successes and some disappointments. One high point within students’ participation in the TLA was the benefit of a reduced hierarchy. As one student stated in their reflection, “what I’ve gained most from the TLA and the co-inquiry model is that the flattened hierarchy allows you to see every individual for their opinions and who they are more than just their title.” To conclude, this paper will share the overall findings of this study and touch on another high in SoTL, which was the experience of the student-staff research team. Gale (2016) states that, “the real opportunities for scholarship centered on student/teacher collaboration lie not in students as the subject of research, but as full participants in the research

enterprise” (p. 21). The students engaged in this research study equally led and contributed to the overall process, which they will share within this paper presentation.

Making Connections: Future-proofing the Australian Bachelor of Arts program **Deanne Gannaway**

Telus 106

An innovative economy requires workers who can demonstrate logical thinking and argument, emotional intelligence and capacity to adapt to new ideas (Davies, Fidler, & Gorbis, 2011; Kinner, 2015): outcomes intrinsic to disciplines in the liberal arts (Blaich, Bost, Chan, & Lynch, 2005). However, the liberal arts disciplines have tended to operate in isolation, competing for status and resources (Kenway, Bullen, & Robb, 2004; Hay, 2016). This status quo makes it difficult to articulate a value proposition for liberal arts education that speaks to prospective students and their parents, government agencies and future employers. In Australia, the 3-year Bachelor of Arts (BA) program is the primary means by which undergraduate students engage with the liberal arts. The BA is also perceived to be under duress, with declining student enrolments and increasing questions of its place in contemporary society (Thornton, 2010; Turner & Brass, 2014); making these conditions the perfect catalyst for changes to curricula in the liberal arts. In 2016/17, a yearlong program of activities was designed to re-imagine the place of liberal arts disciplines in the contemporary higher education context. This program was designed foster a community of academic teachers, senior leaders, students and alumni; all of whom had engagement with the BA in common. Activities included a series of state-based colloquia considering program-level student outcomes, institutional meetings with BA teaching teams and a BA conference, which provided an opportunity to share program-level practices and experiences and to explore potential to push boundaries. The program adopted a realist evaluation methodology (Pawson & Tilley, 1997) to determine actual outcomes. This paper draws on observational data, participant feedback and self-reported reflections to trace the changes to BA programs, participants’ perceptions and practices that eventuated. These activities provided an opportunity to look at the BA curriculum on a “whole-of-program” basis, rather than the traditional focus on disciplines and design at a unit of study level. The activities drew on design-based thinking to re-conceptualise curriculum design processes as a human-centered activity. The outcomes provide an opportunity to describe BA curricula as a curriculum model that pays attention to the development of disciplinary knowledge, life and work skills, innovative and creative mindsets and experiences to encourage individuation-an “R” shaped curriculum. The presentation addresses the theme: New horizons, emerging landscapes, and underexplored territories in SoTL as it explores the emerging landscape in SoTL practice that focuses on whole-of-program curriculum design and the future of liberal arts education in contemporary society.

“I’m Just an Arts Student:” Raising Awareness of Undergraduate Research and Creative Activities **Connie Varnhagen, Crystal Snyder, Joan Schiebelbein**

Telus 106

Undergraduate research as “an inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline (http://www.cur.org/about_cur/)” is widely accepted. However, many educators and researchers are broadening this definition to include a wide range of formal and informal experiences (e.g., Beckman & Hensel, 2004; Healey, 2005; Healey, Jenkins, & Lea, 2014). Raising awareness of the types and importance of undergraduate research and creative activities represents an emerging landscape in SoTL and we are fully engaged in mapping SoTL through our awareness research. At our institution, we have adopted a model of undergraduate research and creative activities based on Healey and Jenkins (2005) that considers a spectrum of activities and learning outcomes in all disciplines. Our model considers undergraduate research and creative activities as extending from being introduced to the latest work through learning methods of the discipline through inquiry-based experiences to mentored opportunities. We will elaborate our model in our presentation and engage participants in discussion about the model. Although we have widely publicized the model on campus, we were interested in undergraduate and faculty perceptions of what constitutes undergraduate research and creative activities and how our programming might affect perceptions over time. We have developed an online survey for undergraduate students and faculty on their perceptions of undergraduate research and creative activities. The survey includes a section where participants are asked to indicate on a 5-point Likert scale how strongly they agree that different statements, such as “attending an artistic event (e.g., concert, art exhibition),” “using the library to find resources for a paper or project,” or “completing an independent studies, honors, or

research course” represent examples of undergraduate research and creative activities. We have distributed the survey to random samples of undergraduate students and faculty for three consecutive years with a sample size of over 1800. We have analyzed responses as a function of participant (student versus faculty), Faculty (Arts, Science, Nursing, Education, etc.), year (2014, 2016, 2016 data collection waves), and type of activity (research versus creative activities). Least squares analysis of variance identifies interesting differences as a function of participant (e.g. students have a broader understanding than do faculty), Faculty (e.g., STEM Faculties have a narrower understanding), and type of activity (e.g., attending a research presentation versus an artistic event), and well as interactions (e.g. as we raise greater awareness, students and faculty are more likely to agree that mentored research is not the only example of undergraduate research and creative activities). These findings will be presented and discussed with the session participants. We are using this research to help develop programming to raise further awareness of undergraduate research and creative activities and to promote the importance of providing formal and informal opportunities for undergraduate students to engage in a range of activities related to undergraduate research and creative activities.

Informal Learning in the Library: A Student-Based Investigation **Susan Beatty**

Telus 106

As part of a qualitative study on students' perception and use of informal learning spaces in an academic library, students were asked to comment on their learning behaviours and the manner by which the spaces in the library supported their learning. It became apparent during the course of the semi-structured interviews that the students themselves had never given any particular thought to the relationship between the spaces where they learn and the way that they learn, yet when asked they were very aware of their learning and space preferences in the library. Students in the study reported being well able to determine their learning goals and complete them to their satisfaction. They self-reported as successful learners. They knew when they were and were not learning. They also recognized where they could or could not learn. One of the more interesting conclusions from the study is that students seek a learning space which offers them mental, social and emotional comfort that enables them to be open to learning. This self-awareness goes beyond "I know it when I see it" to "I know it when I feel it". And it is not until they find that space which allows them to create and maintain their own self-regulated environment (Zimmerman, 1989), that they are then ready to learn and achieve their goals. Investigating how, where and why students learn beyond the classroom holds potential for developing a better understanding of the approaches that students have to learning, including their relationship to learning spaces. This paper presents a summary of the research study, including methodology and overall results. It explores the nature of informal learning in library spaces from the point of view of the students and offers some insight into the way students approach learning. As students in post-secondary institutions are encouraged to undertake more and more learning activities beyond the classroom, through active, collaborative and/or individual learning, teaching and learning researchers need to further investigate students' learning processes not only in the classroom but in informal learning spaces. Painter et al (2013) note that the biggest challenge for learning space design researchers involves the fundamental question, "what is learning and how is it evaluated?" (p. 29). This paper looks at a study on informal learning and its concomitant processes and offers possible investigative routes towards improved understanding of learning and evaluation by looking at the relationship between learning behaviours, outcomes and spaces.

Ethical Considerations: The Link with Human Research Ethics **Cheryl Pollard**

Glen 202

The Scholarship of Teaching and Learning (SoTL) presents a unique opportunity for faculty to develop a connection between disciplinary concepts and methods to examine teaching and learning. Through systematic inquiry faculty can identify unique opportunities for reflective practice; however, SoTL research ethics is a contested area that needs further cultivation. The goal of this session is to encourage participants to engage in a reflective dialogue about research ethics as it relates to the systematic study of the relationship between teaching and student learning. At the end of this presentation you will be able to describe how the ethical principles of respect for persons, concern for welfare, and justice are relevant to SoTL research; identify potential risk mitigation strategies for ethical risks inherent in SoTL research project; and compare and contrast ethical principles in SoTL research projects versus disciplinary research projects. Teaching faculty have long reflected on their teaching-what went well and

what can be improved. These faculty also ask themselves-have the students learned what they needed to to be successful as they advance in their program; and even perhaps life in general. The scholarship of teaching and learning (SoTL) involves studying teaching and learning in some capacity. SoTL research questions are often transdisciplinary. As a result, faculty draw upon their own disciplinary knowledge of research strategies and approaches to explore teaching effectiveness and learning or knowledge exchange and transfer. Not surprisingly, as faculty begin to examine the effectiveness of their efforts through a lens of systematic inquiry rather than from a quality improvement perspective, ethical issues arise that may be new to many. SoTL researchers grapple with many ethical questions. For example, who owns what goes on in the classroom? What permissions are needed? Who benefits and who is at risk when the dynamics of the classroom are documented and publically reported? If I want to share student work, when and under what conditions do I need to seek permission? How do I balance my dual role of instructor/researcher? Is a control group appropriate? If the results are not what are expected does this undermine public confidence in your program or institution? Answering these questions is not about what is right and wrong; it is about determining what is most fitting-finding a balance between benefits and risks.

Making Thinking Visible through Decoding: Mapping the Process
Janice Miller-Young, Michelle Yeo, Jennifer Boman

Glen 203

Experts in a discipline are not only good at what they do, but often seem to do it naturally, without conscious effort. Their knowledge can be held in tacit ways which have become so automatic that they no longer question them and may not even be aware of assumptions or steps they take. This can make it difficult for the expert to articulate and/or slow down the process in order to teach students at a novice level. A strategy for making tacit knowledge visible to its owner is a “Decoding” interview as pioneered by Pace and Middendorf (2004). Decoding begins with an instructor identifying a “bottleneck”, or a concept their students find difficult to master. Then two trained interviewers from outside the discipline interrogate the expert about their own thinking about the concept in order to help them articulate it in as much detail as possible. In a series of studies at our university, we found that participating in a Decoding interview can be a powerful tool to help teachers become more conscious of, and thus able to critically reflect on, an aspect of their knowledge and teaching practice, whether or not they engage in a formal, follow-up SoTL project (authors). While the Decoding model has underlying cognitive assumptions, we have also used it to ‘decode’ epistemological and ontological bottlenecks. For example, we classify a persistent “belief in the necessity of objectivity in journalism” as epistemological because it relates to the nature of knowledge construction in the profession. We considered the example of nursing students “understanding how to apply the nursing code of ethics in their practice” to be ontological because it is about a way of being. In attempting to ‘decode’ more diverse bottlenecks, new lines of questioning have been explored, such as questions about sensory perceptions of phenomena (Currie, in press), and hermeneutic strategies for interpreting texts (authors). Questions that continually come up when we present this work, are ‘what does the interview look like?’ and ‘how do you learn how to interview?’ To overcome this barrier, we will present a concept map of interview questions, suggesting effective interview questions for different types of interviewee responses, which is derived from an analysis of eight Decoding interviews we have conducted on cognitive, epistemological, and ontological bottlenecks from diverse disciplines. Workshop participants will be guided through a Decoding ‘adventure’ with opportunities to practice and reflect on the interview as an interviewer or interviewee, and a facilitated discussion of their experience with the group. We will conclude by engaging the audience in imagining how decoding might be used in their own landscapes, to reach new heights in professional teaching development and the scholarship of teaching and learning.

Teaching Stream Positions: Mapping and Advocating for SoTL in Diverse Landscapes
Diana Gregory, Arshad Ahmad, Mary Huber, Trent Maurer, Nicola Simmons

Glen 209

This panel will explore the diverse landscapes of teaching stream positions from various institutional perspectives while examining the role of SoTL in how various teaching positions are defined, supported, and evaluated. At many higher education institutions around the world, there is a deep-seated tension between teaching and research in terms of the relative value, profile, and perception of each activity. Just over a decade ago, one Canadian university pioneered the creation of two career systems that recognized the different abilities of, and demands on, professors whose primary emphasis is on teaching and colleagues devoted primarily to research. The

two streams, the teaching stream (TS) and the tenure stream (TNS), once considered a bold endeavor have been emulated across the country, with varied results. The teaching stream played a crucial role in advancing pedagogy and the scholarship of teaching and learning. Primarily, the TS opened a pathway to teaching-focused professors, early-career academics, students looking for learning experiences, and for the university to continuously improve its learning mission. However, the specific conceptualization of this teaching stream pathway raised several questions: Does the TS suggest or imply that SoTL is only to be done or valued by TS faculty or that tenure track faculty can't or won't have SoTL work recognized? This is a crucial issue for the legitimacy for SoTL. Huber (2001) argued that "clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique" provide a starting point for "fruitful discussions on how to make visible and evaluate the scholarly dimensions of academic activity of many kinds" (p. 29). Another question that emerges from the TS is the role of tenure in academic freedom. Some conceptualizations of a TS system, like the one described above, explicitly prevent TS faculty from eligibility for tenure, although in some higher education institutions this is not an issue. One of the chief arguments for tenure is academic freedom to engage in controversial or politically unpopular work without threat of political interference in one's work. Although many think of academic freedom with respect to disciplinary scholarship, academic freedom also includes the freedom to teach controversial material or engage in controversial pedagogy. Without the protections of tenure, how much academic freedom in the classroom do TS faculty really have? This is directly related to SoTL because some new teaching approaches are "high risk" and could result in student resistance or lower student evaluations of teaching. Do teaching stream or other non-tenured positions in higher education provide a pathway where faculty are free to pursue the most impactful or transformative SoTL research? There is also increased reliance on contract faculty or part-time faculty who may be free to engage in SoTL work, yet are not supported and lack opportunities to apply to funding councils that require an "ongoing relationship with the institution." Another concern for contract faculty who teach at multiple institutions are the various IRB requirements that can hinder their SoTL projects. While the opportunity to teach similar courses at institutions with very different demographics is well suited to SoTL, without options for institutional/funding support to pursue or present these projects at conferences, this potentially rich area of research goes untapped. Another question emerges concerning how institutions recognize SoTL for all faculty in every level if the institution moves towards rewarding all forms of scholarship in all pathways. This is particularly relevant at regional, comprehensive universities in the USA, many of which are experiencing "mission creep" and a greater focus on research productivity. Could SoTL support and boost Associate Professors to Full if they are "stuck" at their level and no longer interested (or productive) in their original disciplinary scholarship? What tools or support could be offered to faculty to navigate the SoTL landscape? The challenges of designing, producing, and evaluating SoTL projects can be daunting. Yet, with the help of a compass, map, and some tools to get started (O'Brien, 2008), faculty can master the perspectives, processes, and practices in their disciplinary homes. Finally, what role then can advocacy and outreach play in supporting SoTL efforts?

After a presentation from the panel introducing and addressing the issues above (max 30 minutes), during the discussion part of the panel (max 30 minutes) the following questions, and those raised in the presentation, will be shared for discussion: 1. How can SoTL projects be supported in the diverse landscapes of teaching positions from higher education institutional perspectives? 2. If faculty need support to define, map, and chronicle SoTL activity, what type of support could the Advocacy and Outreach Committee provide to faculty teaching at multiple higher education institutions? 3. When current struggles are identified, what tools could the Advocacy and Outreach Committee leverage to share what has been learned in ways that will support faculty? 4. While defining what is ahead for SoTL or what possible barriers exist how can the Advocacy and Outreach Committee communicate specifically to the organization and generally to the public? 5. Are the current methods developed by Advocacy and Outreach (blog posts, case studies) providing the type of support needed for SoTL activities? 6. In what ways can we leverage our collective knowledge to provide a basis for reaching new SoTL heights? Participants will be invited to share relevant case examples as a blog on the ISSOTL website or as a part of a collection of resources for the ISSOTL Advocacy and Outreach portion of the website. Depending upon the discussion, times for follow-up conversations at the conference might be planned.

**THURSDAY, OCTOBER 12, 6:00-7:30
POSTER SESSION (EXHIBITION HALL D)**

**SoTL, Social Justice and Transformative Practice
Regina Rahimi, Delores Liston**

The Scholarship of Teaching and Learning (SoTL) represents a movement in higher education to revolutionize scholarship in relationship to teaching. Seemingly simple, the idea behind SoTL is that teaching is a scholarly activity (Boyer, 1990; Menges & Weimer, 1996). Therefore, scholarship should support teaching, and teaching should support scholarship. The Scholarship of Teaching and Learning has great potential as a vehicle to elevate the work of teaching, improve classroom engagement practices, and enable us to learn more about pedagogy, classroom management, but most importantly our students. This opportunity to explore our personal interactions with our students, the sociology behind teaching, and the diverse perspectives explored through a teaching and learning relationship is perhaps the most powerful promise of SoTL. SoTL reminds us, we are simultaneously learners, teachers and researchers. SoTL's presence brings this fact to the forefront, and insists that we remain aware that embodying this triad constitutes the heart scholarship. Further, recognizing the diverse positionality that each brings to the teaching-researching-learning praxis is at the heart of the potential for a transformative experience and efforts toward social justice. Examination of social justice and opportunity for equity in the work of SoTL is the focus of this paper, which evolves from our forthcoming book, *Promoting Social Justice Through the Scholarship of Teaching and Learning*. This paper connects to the conference theme of New horizons, emerging landscapes and under explored territories in SoTL by addressing the theme of social justice which has thus far been under-represented in SoTL literature. Our presentation presents a thorough examination of social justice through the results of two reviews of SoTL literature and will examine practices that illuminate the relationship between SoTL and transformative classroom experiences. SoTL directs a change in the conceptualization of teaching, learning and scholarship to better match an integrated understanding of scholarship in a community of learners. Critical pedagogy concepts such as intersectionality, cultural sensitivity and cultural responsiveness are implicit in learning to work together in establishing and maintaining the commons. Therefore, we maintain that coupling SoTL with critical pedagogy and transformative education are compatible to forwarding a social justice agenda. The emphasis on community serves as a theoretical foundation for issues of social justice and transformative learning. Braiding together the value base and essential characteristics of SoTL, critical pedagogy and transformational or transgressive (hooks, 1994) education provides a path to more in-depth transformation of teaching and learning. This paper and presentation constitutes our call to action to all scholars, for future SoTL work in all disciplines to grow the commons as locations where students not only learn the language of their fields, but also come to view themselves as scholars committed to enhancing knowledge and understanding within and across disciplines in order to fulfill the promise of creating more socially just societies and communities.

**Colonial Mentality and Pedagogical Implications: A Case of Overseas Chinese Students
Vicki Jingjing Zhang**

With the internationalization of Higher Education in North America, universities, especially quantitative departments, have seen record number of international students in their classrooms. Among many factors, international students prefer quantitative majors partially because they perceived them as requiring a lower level of proficiency in the English language and the local culture. Worried about students' language barrier and overall education quality, universities and quantitative departments are increasingly promoting the incorporation of language learning and evaluation "often marketed as communication skills training - into regular courses. Although I applaud and appreciate the merit of such initiatives, I nevertheless argue that this pedagogical approach can be a double-edged sword. On one hand, such courses may indeed help improve students' communication skills and thus their overall learning experiences. On the other hand, a pedagogy focused on students' language proficiency, especially carried out as a part of regular courses typically implemented by instructors who were not trained to be aware of students' historical background, may thrust into the limelight international students poor language and social skills and unfamiliarity of local culture. This should be a cause of concern because discrimination on the basis of language and culture is a reality on campus. Importantly, students from formerly colonized countries frequently suffer from colonial mentality, which may be exacerbated by the design and/or implementation of such pedagogy. In this study, I focus on the largest subgroup in the international student body students from mainland China. I

review the existing literature on colonial mentality and its negative psychological impact, as well as social identity theory and acculturation models. Through fieldwork in China as well as open-ended survey questions conducted in a major Canadian university in a metropolitan center, I show that many overseas Chinese students demonstrate some degree of both covert and overt colonial mentality, which leads to their existing perception that anything “white”, or American, including language and culture, is superior to anything Chinese. As a result, there is an existing desire to emulate the more “superior” culture. Being exposed as insufficient in the English language and culture in front of other student groups is therefore a significant source of shame, which may lead to low self-esteem, within-group discrimination, and other mental health issues. The study also confirms that language skills and accent is a major basis of discrimination faced by overseas Chinese students, and a leading cause for self-segregation. I argue that courses and programs designed to close the language and cultural gap of students from formerly colonized societies need to take into account the psychological impact of colonialism “both the colonial past and the ways colonization continues to affect members of those societies today. I also argue that there is an urgency in conducting further SoTL studies that incorporate researches and practices from colonial and postcolonial studies and ethnic minority psychology. Such interdisciplinary researches will guide the practical training of instructors on how to lead inclusive classrooms as well as design courses and programs with large proportion of students from formerly colonized countries.

Avoiding Learning Through Plagiarism: Structuring Incentives for Academic Integrity in Coding-Focused Classes

Amanda Sturgill, David Sturgill

Plagiarism is an issue in multiple academic fields, and the ability to easily copy code makes it a particular issue in classes when students write code. Students have developed different methods to disguise copying (Daly & Horgan, 2005). In computer science, faculty have created technical solutions for automated detection (Bradley, 2016). However, continued infusion of technology has meant that coding is now taught in a variety of contexts such as digital humanities (Hockey, 2004) and communications (Royal, 2005). For students in these fields, who may be in them because of a dislike of technical fields, the enticement to plagiarize may be high. For faculty in these fields, a lack of personal comfort with technology may mean a challenge in identifying and assessing copying when it occurs. This is complicated by changing ideas of what code is, as markup like HTML and scripting like JavaScript and by the existence of code repositories. This poster presentation applies some of the lessons learned in teaching computer science to create a taxonomy of the major types of plagiarism detection that are available, as well as general strategies students might use to disguise re-use of code. The suitability of plagiarism detection for markup, scripting and other coding instruction in non-technical fields is also discussed.

Climbing the Heights from How Could I Ask a Teaching Question to Producing Interesting and Useful Answers

Jennifer Mather

Surprisingly, although we have much guidance on university teaching (eg see the Green Guides), little research or advice comes from teachers themselves. A quick search encountered only two papers by university teachers about our craft with advice about how to do it, Parpala & Lindblom-Ylänne (2007) and Dall’Alba (2005). The search also turned up a plea: “what is missing” are the voices of the teachers themselves (Cochran-Smith & Lytle, 1990), even though it was about school not university teachers. Why, if we are also researchers, do we not do more teaching research? And how do we become more comfortable doing so? Fundamentally, we don’t think of doing research on our teaching, and a workshop will help us put together a guide for the novice teaching researcher. Of course the first question is: What’s a good question to ask, the second one is How do I structure questions to get a useful answer, the third What materials, situation, subjects can I use to get these answers, and likely the fourth is What ethics review and permission do I need before I proceed? For a teacher in an area like Psychology these are reasonable questions to tackle, but for someone from, say, Fine Arts or Chemistry these questions come from a completely new direction. I attended a lunchtime Workshop at STLHE a few years ago, and discussed how to tackle these questions with people who didn’t have the easy basis of understanding human psychology research. Last year, I attended a session at STLHE where a group of fledgling teaching researchers presented how they had become a teaching group, met and discussed possibilities, and gradually worked through these question to each come up with a relevant inquiry about his/her own teaching. I thought this was a good

procedure, and we have started up a Teaching Group at my institution. However, we and similar groups would be well served by an outline and guide to procedures that would facilitate moving through these steps. Such a workshop at ISOTTL would have a practical goal, of creating such a guide, as well as the learning goal of figuring out what we needed to produce and finding references and sites that would help the novice teaching researcher. Workshop attendees would be a fully involved and contributing group, and we would address the conference thread of Aspirations and anxieties for SoTL. Some of my background consists of simply being in Psychology, with a knowledge of what kinds of questions we might ask. In addition, I have done teaching research projects over my 30 years here, leading to presentation of some ideas at teaching conferences and carrying a few to publication in the scholarly literature. But I have also often asked questions that might or might not be publishable, and that have sat at the boundary between “I just want to know” and “this is worth disseminating”. It is also worthwhile investigating this boundary.

Applying SoTL Beyond the Individual Classroom: A Framework and Diverse Examples **Jennifer Friberg, Kathleen McKinney**

The purpose of this poster presentation is to describe a framework and provide diverse concrete examples of the application of SoTL research/results/implications beyond the individual classroom level. Our framework for application of SoTL work builds on early discussions of this topic (e.g., McKinney 2003, 2007, 2012) which focus on three questions to design, categorize, or use applications at and beyond the individual classroom: 1. What is the source of the SoTL that is applied (original SoTL or extant SoTL literature)? 2. At what level(s) in the institution and discipline are the research/results/implications applied? 3. What existing or newly created mechanisms or processes in the institution or discipline are used (or could be used) to apply the SoTL results to new areas or contexts, and beyond the individual classroom? In this poster, we elaborate on the possible answers to these three questions, and offer diverse, specific real-world examples of the application of SoTL beyond the individual classroom level from different disciplines and nations based on an edited volume in progress (Authors, 2018). Our focus on SoTL applications beyond the individual classroom should not be interpreted as a critique of, or effort to decrease, SoTL at the individual classroom level. Classroom-based SoTL was the original nature of SoTL and remains the heart of SoTL in our view. Here, we take the “big ten” view of SoTL (Huber and Hutchings 2005, 4). We believe that conducting and using SoTL that moves beyond the individual classroom level is important for greater impact of this work on teaching, learning, and institutional/disciplinary cultures. Such research and applications are most often collaborative involving teams and networks of SoTL scholars. SoTL beyond one classroom may include interdisciplinary, interinstitutional, and/or international research and applications. It may be more likely to use multiple-methods and varied theoretical frameworks. We also believe SoTL research and applications at a broader or more macro level, then, add to the field in terms of providing more information about the role of context and generalizability in our work. Finally, SoTL at these other levels is often connected to department or institutional missions or goals increasing its legitimacy and further use. We hope session participants will be challenged to consider and discuss with others this framework and where the example projects and applications in this poster fit in their understanding of the field of SoTL as well as in the use of SoTL research and results in their disciplines and on their campuses.

Work-Integrated Learning & The Re-Mapping the Spaces and Places of Learning? **Niall Majury, Jacqueline Waite**

It is increasingly commonplace for HE students to have opportunities for real world, practical experiences during the course of their program. These opportunities were once most closely associated with disciplines such as the health sciences, engineering and teaching, where professional accrediting bodies required and defined particular types of work integrated learning (WIL) (e.g. clinical placements and practicums). However, for other disciplines, such as literature, politics, history and geography, WIL is increasingly being embedded within curricula to increase students’ employment prospects upon graduation. In these types of disciplines WIL comes packaged in a variety of forms, and experiences vary across disciplines, HE institutions and level of study. However, they share in common the intentional integration of theory and practice knowledge (Orrell 2011). This paper examines the ways in which WIL has become institutionalised within geography. Drawing upon a review of scholarship on WIL in geography, it examines how it has been understood within the discipline. It uncovers a diverse set of pedagogic practices that have, over time, become framed within the discipline as WIL and codified within benchmarking documents. The

paper reflects on the institutional settings within which these pedagogic practices have emerged and the role of SoTL in their diffusion and adaptation across different institutional contexts. It is argued that WIL, as a re-mapping of the spaces and places of learning within HE, constitutes within geography the re-affirmation of a form of praxis best described as “engaged scholarship”, through which a range of general and discipline specific professional competencies are supported. This builds, it is argued, upon longer standing radical critiques within the discipline on what “geography” ought to be, bringing “knowledge, emotion and action together” (Monk 2001). Geography, however, is indebted to SoTL for bringing together, re-shaping and articulating how this diverse set of pedagogic practices support the development of a particular type of professional ethos and acumen among its graduates.

The Benefits of “Losing” Control: Adventures in Student Centered Learning **Graham Scott, Lesley Morrell**

As tutors it is common for us to decide what our students will learn, when and how they will learn it, and what will be assessed. In effect we are in control and our students receive their education from us. For some (both tutors and students) this is a very comfortable situation and any shift in this relationship can be a frightening prospect. In this presentation we reflect upon the benefits of our “losing control”. In the Biological Sciences at Hull University we have developed a number of assessment tasks that shift the locus of control from the tutor to the student (e.g. Author, 2015). For example, in one module students decide what they will learn and provide evidence of their learning in the form of a co-authored book. The book is formatively peer and tutor assessed to generate feedback that the students use to inform revisions for summative tutor assessment. In another module students write a number of short pieces but only receive tutor feedback on a sample of them. By using the feedback they do receive and the feedback provided to their peers these students decide which pieces of their work should be submitted for summative assessment. Learning tasks such as these provide students with opportunities to have ownership of elements of their learning and to engage in an active way with feedback. Our evaluations of these tasks demonstrate that they enable students to improve their grades, improve their ability to self-assess and provide a boost to their confidence, but that doesn’t mean they all like them!

Undergraduate Research: Not Just a Summer Job **Connie Varnhagen, Crystal Snyder, Alexis Lockwood, Yuan Shi, Joan Schiebelbein**

Much research has identified the importance of undergraduate research for developing research, communication, and time management skills (e.g., Crowe & Brakke, 2008; Kuh, 2008; Schmitz & Havholm, 2015; Singer & Zimmerman, 2012). However, little work has been done to compare the influence of different types of undergraduate research projects on student development. Our centralized unit administers a range of opportunities, including two paid mentored undergraduate research opportunities. One, the Undergraduate Research Stipend (URS), provides funding for undergraduate students to engage in interdisciplinary research for a period of 4 to 12 months. This is a very flexible program designed for students in any year of study, in any academic program and has a low minimum g.p.a. The other opportunity is the Alberta Innovates Health Solutions (AIHS) summer studentship. This program is designed to support high achieving students engage in an 8 to 16 week summer mentored research project in the health sciences. As part of a larger longitudinal study, we have developed an online survey that we are administering to students as they begin their projects, after they complete their projects, and again after three years. In addition to other sections relevant to our larger program evaluation, we have included a modification of the Teaching Goals Inventory (Angelo & Cross, 1993; Craney et al., 2011; Schmitz & Havholm, 2015) in our surveys. This consists of items grouped according to categories of higher order thinking skills (“I have developed analytic thinking”), discipline-specific and interdisciplinary skills (“I understand the value of interdisciplinary research”), work and career preparation (“I have developed time management”), and personal development (“I have developed confidence”). To date, we have administered the first (at the beginning of the project) and second (after completing the project) surveys to two cohorts of URS and one cohort of AIHS students. We are using Mann-Whitney U and t-tests to examine differences between the two funding programs and least squares analyses of variance to examine changes across time between the two groups. At the beginning of their projects, undergraduate students were uniform in their goals to develop disciplinary research skills that would help them meet post graduate or career goals. After their projects, students felt they had achieved their disciplinary and interdisciplinary research goals and had developed better higher order thinking skills. At the beginning of their projects, AIHS students were more likely

to respond wanting to learn to read the scientific literature and to meet professionals in their field of research than were URS students. Interestingly, in response to the survey completed at the conclusion of their project, URS students were more likely to respond that they had clarified their post-graduation goals than were AIHS students. Although the numbers are small (so far only 50 URS and 54 AIHS) and the findings are preliminary, we are reaching new heights and developing new insights into understanding the importance of undergraduate research to students working in diverse disciplines and on diverse projects. The landscape may be different but the adventure is the same.

Evaluating the Effectiveness of Visual Narrative Illustrations (VNIs) Used to Teaching Undergraduate Nursing Students Pathophysiology **Mohamed El Hussein**

To evaluate the effectiveness of a “Visual Narrative Illustrations” (VNI) on students’ performance in a pathophysiology course. Background Delivery of competent and safe nursing care require detailed knowledge of diseases and associated pathophysiology. While knowledge of diseases is critical requirements, students struggle with learning and applying pathophysiology concepts to clinical practice. Method Students (n=75), participated in two phases of this pilot exploratory study that evaluated the effectiveness of VNIs on students’ knowledge of pathophysiology concepts; and assessed the use of VNIs as an effective teaching method. Results Students taught using the VNI strategy did perform significantly better on the posttest than students taught using a traditional lecture. Students commented that the VNI assisted them in learning complex concepts through the use of humor and visual images that created understanding of pathophysiology processes. The implementation of VNIs can enable nursing students to improve knowledge and understanding of pathophysiology concepts.

The Story is the Plan: Storytelling and Game-Based Learning to Support Inclusive Practices in Teacher Education Coursework **Victoria Russell**

Much of games appeal rests on a compelling story. The narrative players immerse themselves in offers a context for action and guides thinking about others. Game-based learning has been promoted in K-12 classrooms as a means to heighten engagement and promote problem-solving skills. Little research, however, has explored whether this is the case in higher education classrooms, particularly in teacher education. Furthermore, what narratives must teacher educators create when using game-based learning (GBL) frameworks in order to promote inclusive practices, especially when working with students with disabilities? Research emphasizes the urgency in preparing general education pre-service teachers for inclusive practices (Forlin & Chambers, 2011; Gable, Tonelson, Sheth, Wilson, & Park, 2012; Hamman, Lechtenberger, Griffin-Shirley, & Zhou, 2013). Numerous strategies and approaches have been considered, including practicum placements (Sokal, Woloshyn, & Funk-Unrau, 2013), problem-based conversations (Miller, 2008), and embedded course design (Lancaster & Bain, 2010; Zundans-Fraser & Lancaster, 2012). To date, the research-to-practice gap remains an acknowledged challenge in teacher education. Miller (2008) notes that an ongoing challenge for the field is to design experiences that better enable pre-service teachers to connect the learning from their formative course experiences to the “stuff of teaching” the lessons, student work artifacts, and associated problems that emerge during initial teaching opportunities (p. 95). Game-based learning offers one option for providing learning environments supporting inclusive practice. Salen and Zimmerman (2004) define a game as a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome (p. 81). The value of games in an educational setting focuses on the purposeful design towards meaningful play. Serious games have a “curricular focus” (p. 19) and are designed for use in a specific context or environment, such as a classroom (National Research Council, 2011). Good game design and, by consequence, meaningful play offer players a context to explore a challenge, invent solutions, fail, revise, and receive feedback towards a clear goal in a social environment. GBL research is extensive but incoherent, spanning everything from theory to the use of videogames in K-12 classrooms (Cicchino, 2015). Limited research addresses how GBL may support critical thinking, a crucial skill in inclusive practice (Cicchino, 2015). This poster session offers a glimpse into a current study of the intersection between developing inclusive practice in pre-service teachers and opportunities available through storytelling in a GBL course design. Focus centers on examination of student voice and storytelling, as pre-service teachers are game players and designers through a variety of choice-oriented, performance-based assessments that advance the course “story” over the course of a semester. Storytelling

as a GBL element shows initial promise in crafting more complex understandings of individual differences in a K-12 teaching environment, but also reveals an instructor's own biases and "blind spots" when crafting course narrative supporting inclusive practice. The poster audience will be encouraged to engage in dialogue on how storytelling in course design offers enhanced opportunities for reflective practice among instructors and the promotion of critical thinking in university students.

Students' Voices as Partners for Change **Rob Wass**

In order to facilitate student learning, students should have the opportunity to influence how teachers structure, organise, and deliver their classes. Unfortunately, many investigations involve research on, rather than research with students. When claiming to represent "student voices", it is important to have students as active participants and genuine contributors to the findings of the study, and to create a range of ways for students to "speak". This ISSOTL poster reports on our experiences of using focus group interviews, critical incident technique and Photovoice as a visual participatory research method to explore diverse students' conceptions of good teaching and effective learning in university classrooms. The participants in our study included 33 high achieving (B average or above) international, Maori, Pacific Island, and (other) local students enrolled in Humanities subjects. Our participants engaged enthusiastically and thoughtfully with all aspects of the study, but the Photovoice task, where students took photographs that represented good teaching and effective learning, provided particularly reflective and creative insights. Photovoice elicited different (richer) ideas, and allowed students more ownership over the "data". Photovoice represents a distinctive method aimed to empower and give "voice" to those who are otherwise marginalised. Through this method, the participants determine the subject and the meaning of their photographs. A key focus of Photovoice is to explore the underlying ideas that the photographs elicit from participants, not necessarily on the photographs themselves. After the focus groups, participants were invited to take part in a Celebration Hui (meeting) at the project's completion. This was an important component of our study because it built in a "findings feedback" into the study design and reinforced students' ownership of the research findings. Our study findings will be used to inform staff development and student support programmes. The participants were aware of this from the outset and it was important to them. Some have expressed an interest in being part of physical "student panels" for student and staff workshops. This poster will offer an opportunity for participants to consider new ways of eliciting students' ideas. We provide some examples of the kind of data that Photovoice elicited, and consider the broader question of how, in higher education, we might more effectively work with students as partners in the teaching-learning process.

The Potential of Using an Ethic of Care Framework for Educational Research **Kari Rasmussen**

The widespread use of technology has enabled a multitude of options for the teaching and learning environment, resulting in a myriad of research initiatives into specific interventions, processes, and justifications around its utilization. However, this focus on technological innovation has resulted in the subjugation of the learner; that is the learner is only a component of the research on the technological innovation. Most research does not allow us to view the learner outside of their role of a user of the technology; their role as a human being with multiple responsibilities is rarely acknowledged. A recent literature review that investigated articles examining student experiences or needs found very few that examined the students' needs as the main aspect of the study (Hellsten & Prescott, 2004; Leners & Sitzman, 2006; Sitzman & Leners, 2006). Most often these studies focused on instructional design, learning theory or methodology; this would include Cercone's (2008) article that focused on adult learning theory and Huang's (2002) article that examined the impact of constructivism. In no way does this devalue the research being undertaken; but when one examines the description of the learner they are often characterized as one dimensional entities. They are commonly differentiated by their modality of learning (online learner versus one in a blended environment or in the traditional classroom), or are identified very generally (adult learner versus child, traditional versus non-traditional). This is not reflective of the extent to which learners are unique or respectful of the challenges and opportunities that they face both in and outside the classroom. Engaging in research that looks at the larger implications of education and its place in our lives can be examined if one utilizes an adapted ethic of care framework (Tronto, 1993). This model provides a solid structure in which to

investigate many aspects of education from strategic visioning to the underlying structure of an instructor's role in the classroom. Additionally, this framework provides a more humanistic

Indigenizing Course Outcomes: Use the Medicine Wheel as a Curriculum Design Framework **Marcella LaFever**

In December 2015, the Truth and Reconciliation Commission of Canada released its calls to action for reconciliation related to the oppressive legacy of Indian Residential Schools. Required actions for educators include incorporation of indigenous ways of knowing and learning. Current curriculum design practices have primarily been developed from euro-centric traditions based in three domains of learning referred to as Bloom's taxonomy. This poster demonstrates use of the Medicine Wheel, a teaching/learning framework that has widespread use in indigenous communities, for use in designing course outcome statements. Bloom's taxonomy of the cognitive, psychomotor, and affective domains, is missing the fourth quadrant of the Medicine Wheel, spiritual.

A SoTL Community of Practice in an Urban Community College: Joining Expertise to Reach a SoTL Summit **Nelson Nunez Rodriguez, Jacqueline DiSanto, Antonios Varelas**

This paper describes the creation of a SoTL community of practice at an urban New York City community college. Four faculty members, from a variety of disciplines and with SoTL experience, invited a group of 15 faculty to join in a SoTL journey. At this institution, faculty have a heavy teaching workload, and SoTL publications are considered for tenure and promotion. Thus, these factors are perfect backpack and hiking boots to initiate a SoTL climbing journey. Like climbing a mountain, not everyone will climb at the same pace. But through this two-year journey, we have embraced everyone's anxiety, fear, curiosity, vertigo, complaints, and desires by transforming all these passionate feelings into purpose and research questions. At the beginning, the summit looked unreachable. Knowing the upcoming challenge, the leaders spent one semester planning this adventure. They took advantage of their previous experience serving on the Center for Teaching and Learning Advisory Council to engage new and fellow climbers in this adventure. During the subsequent two terms, the group met for four hours twice every term. Everyone helped each other move from doubts to questions, from thinking to trying, from trying to refining questions and methodology, from defining evidence to improve our course understanding. Faculty leaders embraced the wide range of disciplines and expertise by encouraging participants to first create and pilot projects and then, by the second term, to refine and develop approved projects based on our policies for research involving human subjects. Together, the four faculty developers, new faculty, and junior and tenured faculty, regardless of their degree of SoTL experience, opened themselves to new territories. Since there is often a difference between professional identity and pedagogical expertise, this collective journey provided support among shared experiences. This SoTL community of practice has taught us the need to create space just to have time to talk, reflect, and find questions rooted in our own discipline and teaching style. Furthermore, they have reinforced the role of qualitative and quantitative methods in each discipline and helped faculty to use their professional identity to define rigor and evidence. In summation, this climbing effort has fostered a climate of sharing and collegiality safe enough to uncover our weaknesses. Faculty with experience in education, library resources, developmental math education, advanced chemistry course, and developmental and advanced language courses have learned from each other. As a group climbing a mountain there is value beyond reaching this SoTL summit, including the ultimate goal of publishing. Certainly, this collegial bond will remain and flourish in other scholarly projects. This approach offers a flexible SoTL template for faculty developers that is suitable for implementation considering the different institution requirements. Indeed, this may be used as a model to nourish assessment of student learning rooted in faculty's passion for teaching. Overall, as SoTL publications are heavily considered for tenure and promotion in this institution, being published, appears as a rewarding culminating step. As with any teaching moment, reaching this summit has definitely opened another horizon for us.

Aligning SoTL within Quality Assurance Policies and Processes **Jason Openo and Klodiana Kolomitro**

While SoTL is part of the growing expectations of the work of educational developers (McDonald et al., 2016), it is not yet situated within quality assurance (QA) policies or processes. This study describes how SoTL could

become a powerful means to enhance educational quality when it is described within foundational QA policies as a model for improving teaching quality and then adopted within institutional QA processes as a standard component of program review. This idea addresses the conference theme of aspirations for SoTL by mapping it into institutional culture with faculty, not administrators, taking the leadership role in examining teaching and learning practice. Quality assurance processes in higher education are frequently disconnected from improvements in teaching quality. This disconnect partially explains why academics see quality assurance processes as externally imposed monitoring measures (Anderson, 2008) rather than as earnest attempts at quality enhancement (QE). Departments often react to rather than engage with the quality assurance process in a way that is meaningful and useful for continuous improvement of their academic programs (Hutchings et al., 2013). Mårtensson, Roxå and Stensaker (2014) describe quality assurance policies as de-coupled from the everyday practices of academics and from the traditions and saga found within universities. Despite these criticisms, quality assurance (QA) has become a dominant force in higher education. This study used document analysis of QA policies in Canada to interpret the original intentions of QA processes and their role as positive change agents for teaching and learning enhancement. Our analysis revealed a disconnect between how quality assurance processes lead to quality enhancement and we suggest SoTL as one means to bridge this divide. SoTL represents the efforts of those faculty already involved in innovation and quality initiatives where “The overall intention ... is to improve student learning and enhance educational quality” (Poole & Simmons, 2013, p. 118). SoTL can contribute to both assurance reviews and teaching development by linking the study of daily classroom practice by individual educators to formal institutional reporting mechanisms for teaching and learning. Quality Assurance processes can trigger the examination of teaching and learning issues, providing faculty with an opportunity to systematically study their impact on student learning. However, A QA report should not be the end result of an assurance process. It is the beginning of a change process that is intended to lead to improvements in the student learning experience. This poster highlights our considerations on how SoTL provides a research-minded approach to initiate continuous improvements within a quality assurance framework, and we offer suggestions for how it might be integrated into evolving provincial frameworks. Specifically, our goal at the end of this poster session is to: Highlight our document analysis findings of current provincial QA policies in Canada Share considerations on how SoTL could become a powerful means to enhance educational quality, and Engage in a conversation on opportunities for weaving SoTL into QA processes as a way of helping faculty take a critical, central, and empowered role in continuous improvement.

Students as Partners: The Development of Course Goals and Student Assessment of a Third Year Psychology of Sexuality Class
Evelyn Field, Kathleen O'Reilly

Students as partners in the classroom is becoming increasingly important for student engagement in classroom activities and discussions. However, how students can act as partners within the classroom is not well defined and is an area of teaching and learning that is in its infancy. In this presentation we will provide an overview of how students are currently working as partners in our Psychology program and more specifically in our third year Psychology of Sexuality class at Mount Royal University. Rather than determine the course content and assessment prior to the start of the semester I (Evelyn Field) went into the first classroom with only a textbook and asked the students to develop their own course outline and assessment for this third year course. The students broke into groups of three or four and over the space of the first three class hours developed their list of topics of interest and suggestions for class assessment. By the end of these three hours, via a democratic process, we decided on the topics that would be covered and the basis for assessment in this course. This presentation will present an overview of the process we used to determine course content and assessment and a reflection on the strengths and weakness of this process by Evelyn Field, the course instructor, and Kathleen O'Reilly, a senior Honours student in our department that took this course. From these reflections we have developed recommendations to optimize, advance, and further evaluate, the integration of students working as partners with the instructor in senior Psychology courses, such as Psychology of Sexuality, throughout the course and not just as part of the first class.

Adventures with Fellow Climbers: Insights from Partnerships in SoTL Between Faculty Developers and Faculty

Janel Seeley

Faculty are often experts in their field, but not always knowledgeable in best practices for teaching and learning. Additionally, faculty are often not familiar or comfortable with developing a SoTL project (Boshier, 2009). Collaborations with others can provide additional resources for helping faculty consider and assess new teaching practices (Kahn, Goodhew, Murphy, and Walsh, 2013). Faculty developers specifically, can be excellent resources in developing connections in SoTL (Matthews, Crampton, Hill, Johnson, Sharma, Varsavsky, 2015). As a faculty developer, this action research project shares my current adventures in partnering with faculty from a variety of disciplines, in SoTL projects. Using the action and reflection cycle (McNiff and Whitehead, 2011), I sought to do the following: 1) Identify a question in area of practice to examine, 2) Reflect on an answer to this question, 3) Implement action, 4) evaluate the action, 5) Change practice, and then 6) Continue the cycle by identifying further questions based on evaluation. I began the research with the following question: How can I, as a faculty developer, encourage faculty to design SoTL projects on their practice? I partnered with three faculty, from a variety of disciplines, to see if my expertise in educational psychology might help foster a dialogue on SoTL. Projects were then collaboratively designed with each of the faculty, and are currently in various stages of completion. Continued reflection, action and adjustments are being made on the projects, in order to assess effectiveness. The three SoTL projects in this study include: 1) designing a project on the use of an augmented reality sandbox in soil science labs, 2) creating measurable learning outcomes for an NSF grant in engineering and 3) conducting a study on the use of group dialogue in a large introductory anthropology course. Currently, these collaborations have resulted in two presentations at national and international conferences, two articles and one NSF grant proposal that will include a SoTL component. This presentation will describe the cycle of action research in each of these projects, including the roles of individuals in these collaborations, challenges and considerations for future collaborations, and current outcomes from each of the projects.

Mapping ISSOTL: A Spatial Analysis of Past Conferences

Brian Jackson, Margy MacMillan

We know that ISSOTL is a truly international conference, with presenters coming together each year from all points of the compass. But what do we know about the geographical distribution of SoTL researchers? Are there pockets of SoTL research? What distances are bridged through collaborative research? Does the conference location have an impact on who shows up? This poster will address these questions through spatial analyses of ISSOTL conference presentations from 2012 through 2016. Using institutional affiliations of ISSOTL presenters as a basis for our examination, we will put SoTL researchers on the map in order to chronicle part of ISSOTL's history and identify geographical trends in the scholarship of teaching and learning. We will describe the distances researchers will go to present their findings and to connect with others in the SoTL community, zoom in on hot spots of SoTL research, and look at relationships between the geographies of presenter and conference.

Threshold Concepts of Professional Accountability and Patient Safety for Nursing Students: Can Simulations Help?

Pamela Khan

The majority of our students are admitted to the Undergraduate Nursing Program with a science degree, and in 22 months they complete a BScN. Many find it challenging to shift their perspective from that of a lay person to that of a Health Care Professional, particularly when they are asked to understand the interconnectedness of a variety of nursing skills, competencies and responsibilities. To address these needs, Faculty, while expanding their Scholarship of Teaching and Learning, have developed learning activities based on insights through stretching for new horizons. These activities, experienced through a social constructivist lens, help students connect various kinds of learning to more fully grasp two Threshold concepts of Professional Accountability and Patient Safety. To actively experience and make these connections, students participate in simulations of clinical scenarios based on mental health nursing practice. A threshold concept is seen as a portal that opens up new and previously inaccessible ways of seeing and thinking about something (Meyer and Land, 2003). This has particular relevance for nursing students who are developing an identity as a Health Care Professional. Their learning involves drawing on new capacities,

and enacting them through a professional persona, accountable for excellent and safe care. When providing care, students do not always have final responsibility for the safety of their patients, although they regularly participate in related activities. As well, they are not fully accountable for certain types of care that fall outside the student role. To help students develop capacities beyond those that they acquire in their practice Faculty members developed scenarios that require them to “provide care” in more complex situations, where they make decisions about Patient Safety while being Professionally Accountable for their actions. During debriefing sessions clinical teachers and Faculty members review with students the significance and meaning of the information they draw on and the decisions they make. In this poster presentation simulation scenarios will illustrate situations where students are required to identify a clinical problem to be addressed, do a focused assessment, determine priorities among possible actions, and carry out those actions, while maintaining professional communication with their patient throughout the encounter. Ideally, once students begin to grasp the two Threshold Concepts, Meyer and Land would expect that a transformation of their internal view of the subject matter from the perspective of their discipline will take place (2003).

Building Competence by Design in Athletic Therapy: Constructive Alignment Between Curriculum and Student Evaluation

Mark Lafave, Michelle Yeo, Dennis Valdez, Khatija Westbrook, Breda Eubank and Jenelle McAllister

There is a mandate from the Canadian Athletic Therapy discipline to implement competency-based curriculum delivery by the year 2020. In response to this mandate, the XX University Athletic Therapy program began to implement significant changes to its new curriculum commencing in 2014. The XX AT program had transitioned from a collaborative undergraduate degree to an autonomous bachelor's degree creating the opportunity to implement new approaches to curriculum delivery. In order to execute this new model of curriculum delivery, a clinical presentation (CP) model was used as the primary vehicle to delivery competency-based education. Evaluation strategies for the new CP model were also conceived. The purpose of this paper is to describe the XX University experience with curricular change and the constructive alignment to student evaluations and development. An important step in developing a new curriculum was for its faculty members to meet regularly to discuss where competencies were being delivered and how they were being evaluated. A curricular map was created to align CPs and their evaluation. An entrustable professional activity (EPA) matrix was created for 253 CPs across core classes. The EPA matrix guided when, where, how and by whom these CPs were taught and evaluated. Bloom's Taxonomy was used as a guide for both course and program evaluation. In general, higher levels of Bloom's Taxonomy and student evaluation corresponded with greater length in the program. For example, third year students completed a practicum reflection assignment that required greater analysis and evaluation. Alternatively, if CPs were only introduced in theory, written examinations predominated the evaluation method chosen. Developmental stages above “application” in Bloom's Taxonomy are where the majority of discussion and debate transpired among faculty members. CP logbooks were central to competency tracking and development. Students tracked CPs over the course of the program and they also self-evaluated based on a novice-expert continuum introduced by Dreyfus (2004). In addition, students focused on one CP per week to reflect on connecting theory to practice. A reflection rubric was employed to guide the depth and detail from student reflections. Other forms of competency development included CP in-class mock scenarios evaluated by peers and instructors as well as objective structured clinical examinations (OSCEs) that measured components of competence. Another significant aspect of the competency-development evaluation inventory included feedback from clinical supervisors/preceptors. The mini-CEX was designed to measure student competence in its most complete, authentic form since it was an evaluation of student-patient interaction by the clinical supervisor. The mini-CEX is intended to combine both the hard skills needed to evaluation and manage/treat CPs, but also the soft skills to be holistically competent. The mid-term and semester-end evaluations were 360 degree evaluations completed as a retrospective analysis of student competence across over-arching domains of athletic therapy practice by supervisors, patients, coaches and anyone the student may have come in contact with over that period of time. This poster will chronicle the SoTL around these student evaluations.

Shift/Work: Manual
Neil Mulholland, Dan Brown, Jake Watts

Running prior to our paper on Shift/Work Speculations, this poster is a small pop-up exhibition that offers insights into Shift/Work, an artistic practice that leads developments in SoTL and the educational turn in contemporary art. Shift/Work is a collective that composes workshops that enable participants to reflect upon and recalibrate the processes of artistic learning. Key to this is an open engagement with practice (work) as a means of both generating and transferring new knowledge (shift). 'Shift/Work' is an iterative process, a rolling workshop that can be continually re-performed like a musical score. Our artistic 'workshops' are convivial means of collective artistic production that enable meta, or 'double-loop' learning. They apply structured game play as a compositional device to heighten participants' awareness of play and reciprocity in the learning process. Shift/Workshops enact new practices and collectively compose open educational resources for artists, art professionals, curators and art educators to adapt and implement.

Shift/Workshops are documented using a utilitarian poster template designed by the artist Andrew Gannon. Our poster will adapt this format to present four completed SoTL workshops in the form of a how-to 'manual', or assembly instruction pamphlet. On the wall, we will display a poster-manual featuring a score for workshops composed at Edinburgh Sculpture Workshop and play-tested at various international art venues and art schools. To ensure aesthetic continuity with Shift/Work's corpus, the poster-manual design and illustrations will be by Gannon. The large-format poster will be hand-printed at ESW. Shift/Work will also print the poster as a 'pamphlet' (folding into A4 or A5), and make this available to take away. Poster for Shift/Work: Manual offers a unique insight into Shift/Work's ludic approach to 'workshops' as reciprocal and enmeshed game-rules governing how actants interact. Learning how to compose the ritual interaction and ecstatic mutuality normally found in gaming ('mechanics'), for the purposes of learning how we learn will be of particular interest to SoTL scholars.

The poster-manual enables Shift/Work to discuss our workshops informally and in detail. Meanwhile, the smaller poster-pamphlets allow us to distribute these workshop as scores to be played, at a later date, by ISSOTL17 delegates. Because the display of the poster-manual is similar to an exhibition format, it will give delegates a sense of how important aesthetics (game mechanics, score composition, graphic design, drawing, printing, etc.) are to the SoTL. The poster-manual format provides an accessible primer the SoTL in relation to artistic research methods for those new to this field. Given that SoTL generally does not feature in contemporary artistic practice or pedagogy, the poster-manual is an innovative contribution to SoTL. Moreover, rather than simply reflect upon SoTL and artistic research, the poster-manual actually provides new scores for participatory action research. Delegates, thus, will learn how to integrate SoTL and 'educationally-turned' contemporary art frameworks. Engaging with our poster-manual enacts Shift/Work's commitment to codifying playful pedagogy by publishing and distributing it as an open educational and artistic resource. This has invaluable implications for how delegates might choose to conduct SoTL as experimental pedagogy.

Engaging the "Whole Musical Self": Methods for Teaching Expert Processes in the Music Theory Classroom
Robin Attas

What does expertise look like in music analysis, and how can music theorists better teach it to their students? These questions inspired a three year project to revise pedagogical practices in a second-year music theory course. This poster describes the use of the Decoding the Disciplines framework to develop a plan for pedagogical changes; provides examples of in- and out-of-class revisions to better teach expert approaches to music analysis; and uses close analysis of student work to analyze and interpret results. The poster is both a case study of how the Decoding framework can be fruitfully applied to music theory, and a reflection on the process of pedagogical revision itself. The Decoding the Disciplines framework is a seven-step process; the first two steps ("defining a bottleneck to learning" and "uncover the mental task" by considering expert methods of overcoming the bottleneck) proved most beneficial to the present project. The author's focus on music analysis as a bottleneck to learning led to the development of a theory of expert music analysis based on a new idea of the whole musical self. A typical expert musical analysis is presented as a series of static marks or diagrams, often integrated with a musical score. But that silent analytical product hides the musical process that created it: expert analysts will sing, play, and listen to the music under analysis; compare it to other pieces of music and to general principles; and revise their

ideas before presenting a final analysis. The author argues that music theory, which often seems disconnected from practical music making, in fact involves deep musical engagement. With this discovery in hand, the author observed student processes of analysis, compared them to the “whole musical self” model, and developed better ways of teaching expert analytical methods. The poster will present two areas of attention in the target course, one in-class (the use of lecture to model expert behaviour) and one out-of-class (music analysis prose writing assignments). For each area, the poster will include examples of the author’s revisions to deepen student use of expert processes, analysis of student work before and after revisions, and reflection on the efficacy of the author’s redesign. The redesign project led to both personal and professional discoveries. The author’s teaching practice shifted from one that strongly emphasizes engaged, hands-on learning in a flipped classroom, to one where lecture is a valued tool for modeling expert musical-analytical behaviours. Professionally, the skill of prose writing, often seen as an “extra” in music theory pedagogical practice, was demonstrated to be a highly effective means to encourage expert analytical approaches. This poster will spark conversations around the application of the Decoding the Disciplines framework, the value of engaging in a sustained course redesign that includes both data collection and assessment, and the ways in which uncovering our personal and professional teaching biases can lead to new discoveries in teaching and learning.

Big Ideas and Powerful Conversations: Introducing Graduate Students to SoTL **Kimberley Grant, Catherine Burrell, Lena Barrantes**

This poster outlines a newly initiated program designed and led by a graduate student to introduce graduate students at the University of Calgary to SoTL. It describes some of the initial successes and challenges from the perspectives of the program facilitator as well as some participants. The program which is now in its third iteration aims to help participants learn to * describe SoTL as a field and as a practice, emphasizing its key concepts, questions, and scholars, * use SoTL to begin asking meaningful questions about their own disciplinary teaching and learning experiences, and * develop a basic SoTL plan by identifying a meaningful question and appropriate methods for answering it. Over the course of a term, participants engage in a series of group discussions centred on some of foundational SoTL texts (e.g., Barr & Tagg, (1995) “From Teaching to Learning: A New Paradigm for Undergraduate Education” and Felten (2013) “Principles of Good Practice in SoTL”), attend a workshop on how to design SoTL research, and create a culminating blog post that outlines a future potential SoTL project. Participants attend the program for a variety of reasons: at the encouragement of a supervisor, in order to better support a SoTL project as a research assistant, to gain microcredentialing, and for personal interest in preparation for an academic career. One of the successes of the program, as expressed by the participants, is the creation of a peer-oriented space within which to discuss teaching and learning challenges. Because many graduate students are also teaching assistants, sessional instructors, and/or lab supervisors, they approach teaching and learning from a dual-role perspective. The program also provides opportunities to have conversations about effective teaching and learning with peers from other disciplines which enriches participants’ understanding of their own disciplinary grounding and higher education as a whole. For the facilitator, it has been an enlightening process to guide these discussions as three-way conversations between personal experiences, disciplinary norms, and SoTL research. These conversations have been significant in the ways that they develop trust among participants, including the facilitator, as together we negotiate the meanings of these foundational texts for our own contexts and practice (Roxa & Martensson, 2009). Some of the challenges for participants have been related to considering new approaches to research while they are still developing disciplinary research methodologies, especially when trying to outline a hypothetical SoTL project. In some cases, considering SoTL principles such as partnering with students (Felten, 2013) requires a paradigm shift in what counts as research. For the facilitator, one of the challenges has been how to provide leadership from within a peer role. By positioning herself as a host rather than as a teacher, the facilitator seeks to gather with the participants around the readings and big questions about teaching and learning in a kind of “educational community” (Palmer, 1998, p. 110).

Value Added: Demonstrating Student Skill Development at Your Institution **Natalie Simper, Jill Scott, Brian Frank**

This poster summarizes findings from the Queen’s University longitudinal learning outcomes assessment study. The research was supported by the Higher Education Quality Council of Ontario with the goal of

investigating the effectiveness and utility of assessment practices for evaluating transferable skills. Over the last decade there has been an increasing demand for institutions to provide evidence for the quality of student learning (Spellings, 2006; (Bradley, Noonan, Nugent, & Scales, 2008; Herbert, 2015). To gather reliable, valid evidence that is generalizable within and across the institution remains an ongoing challenge for the higher education sector. Globally, employers state that many new graduates lack the critical thinking, writing and problem-solving skills needed in today's workplaces (Bartlet, Uvalic, Durazzi, Monastiriotis, & Sene, 2016; Casner-Lotto & Barrington, 2006; "Career Readiness Competencies: Employer Survey Results," 2014). In developing these skills, experts in the field recommend assessment approaches that yield actionable evidence to ensure students actively participate in the process (Roksa, Arum, & Cook, 2016). Presented here are insights from administration of the Collegiate learning Assessment (CLA+), the Critical thinking Assessment Test (CAT), and the Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics. These tools were selected based on the skills they assess and were applied in various contexts across a range of undergraduate learning areas. The results of the study quantified longitudinal achievement of student learning outcomes, on the three instruments, with incremental growth in skills demonstrated across the studied undergraduate programs. There were however logistical implications, sampling challenges and motivational concerns with each. The poster highlights actionable evidence through targeted assessment using standardized measures, to open the door for scholarly approaches to the improvement of student learning.

Evaluation of a Student-Oriented Logic Course **Aaron Thomas-Bolduc, Richard Zach**

Courses in formal logic are taught in most English-speaking philosophy departments. Yet very little effort seems to have been made to deliver these courses in a way that improves learning outcomes. A typical introductory course in formal logic still involves a standard lecture format, with tutorials, problem sets and closed book exams. Textbooks tend to be pricey (\$100 and up). Logic courses often have a highly skewed gender split, and instructors face the issue of teaching to a wide range of student backgrounds and expectations. Although there is significant scholarship dating back at least a century on the instruction of elementary logic (Croy, 2010; Geach, 1979; Hedges, 1999; Schiller, 1913), most of this has assumed the traditional lecture model. One notable exception is Butchart et al. (2009) who investigated the implementation of peer instruction. They found that peer instruction provided statistically significant increases in student satisfaction and learning outcomes as compared to the traditional lecture model of instruction. Macpherson (2016) provides a meta-analysis of the recent literature on math anxiety and its effects on learning high school and undergraduate level mathematics and logic, reporting that students who score highly for maths anxiety on established evaluation rubrics have worse learning outcomes than students with more confidence in their mathematical ability. Macpherson suggests that cooperative learning decreases maths anxiety and its effects among students. Cooperative learning—roughly students working together to understand the material and solve problems, is integral to both peer instruction and classroom flipping. We will report preliminary outcomes of a pilot project for a course in formal logic in which we aimed to (a) improve student engagement and mastery of the content, and (b) reduce maths anxiety and its negative effects on student outcomes, by adopting student oriented teaching including peer instruction (PI) and classroom flipping techniques that have been developed particularly by instructors in the sciences and mathematics. We hope to gain and retain the interest of students who do not antecedently see themselves as interested in logic. Towards these goals we have revised and remixed a free and open source textbook, forallx, which the lead author is using as the primary text in their introductory logic course. They have also implemented a partially flipped approach to that course, with short screencasts made available online once a week, followed by group-work assignments covering in part, the material from the screencasts. The group-work is organised so that it can be finished over the course of one class period plus one tutorial session. This format allows the students to work together in figuring out the material, but have access to the instructor and TA as well. We will present quantitative and qualitative data gathered through surveys of the students as to the effectiveness of these methods, and the textbook, as well as the impressions of the instructor, who has found this to be a successful format. The data is preliminary as this is a pilot project, but will be informative regarding which changes have been most effective in improving understanding of, and confidence in the material.

Digital Teaching Interface Enhances Graduate Biomedical Learning

Elaine B. Bohórquez, Julie Doran, Consuelo Arellano

Technology and small group work have each been shown independently to improve student learning. PHY503 and PHY504 compose a large lecture graduate-level physiology course sequence required for the graduate physiology degree at North Carolina State University. This course sequence combines formal lectures with team-based learning. To promote student engagement during lectures, the digital teaching interface Top Hat was incorporated. Top Hat allowed students to access and annotate lecture slides in real-time and respond to a variety of question types through an application on their own devices anonymously. A perceptual survey was given to students on the usefulness of Top Hat. Most students were neutral in their assessment of Top Hat. A small subset of students, who had completed one-half of the course sequence without the interface, rated Top Hat more favorably. Grades for the three non-cumulative exams of each course were compared between Top Hat and non-Top Hat semesters. A pre-test was administered on the first day of each course. No difference in pre-existing knowledge of concepts to be covered was found between Top Hat and non-Top Hat semesters. Exam scores were consistently higher when Top Hat was part of the formal lecture structure. Overall, significant increases ($P < .05$) were found in exam scores for each course. Notably, the greatest significance was highly concentrated for students' first exam of the course sequence (PHY503 Exam 1: $P < .001$), suggesting that Top Hat gave students a jumpstart on approaching the material. The most difficult subject of the course sequence anecdotally (PHY504 Exam 2) also benefited significantly from the use of Top Hat ($P < .01$). As the first SoTL project conducted on this course sequence, these results are encouraging for the use of the digital teaching interface Top Hat in conjunction with team-based learning to improve student performance and perception of large lecture graduate biomedical courses.

Ethics in SoTL: Key Principles and Strategies for Ethical Practice

Lisa Fedoruk

Adhering to multiple ISSOTL conference threads, but most specifically to "New horizons, emerging landscapes, and underexplored territories in SoTL", this poster inspires dialogue and critical engagement that specifically pertains to SoTL inquiry that requires research ethics board approval. Inquiry within SoTL encompasses the knowledge, actions and beliefs of human beings, therefore, a responsibility to act ethically is a priority with the involvement of human participants. As Hutchings (2003) advised, critical consideration on the ethical significance of SoTL investigations can mitigate harm to research participants, and create an opportunity to reflect upon our own identity and value to our work as researchers and educators. Ethical implications must be considered throughout the process of SoTL research, most notably while preparing an application for review by the Research Ethics Board (REB). At the University of Calgary, the Conjoint Faculties Research Ethics Board (CFREB) reviews applications involving human participants across diverse disciplines to ensure the protection of rights and welfare of individuals using the Tri-Council Policy Statement (TCPS-2) as a guideline. It is necessary to recognize that interdisciplinary SoTL researchers approach the REB review process differently. Due to the diversity in disciplines and contexts, coupled with SoTL in its nascent form, research ethics boards may be unfamiliar with SoTL inquiries and possess varying amounts of scope or familiarity with this field of research. Additionally, the REB process can be complex due to differing interpretations of the TCPS-2 guidelines when applied to SoTL projects. This can commonly result in variations in how SoTL is regarded or managed across institutional contexts, and even by internal members of the same research ethics board. Finally, SoTL researchers themselves come from various academic areas and research practices. It is not unlikely that an accomplished researcher, used to a particular research tradition, experiences issues with the ethical guidelines and treatment of human participants when commencing a SoTL inquiry. Furthermore, seasoned researchers with an ability to navigate the REB process seamlessly may also find complexity when submitting a SoTL application for review. When considering your students as participants in research conducted in your classroom, you may have a dual role, that of instructor and researcher. The potential for ethical dilemmas to arise may increase in areas of possible conflicts of interest, power relationships, voluntary and informed consent, fairness and equity, and privacy and confidentiality. With proper planning and consideration, the instructor/researcher must address relevant ethical issues that have important implications for the ethical review process as set out by their institution. Regardless of the challenges involved, the REB process can serve as an educative experience and an important opportunity for SoTL investigators to solidify their inquiry plans and reflect on ethical ramifications in this area of research. This poster includes a summary of ethics in SoTL, it presents

practical suggestions to navigate the REB process, proposes strategies to mitigate risks and maximize benefits, and sets researchers up for successful dissemination of knowledge within their discipline. Finally, it provides additional resources that may support ethical considerations and practices in SoTL research and REB review.

What is the Cost of Online Learning?

Jennefer Rousseau

In a day where student debt is a mainstream topic, institutions are responsible for demanding fair fees and providing all stakeholders with transparency. As online teaching and learning becomes popular, several institutions have turned to online learning as a way to save costs. The hereby research sets out to find out: What is the cost of online teaching? The purpose of this research is not to discourage online instruction, as its benefits are necessary to our changing world. Online courses accommodate working adults, families, students in remote locations, students in war zones, reduce transportation costs, promote green learning, allow for cross cultural communication and interactions and provide choices for students that were in the past not possible. The purpose of this research is to demonstrate that the cost of online learning is not a definitive cost but rather an equation that can be balanced based on the needs of an institution and its student population.

Creating Conflict: Developing and Using Simulation to Work Through Communication and Conflict

Minn Yoon, Marianne Howell, Gisele Gaudet-Amigo

A core competency for collaborative practice is interprofessional communication, and a sub competency is “the use of respective language appropriate for a given difficult situation, crucial conversation, or conflict” (Interprofessional Education Collaborative, 2016, p. 13). Providing a meaningful experience for students in health professions, allowing them to work through a conflict situation, framed the development of this simulated experience. As noted by Paradis and Whitehead (2015) in their review of power and conflict in interprofessional education, limited studies have addressed the connection between power, hierarchy, and conflict in an interprofessional education setting. Further, literature suggests there are limited educational experiences incorporating power related interactions (Greer et al, 2012). Although role clarification is a component of interprofessional education, the power and hierarchy of these roles, and associated interactions, are often not addressed. This simulated experience was developed to create a collaboration between two professions to work together in addressing a conflict situation where power was a factor. Based on the literature, we devised a simulated experience to explore the ability of dentistry and dental hygiene students to collaborate in addressing a conflict situation including a power differential. Learning materials were provided in advance of the simulation. In a lecture preceding the experience, the students were provided with a set of techniques and interaction guidelines for addressing conflict situations. Within the simulation, the students (in groups of 3 or 4) were shown a video which highlighted 7 breaches of infection, prevention and control by an instructor in the dental clinic. Students were provided time to develop a plan of how they would approach and discuss the observed breaches with the instructor. The simulation proceeded with the instructor then joining the group and were tasked with discussing the observed breaches with the instructor. Following the discussion with the instructor, a debrief with the students was conducted. The debrief focused on the techniques and process used by the students to determine their approach for the discussion with the instructor. Informal feedback from the instructors and students suggest this was a positive learning experience. For students, the experience highlighted the need to collaborate and communicate when presented with a conflict situation. Next steps include a formal study of the simulated conflict situation. This learning experience explores new horizons in interprofessional collaborative practice. Although interprofessional education often addresses working together, little attention has been given to how one successfully navigates conflict and how to work within a power differential (whether perceived or real) in real world situations.

SoTL Immersion: Laying the Foundations for SoTL in Disability Studies

Joanna Rankin

Reflective of this year's conference topic "SoTL newcomers, fellow climbers, and guides," this poster presentation will outline my international ventures as a newcomer to the world of SoTL. Through both a literature review and my immersion in the culture and content of SoTL communities, this poster presentation will reflect my experiences in a variety of contexts. The poster will emerge from the material that I learn and the community that I

encounter by attending three diverse, multi-disciplinary, international and multi-focused, yet complimentary SoTL conferences. Based on my attendance at conferences in Canada (2017 University of Calgary Conference on Post-Secondary Learning and Teaching, Calgary, Alberta), the United States (10th annual SoTL Commons Conference, Savannah, Georgia), and Europe (EuroSoTL, Lund, Sweden) I will surmise the comparisons and contrast of SoTL practice and communities in these diverse locations. As both an observer and presenter, I will highlight my engagement with some of the processes, developments and diverse perspectives offered by local, national and international SoTL scholars and communities. Looking to the future, I will also share the ways that this immersion has laid the groundwork for the meaningful application of SoTL practices in my own work and planted the seeds for a future engaged with this type of practice in the Disability Studies field. Translating these experiences and the development of my knowledge to my own discipline, I will review the ways in which the learning that I have taken part in through this journey and the learning paradigm more generally resonate with the re-evaluation of perspectives and practices surrounding people with disabilities that is foundation to Disability Studies.

Aspiring to Act: Musings about Our Current and Future Teaching Practice Considering Historical Trends of Students' Characteristics **Laureen Styles, Piera Jung**

Continual attention to how and what we teach as (nurse) educators is required in order to meet students' interests, needs, and desires in the context of how learning is understood and best facilitated. Studies have shown that awareness and understanding of students' demographics are necessary to reform nursing pedagogy in colleges and universities (Earle & Myrick, 2009). Concurrently, in the knowledge era there is a plethora of information to access in support of evidence-informed teaching that is learning-centered (Blumberg & Weimer, 2013). And an implicit moral imperative exists to utilize multiple forms of knowledge to continue to enhance quality of teaching-learning interactions. In order to gain a deeper understanding of factors that support actions and methods of teaching and learning, we examined 10 years (2006-2016) of institutional student data to identify and describe trends in select student population characteristics and changes over time. Examples of such characteristics included descriptors as age, gender, and previous post-secondary experience. While on the surface this could be viewed as 'basic information', interpreting and translating trend results into aspirational actions that benefit students' learning for us is a complex endeavour. Surfacing enrollment trends from institutional data provided educators and administrators with valuable information to better understand the students' characteristics for learner and learning-centered teaching in a more purposeful manner. Nursing curricula continues to needs strategies consistent with changing pedagogy within the current framework.

This inquiry provided the fruitful grounds from which to critically examine and discuss with colleagues current teaching practices and possible future practices for 'best fit' considering student characteristics and illuminated the necessity of revising engagement and assessment approaches. Recommendations for faculty and staff development opportunities (informed by Gayle, Randall, Langley, and Preiss, 2013) also emerged from this work to aspire to act in new ways and reduce anxieties that may result from changing pedagogy.

Navigating the Mountain: A Database of Scholarship of Teaching and Learning in Higher Education **Nicola Simmons**

Scholars of teaching and learning come from all disciplines and often bring their disciplinary lenses to exploring these processes. These postsecondary practitioners and researchers are often journeying into uncharted territories through being unfamiliar with the research literature about learning and may have no point of entry for their investigations (Weimer, 2010). Further, they may be expected to be conversant with diverse literature—much of which is new to them. A frequent challenge is finding “point of entry” literature on a topic, say deep and surface learning (Trigwell, Prosser, & Waterhouse, 1999) that provides starting points for further exploration. In addition, it can be challenging to grasp the ongoing scholarly debates in literature with which one is not yet familiar. Further, as Christensen Hughes and Mighty (2010) note researchers have discovered much about teaching and learning in higher education, but dissemination and uptake of this information have been limited. As such, the impact of educational research on faculty-teaching practice and the student-learning experience has been negligible (p. 4). Disseminating teaching and learning research in ways that connect it to practice continues to be a challenge (Poole, 2009). In order to address these challenges, with the help of an Educational Developers Caucus (EDC) grant, I have been creating a website outlining key literature about teaching and learning in various topics, each

comprising a topic, alternative keywords, a brief overview of the current thinking on that topic, a short list of annotated key literature, and a concise description of ongoing debates in the literature. Topics have been selected in consultation with SoTL scholars, SoTL developers, and SoTL journals. Initially, each author chooses a key article or two on that topic based on what they have found to be useful. Keywords arising from each of these articles are then entered into Google Scholar. Two to three additional articles are selected that have relatively high citation counts for this topic. In some cases, this leads back to historically foundational literature; in some it leads to recent studies that had been frequently cited. Additionally, making use of the keywords, the word a “counterargument”, or the use of “not” or “critique” in front of the keywords leads to articles that provide a counterpoint to the ones found above. An invited panel of key scholars of teaching and learning from across Canada reviewed the pilot website of 10 entries and their comments were integrated. Currently, and with the assistance of my wonderful graduate students, there are now over 65 entries on the site on diverse topics such as e-portfolios, mobile learning technologies, SoTL identity, and universal instructional design. This poster presents this website, which is for postsecondary scholars and students from across all disciplines who wish to improve their practice or conduct research pertaining to these topics. It is an evolving tool, and I welcome your recommendations and contributions, with authorship noted. I hope it will serve as a point of entry to the literature on the Scholarship of Teaching and Learning. Full references at poster

“Grooming the Trail” of SoTL: Early Successes with a New Model
Carolyn Hoessler, Ryan Banow, Susan Bens

SoTL research can feel like a lonely and unfamiliar path for faculty members. They hear tales of colleagues who have made it all the way to dissemination, the lookout point on the trail, yet with the hope of reaching the lookout comes uncertainty about how to get there. To “groom the path” for individuals new and experienced in SoTL, we created a network-based approach to growing SoTL engagement, skills, and community with guidance from existing models, literature, and our faculty’s needs and experiences. Our “SoTL Clusters” are faculty-led research groups, proposed and directed by faculty, with embedded supports to create networks of researchers working together to learn and engage in SoTL from initial ideas to publication and all the steps in between. The provided funding for research expenses is flexible and allocation is decided by members of the SoTL Cluster. Our poster describes the supportive path in the SoTL Cluster program. At each stage of the supports of this “groomed trail”, and the challenges are identified. Early successes and designed embedded supports are also highlighted. By engaging with our poster and us, colleagues will be able to: identify new and existing ways they can support SoTL; and describe challenges and strategies with SoTL in a networked approach. In light of the conference theme of new heights and the conference thread of SoTL newcomers, fellow climbers, and guides, we hope to engage SoTL newcomers in identifying their needs and supports, fellow climbers in how they are working and can work with colleagues, and guides in what is possible when we “groom the trails” and point to the trail head. In planning our approach, we drew upon Peter Feltens’ (2013) principles of contextualized, methodologically sound, focus on student learning, and public, alongside recognized practices of embedding research process support (Hum, Amundsen, & Emmioglou, 2015), social networks, inviting senior admin support (Williams et al., 2013), and careful attention to ethical dual roles of educators as researchers (MacLean & Poole, 2010), and qualities of good research (Glassick, Huber & Maeroff, 1997; Patton, 2015). Felten, P. (2013).

Fit-Breaks: A Physical Activity-Based Intervention for the University Classroom
Alyona Koulanova, Ary Maharaj, Brian Harrington, Jessica Dere

When considering methodologies to transform higher education, physical activity is often an afterthought—a hobby students can engage in as an extracurricular activity. However, we believe that physical activity is an underexplored and emerging classroom tool that can be used to improve student experience, decrease stress, and increase engagement. In 2016-17, we piloted a program at [University Redacted for Anonymity], that integrated physical activity into three large first-year classes on a weekly basis. The present poster outlines our program and displays our findings on student outcomes. “Fit Breaks” are short bursts of easy-to-follow exercises and stretches carried out during the usual 10-minute break in lectures lasting 2 hours or longer. They aim to provide students with a healthy break, allowing them to reset and refocus their attention, while simultaneously helping relieve the stress of a fast-paced lecture experience. The rationale for this initiative is two-fold. Students in post-secondary education are

increasingly struggling with mental health issues, with 21% of students reporting overwhelming anxiety and 17% stating that they felt too depressed to function in a recent national-level Canadian student survey (ACHA-NCHA, 2013). As educators, we observe this stress as it carries over to the classroom, manifesting as poor academic performance, social isolation, and other health concerns. With a strong literature base documenting the impact of physical activity on cognitive functioning and positive mood, we set out to transform the classroom experience by utilizing weekly Fit-Breaks as a means to promote healthy activity during the break without disrupting the lecture (Bray & Born, 2004; Budde, Voelcker-Rehage, Pietrayk-Kendziorra, Ribeiro, & Tidow, 2008). We collected quantitative and qualitative feedback from students through pre- and post-assessments on their levels of physical activity, well-being, and perceived stress. In addition, students provided weekly reflections of their Fit-Break or control-break experience in exchange for the opportunity to earn bonus credit. Our results suggest that students participating in Fit-Breaks had a heightened level of life satisfaction, lower perceived stress, and an improvement in academic performance, building on the literature that documents the impact of habitual exercise on these very constructs (Carek, Laibstain, & Carek, 2011). This easily replicable, simple classroom intervention could have a positive impact on all students in post-secondary education. Our results indicate that even small weekly bursts of physical activity in a real-world setting can have a positive impact on the stress and well-being of students. We hope to encourage our colleagues to build on this work, as we believe that incorporating Fit-Breaks into more classes can contribute to the creation of a campus culture that emphasizes the overall health of its students, while simultaneously teaching students a valuable life skill that they can habitually repeat post-graduation. As Pamela Das and Richard Horton state in *The Lancet*, we must strive to integrate physical activity into our daily lives and by doing so, reap the many rewards that being physically active can bring—academically, experientially, and psychologically (Das & Horton, 2016).

A Cognitive Apprenticeship Process Using Phenomenology of Practice **Karen Swanson, Jane West, Sherah Carr**

Our phenomenological study illuminates the critical role of coaching in the cognitive apprenticeship framework. When seven doctoral candidates receive coaching in strategies to improve their skills and dispositions, they can tackle increasingly challenging tasks with confidence (Collins, Brown, & Holum, 1991). Data include interviews with Ph.D. program graduates and faculty members' reflections on their work with students. We have characterized graduates' path as a transformation from student to scholar and have used cognitive apprenticeship as our lens for thinking about how best to support that journey. In Mezirows (1991) theory of transformative learning, transformation is a critical dimension of learning in adulthood, enabling learners to recognize and re-examine the organization of assumptions and expectations that structure their thinking, feeling and behaviors. Mezirow (1981) proposes that the goal of transformative learning through critical reflection is to develop in adult learners "a crucial sense of agency over ourselves and our lives" (p.20). It is through looking back and filtering through those perspectives of meaning that we come to assimilate new viewpoints and understandings. We have chosen van Manen's (2007) phenomenology of practice to inform our work because it addresses how individuals act. This orientation to studying practice speaks to faculty and students' personal and professional decision making. A phenomenology of practice aims to open up possibilities for creating formative relations between being and acting, between who we are and how we act, between thoughtfulness and tact (p. 13). This approach has framed the way in which we investigate the transformative process for doctoral students. Our preliminary findings focus on the two areas of student experiences and the support they receive from faculty. Students' experiences were often marked by disorienting dilemmas-- quandaries that might arise when the learner is challenged or comes to an uncomfortable realization which stifles progress (Mezirow, 1978) and how or whether they were able to reconcile the dilemmas and move forward. The findings on faculty support suggest that the timing and nature of coaching are crucial for students who are experiencing a disorienting dilemma. Using the cognitive apprenticeship model, and based on data and feedback from students, we have made adjustments to aspects of the program such as assignments, course content, course sequence, and the kind and amount of support provided which van Maren would suggest is the pragmatic side of phenomenology of practice. We have ongoing questions about determining the appropriate amount of coaching. Is there such a thing as too much coaching? We think so. How can we best determine the just-right amount of coaching to provide the support needed for forward movement, while still encouraging learners toward transference and transformation?

Reflection is Easy, Right? The Challenge of Meaningful Reflection in Community-Based Learning in the Arts and Sciences

Sandra Godwin, Chavonda Mills

Georgia College, Georgia's designated public liberal arts university, recently identified Community-based Engaged Learning (C-bEL) as its university-wide quality enhancement plan. Designers of the plan define C-bEL as an opportunity for high-impact experience (Kuh, 2008) that integrates theory and practice, requires direct interactions and mutually beneficial partnerships with community members and/or groups, and structured critical reflection. As such, recipients of internal C-bEL implementation grants must include critical reflection as a form of assessment. To date, twenty-six faculty and staff have been awarded grants with a significant number reporting that they have been only minimally successful at critical reflection. This paper examines obstacles to meaningful reflection for undergraduates, particularly students in Science, Technology, Engineering, and Math (STEM) disciplines (Nelson Laird et al. 2008). In addition, many faculty report time constraints and difficulty convincing students of the usefulness of reflection. Some faculty themselves report ambivalence. We explore the challenges reported by faculty in our sample, with a comparison of reflection data from STEM disciplines and from the arts, social sciences, and humanities. Our research adds to the growing literature on reflection in STEM disciplines (Harvey 2016, Mathieson 2016). We will share our findings with the ISSOTL community to create further dialogue on the inclusion of critical reflection as a form of assessment in community-based learning and to identify strategies to overcome barriers. As recipients of C-bEL implementation grants with our own set of challenges teaching reflection to students, we will also speak to our experiences as newcomers to SoTL.

Integrating Undergraduate Research into Coursework: A Project Based Approach

Hasitha Mahabaduge

Liberal Education and America's Promise (LEAP) promotes students' signature work to prepare students to complete a substantial cross-disciplinary project in a topic significant to the student and society. Two upper level physics courses were designed with a focus on hands-on research and community-based projects. The community-based projects for the course were designed to let students pursue their own signature work, applying the knowledge they gained from the course. Retrofitting a solar powered golf cart and conducting renewable energy workshops for elementary schools were examples of the community-based projects students completed as part of the Physical Principles of Renewable Energy course. By integrating hands-on research, into Statistical Mechanics course, students were prepared to position themselves at the forefront of knowledge in a field that is rapidly developing. Students presented their results in conferences and were given the opportunity to experience the entire process of doing research starting from a literature survey to disseminating results. These projects provided students with numerous opportunities to engage with hands on learning in order to develop those critical thinking skills that are crucial to evaluate, synthesize and construct their own insights. This presentation will provide insight into the process of developing undergraduate courses that successfully integrate hands-on research and community-based projects at a liberal arts college. A qualitative analysis of student perspective on the educational benefits gained by intentionally integrating research into coursework will be presented along with a plan to develop a quantitative assessment toolkit.

Building an Assessment Program through Threshold Concepts: Student Learning and Faculty Development in Gender, Sexuality and Women's Studies

Jessica Van Slooten, Amy Reddinger

In this poster we discuss the ongoing process of building a successful assessment program based on threshold concepts in gender, sexuality, and women's studies (GSW). Our assessment program began in 2009 with a broad focus on general education outcomes in order to fulfill the institutional assessment requirements. We assessed student learning using shared institutional proficiencies as well as through program-specific projects. This evolved into a more pointed focus on student learning of threshold concepts in our program assessment projects. By focusing on core concepts including patriarchy, the social construction of gender, feminist analysis, and intersectionality, we aimed to articulate learning goals that are at the heart of interdisciplinary learning in GSW. Our recursive assessment projects and data analysis are grounded in SoTL theory of threshold concepts (Meyer and Land; Launius and Hassel), and lesson study (Cerbin; Hassel, Reddinger, and Van Slooten), as well as feminist theory

(Crenshaw; Johnson; Lanius and Hassel). The projects generated various kinds of data, including student responses to prompts/quizzes, observations of student learning, program member surveys, and faculty assessment of student learning, which we analyzed using primarily qualitative methods of textual analysis. Ultimately, we argue for the importance of developing a disciplinarily-rigorous program using faculty development activities emerging from thoughtfully-conceived assessment work. Through trial and error, the program assessment projects have made us aware of pedagogical and institutional challenges that impede quality assessment. Over time, the recursive studies have provided us with solid information for constructing activities that will effectively facilitate our students' knowledge of threshold concepts. More than anything, we have learned that assessment leads us to think critically about our students' learning needs as we reconfigure our programmatic goals. We have found that assessment studies enhance our mission as a GSW program that is situated in a two-year institution. In an institutional context that caters to many students who are not college-ready, it is essential that we establish a curriculum that clarifies a path to academic success in every discipline. With specific assessment data on the GSW program, we are able to pinpoint gaps in disciplinary learning and then begin to work with one another to find the best way to proceed as a collaborative community of feminist educators. Program assessment projects have illustrated differences in types of courses, degrees of difficulty for different threshold concepts, and the importance of ongoing conversation and collaboration between program members to enhance our disciplinary identity and student learning. Disciplinary rigor thus begins with providing instructors with resources and opportunities to hone concrete pedagogical strategies that nourish a cohesive curricular plan. Threshold concepts facilitate that cohesion as they promote a deep understanding of disciplinary knowledge among students of various backgrounds and levels of preparedness, such as those who attend two-year institutions.

Engaging Students Through Partnerships: Including the Learner's Voice in Simulation Teaching **Erica Cambly**

Academia is undergoing a paradigm shift where students are no longer viewed as passive recipients of knowledge and are instead viewed as active participants engaged in the process of learning. In higher education, the importance of student engagement and learner-centeredness has been widely discussed in the literature (Fink, 2013; Seale et al., 2015). Partnering with learners in the design, delivery and implementation of educational materials not only improves student engagement, it also provides a unique perspective for instructors to better understand student identified needs (Boville et al., 2011; Jensen et al., 2016; Seale et al. 2015). Across our second-entry nursing program, simulation is used to enhance the learning experience of clinical courses in the undergraduate curriculum. A group of five faculty members, with special interest in simulation, make up our "simulation team". These faculty members are responsible to plan and facilitate simulations that are connected to the various clinical courses throughout the year. Over the past two years our simulation team has taken an innovative approach to increasing student engagement with simulation. We invited senior nursing students to partner with us as part of the simulation team. These student partners attended simulation team meetings, provided ideas for future simulations, and worked alongside faculty members to facilitate simulations for entry year students. This initiative has been very successful. Participation on the simulation team provided the senior year students with the opportunity to develop skills in facilitation and debriefing which is becoming increasingly important in the practice setting. In addition, their presence in the simulation debrief lent credibility to the value of the experience to the entry year students as senior year students were able to link the simulations to their own clinical practice. Lastly, faculty simulation team members received valuable feedback regarding our clinical simulation scenarios and the relevance to students' practice experience. This presentation will provide session participants with the opportunity to engage in dialogue about their own experiences or opportunities to work with students as partners in course or curricular development within their organizations.

The Oasis in a Concrete Jungle: Arts-Informed Methods in Social Work Classrooms **Yahya El-Lahib, Samantha Wehbi, Ganna Zakharova, Jordan Perreault-Laird**

The past decade has seen growing recognition for the potential of reaching new heights in the scholarship of teaching and learning through the integration of arts-informed practices in professional disciplines such as social work, nutrition, midwifery, nursing, among others. Focusing specifically on the example of social work education, our interactive poster reports on a study that addressed how educators are relying upon arts informed methods in

their teaching practices. As educators and students gain wider views of teaching and learning, the growing interest in the intersection between creative arts and social work has led to the development of a nascent scholarship focusing on theoretical discussions and anecdotal evidence (e.g. Dennison, 2011; Huss, 2009; Keddell, 2011; Maidment & Macfarlane, 2011; Walton, 2012). Arts-informed practices have also been utilized to advance social justice causes (e.g. Moxley, Feen-Calligan, & Washington, 2012; Ranta-Tyrkko, 2010; Reed, 2005; Reiter, 2009). While extant literature emphasizes the experiences of students, professors become fellow climbers on students' journeys of exploration, especially if educators choose to adopt a social justice oriented lens to education that extends beyond lecturing or the "banking" method (Bishop, 2012; Jones, 2009). Our study proposes the questions that remain unasked: How do social work educators rely upon arts-informed methods in teaching about social justice, diversity and inclusion and in what ways do such teaching practices contribute to student engagement and critical reflexivity? As well, how do such teaching practices enhance their own development as educators committed to social justice? To chronicle the aspirations, anxieties, highs, and lows of educators' experiences, our study relied upon arts-informed research methodology (Cole & Knowles, 2008) framed within a constructivist grounded theory approach (Charmaz, 2014). We conducted interviews at two universities with 10 educators including tenured faculty, pre-tenure faculty and contract instructors with a wide range of teaching experiences at undergraduate and graduate levels. Interviews focused on in-class teaching experiences where educators engage students in critical thinking about issues related to social justice. In terms of research methods, we were inspired by photo-elicitation techniques (Dumbrill, 2009), and concept mapping (Kerwin-Boudreau & Butler-Kisber, 2016) as a visualization tool to support theory creation. Initial findings from educator interviews reveal the tensions experienced at various points of their academic careers when introducing arts-informed activities in classrooms. Findings also highlight the potential contributions of arts-informed methods to enhance student learning, contributions to transformative social work practice, and educator development. The emerging landscape of these findings will be presented through an interactive poster whereby symbolism and iconography created by participants within the interview process will be transformed into an interactive poster. In this way, the dissemination of findings will in itself embody a new terrain of arts-informed teaching and learning as conference participants will engage with the poster to uncover this underexplored area of teaching and learning.

Learning by Doing: Modelling the Scholarship of Teaching and Learning (SoTL) for Faculty Fellows by Researching the Impact of Lecture Capture/Annotation Software on Student Perceptions of Learning
Carolyn Ives, Paul Willam Martin, Laurie Osbaldeston, Sarah Flynn

In the fall of 2016, a team from the MacEwan University's Centre for the Advancement of Faculty Excellence (CAFA) and MacEwan's Office for Service for Students with Disabilities (SSD) began collaborating on a SoTL project studying the impact of Sonocent Audio Notetaker on student perceptions of their learning. As the leaders of an in-house SoTL fellowship program modeled initially on the Mount Royal University Nexen Scholars Program, the team from CAFA realized that one way to help guide new SoTL researchers would be to engage in the program alongside them. Audio Notetaker is a lecture capture, visual, and annotation tool that our Services to Students with Disabilities (SSD) unit provides to students who experience barriers with the notetaking process. Based on principles of Universal Design for Learning (UDL), we wanted to investigate whether this program would be beneficial for all students, not only those with identified disabilities. This explores an underrepresented group in SoTL, as students with disabilities are, at times, excluded from SoTL research because their accommodations can be difficult to meet in a traditional classroom setting. Our study involves the use of Audio Notetaker in one section of ENGL 103: Introduction to Literature. Students are not required to use the software, but it has been provided to them at no cost, with downloads possible at any time in the term. Audio Notetaker is used in each class period to capture the audio, and the instructor uploads PowerPoint slides, photos of the board, and other documents into each file to correspond with the audio. Files are then uploaded for students to add notes and review. Students are also invited to record the class periods themselves, using the tools in Audio Notetaker in real time. We enabled statistics tracking in BlackBoard and tracked the number of downloads. At the end of the term, participants will also be asked to complete a survey. The survey responses will be compiled for us to gain insight into how the students use the software and the students' perceptions of the program's impact on their learning. The research regarding use, effectiveness, and student uptake of assistive technology is a small field and generally is seen to have not kept up with the rapid growth and development of these technologies (Peterson-Karlan, 2011); this is further evidenced by the lack of specific studies about Audio Notetaker. However, from results to date, we know that students have

been found to benefit from technologies that assist with reading, note taking, organization, spelling, and writing, allowing students to focus on engaging in higher level thinking and problem solving (Van Zanten et al., 2012; Vajoczki et al., 2011; Holbrook & Dupont, 2009; Luna & Cullen, 2011; Brotherton & Abowd, 2004; Scutter et al., 2010; Shaw & Molnar, 2011; Bollmeier et al., 2010). Although Audio Notetaker does not allow for the inclusion of video, it does allow for the inclusion of other visual elements, such as slides, pictures, diagrams, pdf files which can be paired with audio. Although the survey has not yet been administered, we will have results in late April for inclusion in our conference presentation. From the literature about lecture capture software and our own experiences as educators, we expect a positive response from students about the value of Audio Notetaker for their learning. Depending on our findings from the statistics tracking, download information, and survey information, we may develop a larger-scale study to investigate the use of Audio Notetaker in different kinds of courses and with a greater variety of students. Further, we hope to explore additional potentially useful UDL tools to help students succeed in higher education. Most importantly, our experiences with our SoTL work have helped us evolve as educational developers intent on supporting faculty in our SoTL Fellows Program. It's still early in our process, but we are hoping that this program will help build capacity for SoTL at MacEwan University.

On Love, Learning, and Implications for Practice: Reflections of a White Professor Teaching Cultural Competency to Black Adult Students **Shantih Clemans**

Talking openly and genuinely about race and racism in the United States is especially complex and challenging for white faculty who mentor and teach black students. Faculty need support, guidance, and models to help develop comfort and confidence to teach these important topics. A reflective teacher needs to be open to learning, curious about students' lives, and skilled in self-awareness. There are many ways to develop self-awareness in teaching. Reflective writing is one method teachers use to improve their own practice approaches. Informed by feminist, social work, adult learning, and intersectionality literatures, this paper reports on the author's research on teaching Cultural Competency to a class of black and African American adult college students. The paper includes detailed examples of the author's teaching journals and samples of student writing, as well as the author's thinking, questioning, wondering, and learning in response to these examples. The paper concludes with several practice principles for engaging and supporting faculty in developing reflective practices that promote genuine dialogue about race, racism, oppression and social justice.

Conceptualizing the Use of Cases in Teaching and Learning **Jean Slick**

New horizons, emerging landscapes, and underexplored territories in SoTLThe use of cases in teaching has a long history in professional fields of study, including law, business, and medicine; within each of these fields there are recognized signature case-based pedagogies. The motives for development of these signature approaches to the use of cases were common "there was a recognized need to improve students' learning outcomes (Garvin, 2003). Existing schema for conceptualizing methods of using cases in teaching (e.g., Barrows, 1986; Jonassen, 2010) do not fully distinguish between the types of learning outcomes associated with the use of cases. This poster will describe and illustrate a novel conceptual framework for explaining three different functional approaches to the use of cases in teaching, which are differentiated based on learning outcomes (Author, 2016). The conceptual framework presented in this poster was developed as part of a recent study investigating why and how faculty members use cases in their teaching in postsecondary disaster and emergency management (DEM) programs in Canada and the United States. DEM is new field of post-secondary study and as of yet there do not appear to be any signature case-based teaching methods, as there are in other fields of study. Thus, this study also sought to explore what the distinctive characteristics of the use of cases in the DEM field are and might be. Qualitative case-based research methods were employed to explore faculty members' reasoning for and approach to the use of cases in their teaching in the DEM field. The orienting theory for this study was activity theory, which is a recognized variant of socio-cultural learning theory. The conceptual frame also drew from literature on the disciplinary and signature characteristics of pedagogy. Data included transcripts from interviews with seven faculty members who have made significant contributions to the development of DEM as a field of study, as well as copies of course syllabi and materials used in their case-based learning activities. A total of 37 different case-based learning

activity designs were examined in detail. The type of instructional guidance developed from the study findings was informed by design-based research methods as used in the education field. The findings from the study supported the development of a domain-based outcome theory explaining three distinctive reasons for using cases in teaching in the DEM field, as well as an activity theory based explanation of the function of cases relative to each of these different outcomes. While there are recognized limits to the types of generalizations that can be made when using case-based research methods, the conceptual framework developed for explaining how and why cases are used in DEM postsecondary programs was also found to (a) explain differences between the use of cases in other established programs, including law, business, and medicine; and, (b) extend theoretical explanations about how cases support learning. The focus of this poster is on sharing this novel conceptualization of how and why cases have and can be used in different fields of study, as well as key instructional design questions that application of this framework in other fields of study.

Integrating Game-Based Learning into Undergraduate Nursing Education **Sandra Davidson, Karin Olson, Upinder Singh, Liz Cernigoy**

The ability to appraise and apply research to clinical practice is a requirement for professional practice as a registered nurse in Alberta. Unfortunately, undergraduate nursing research courses are historically perceived as dull and boring. We developed an online game for teaching nursing research to see if we could increase students' interest in and knowledge about nursing research. Online game-based learning (GBL) links gaming theory, computer technology and principles of teaching and learning. GBL is grounded in the pedagogy of mastery learning and has positively demonstrated transformative learning experiences in K-12 education. Using GBL in a nursing research course provided an opportunity to extend this strategy into a post secondary education setting and support the development of educational scholarship in an emerging field. Given the limited research on GBL in nursing education, this mixed-methods study provided an opportunity to advance GBL as a valid teaching and learning strategy, and hence is directly relates to this year's ISSOTL theme of "New horizons, emerging landscapes and underexplored territories" in the scholarship of teaching and learning. In this study we compared two ways of using GBL– a blended format in which it was used in conjunction with face-to-face delivery of course material, and an online format. The study outcomes were: Student satisfaction with course delivery, student engagement, and achievement of course objectives. An online gaming platform, 3D Gamelab, was utilized to apply GBL principles. Student responses were assessed using questionnaires and narrative comments. Descriptive statistical analysis revealed that among students in the blended format, GBL positively impacted their ability to formulate research questions, assess the validity of research articles, and differentiate between qualitative and quantitative research designs. Data on study outcomes from online students were limited, but they noted that the use of varied learning tools (i.e videos, quizzes) in 3D Gamelab; quest-based learning; and instructor feedback, positively influenced their ability to achieve learning outcomes. Student feedback also revealed the value of visual learning tools to promote engagement. The availability of a strong information technology team in our faculty was a definite facilitator during development and implementation phases of our work. The quests in our game were linked to clear learning objectives, and built on each other, resulting in the knowledge and skills required to appraise nursing research literature. We found that GBL worked best with classes of about 30 students, given the time required to provide feedback to students' work. Our findings raised some questions, however, about the place of mastery learning in professional programs, and this will require further exploration. Our evaluation showed that students using both formats were engaged and that learning outcomes were met. Many, though not all, students were satisfied with both course formats. Based on the results of this study and our continued experience with GBL in the undergraduate nursing research course in our faculty, we plan to continue exploring new ways to use GBL in our teaching.

Comparing the Teaching Strategies Used by Allied Health Academics to Make Their Teaching Meaningful and Engaging with the Strategies Used by Nursing Academics **Kay Crookes, Karen Walton, Anne-Therese McMahon, Patrick A Crookes**

This presentation will present data from a qualitative-descriptive study undertaken in Australia, examining the methods, which academics from a range of Allied Health professions, use to make their teaching 'meaningful and engaging' for their students. This inter-disciplinary study builds upon previous work undertaken as part of a

Master of Philosophy degree that explored 'meaningful and engaging teaching techniques used by nurse academics' (author, 2015). It is therefore intended, that not only will data collected from Allied Health academics be presented; but that data will also be compared and contrasted with data collected from the previous study (author, 2013). This process engages with the conference theme of "SoTL newcomers, fellow climbers, and guides" as it will look to compare and contrast the experiences of fellow SoTL scholars in different disciplines to provide guidance to fellow scholars and SoTL newcomers. Nurse academics believe that nursing students are different to students in other disciplines - and that they thus require different teaching approaches from other disciplines (Hylton, 2005). It will be interesting to see if allied health academics see their students in a similar light. In line with the original project, it is intended that around 20 academics from a range of allied health disciplines will be interviewed regarding the ways in which they attempt to make their teaching meaningful and engaging for their students. These interviews will be taped and then analysed post-facto to identify themes in the data. Also of note, is that this follow-up project is being conducted with academics from allied health backgrounds. As such, it is the first step in a longer plan of inter-disciplinary research focusing on the effectiveness of teaching health professionals. At the end of this presentation, the audience will have an opportunity to ask questions and will be encouraged to reflect upon their own use of meaningful and engaging teaching techniques and how these may differ from those used by nursing and allied health professionals.

Do They Actually Read What I Write? Business Student Engagement with Written Feedback **Mark Arnison**

It is common practice in business schools for professors to provide written feedback to their students relating to major written projects such as case study reports, marketing plans and research papers. Many of us feel that we are providing insightful information for our students that will help them improve their work in our course and in future courses. However, it is not always clear whether or not our students actually read or act on that insight. This exploratory study has been designed to find out what students do with the feedback they receive, how they perceive that feedback and why they respond the way they do. While there is a significant amount of research about what students who engage with feedback find useful when they receive it, the overall level of student engagement with feedback is considered an under-researched area by some researchers studying the higher education environment. The study draws on students registered in an undergraduate university's Business Undergraduate Research Pool (students receive a small amount of course credit for participating as subjects in several research studies during the term). Study participants completed an online survey that asked questions about their response when receiving written feedback from professors, and their thoughts and feelings about receiving that feedback. The survey also collected data relating to the students' academic self-efficacy (surface apathetic approach, strategic approach or deep approach to learning), the students' preferences for learning environments (information transmittal vs development of understanding) as well as the big five personality traits (extraversion, agreeableness, openness, conscientiousness and neuroticism). Demographic information, including previous educational experience, was also collected. The study provides a literature review of feedback frameworks, and student and faculty perceptions of feedback in higher education environments. The intent of the research is to inform the development of feedback processes to ensure that learners are fully engaged with the learning process. This study is a work-in-progress, with data collection complete and analysis underway. Preliminary findings show that, for the most part, students do engage with the feedback that they are provided, but not always for the reasons the professors might expect.

The Importance of Teaching And Researching Teaching For Career Success For Female And Male Academics At Canadian Universities **Elizabeth Bowering, Maureen Reed**

At nearly all North American universities, tenure and promotion to the rank of Full Professor is largely dependent on research productivity. In an effort to identify the factors underlying research productivity, and hence promotion, researchers have examined several variables, including the faculty member's gender, self-esteem, and research efficacy. Although the findings are mixed, gender has been associated with research productivity, with female faculty less likely to achieve the rank of Full Professor than their male counterparts. Why this is so is unclear. In the current study, we are interviewing female and male tenure-track faculty at Canadian universities about their

career goals as well as the personal and work environment factors that affect their research productivity and, hence, career progression. One hypothesis under examination in our study is that female faculty are more likely than male faculty to emphasize their teaching-related responsibilities and also be involved in conducting research that examines teaching. Might these teaching and research interests be less effective in achieving promotion in rank? Overall, our work is relevant to the conference theme of “Reaching new heights” because it speaks to the relative importance of teaching-related responsibilities and research in teaching for career success for female and male academics.

SoTL’s Slippery Slope: Subjectivity in Statistics **Ashley Akenson, Tessa Bishop**

Quantitative research methods are often imagined to be very cut-and-dry and merely a collection of steps to follow in order to get the important stuff: the findings. Findings are vital in helping shape the SoTL landscape and provide educators with the knowledge, strategies, and practices to provide a valuable education experience to students. So, research methods rarely pique interest. Yet it is these methods that provide the frameworks, approaches, and tools that produce our much-employed findings. In order to best understand and adopt these research findings in our roles as educators, a closer look must be given the research methods and the assumptions we make about them for they have a greater impact than we realize. This project focuses on an under-recognized element of statistical research projects “subjectivity” and details the points in statistical research that are guided by subjective choices. In Western culture, we instinctively believe that numbers don’t lie; whatever the results of quantitative research project are, they must be true (assuming the research design was sound and the analysis was appropriately performed) (see Berger & Berry, 1988; Kuhn, 1977; & Parker, 2015). Aside from Bayesian statistics, which incorporates a researcher’s best guess on how the analysis will turn out (Berger & Berry, 1988), statisticians and quantitative researchers and the wider academic and general public generally assume the results of a statistical analysis are devoid of subjectivity and have no connection to the researcher or analyst (Parker, 2015). Certainly there can be no subjectivity to the extent seen and interrogated in qualitative research! We beg to differ. While many researchers, qualitative and otherwise, take issue with this claim (Breuer & Roth, 2003; Holzkamp, 1991; Mayo, 1983), we have yet to find in the literature a systematic argument illustrating ways in which statistics is inherently subjective and produces inherently contextual results. Without recognizing this subjectivity, the findings we use as educators may be implicitly biased and may have unintended consequences. In this presentation, we recognize the decisions made during any statistical research project that necessarily stem from the individual, contextual, and subjective choices of the researcher. First, we look at the initial steps of the project, from creating research questions to selecting a project design to screening data. Next we move to examine the inherent assumptions of the analysis phase, primarily the choice of statistical tests used to run the numbers. Finally, we detail the interpretation phase of the project, from choosing an alpha level to translating the abstract statistics that an analysis produces and what that means for educators as consumers of statistical research. Ultimately, our goal is to trouble the long- and widely-held notion that statistics and quantitative research methods are value- and context-free producers of objective knowledge. By troubling our typical understanding and conception of statistics and quantitative research methods, we further position ourselves as effective producers and consumers of SoTL research that use these methods and, in turn, continue to create and improve valuable educational experiences in the classroom.

You Reached the Peak, But I Can’t Follow: Crevasses in Flipped Classroom Literature **LeighAnn Tomaswick**

Have you read journal articles on the flipped classroom approach and felt like you did not get enough detail to be successful in your approach? If so, you are not alone in that crevasse. Articles are one of the top sources of information that faculty choose when considering new teaching methods (Robertson et al, 2011). Instructors often implement a modified flipped approach using the limited information and find no improvement in student outcomes (Andrews et al, 2011). While jargon usage is decreasing and methodological rigor is improving, most articles do not provide sufficient detail for others to understand the whole picture of that classroom and what may be part of that (un) successful implementation. Literature reviews of the flipped classroom suggest improvements in methodological rigor of published studies, but the reviews rarely emphasize the need for more

details provided about the research classroom in relation to validity of the study (Seery, 2015). Most flipped classroom developers, instructors and researchers would agree that a flipped classroom approach is one in which the traditional lecture is introduced as pre-class work and the face-to-face (f2f) time is focused on active-learning experiences. Active-learning experiences include (but are not limited to) hands-on experiences, peer instruction, use of student response systems and group work. Other scholars may require pre-class work to be video-lectures or require post-class work for reflecting and refining knowledge. The flexible nature of the approach leads to varying implementations and more places for climbers, those implementing the approach, to fall into a crevasse and lose their way. This poster presents the results of a systematic review of the flipped classroom literature, in the context of chemistry classroom research between 2014-2016, and critically appraises the transparency of key elements as described by Schwab (1973); the learner, the subject matter, the milieu, and the instructor (Schwab, 1973). In order for an instructor to reach the peak of successful implementation of a flipped classroom approach, they should be able to review publications with transparency of these key elements. These important guideposts to the peak might include characteristics of the students, questions asked, lesson plans and other elements to the curriculum (subject matter), physical classroom space and student experiences in and out of the classroom (milieu), and experience, actions and support as related to the instructor. It is particularly important for these details to be provided in the flipped classroom literature due to the flexible nature in which the approach can be implemented. The purpose of this poster is to present findings from the literature review and discuss the implications for future research and publications; i.e. more transparency in publications to help those wishing to summit the highest peaks.

A Survey of Experiential Teaching and Learning Opportunities in Psychology at the Post-Secondary Level in Canada
Evelyn Field, Douglas Murdoch

Experiential learning is becoming increasingly important for students in post-secondary education. Experiential learning is often defined as “learning through doing”, and via student reflection on the process of doing. In many professional programs experiential learning opportunities are critical for accreditation (for example education and nursing) and are clearly described on their websites. However experiential learning opportunities in non-professional programs, such as undergraduate Psychology and other Faculty of Arts programs, are often not clearly described in their online websites. Our Psychology department is considering the development of a formal experiential learning stream in our degree program. We therefore undertook a cross-Canada examination of experiential learning opportunities in undergraduate Psychology. We found several examples of well-defined experiential learning programs in psychology but many psychology programs had only scattered information. In this presentation we will provide an overview of the experiential learning opportunities in Psychology across Canada in various categories such as Community Service Learning and Co-operative Education among other novel initiatives. Finally, student reflection on the “learning through doing” component of experiential learning is often not apparent on experiential learning websites. We will include possible strategies for incorporating student reflection on experiential learning initiatives in Psychology programs that may be useful for faculty teaching at any level of post-secondary education.

Emerging Transdisciplinary Approach to Curriculum for Community-Based Research and Service Learning for Sustainable Development
Vladimir Kricsfalussy

Environmental sustainability has become an important global issue with many universities developing undergraduate and graduate programs about the use and preservation of natural resources. Diverse forms of experiential education be used to reinforce learning about environmental issues and sustainable responses. Interdisciplinary studies will continue to play an important role in preparing students for working collaboratively across disciplines. However, more programs are required that foster cross-sectoral transdisciplinarity and develop the student ability to work with multiple forms of knowledge and information. We offer our experiences in developing graduate program in the School of Environment and Sustainability at the University of Saskatchewan. The program, described here Master of Sustainable Environmental Management, is design to provide advanced knowledge and professional skills, an appreciation of the breadth of environmental and sustainability issues, and an ability to interact with professionals outside a single discipline and stakeholders outside a university setting. The program brings together students from different natural and social sciences and varied backgrounds, and it enables students

to pursue careers in the environmental and sustainability sector. The program encourages a transdisciplinary approach to curriculum and instruction that promotes student-centered inquiry, problem-based learning, and instructor collaboration. Strategic program partnerships engage community-based organizations, governments, businesses, and other external partners who offer research projects and support as a means of encouraging students and instructors in community-based research and service learning. Project work is the heart of the program. Building an analytical frameworks for transdisciplinary sustainability research students learn to solve practical problems and to produce a result collaboratively, aided by instructors from the university and project managers from external partner organizations. Students develop knowledge and methods of science and project management in study teams. Embodying the concept of “mutual learning”, the program entails work on complex problems with case agents in areas such as sustainable agriculture, biodiversity conservation, food systems, urban and regional development, sustainable energy, environmental interventions and many others. This provides a real-world environment for students, instructors and partner organizations to engage in learning opportunities. An advantage is that such model allows students to develop competencies in multiple field and analytical techniques, to practice their academic and professional skills, and to provide usable knowledge directly to decision-makers in the environmental and sustainability sector.

“Do I Really Belong Here?” Examining the Implications of Religious Identity for Student Accommodation and Inclusion in Higher Education **Michael Agnew**

Over the past two decades there has been a notable increase in the attention accorded in the popular press to the role of religion in higher education (Finder, 2007; Hill, 2011). Despite media interest in the religious beliefs of undergraduate students as well as public debates about the role of religious accommodation in publicly funded, nominally secular educational institutions, scholarship on these issues has been limited (Mayrl and Oeur, 2009; Stevenson, 2014). Indeed, Nicholas Bowman and Cynthia Smedley have argued that religious affiliation constitutes an important “yet often overlooked” form of identity that may influence academic performance as well as student engagement and inclusion within their campus community. They term those students from marginalized religious groups as “the forgotten minority” within higher education scholarship (Bowman & Smedley, 2013). Based on quantitative surveys and semi-structured interviews conducted with undergraduate students and staff at a Canadian university, the goal of this presentation is to present a nuanced understanding of student belief and practice in Canadian higher education, and to explore what effect this may have on students’ sense of inclusion and engagement both within the university classroom and in the broader campus environment. This paper will argue that for those students who self-identify as religious or spiritual, their worldviews are integral to their identity and not something that can be readily bracketed once they enter the classroom. Religious and spiritual beliefs and values hold the potential to be key interpretive lenses mediating in-class learning and interactions with faculty and fellow students. This paper will also examine the implementation of an academic accommodation policy relating to religious observances, which came into effect in September 2015 at our institution. Up until the policy was implemented, the process for requesting religious accommodation was uneven and often arbitrary. The new policy at our institution is designed to provide greater consistency and equity for religious minority students whose observances are not recognized in the academic calendar, which in the past had led to conflicts with their academic obligations. Within the past five years, most Canadian universities have now adopted some form of official accommodation policy relating to religious and spiritual observances. The degree to which the new policy has been taken up by students, as well as the effectiveness of the policy in addressing students’ accommodation needs will be discussed. Understanding student religious identity and its implications for higher education institutions is critical as they strive toward providing greater access to educational opportunities and to inclusive spaces for an increasingly diverse student population. This paper will invite conference attendees to engage in a facilitated discussion about student religious identity and accommodation policy in higher education (a nascent area of research within the SoTL literature), and will allow them to reflect on the contexts of their home institutions. As such, this paper will engage participants in exploring ideas closely connected to the conference thread of new horizons, emerging landscapes, and underexplored territories in SoTL.

The Role of Educational Electronic Health Records (eduEHRs) and Field Trips in Undergraduate Health Informatics Curriculum: Reaching the Summit of Competency Development

Gulprit Randhawa

Background and Rationale: Undergraduate Health Informatics (HI) students are expected to develop Health Informatics Professional (HIP) competencies. In their required co-op work terms and future careers, HI students are expected to analyze, design, implement, and evaluate Electronic Health Records (EHR). However, first and second-year HI students have very limited exposure to EHRs. This lack of exposure results in challenges with developing HIP competencies that are pre-requisites for upper-level HI courses and co-op work terms. Currently, there is a dearth of literature on: (a) methods for developing HIP competencies in HI students (Gloe, 2010), (b) the use of educational EHRs (eduEHR) in HI courses (Borycki et al., 2013), and (c) the use of field trips in HI courses to expose students to real-world use of EHRs. In Canada, there are only two studies examining the use of eduEHRs in undergraduate HI curriculum (Borycki et al., 2014; Bassi, 2011). The authors recommend future research on (a) the effects of eduEHRs on HIP competencies for undergraduate students, and (b) appropriate learning activities to integrate eduEHRs into undergraduate HI curriculum. **Motivating Inquiry Question:** What are the effects of providing students in a second-year HI course with exposure to an educational EHR and field trips on HIP competency development? **Methods:** A quasi-experimental design (one-group pretest-post-test using a double pre-test) will be used. The double pre-test will allow students to serve as their own controls. The intervention will include an eduEHR and field trips for students in HINF 200 (Principles of Health Database Design) at the University of Victoria (UVic). Prior to and after the course, students will complete a demographic questionnaire, HIP competency questionnaire, and an EHR assignment that requires application of HIP competencies. They will also participate in a focus group to share their perceived impact of the intervention on HIP competency development. Descriptive statistics will be used to analyze the data from the demographic questionnaire. Repeated Analysis of Variance (ANOVA) will be used to test the significance of any changes between the observational measurement time points for the HIP competency questionnaire data. Qualitative data from the focus group will be analyzed using thematic analysis. The quality of the EHR assignments will be assessed by the course instructor. **Outcomes and Insights:** In September 2016, the author had introduced an eduEHR into an undergraduate HI course at McMaster University without a SoTL approach to empirically examine the pre-post effects of the eduEHR on students' HIP competencies. Based on critical reflection of the lessons learned from this experience, a SoTL approach will be employed to explore the motivating inquiry question at UVic. The author hypothesizes that the intervention will significantly broaden the scope of students' HI experience beyond that achievable with text-based learning. Specifically, the intervention will help students to design a user-friendly EHR with robust functionality, which is a critical success factor to achieve new heights in global EHR adoption and use. This project will positively contribute to the understanding and practice of SoTL in HI, which is a highly underexplored territory in SoTL.

Clarifying and Sharing: The Journey to Define “Best Practices” in Active Learning at a Japanese Liberal Arts College

Cathrine-Mette Mork, Satoshi Ozeki

In 2014, The Japanese Ministry of Education awarded a five-year grant to Miyazaki International College (MIC) to explore and clarify “best practices” in active learning teaching strategies (ALTSs) at MIC. In so far as the use of ALTSs helps students to develop critical thinking skills, the ministry is invested and committed to promoting active learning methodologies in university classrooms throughout Japan. As one of the first English-medium, liberal arts colleges founded in Japan, and as one that has stressed since its founding the development of critical thinking skills and active learning methodologies, MIC was thought to be an ideal institution for research into active learning and critical thinking skills. Following through on the objectives outlined by the grant, the college's Active Learning Working Group (ALWG) compiled and defined a list of over thirty Active Learning Teaching Strategies (ALTSs) used at the school. These strategies are essentially the teaching techniques that instructors employ in their classes to engage students in the learning process, encouraging them actively interact with the materials, the instructor, and each other and employ various levels of critical thinking. The list was compiled by researching strategies used at several American universities and through class observations and interviews with teaching faculty at MIC. The ALWG decided to organize the strategies in a logical fashion in hopes of determining how the AL strategies differ from each other, and how much of what kinds of activities are currently being employed at MIC. The group's efforts resulted in a categorization heuristic that may be of use to other institutions wishing to clarify their educators'

preferred practices for ALTs. This poster presentation includes a visual of the MIC ALWG matrix (heuristic) and an explanation into how it was developed and what significance it holds. The group's compilation of ALTs will also be made available to those interested.

Feedback Model in Teaching & Learning

Qi Gao

Feedbacks in teaching & learning have been concerned for longtime. Numerous researches indicated that feedbacks could obviously enhance the learning outcomes and encourage active learning (Kluger & DeNisi, 1996; Black & Wiliam, 1998; Vollmeyer & Rheinberg, 2005). Existing studies focused on the ways of feedback and how they impact on learning process (Hattie & Timperley, 2007; Thurlings et al., 2012), but the mechanism of feedback in teaching & learning sometimes is overlooked. In this paper, a general feedback model in teaching & learning has been proposed. Unlike most feedback models in education which are built on cognitive psychology, the novel model absorbs the essences of control system theory. In this model, the instructor acts on learner by teaching and the learning outcomes feedback to the instructor. Thus, not only feedback from instructor to learner impacts the learning outcomes, but also the feedback from learner to instructor influences the teaching action. The continuous two-way effects in a close-loop system make teaching & learning dynamic and complex. From the perspective of this model, several elements should be concerned: 1) Positive and negative feedback. Negative feedback reduces the error between system real output and expected output in contrast to positive feedback which increase the error. Negative feedback usually has been regarded as beneficial because it will lead the output towards the expected result. In teaching & learning process, negative feedback is very popular that normally is known as "corrective feedback". But in reality, positive feedback is also very important because it will push the system output towards a new state. In teaching & learning it inspires the self-growth of the learner. 2) Stability To a close-loop system with feedbacks, stability is a key performance indicator. The existing of feedbacks implied that past system outputs will influence the future outputs. In teaching & learning loop, the loss of stability will be observed as learning outcome diverged or conflict between teaching and learning. According to Control Theory, the intrinsic learning style of learner, the forward gain between teaching action and learning outcome, and the intensity of teaching will determine the stability of teaching & learning. 3) Time-delay. Time-delay is another key factor which will influence the stability of a teaching & learning system. Generally, long time-delay is harmful to a close-loop feedback control system. But it's a common feature of teaching & learning activities. Prediction-based teaching strategy is an effective pedagogy to solve this problem. 4) Steady error. The steady error in teaching & learning could be construed as the error between real learning outcomes and expected learning outcomes after all teaching & learning process ended. Theoretically, a linear input acting on a system without integral element will result an output with steady error. So if the steady error is expected to be eliminated in a teaching & learning system, the teaching action must depend on the historical learning outcome of the learner. Otherwise, the error of final learning outcome must be tolerated. 5) Dynamics. The dynamical performances of a close-loop system include overshoot, settling time etc. The theoretical analysis shows that fast control and less overshoot are incompatible. It reveals that strong response to feedback will lead to big deviations, and smooth learning process need patience. At last, the categorized feedbacks and their practices in literatures have been analysis based on the proposed feedback model of teaching & learning. All elements above in the model would be discussed to provide evidences against the effectiveness of this model.

SoTL Aspirations: Multidisciplinary Writing Groups as an Entrance into the Practice of SoTL for Contingent Instructors

Sherry Fukuzawa, Marie Vander Kloet, Mandy Frake-Mistak, Marion Caldecott, Alice Cassidy

This poster will demonstrate how multilevel and multidisciplinary networks can support contingent instructors to leverage their teaching experiences into SoTL. We will integrate contingent instructors into the model by Williams, Verwoord, Beery, Dalton, McKinnon, Pace, Poole & Strickland, (2013) that stresses the importance of using social networks to integrate SoTL into Institutional cultures. We will do this by providing an example of a multidisciplinary and multilevel writing group that collaborated on a publication investigating the complicated relationship between contingent instructors and the practice of SoTL. Our writing group was part of a larger process organized by the Society of Teaching and Learning in Higher Education (STLHE) that oversaw several multidisciplinary and multilevel writing groups in a year long project to investigate different perspectives in the practice of SoTL (Marquis, Martensson, & Healey, 2017 on-line pre-publication). Our collaborative writing group was

comprised of nine women from different institutions across Canada. Our group included SoTL newcomers (two current full-time contingent instructors and one part-time graduate student contingent instructor), SoTL fellow climbers (tenured professor and Dean), and SoTL guides (educational developers). This poster will use the Williams et al., (2013) model as a foundation to demonstrate how institutional multi-level networks can include contingent instructors as SoTL newcomers with valuable teaching experiences. We will include the highs and the lows of this collaborative process to emphasize the importance of the formation of multidisciplinary networks to support contingent instructors to feel more confident and comfortable in their contributions to the practice of SoTL. In Canada, contingent faculty teach a growing number of undergraduate courses at colleges and universities (Field & Jones, 2016). They experience a broad spectrum of conditions and experiences because they are governed by institution specific policies. This makes researching contingent faculty a complex process (Brownlee, 2015). Recent research in Ontario, Canada has highlighted that, amongst the spectrum of contingent faculty demographics, there is a growing sector of long-term contingent instructors who have been teaching several courses (often at different institutions) for an average of four to five years. They are often dependent on these teaching contracts for income and aspire to full-time teaching stream positions (Field & Jones, 2016). The possibility of securing full time positions is dependent on continued scholarly output which is difficult for contingent instructors who have high teaching loads and often are without Institutional networks and supports for research. Some contingent faculty may consider drawing on their teaching experience and expertise to begin undertaking SoTL research. This can be challenging because successful SoTL work is often dependent on collaborations and networks (Verwoord & Poole, 2016). Due to their precarity, contingent instructors feel marginalized on the fringe of their institutions. How do contingent instructors who are interested in SoTL get involved? How can contingent instructors advance their teaching experiences into methodologically sound and significant research? This poster will look at one way this can be achieved.

HiITing the Optimal Prescription: Exploring How Exercise Breaks During Lecture Can Improve Academic Performance

Michelle Ogrodnik, Barbara Fenesi, Kristen Lucibello, Joseph A. Kim, Jennifer J. Heisz

Student attention during a university lecture typically declines as the lecture progresses, negatively affecting learning and memory for the presented material. Our prior work showed that exercise breaks during a university lecture improved student attention and learning. Participants watched a 50-minute online lecture while intermittently taking exercise breaks, cognitive breaks (computer game), or no breaks. The exercise breaks (5-min of high intensity exercises) significantly improved on-task attention throughout the lecture ($p < .05$), which translated into improved learning compared to other conditions on immediate testing and after a 48-hour delay ($p < .05$). Although promising, high-intensity exercises may be an entry barrier for a growing population of sedentary university students. Our current work aims to determine whether reducing the intensity of the exercise breaks can still yield similar benefits, leading to greater feasibility for implementation. Interestingly, previous research shows no added benefit of high-intensity over moderate-intensity exercise on cognitive performance, particularly with complex tasks. We are comparing a no breaks condition to exercise breaks of high, medium or low intensity. Additional lab research will continue to refine the exercise prescription leading to a classroom implementation study to document the impact of physical activity on learning performance across an academic term.

Facilitating Learning Using Online Video with Peer-To-Peer and Self-Evaluation

Erica Cambly

Peer-to-peer and self-evaluation has been recognized as a useful tool in higher education (Rush et al, 2012). Students receive constructive feedback from a peer that may influence their own practice but they also may benefit from watching another's actions and providing feedback in a thoughtful, professional manner (Grierson et al, 2012). Several authors suggest that formative assessment about communication and interpersonal relations is particularly influenced through the receipt of peer feedback (Hulsman & van der Vloodt, 2015; Perera, Mohamadou, & Kaur, 2010). Self-assessment aims to promote autonomy and independence and encourages the learner to critically reflect on their practice. The use of video allows the learner and reviewer(s) to observe the interaction multiple times if necessary, allowing for richer evaluation. This presentation will reflect on the integration and evolution of online peer and self-evaluation into a foundational nursing course. Prior to completion of the online

project, students attended a lecture, practiced in a laboratory setting and had access to a video where they could observe a faculty member performing the skill. Each student filmed themselves demonstrating the skill while incorporating elements of assessment, interpersonal communication and therapeutic technique. The videos were uploaded to a secure server where students could share them with faculty, teaching assistants and peers. Students received evaluation from a peer and provided that peer with feedback. This evaluation was formative in nature and provided no grade. After receiving the peer evaluation, each student completed a self-reflection using the themes of assessment, psychomotor skill and relational processes and were encouraged to incorporate new learning gleaned from the peer evaluation into their own reflections. Once all components were submitted within the online environment, each student received feedback and a grade from a teaching assistant or faculty member. The use of video with formal peer- and self-evaluation may be useful across disciplines in higher education. This presentation will highlight challenges and opportunities faced when incorporating video with peer- and self-evaluation. Session participants will be engaged in a discussion pertaining to how other programs and disciplines may adopt similar approaches to create more effective learning experiences for their students.

Open Enough? Transitioning from Closed to Open Resources and Courses and the Impact on Teaching and Learning

Erik Christiansen, Michael McNally

This paper examines the continuum from “closed” to “open” for both open educational resources (OER) and open courses. The primary focus is to evaluate what instructional choices are needed to increase the openness of courses and how such openness impacts the student experience. The majority of OER literature is concerned with cost savings to students and are presented as institutional case studies. This conceptual paper provides an analysis of the critical academic literature and summarizes the common obstacles instructors face when working on their own OER projects - namely instructional design, technical support, and institutional tenure. Through this analysis, the authors propose a six step scale for conceptualizing openness - outlining the work and support required as one moves from a closed to open course design model. The preliminary findings reveal that creating open courses requires considerably more work on the part of the instructor. In addition to being a content expert, truly open courses require a greater percentage of open access readings, design for a variety of audiences, knowledge of open licensing and copyright, knowledge of dissemination platforms and venues for open educational resources, and an understanding of usability and accessibility. Significantly, the scale also illustrates that each successive step towards openness requires ever greater time and expertise on the part of the instructor. For instructors to develop fully open courses knowledge of pedagogy and design principles may supercede the required content expertise. While fully open courses have inherent value to the public, there can be pedagogical consequences such as self-assessment limitations and a lack of foundational literature and sophistication. Without sufficient incentives and institutional support it is unreasonable to assume that instructors will transition traditional closed resources and classes to open variants. The authors conclude by offering recommendations to instructors for striking the right balance between content and access as well as identifying key means through which institutions can support instructors to facilitate the development of open courses and resources.

Exploring the Effect of Diagnostic Score Reporting for Clinical Assessments

Alix Clarke, Hollis Lai, Alexendra Sheppard, Minn Yoon

Structured clinical assessments (SCAs) are essential to health professional education, as they assess not only students' knowledge, but also their ability to apply that knowledge. These assessments are intense, thorough and capture a tremendous amount of information on student ability, but this information is rarely translated into quality feedback that students can reflect upon and use to improve clinical performance. Time limitations and assessment confidentiality make quality feedback provision difficult in SCAs. Online diagnostic score reporting (DSR) is a mechanism for providing timely feedback following an SCA, describing student performance according to the underlying skills a test intends to measure (rather than by individual test items). DSR is well established in primary and secondary education, but has not been rigorously studied specifically in the context of post-secondary clinical assessments. Objective: To evaluate the effect of online DSR on student performance and reflective capabilities for a dental hygiene SCA. Methods: The dental hygiene year-end SCA at the University of Alberta assesses students' abilities in conducting a thorough history taking and determining modifications/contraindications to the care plan prior to dental hygiene therapy. A framework for online DSR was developed by mapping test items and

competencies to the skills measured within the assessment, specifically: effective communication, client-centered care, eliciting essential information, and interpreting findings. Final reports included scores by skill with their descriptions, cohort comparisons, and suggestions for how to improve. Following a mock-SCA—developed to mimic the structure of their year-end SCA but with different content—half the students were randomly chosen to receive DSR and the other half an overall grade. All students were then asked to submit a written reflection on their SCA performance, addressing what they did well and what they needed to improve. Ten days later, students took their regularly scheduled year-end SCA. Reflection quality and content, and year-end SCA performance were used in between-groups analysis to determine DSRs effect on student outcomes. Results: No differences in reflection quality were detected, however reflection content significantly differed by group. The DSR group was significantly more likely to report needing to improve on interpreting findings ($p = .007$), while the control group focused on improving on eliciting information ($p = .04$). Overall, students tended to perform quite well on eliciting information ($M = 92.11\%$, $SD = 9.63\%$), but poorly on interpreting findings ($M = 42.11\%$, $SD = 17.56\%$). The DSR and control group did not show significantly different improvements on their year-end SCA ($p > .05$), in fact, the DSR group scored slightly worse on communication scores ($p = .05$). Conclusion: Online DSR following a dental hygiene SCA resulted in more accurate self-reflection, specifically in identifying skills that required improvement. However, this improved self-reflection did not translate into improved performance. Therefore, the current DSR system presents a promising starting point for providing quality feedback, but further enhancements are required. Suggestions for improving the feedback in order to help facilitate behaviour change include: providing links to relevant references, video exemplars for good communication and client centered-care, and more personalized/individualized reports.

The Seductive Lecturer Effect: The Cost of Engagement in the Brave New World of Online Education **Kristin Wilson, Daniel Smilek, Evan F Risko**

Teaching and learning in online learning environments is a rapidly developing and shifting educational landscape, with many universities and colleges now offering blended and fully online courses in growing numbers (American Association of Community Colleges, 2015; Martel, 2015). One of the most significant challenges to online learning is the task of capturing and maintaining learners' attention and motivating learners to engage with online lectures. A recent study highlights this key challenge, revealing that within the first 5 minutes of an online video lecture more than 50% of learners have turned the video off (Kim et al., 2014). Even when learners watch an entire lecture they spend, on average, 40% of the time mind wandering (inattention) (Farley, Risko, & Kingstone, 2013; Risko, Anderson, Sarwal, Engelhardt, & Kingstone, 2012). One of the key factors that may impact learner engagement may have to do with how lecture material is presented online. Lecture material can be presented to online students in various formats (e.g., audio recordings, lecture transcripts, slides, video recorded lectures, etc.); however, which lecture presentation modalities best serve learners remains unclear. In particular, there is debate about the use of video recordings of lecturers, as the creation of these videos is timely and costly, and it is unclear whether these videos actually aid learning. Some argue that videos of the lecturer may foster social connection, motivating attention and engagement. There is reason to believe, however, that the presence of the lecturer may draw attention to erroneous visual details of the lecturer (features and movements), which are not pertinent to the lecture content, wasting capacity-limited cognitive resources. In other words, visuals of the lecturer may act as an irrelevant or seductive detail, drawing the learners' attention to irrelevant features, negatively impacting comprehension and possibly attention or mind wandering (MW). Here we use cognitive psychological methods to shed light on this under explored terrain, taking into account not only learners cognitive outcomes (i.e., attention, mind wandering, comprehension), but also subjective factors that likely influence decisions people make about their learning (i.e., beliefs about their learning and preferences). Through a series of experiments we found evidence that the lecturer in online video lectures has a seductive effect on the learner. The presence of the lecturer in an online video lecture negatively impacts comprehension, but not MW, while learners prefer and believe their learning is facilitated by the lecturer's presence. This research highlights a gap between liking and learning in online learners, and provides insight into the nature of this gap which may help explain why online video lectures often fail to engage learners. Drawing on cognitive psychological methods, as we have done here, can bring novel insights to the scholarship of teaching and learning, especially in understanding learner processing capacities and how subjective evaluations influence learning choices and behavior in online educational environments. Growing this body of knowledge can help us close the gap between liking and learning, and enhance learner engagement and comprehension.

Getting REAL with Biochemistry Labs

John Chik, Chantal Du Plessis

Although the importance of laboratory experiences in science and specifically chemistry is nearly universally accepted, a number of authors have pointed out that the literature is actually inconclusive about their importance and instructional value. One possible reason for this observation is an incomplete understanding of what laboratory instruction should do and how to measure it. The laboratory environment involves many more aspects of learning beyond the traditional cognitive domain such as manual (psychomotor) and troubleshooting skills which are not well captured in conventional testing. Intentionally involving and valuing these other learning modalities has the potential of significantly improving student engagement. In our third-year biochemistry courses, we have developed a “new” laboratory instructional pedagogy, called REAL (Real Experience and Learning) labs. It replaces the traditional weekly episodic experiments/exercises with a semester-long investigation. The central element in REAL labs is that neither students nor instructors know the final outcome of the project. This forces students to rely on their own data in order to arrive at a “conclusion”. It compels them to analyze and critically evaluate their data over the entire semester, recognize “problems” with their results and then troubleshoot and “fix” the problem. It is by doing this that students gain an appreciation of the amount of work needed to arrive at a scientific conclusion. REAL labs emphasis on providing an experience close to actual scientific practice places it within the “authentic learning” framework advocated by other educators. We have initiated a study examine the effects on students of REAL labs using the “Meaningful Learning in Laboratory Instrument” (MLLI). The MLLI was constructed based on Novak’s Human Constructivism ideas. In addition to the MLLI, our survey also asks students about their general views of labs, their previous laboratory experiences and their current progress towards graduation. With ethics approval, we are recruiting students from a third-year biochemistry course that uses REAL labs and students from the second-year biochemistry which uses a traditional laboratory pedagogy as a control. The second-year biochemistry course is a prerequisite for the third-year course. As done in previous studies using the MLLI, the study consists of a start-of-semester and end-of-semester survey. At iSSoTL17, we will present our data from Fall 2016 and Winter 2017. It is our plan to collect another two semesters worth of data.

Mapping Critical Thinking Education for the Twenty-First Century: Discussing Practices for Teaching Critical Thinking in Digital Worlds

Aakriti Kapoor

This presentation will identify practices for teaching critical thinking in twenty-first century education classrooms. Critical thinking is of special importance in the twenty-first century, a day and age where our intake of digital information is constantly increasing. In an environment where students are constantly bombarded with information, it becomes more crucial than ever to help students critically evaluate the information fed to them. I define the notion of this information influx as the infolux. Existing literature on the topic identifies the reality of information influx through terms like information overload, infobesity, or infoxication. However, these terms attempt to solve the issue by teaching students how to sift through large amounts of information in academic searches, rather than focus on teaching students how to critique all the information in their everyday digital environments. In this presentation, I argue that in order to successfully teach students how to evaluate digital information, it is more important to teach them how to critically read texts to identify biases and implicit messages; yet instead of teaching them this skill just for in-class assignments, we should be teaching students to practice this skill more generally in their everyday lives. SoTL aims to focus on proof of student learning, but there is a lack of literature which empirically determines what pedagogies help students develop a mindset that allows them to think critically in infolux realities. In this presentation, I will describe a mixed methods study that explicitly tried to teach students how to think critically in digital settings. The strategy I use to teach students critical thinking is based on an educational software I created, and I will be discussing the efficacy of this pedagogy in helping students learn how to think critically about digital information. A limitation of this study is that this pedagogy was tested in a lab study with a select sample of students, and as such, may not be generalizable to large classroom settings. Nevertheless, findings from this study generate a discussion about how we can best prepare students to live in infolux worlds. The digital age fosters a scroll fast culture where students are inundated with information without being given time to pause and analyse what the information is saying, whether it is true, and whose voices it is leaving behind. As

such, this study will explore how students can be taught to not just navigate information in the twenty-first century, but also how to critically engage with it.

Hearing Diversity in the Literature Classroom Online; Seeing & Hearing African Authors Face-to-Face: Enhancing Learning Inclusion at the University of Michigan-Flint **Pat Emenyonu**

Teaching literature courses online that require students to read texts by African, Caribbean, and African American authors can be a challenge because of the names of characters, settings, and other vocabulary imbedded in the story. How do you pronounce Okonkwo (*Things Fall Apart*)? What is an Ogbanje child? How do you say Mbaino? When a student in my literature class was involved in a car accident several years ago that affected his short term memory, he requested help with the text *The Joys of Motherhood* by Buchi Emecheta. I promised to record the novel. Few commercial recordings of diverse literature were available (certainly not for this novel), and I knew the culture and could read the story with confidence, pausing to explain a point while reading from the text or introducing a chapter to help listeners anticipate what might happen next. Not only did it benefit the student who had short term memory problems, a student who had visual problems, but it also helped students who could read on their own but spent time commuting to class from home or work as long as an hour each way or more. They could download the audio book to an MP3 player from blackboard and drive and listen. Or be at home and listen while preparing dinner. Or simply follow along with their hard copy, listening to the flow of the story without pausing to figure out how to say a place name or character's name. I could present authentic language and dialogue. And so recording text became part of the methods I used to bridge language and cultural gaps in my courses. Similarly, a unique collaborative program between the Department of Africana Studies and the Flint Public Library known as 'Renowned African Writers/African and Diaspora Artists Visit Series' has, over a period of almost two decades, made it possible to record live the voices of leading African writers reading their works before special Teachers/Educators workshop audiences making it possible for such recordings to be used to best advantage in African literature courses. This paper discusses with illustrations and excerpts the use of recordings of works of fiction and voices of authors in special circumstances as a means of fostering a love of reading in face-to-face literature courses in general, and online classes in particular. It emphasizes that it is not cheating when technology enhances a student's learning experience providing better access to multicultural experiences which enrich their worldview and foster a love of literature and reading. The paper reports instances of success in the use of this methodology at the University of Michigan-Flint and recommends its application elsewhere to bridge language and cultural gaps in teaching multicultural or non-Western texts.

Adventures in Assessment: Evaluating Student Learning in Speech-Language Pathology Clinical Practicum **Allison Meder**

This poster session will represent preliminary and ongoing work by a SoTL newcomer. As a graduate teaching assistant supporting clinical education for future speech-language pathologists, I found myself asking questions like "What's working?" "What's not working?" and "What can we do better?" related to our assessment of students' learning. After reading "Effective Grading: A Tool for Learning and Assessment in College" and discipline-specific "Scholarship of Teaching and Learning in Speech-Language Pathology and Audiology: Evidence-Based Education", a SoTL project was born (Ginsberg, Friberg, & Visconti, 2011; Walvoord & Anderson, 2010). This poster will document the risks I've taken in developing my first SoTL project as well as what I have learned along the way. This presentation will focus on: 1) identifying a SoTL problem, 2) describing the collaborative effort in creating an assessment tool and 3) reporting the preliminary outcomes of piloting the tool. Preservice speech-language pathologists are expected to meet a number of knowledge and skills standards prior to exiting graduate school (American Speech-Language-Hearing Association, 2014). Skills outcomes such as "Adapt evaluation procedures to meet client/patient needs" and "Develop setting-appropriate intervention plans" are particularly challenging to assess due to the complexity of underlying skills needed to demonstrate competency in these areas. Many speech-language pathology programs nationwide use simple performance rating scales to measure the percentage of opportunities in which skills are demonstrated and/or the quality of student performance in a skill area; however, tools like these are sometimes used as a form of summative assessment at the completion of each clinical practicum experience. As a result, without a structured formative assessment process, the summative assessment can become rather subjective. Therefore, this poster session will explain the efforts taken to create a formative assessment tool.

In particular, I will present the methods employed to pooling our clinical faculty's expertise in order to identify the bottlenecks to student learning in our clinical practicum experiences and to develop a formative assessment tool (Pace & Middendorf, 2004). Survey data indicating faculty's perception of the process will be presented. Clinical faculty are currently piloting the tool, and I will present pilot data representative of their reflections of the process. Similar to evidence for the development of the tool, additional data will be reported associated with implementing the assessment tool. Data collection will further engage faculty in reflections about the future of this SoTL project. I will also report my own self-reflections as a SoTL newcomer, highlighting the insights gained throughout this adventure.

Climbing the Rock: Implications of Foreign Language Learner Preferences for Feedback Across the Disciplines **Britney Paris**

Language learning is much like rock climbing in that there is a fundamental trust relationship between the learner and the instructor, or the climber and the belayer. In this poster session I describe the findings from an embedded mixed methods (Creswell, 2014) research project which investigated foreign language learners' perceptions of and preferences for written corrective feedback and how it is through the relationship between the instructor and the learner that we can reach new heights. Written corrective feedback (WCF) is a common feedback tool used in foreign language learning that has been shown to improve both the grammatical accuracy of student writing and learning outcomes (Ferris, 2010; Kang & Han, 2015; Shute, 2008). Ellis (2009) defines Direct Feedback (DF) as the teacher providing the student with the correct form, such as correcting "hors" to "horse"; with Indirect Feedback (IF) the teacher only indicates that an error exists, often showing the location of the error in the text. Kang and Han (2015) also suggest that whether DF or IF is more useful may depend upon learner proficiency. Therefore, this study sought to answer the research question of the relationship between language learner proficiency and the effectiveness of two different types of feedback. To address the question, I used Think Aloud Protocol and individual interviews with eight participants (four beginner and four advanced) registered in a German language course. As others have indicated, the preferences for feedback of individual learners is varied (Hyland, 1998; Radecki & Swales, 1988), the qualitative findings of this study indicate that both beginner and advanced students prefer having the rope held tight, that is direct feedback, even though they know they should take a little slack as they climb, because indirect feedback forces them to learn for themselves. My findings also show that the feedback is not enough; what is required is a relationship between the instructor and the learner. In rock climbing, the trust relationship between the climber and the belayer is of fundamental importance. The climber must trust the belayer to provide feedback by pointing out holds or to take up the slack in the rope when called for. The belayer must also trust the climber to not climb too fast and to call out commands to let the belayer know when they plan to climb or plan to rest. Just as in language learning, the learner builds confidence through the relationship with the instructor. If the learner does not have that relationship, where they feel uncomfortable communicating with the instructor, the learner will continue to make the same mistakes over and over. Just as in rock climbing, in any discipline, while the learner must be willing to take risks, they must also know that the instructor has "got" them.

A Framework for Developing Teaching Expertise in Postsecondary Education **Natasha Kenny, Carol Berenson, Nancy Chick, Carol Johnson, David Keegan, Emma Read, Leslie Reid**

As learning institutions continue to provide students with forward-thinking programs for developing knowledge and building contemporary skill sets, faculty are given opportunities to enrich their own teaching practice and expertise. Given the diverse landscape of teaching needs across postsecondary faculties, this poster has been constructed to inspire new ideas, promote dialogue and elicit critical engagement regarding what it means to develop teaching expertise in postsecondary education. Many institutions have started to expand on what it means to develop teaching expertise, recognizing not only the breadth of what is involved to actively demonstrate teaching expertise, but that teaching expertise is developed through a learning process that occurs over time (Hendry & Dean, 2002). Although, Kreber (2002) suggests that faculty who engage in on-going reflection on what works (or does not), why it works (or does not) for the purposes of becoming "even more effective" develop expertise in teaching (p. 13), there is little research available to: 1) describe specific attributes and dimensions of teaching expertise, and 2) support peers and academic leaders in having robust, developmentally-focused

conversations with colleagues, for the purposes of engaging in meaningful reflection to identify specific priorities for developing their teaching expertise. Based on a comprehensive review of literature related to the scholarship and practice of teaching, learning and educational leadership (e.g. Bernstein, 2013; Lizzio et al., 2002; Taylor, 2005; Tigelaar et al., 2002; Trigwell et al., 2000; Huber & Hutchings, 2005; Felten, 2013; Miller-Young et al., 2017), this poster will present a developmentally-focussed framework for teaching expertise. The framework presents specific attributes across multiple dimensions identified in the literature (e.g. Teaching and/or Supporting Learning; Professional Development; Educational Leadership; Scholarship, Research and Inquiry; Inclusivity and Professionalism; Mentorship; Expert Knowledge in the Discipline), and includes coaching questions to encourage reflection and meaningful, future-oriented dialogue for each dimension. During this poster session, conference participants will be invited to actively engage with and contribute to the on-going evolution of this framework, by adding to or revising the attributes that make up each dimension, as well as refining the coaching questions that are intended to inspire further reflection and dialogue amongst colleagues. It is anticipated that this experience will push our on-going thinking about how the breadth of literature related to the scholarship and practice of teaching and learning has informed what it means to develop teaching expertise in postsecondary education.

Using SoTL as a Portal for Cross-Disciplinary Pedagogical Projects: The Virtual Mystery Project
Sherry Fukuzawa, Michael DeBraga, Heather Miller, Trevor Orchard, Kenneth Berry, Simone Laughton

This poster will demonstrate a project that creates a cost-effective, collaborative, small group, self-directed learning experience for students in large courses. The virtual mystery project is a series of practical scenarios that are set up as mysteries with digital images and weekly clues that self-release to groups of 5-10 students through the institutional learning management engine. The virtual mystery project is based on the principles of problem-based learning (PBL) where students engage in small group problem solving to develop critical thinking skills (Loyens, Jones, Mikkers, & van Gog, 2015; Savin-Baden, 2016). The challenge of implementing PBL in large courses is that this active learning experience requires additional resources to facilitate the small group problem-solving process (Long & Qin, 2014; Klegeris & Hurren, 2011). The virtual mystery project overcomes this challenge by using the self-release functionality of the institutional learning management engine. PBL groups meet in an online forum where one facilitator can monitor several groups simultaneously. The virtual mystery project started in 2010 as a cost effective way to engage students in a student centered active learning experience in a large first year undergraduate anthropology course (N = 800 students). It began as a participation grade with 15 mysteries running throughout the course for groups of 50 students. Although the students evaluated the mysteries very highly, and it was successfully tested against a passive learning option in 2014, the large group sizes were problematic (Fukuzawa & Boyd, 2016). Through a SoTL publication and presentations on this initial pilot project, the application of the Virtual Mystery Project expanded across disciplines. We are currently creating 400 virtual mysteries using the Anthropology Specimen Collection at a large Canadian University, and piloting the virtual mystery project in the department of biology where 10 virtual mysteries are being created using the Paleontology Specimen Collection. This poster will demonstrate the Virtual Mystery Project as a cross-disciplinary online hybridized PBL teaching tool that can be used to engage students in large courses in a self-directed, collaborative small group experience. Our poster will also serve as an example of how instructors can leverage their teaching ideas into cross-disciplinary projects by engaging in the scholarship of teaching and learning.

Chronicling the Ten-Year Evolution of Course
Jill Scott, Amber Hastings-Truelove, Jamie McKenzie-Naish, Andrea Phillipson, Denise Stockley

As educators, we know that course content and course structure is dynamic and always evolving. In reflecting on the past 10 years which had seen what was initially a graduate seminar transition to what is now a 100-student undergraduate course, my teaching assistant and I decided to conduct a systematic review of our experiences with this course, myself from the perspective of having taught it for 10 years, and hers from the perspective of being engaged with the course for the first time. To contextualize the evolution of the program we analysed course documents, including the syllabi for the past 10 years. To examine our own perceptions of the course, we adapted the methodology used by Parr and Woloshyn (2013) in their self-study of teaching. At the mid-point in the term we completed a self-reflection questionnaire which focused on changes in the course, our perceptions of our roles and responsibilities in the course, and strategies used for student learning. After the course

was finished, we conducted an interview/conversation facilitated by a researcher to reflect together on our experiences with the course. This presentation will share our experiences and lessons learned across the evolution of this course.

Experiential Learning in Postgraduate Medical Training: The Influence of Contextual and Diverse Demographic Factors on the Provision of Formative Feedback **Veena Singaram, Chantal Bagwandeem**

The importance of feedback in enhancing clinical competency in the postgraduate medical education arena is well documented. Many definitions of, and models and frameworks for delivering feedback exist. Trainee specialists must learn how to use the feedback that they receive to hone their knowledge, skills and professional performance. Clinical supervisors (CS) must be equally effective in delivering the best feedback possible in all spheres of the training platform so as to impact positively on performance. However, while many studies have explored how feedback is given and received in postgraduate medical education, these studies have been conducted in homogenous settings. Aim: To explore the influence of contextual and diverse demographic factors on the provision of feedback in a diverse postgraduate medical experiential learning setting. Methods: A mixed methods approach was adopted for this study. Qualitative and quantitative analysis was done regarding the perceptions of the quality of the current delivery of feedback across six disciplines at a South African teaching hospital. The CS and their trainees consented to complete a questionnaire consisting of open- and close-ended questions to determine the quality, quantity, type and timing of feedback. The relationship between demographic factors such as age, race, gender, home language and discipline of study were also evaluated. Descriptive statistics were used to analyse the data. Differences between groups were calculated using Pearson's Chi Square test for independent variables. Semi-structured interviews were also conducted with the Clinical Training Heads. The Walt and Gilson (1994) triangular framework for policy analysis was used to guide the thematic analysis. Results and Conclusion: The results revealed a disparity in the perceptions of the CS and trainees regarding current practise. Although the CS believed that they provided adequate feedback, the trainees disagreed, citing an overall dissatisfaction with the process. Trainees believed that the CS lacked training in how to give feedback, and that important elements such as prior provision of the standards to be obtained, as well as feedback being based on directly observed performance were missing. The CS concurred that they lacked capacity in how to give adequate feedback, but felt that heavy workloads, fear of negative reactions and the apathy of the trainees as well as their failure to act on feedback when given, hampered the process. Male CS and trainees both reported better experiences of giving and receiving feedback overall. Trainees who were English second language speakers had statistically significantly more favourable outcomes with feedback compared to English first language speakers. The Clinical Training Heads reported that lack of appropriate institutional support and an overall guiding framework, combined with multiple administrative bodies of the trainees as well as language barriers, were challenges to be overcome. They identified areas for future improvement, including standardisation of the process, more effective use of logbooks and better monitoring and evaluation in postgraduate experiential learning settings. Overall, this study highlights the need for effective learning tools such as formative feedback to be integrated into the culture of the university teaching and learning ethos.

Accounting for Intro Lit: A Mixed-Methods SoTL Project in the Humanities **Angela Zito**

This poster presentation engages two major concerns presented in the closing article of the special section "Arts and Humanities in SoTL" in issue 4.1 of *Teaching and Learning Inquiry*. In the piece, "Asking Bigger Questions: An Invitation to Further Conversation", Bloch-Schulman et al. lay out the shared challenges and anxieties among arts and humanities SoTL scholars in navigating methodological tensions with colleagues in both their home disciplines (where there is the expectation of less empiricism) and in SoTL (where there is the expectation of more empiricism). This presenter is a newcomer to the SoTL community, but not to this methodological quandary. My proposed poster shares research in progress that mixes qualitative research methods from the social sciences with methods more conventional of the humanities. The research comprises a grounded theory study of literary scholars' approaches to articulating and assessing student learning goals in introductory literature courses at a public research university. The project is expected to culminate in an assessment proposal for the introductory literature program under consideration, one that both prioritizes the humanistic values shared by participating English faculty

and resists quantifying the teaching and learning of intro lit as if it were a “commodity” for the university “market”. This is the second concern from “Asking Bigger Questions” engaged in this presentation: What can SoTL contribute to our collective understanding of student learning beyond sharing the results of specific pedagogical interventions? How can SoTL help rebuild the structures and perceptions of higher education so that the focus is on students as learners rather than consumers? This poster suggests that SoTL research in introductory level courses will be particularly significant in pursuing these challenges because, like SoTL research itself, introductory courses face pressures from without (e.g. the university, the public) and from within (e.g. the department, the discipline) that are more intense than do their counterpart courses that are more securely nestled within the expectations of their major discipline. College and university instructors across disciplines are familiar with the challenges particular to introductory level courses: How do I teach a specialized discipline to students with varying levels of experience and interest? As complex as these questions are, when paired with the pressures of accountability and assessment they become yet more complicated and more vital to understanding the goals and values of the discipline and the university: How can I not only incite my students to engage thoughtfully with the discipline, but ascertain what learning happens when they do so? What is valuable to these students in achieving that learning? Rather than rejecting assessment outright as capitulation to neoliberalism, this project investigates the potential for discipline-specific, student-centered learning outcomes assessment as aspirational SoTL research capable of contributing critical, reflective, and iterative articulations of the goals and values of literary learning. This poster presentation will outline the project’s data collection and analysis protocol, and discuss the significance of preliminary findings to current and future SoTL work.

Faculty Development Adventures: Reflective Teaching Partnerships and Students Assessing Teaching and Learning

James Zimmerman, Adriana Signorini

Individual faculty mentoring and consultation activities constitute some of the most transformative, but also time-intensive, work that is typically supported by a learning and teaching center.Â Indeed, the methodology applied here - a series of individual consultations - has been shown to be a powerful means to help faculty members reflect on their teaching presence (Piccinin, 1999), increase their pedagogical content knowledge (Shulman, 1986), and modify course materials in a way that aligns with student learning outcomes (Biggs, 1999). Yet, programs to develop teaching skills (especially those involving classroom visits) typically encounter faculty resistance. Frequently, faculty are hesitant to participate, believing that the formative assessment process is covertly connected to summative evaluation of teaching, promotion decisions, and ultimately tenure. Participating faculty may be embarrassed to admit misgivings about their teaching to a colleague, and whoever is asked to conduct the classroom observations will have to deal with yet another demand on their time. To address these issues, two programs have been developed utilizing distinctly under-utilized resources as partners: a mentorship program utilizing motivated emeritus faculty, and a Students Assessing Teaching and Learning (SATAL) program that trains interested undergraduate students. Like many of their students, faculty members desiring to learn and practice new skills need an environment in which support and challenge are balanced. Like their students, they can only move forward by building on present strengths. And, like their students, they often need help in identifying their teaching strengths and seeing possible avenues for expanding them. In Reflective Teaching Partnerships, retired faculty members can offer the safety that may not be felt with mentors who are part of the formal faculty evaluation system or with colleagues with whom the teacher interacts each day. When such a mentor was routinely identified during their academic career as both an effective and a reflective teacher, they typically have the ability and the resources to challenge younger colleagues to see classroom dilemmas and opportunities in a new way. This session will include observations from faculty who have participated in this innovative program, and the results of qualitative programmatic evaluations. The idea behind SATAL is to value the voice and views of students and their educational development. To that end, SATAL will provide instructors and programs with valuable student insights into student learning through various measures such as observations, surveys, and interviews. These forms of indirect evidence coupled with more direct evidence, such as course portfolios and examinations, can provide a more holistic understanding of what’s happening in a particular classroom.

Work-Related Learning Provides Motivated, Inspired and Satisfied Students and Teachers

Sara Nyberg

Work-related Learning provides motivated, inspired and satisfied students and teachers (Elmgren, M. & Henriksson, A-S. 2014; Biggs, J. & Tang, C. 2007). This minor qualitative study shows how important it is to involve work-related learning (WRL) into teaching. Abstracts in this topic are rare and is important to present. I would like to share these findings to motivate teachers to use work-related activities. Motivated students will provide motivated, inspired and satisfied teachers. During 2015, a course within the Chemistry program was developed including the following: adding mandatory study visits during the course, using authentic cases, adding intended learning outcomes related to skills and having the students reflect in writing about the study visits. The written assignment should contain reflections in pair about the connections between the course subject and the companies; examples on methods, processes and tools that the students have experienced; what kind of areas of professions they could identify and how the visit would influence their choice of master program and future career. The aim with the study was to follow experiences of, and reflections made by, the students and the teachers after the completed changes. The result from 2015 gave indications that work-related activities increase the motivation of the students and as a result, also the motivation of the teacher. To identify several findings and to confirm the result from 2015, data was gathered from the same course 2016. Since added changes in 2015 gave positive result, the changes were maintained and further elements were added to the course, namely, one more study visit, individual reflections and levels of reflections (Hatton & Smith 1995). The same positive result was confirmed and identified in the individual (48) reflections and are presented as: I. Student motivation II. Student identifying Professional roles and work places III. Inspiration and increased interest of the subject. Example: Our study visit was very informative and made me see the working life and how I can utilize my knowledge from the course in materials chemistry and properties. Negative comments and criticism from students regarding the work-related activities focused mainly on wanting to have more insight of the everyday work of an engineer or having additional engineers to interact with during the visits. The result was presented at a meeting for Program responsible at The Royal Institute of Technology and also filmed for further use in our Teacher Support Web. Next step of increasing these activities within the program will include both to invite colleagues to participate in the development and to further develop the course. This will hopefully engage the teachers to develop their course and to give the author and teacher, Pr. U Edlund of the Chemistry course, further material for quality enhancement.

The Community of Inquiry Framework: Scholarship and Practice in Teaching and Learning

Martha Cleveland-Innes, Stefan Stenbom, Stefan Hrastinski

The post-industrial era of higher education requires new levels of expertise for faculty in teaching and learning. Along with the need to address education accessibility, quality, and costs, pedagogical change is urgently needed to address shifting student characteristics and expectations, technology implementation, and preparation for lifelong learning. Social and experiential learning offer opportunities to enrich higher education learning, as described by the Community of Inquiry theoretical framework (Garrison, Anderson, & Archer, 2000). Designed in the late 1990s, this framework is a topic of significant research in teaching and learning. Three “presences” are the conceptual elements which cohere to create meaningful learning experiences. Social presence is the ability of participants to identify with the community, communicate purposefully, and develop inter-personal relationships by projecting individual personalities. (Garrison, 2009, p. 352). Cognitive presence refers to the extent to which learners construct and confirm meaning through sustained reflection and critical discourse. Teaching presence includes actions of both instructors and students in support of design and organization of the course and facilitation and instruction of content learning. See coi.athabasca.ca for further information. Below is a visual representing this model: Insert Figure This survey uses the validated measurement tool created for the Community of Inquiry to orient higher education faculty to the activities required to create such a learning community. Faculty from multiple programs who participate in teaching development opportunities complete the survey and answer questions about the challenges and benefits to creating a Community of Inquiry in their classroom-based, blended, or online courses. Preliminary findings from research on the use of the CoI measurement tools for instructors suggest faculty who engage in communities of inquiry as part of the teaching development process perceive 1. How the framework may be used and could provide benefits and 2. The need for removal of barriers in order to put this framework to

use. Preliminary conclusions suggest that teaching and learning change may be fostered by the use of the CoI in faculty development but has to be appropriately paired and integrated with other higher education reforms such as technological infrastructure and attention to changing student demographics. Participants attended this paper presentation with be engaged in an interactive discussion about this model, the research at hand, and opportunities for using this model for SoTL activities.

High Altitude Goals in Faculty Development **Deborah Walker**

The Teaching Academy is a six session workshop developed by the university's faculty development center (Center for Teaching and Learning - CTL) designed to provide faculty with the opportunity to read, discuss, and reflect on research-based principles of student learning in the context of their own teaching. Using the book *How Learning Works* (Ambrose et al.), the workshop engages faculty in a series of activities that supports the cultivation of a reflective/metacognitive approach to teaching and leads faculty in using this reflective/metacognitive approach in identifying ways to refine their own pedagogical practice. Mellow et. al (2015) argue that, while faculty developers offer new strategies for pedagogical improvement, they often fail to inspire permanent pedagogical change. This failure stems from the fact that strategies for improvement "underemphasize the professional evolution that might occur with an interactive and thoughtful reflection on practice" (p.10). The multi-session Teaching Academy addresses the need to emphasize professional evolution through prolonged reflection by requiring participants to submit weekly reflection journals. According to Alan B. Knox (2016), "Effective leaders of professional learning sessions recognize that active learning and engagement are especially important", yet faculty workshops often take the traditional format of a lecture or guided discussion (p.72). Academy facilitators strive to engage participants through tools and activities that promote an active learning and reflective experience that faculty can translate into their own classrooms. Thus, the purpose of this research is to evaluate the change in teaching perspectives and practices of faculty that participate in a workshop focused on incorporating reflective and metacognitive practices. This research project proposes that faculty that participate in the workshop will increase the use of teaching practices that incorporate metacognition and the science of learning. Researchers will use the following instruments to gather information: teaching inventory survey, self-reflection journal, and impact assessment survey. Participants complete the teaching inventory survey before the workshop begins and then at the end of subsequent semesters. Initial data from the teaching inventory survey will be shared. Participants also complete a weekly reflection journal which asks them to respond to 3 prompts: This week I learned..., This learning is important for me because..., in light of this learning I will... Samples responses will be shared. The impact assessment survey is given at the end of subsequent semesters. The goals of this workshop and the goals for this research project correlate well with "Aspirations and anxieties for SoTL". This project has high aspirations of being able to track implementation of teaching strategies and approaches acquired through the Teaching Academy experience and track the sustainability of these practices over time. This process causes much anxiety! Reflective and metacognitive practices are deeply personal so may be difficult to capture in a research project. Since this project is interested in sustainability over time, maintaining a significant number of participants willing to respond to surveys in subsequent semesters also poses a challenge! We aim high, though! We aim for new heights in faculty development and research based teaching and learning practices!

A Reflection of a Librarian Participating in a SoTL Project **Asako Yoshida**

This presentation offers a reflection of a librarian who has been conducting a scholarship of teaching and learning (SoTL) project in the context of a 4th-year undergraduate research-based workshop course offered through the Department of Human Nutritional Sciences at the University of Manitoba, a research-intensive university, in collaboration with the course instructor for the past four years. This exploratory SoTL project included self-reflections and discussions on teaching practices and course content between the librarian and course instructor at the end of each term, generating ideas for enhancing course instructions and group activities toward more learner-centered model (Barr & Tagg, 1995). As a result, the librarian gained insights into the complex nature of the SoTL project, which was more than they initially set out for the project. As the librarian journey into reading and learning more about SoTL, it leads to reflection on teaching strategies and further scholarship (Bray, 2007). The objective of the

collaboration was to facilitate student learning and engagement in undergraduate research. The course instructor and librarian used the Research Skill Development (RSD) framework (Willison & O'Regan, 2007) for this project. The RSD framework was a useful conceptual model for reorganizing and realigning instructional materials and activities, and for developing the rubrics for assessing the course requirements. To measure the effects of the instructional reorganization on student's learning, students completed a self-assessment survey on research skills adapted from the RSD framework study (Willison, 2012). The survey was administered at the beginning and end of the course during 2014, 2015, and 2016 course offerings. The samples used in the project were rather small (8, 17, and 10, in 2014, 2015, and 2016, respectively) reflecting the course enrollment counts. Furthermore, when considering many adjustments made to the teaching and learning circumstances of the course during the study period, drawing any significant patterns in student learning outcomes based primarily on the survey results was not useful. Other changing factors included a sessional instructor teaching of the course in 2015, and different class dynamics observed in each course year, such as classroom interactions. Biesta (2015) critically points out that "teaching" does not necessarily bring about "learning" when you consider social and cultural circumstances such as structural constraints and, student identity and agency. The librarian was subject to what Biesta calls "learnification" of educational discourse and practice" (p 234) at one point when she was trying to make sense of the survey results from the past three years. It can be argued that this is a potential ontological trap of the SoTL researchers. The SoTL, on the other hand, helps the librarian grow as an instructor by asking questions regarding students' learning outcomes. These include: how can the librarian take part in facilitating student's critical thinking, problem-solving, and decision-making skills in the face of the abundance of information and complex knowledge?; how can she enhance and facilitate student learning through the use of the emerging technology?; and, how can she respond to student's different value, identity, attitude toward learning, or professional trajectory, and their effects or no effects on their learning (Guglietti, 2015)? These questions require on-going self-reflection and are worthy of investigation. This exploratory SoTL project ultimately helped the librarian reflect on her commitment to supporting the course during the past four years by self-evaluating her decision regarding the approach to her instruction and what to accomplish with the instruction (Pratt, 2016).

Can Service Learning Better Serve Pre-tenure Faculty? **Christian Cook, Leah Hamilton**

Service learning is a high impact teaching and learning practice (Deeley, 2015). Yet, it continues to receive diverse levels of adoption and acceptance at the university, school, and faculty level (Abes, Jackson, & Jones, 2002). This presentation, based on a conceptual working paper, brings focus to the use of service learning among pre-tenure faculty, highlights research which has helped to identify barriers to adoption and acceptance, and offers techniques to mitigate such barriers for pre-tenure faculty. Faculty tend to employ service learning because they believe it creates experiences for deep learning of course material (Darby & Newman, 2014), authentically engages students in the learning experience (O'Meara, 2013), and enhances students' personal accountability to learning (Madsen, 2004). Barriers for pre-tenure faculty to engage in service learning include: the significant investment of time to plan and deliver service learning based courses—often at a cost to other pre-tenure work demands (Blakey, Theriot, Cazzell, & Sattler, 2015; Kolenko, Porter, Wheatley, & Colby, 1996; Pauly, 2014), the perceived lack of recognition for service learning efforts in university tenure and promotion systems (Abes et al., 2002; Hou & Wilder, 2015; Kezar & Rhoads, 2001; Neilson & McShane, 2016; Pauly, 2014), and the lack of institutional support for service learning (Kolenko et al., 1996; Madsen, 2004; O'Meara, 2013). In addition to potential student resistance to the adoption of service learning, research has emerged to suggest another point of resistance to its acceptance may be some tenured faculty who perceive service learning as being "less academic" than traditional course delivery methods (Hou & Wilder, 2015, p. 4). This perspective may signal to pre-tenure faculty that service learning may not just be under-valued, but serve as a detriment to candidacy for tenure. Balancing work toward the essential common elements of service, teaching, and scholarship achievements embodies much of the efforts of pre-tenure faculty. This presentation aims to support pre-tenure faculty through providing techniques from two tenure-track professors engaged in service learning in the non-traditional setting of a business school within a primarily undergraduate university. This presentation holds specific utility for pre-tenure faculty who seek practical advice, based on existing research as well as our own experiences, to engage in service learning while remaining on track to balance the myriad expectations of tenure achievement. Techniques to mitigate risks to student evaluations and opinions of instruction, establish and leverage community partnerships, and create efficiencies in the often time

intensive design and delivery of service learning courses will be shared. Special focus will be afforded to sharing lessons learned in managing and meeting student expectations, and structuring and assessing service learning assignments. It is important to note that the intention of this presentation, and the direction of the conceptual working paper overall, is not meant to provide advice or guidance on how to achieve tenure—but rather how to manage the many demands of designing and delivering service learning when adopted in appropriate frameworks of approved university programs.

Unexplored Territory: Measuring Self-Efficacy, Student Knowledge and Satisfaction in a New Blended Health Assessment in Nursing Course

Keri-Ann Berga, Elisha Vadnais, Agnes Mitchell, Jody Nelson, Sharon Johnston, Rui Hu, Bo Olaiya

In nursing curriculum, a Health Assessment course is typically offered in the second year of the program. Health assessment courses are often mandatory, frequently involve a lab component, and have traditionally been delivered through on campus lectures. Recently there has been an exponential rise in blended course offerings, with a portion of face to face classes being offered online. Research demonstrates that the blended learning approach can enhance student knowledge and satisfaction, however further research is required to assess the effectiveness of blended teaching methodologies. There is limited research related to student satisfaction and knowledge outcomes in blended learning courses, and the relationship between student perceptions of blended learning and student achievement is largely unexplored in the nursing education literature. Additionally, limited research regarding blended learning and student self-efficacy has been published, all of which this study endeavours to explore. Procedures. This study used a purposive sampling method to invite participants from two sections of an undergraduate BScN course. One section received the course material and lectures through a blended format, and one section received material and lectures through the traditional face to face method. Data collection took place at the beginning and end of the term. Sample sizes were $n = 36$ in the blended group and $n = 38$ in the face to face group. Research Questions. Research questions include: Is there any difference in self-efficacy scores between the students enrolled in the traditional face to face method, versus students in the online blended course? Is there any difference in knowledge between the students in the traditional face to face method, versus students in the online blended course? For students in the online blended course, what is overall student satisfaction with the blended learning course and what are the students' perceptions of the online learning environment? This will be measured using a blended learning student survey (BLSS) and the WEBLEI tool. The final question explores whether there is a relationship between student perceptions of blended learning and student achievement, examining correlation between the BLSS, WEBLEI and course marks. Results. Data analysis will take place in May 2017. Available results will be presented. Conclusions. The implementation of this newly blended online course, with ongoing data collection and analysis could potentially expand the current body of knowledge related to blended learning. The literature states that newly developed blended course modules should be tested repeatedly to identify any differences, and to facilitate development of the most effective course modules in nursing education. This relevant study is repeatable in subsequent semesters, with further data collection planned for a similar cohort of students over several semesters. Further data collection is also planned for Winter 2018. Insights gained from this research may be used by nurse scholars, educators and other academic institutions utilizing blended learning pedagogies in their curricula.

To Teach is to Engage: Designing an Intensive Research and Communication Skills Program for Mature-Age International Master's Students

Tomas Zahora

The master's degree provides a great opportunity for mature-age students to advance their careers or expand their disciplinary knowledge. Taking part in a master's degree as an international student provides the additional benefits of expanding professional networks as well as of learning about another country, language, and way of thinking. The growing popularity of master's programs in English-speaking countries has also become a boon for universities, which have the opportunity to enhance their reputation, welcome students from a range of countries, and develop new programs to cater to unique cohorts. The brevity of the master's program poses a number of challenges. In addition to dealing with a new landscape of disciplinary and cultural language, students must rapidly develop new habits in order to adapt to academic and research conventions. To tackle discipline-related content, mature-age international students can draw on well-developed sets of skills in areas of their

expertise. When it comes to skills relating to English-language academic and research culture, however, students are faced with varying degrees of unfamiliarity, even incomprehensibility. The disjunct between expert- and novice-level knowledge of different skills sets often results in confusion and learning fatigue that can have significant impact on the learner and lead to dissatisfaction or withdrawal from the program. To address this challenge in the context of the Master of Public Health degree at Monash University in Melbourne, Australia, we designed a twelve-part skills-development unit to complement and enhance students' research and communication skills. Combining aspects of the research cycle, revised Bloom's taxonomy, composition theory, and blended learning approach, the unit draws on students' strengths while introducing them to unknown, unfamiliar, or culturally different academic practices. The strategy of interweaving several pedagogic dimensions with students' existing knowledge, and of scaffolding the classes in order of increasing intensity and learner autonomy has resulted in highly positive student feedback and improved overall program results. Among the most noted aspects of the program was its ability to interest and engage students in an active, experiential way. Drawing on student feedback as well as skills analysis across the curriculum, the paper provides an analysis of this engagement-focused approach to skills education, and makes recommendations for designing a successful research and communications skills units particularly for mature-age international students.

Investigating Undergraduate Level Methods Instruction Using Brookfield's Critical Incident Questionnaire **Michelle Vaughn, Vicki Luther**

This study describes data gathered during a methods course in an undergraduate teacher education program. Students from a non-traditional, undergraduate teacher education program were recruited for the study. Students reflected on learning and documented when they were not engaged, distanced, what they found helpful, puzzling and or any surprises (Brookfield, 1995, 1998) that took place during the learning segment. After data was analyzed, changes were made to the course. Brookfield (1998) explains the importance of practitioners being able to critically reflect on their practice. One way to gain this needed information so the practitioner can reflect properly is by administering the Critical Incident Questionnaire (CIQ). Brookfield's CIQs (1995) where students answered open-ended questions regarding their own learning and if questions remained regarding the learning topics were completed. Fink's taxonomy of significant learning was used to implement a course redesign. Periodically, during the methods class, students were asked to complete Brookfield's CIQ. Results from the CIQs indicated common themes such as students in the class being most engaged during times when they were able to collaborate as a group and when they were able to participate in hands-on activities. There were also data from the CIQs that were conflicting. Students documented that the personal writing time performed each class was not a moment where they felt engaged whereas other students indicated this personal writing time was engaging. Other themes noted from the data were an uncertainty with lesson plans, edTPA, the final class project and the disrespect classmates demonstrated during class. Based on responses in the CIQ and the class discussions, immediate changes were made that could be made. However, substantial changes pertaining to curriculum, choice of text book, objectives for the class, etc. were post-posed until the course could be reviewed for redesign purposes. In order to redesign the course, Fink's taxonomy of significant learning was used to aid in redesigning the course. The conference thread of aspirations and anxieties as well as adventures and insights will be highlighted during this poster presentation. Being newcomers in the Scholarship of Teaching and Learning world, a new perspective has been developed because of "the want" of positive learning outcomes for students to take place. The teaching and learning that has taken place during this study has proven to be a great adventure where specific insights were taken away. Through this study, new heights were reached regarding our teaching and learning. Because we discuss the importance of reflective practices with preservice teachers, we want to make sure we model such skills; when preservice teachers see this act in practice and not simply in theory, we feel that it adds even more value.

Lessons from the Mountain Top: Preventing Information Overload in the Microbiology Laboratory **Ana Colina**

The science laboratory is an ideal environment to foster the acquisition of technical competencies such as experimental design, data collection and interpretation and problem-solving. These skills are essential for success in the fields of science, technology, engineering and mathematics (STEM). Active learning in the microbiology laboratory requires the combination of cognitive (knowledge), affective (attitudes) and psychomotor (skills) domains,

thus preparedness is important to maximize the benefits of practical classes. Poorly prepared students won't be able to connect the conceptual framework of the laboratory experiments with the manipulative tasks being performed. According to the Cognitive Load Theory (CLT), these students are likely to experience information overload and would resort to solely conduct the procedural steps, while missing the opportunity to understand the relevance of the experimental work. This study explores the implementation of web-based pre-laboratory preparation modules as a strategy to improve readiness and to prevent cognitive overload in the microbiology laboratory. The instructional tool would include videos/animations reviewing the conceptual framework of the experiments and demonstrating the procedural steps and safety precautions. The cohort includes students enrolled in the laboratory section of the introductory level course Microbiology-BIOL 2105, in the Department of Biology at Mount Royal University (Calgary, Canada). The impact of this intervention on knowledge gain, perception of preparedness and perception of information overload will be measured using a mixed-method approach. Details related to the design and implementation of this instructional intervention will be discussed.

Chronicles of Charting a Newly Blended Course: Health Assessment Across the Lifespan **Keri-Ann Berga**

Blended learning is an instructional approach that substitutes online learning for a portion of traditional face-to-face instruction. In recent years, there has been an exponential rise in the use of blended learning, along with a great deal of interest in redesigning traditional face to face courses to meet the needs of students attending higher education. Blended learning offers many advantages to institutions, faculty, and students, including: efficient use of classrooms, increased flexibility in schedules, and some studies suggest an increase in student satisfaction and achievement. Many institutions have implemented blended learning because faculty has experimented with, or adopted this method, however it is not always a strategic institutional initiative. This poster will provide an overview of the development process and insights gained during the development of a blended Health Assessment in Nursing course within a Canadian Bachelor of Science in Nursing program. The course was planned through a bottom up approach with institutional support, which allowed for creativity in course design, development and implementation, and also fostered the opportunity for scholarship of teaching learning research to simultaneously occur. Please refer to the research poster submission for further details of the actual study and results. Course Context, Content and Delivery The online portion of the course was delivered through a paced, asynchronous method. Hands on laboratory practice remained a face to face learning opportunity, offered on a weekly basis. The decision to format online lectures through asynchronous lectures and interactive online activities is strongly related to the program of study and offers students some flexibility in an otherwise busy and intensive nursing program. The course was delivered over 13 weeks, with two 90 minutes lectures each week. 16 classes were online and ten classes were face to face. The face to face classes took place at the following times: three at the beginning, five interspersed for throughout the middle of the term to review more challenging content, and two at the end of the term, to facilitate review and practice classes. Online course material was provided through pre-recorded, interactive lectures using Adobe Captivate and Screencasting, including Blackboard Kaltura. Further details on these modalities will be described. Theoretical Base Beyond the logistical planning and development of the course, it is vital to consider and deliberately plan how the students will be involved and engaged in the course. For this reason, the theories of connectivism, constructivism and experiential learning provided a sound basis for a holistic approach to teaching and learning in a blended online setting. This poster will provide conference participants with an overview of the process of planning a blended course within an undergraduate BScN program using theories of connectivism, constructivism and experiential learning. Although the development of an online or blended course requires careful planning and thoughtful intention, it is possible to incorporate experiential, socially connected and relevant learning opportunities within an online course, as evidenced by the various theories, course activities and course delivery methods that will be described in the poster.

Students as Fellow Climbers and Not Baggage Handlers: Methods, Models, and Principles of Co-Inquiry **Galia Blackman, Chris Ostrowski, Tiffany Doherty**

In this poster, we present a conceptual framework about students as co-inquirers (SCI) within SoTL. This framework is the result of a literature review on SCI, an inquiry into the principles and models of what SCI can look like (Chapter in progress: Co-Inquiry with Students). We explored how SCI has been done and what has it looked

like in practice, in presentation, and in writing. Using visual vignettes, this poster will present an SCI model grounded in SoTL literature and our experiences as SCI. SCI can be described either as “in-class SoTL” where the co-inquirers are students who are part of the class being studied, working as partners with the instructor, or “out-of-class SoTL” where the students work with faculty to study a course which they are not directly taking or teaching. These contexts include students’ involvement in the research process as well as dissemination of findings. But wait! In our process of writing about the SCI model, we noticed themes of student voice (Werder, & Otis, 2009), power relations (Bell, 2016), and etiquette (Werder, Thibou, & Kaufer, 2012). We concluded that describing a good model is not the only way students and faculty can know sound SCI in SoTL research. As we read examples of best practices and what researchers called sound practice (Cook-Sather, Bovill, & Felten, 2014), our critical slants unearthed instances of troubling examples of SCI (Bell, 2016). Regardless of the context and the stage of the SoTL inquiry, faculty can foster an atmosphere of integrity, ethics, and strong research practice which allows the student presence in SoTL to be a mutually beneficial venture. In response to the questions: What happens to initiate the research; what happens during the research; what happens with the findings; and based on our experiences and review of the prominent research on SCI, we present a visual of a model of SCI, outlining key methods, practices, and principles, juxtaposed with how it can easily go counter to principles of partnership and etiquette. We hope to engage SoTL researchers to consider elements of power dynamics in their own practice and ways that the student presence in research is nurtured and strengthened. We seek to inspire detailed dialogue and critical engagement, not didactic conclusions about what is poor etiquette in SCI. We question a few of the lows to ultimately strengthen the highs. The outcome is a theoretical framework of SCI that includes students as fellow climbers and not baggage handlers in the research process.

Integrating Sciences to Connect the Dots for At-Risk Freshmen **Chamaree de Silva, Jeff Pullen, Jarred Jenkins, Katharine Northcutt**

Program in Integrative Science and Mathematics (PRISM) is a pilot project designed to guide a selected cohort of at-risk, non-calculus ready, incoming student population. In this program, students study Physics, Psychology, Biology, Statistics, and Precalculus in an integrated manner with four faculty members over the first two semesters. In addition, we teach and model how the disciplines interact with each other through integrative assignments, activities, and exams. Furthermore, PRISM students conduct an authentic research project and present their findings to administrators, faculty, and students from across campus. Now in its second year, students have been successful in the program; anecdotally, PRISM has been particularly helpful for underrepresented minority students.

Building SoTL Community to Support a Culture of Institution-Wide Curricular Renewal **Kelly McConaughay, Sarah Glover**

Our institution recently revised its 30-year old general education program. Conceived of as a campus-wide initiative from the onset, the revision process incorporated several key guiding principles that provide precedence for future large-scale curricular revision efforts, notably backwards design thinking, data-informed curricular design, and a transparent, inclusive design process. The process of designing the new Core Curriculum (CC) took two-years, and engaged over 140 faculty and professional staff from across all academic and academic support units on campus. Our goal from day one in this process was to engage the campus in curriculum development and in authentic, ongoing curricular assessment, improvement and renewal. Assessment of core learning outcomes, course-embedded assessment, program-wide alignment, curricular review and revision were explicitly included in the revised curriculum. In order to help faculty become full participants in the stewardship of the CC, we are strategically developing structures to support the development of a community of SoTL practitioners. Borrowing from current research on the role of SoTL communities in support of institution-wide curricular reform (e.g., Hubbell, Pearson, and Clark 2013, Poole 2007, McKinney 2006), we have designed a 9-month professional development program that utilizes both cohort and peer-mentoring approaches to develop a cadre of SoTL practitioners working on projects aligned with specific CC curricular design elements or core outcomes. Faculty who complete the program are eligible to serve as peer-leaders and mentors to successive cohorts. As the CC comprises over 25% of the total program for every undergraduate student at Bradley, a community of SoTL practitioners focused on BCC design and outcomes illustrates a “scholarship of curricular practice”, or SoCP (Hubbell and Gold 2007), focused explicitly on

those common educational elements that characterize our institution's educational experience. Our presentation will focus on the logistics of developing a SoCP, an analysis of the results from our first SoTL scholars cohort, and lessons learned.

A Changed Approach to Learning for Nursing Students **Michelle Yeo, Sarah Webb, Sarah Hewitt, Joanne Bouma**

In 2014-15, we conducted a study on the use of an innovative approach to deliver a first year Anatomy and Physiology service course required for first year nursing students. A variety of active learning techniques were implemented in this course, most significantly, the creation of detailed concept maps by the students for each topic within the course, using skeleton maps created by the instructor. Concept maps have been identified by Jaafarpour, Aazami, & Mozafari (2016) as having a positive effect on the academic achievement in nursing students. Using a modified flipped approach, the intent was to provide a more interactive and active learning environment within the class (Abeysekera & Dawson, 2015), to require a higher weekly engagement and study time outside of class, and to help students see physiological content from a conceptual point of view. Cyclic delivery of content and activities gave students an initial introduction to the topic, directed study time, time to consider the content conceptually, work together in groups, and be tested on the material on a weekly basis. In response to repeated calls for research on the flipped classroom (Abeysekera & Dawson, 2015; Bishop & Verleger, 2013), we have engaged in a multi-year SoTL study on this approach, still ongoing. We have conducted interviews with several cohorts and inspired by von der Heide's (2015) approach, devised a method to analyze their concept maps for evidence of learning. There are compelling indications that the approach is an effective pedagogy for content heavy courses of this nature. Students described the importance of their intent to learn, the benefits of continuous exposure to the material, the role of accountability in motivation, the reorganization of their study time and strategies, the retention of their learning with this approach, and their ability to make connections to other contexts. When we began re-interviewing our original participants after their second year, to our surprise, some students had begun to create their own concept maps on their own, based upon their experience in the first year. The practice of concept maps has now been adapted and extended formally into the second year patho-physiology and pharmacology courses by some of the instructors to build upon the first year. This poster will report on our evolving understandings of the effects of using concept mapping and flipped approaches for nursing students in learning complex material—both our adventures and insights so far.

Drawing as a Learning Tool in Zoology **Mindi Summers, Jessica M Theodor**

Zoology instructors seeking to reform their curriculum face limited documentation on how students learn and develop scientific practices in zoology. Drawing has been advocated as an active, learner-centered technique to develop critical observation and visual literacy. However, there remains a need for scholars to document how students learn using drawing and identify effective pedagogical techniques that incorporate drawing. To investigate this underexplored and new area of SoTL inquiry, we developed and implemented a survey on student motivation to draw, designed a set of learning experiences that encourage drawing and interaction with scientific illustrations (e.g., drawing notebooks, exercises, and short-answer questions), and provided students with the option of drawing responses on midterm and final exams. We will present our preliminary findings on student attitudes towards and use of drawing in our courses, provide recommendations for best practices when incorporating drawing as a learning tool, and discuss future avenues for research in this new horizon of SoTL.

Leading a Center for Teaching and Learning: Looking Back, Looking Forward **Mary Jo Finney**

Scaling the peaks of directing a Center for Teaching and Learning (CTL) is a venture fraught with high and low points. It is a career move without an obvious career track yet the creativity it requires is unmatched. It was not until I systematically looked back at the many facets of directing a CTL that its relevance to my current work became richly apparent. I can now look forward with a more robust understanding of the impact the CTL directorship has had on my work. This paper offers a retrospective analysis of a CTL directorship so that current directors may look back and future directors may look forward to their own challenging yet invigorating terrain to be

scaled. Being a director may appear to be nothing more than a glorified event planner, marketer, and provider of tutorial services for faculty who struggle with their teaching. In reality, directing a CTL requires a fierce entrepreneurial spirit and unshakeable drive to reach faculty who may have lost their way while it may teeter close to the edge of a university's budget cuts. A CTL director is charged with designing and enacting faculty development for specialized scholars some of whom do not see themselves as needing "development". Working with experts who may view teaching as a purely didactic event challenges a director to find meaningful ways of working to redirect firmly entrenched beliefs. A CTL directorship requires leadership that is neither out front nor from behind. It is, as referred to by Rutt (1979), a collaborative model. It means finding ways to convene faculty members in varied opportunities for dialogue around myriad topics. Altany (2011) attends to this concept of space for faculty development by comparing it to the deep roots of a banyan tree creating a powerful image of how it is that the work of faculty engaging with one another matters more than where they engage. As I sought my own metaphor, it came from Rheingold's (1993) image of a virtual community as a panopticon or electronic agora. I worked to create a faculty agora. The interpersonal skills acquired by working with faculty across a range of disciplines and learning unique departmental cultures built confidence and were invaluable in my future work as dean and chair. A CTL belongs to all academic units but to no one in particular. It is ideally suited to serve faculty who may be at their most vulnerable and most grateful. It offers unparalleled views of the university and, in seeking to scale new heights in SoTL, inspired directors are needed.

The Future of SoTL: Involving Undergraduates in Assessment. How We Navigate the Routes for Getting There

Adriana Signorini, James Zimmerman

To support and sustain assessment, the Center for Engaged Teaching and Learning at our university offers the XXX program, in which trained undergraduates gather indirect evidence of student learning on behalf of faculty to improve student learning. XXX trains undergraduates in research design, data gathering and effective reporting. In this interactive session, we will explore the XXX program structure, benefits and evidence of impact on instructional practices and curriculum at course and program levels. We look forward to a conversation about the assessment findings and how to replicate the program elsewhere to support the SoTL cycle. Presentation will be assisted with PowerPoint slides and during the presentation participants will:

- 1) Gain familiarity about the program goals and structure. Initiated in 2009, the XXX provides anonymous, aggregated feedback on instructional and co-curricular activities. The goals are to gather data for course and program assessment and to involve undergraduates in assessment as a form of undergraduate research training. The program's most frequent projects attend to student perceptions of instruction and co-curricular services and to student self-perceptions of their own educational experiences at any point during a semester. Presenters will introduce an overview of the program by sharing a XXX program website with goals, services, request and feedback forms, and training modules on different services in webinar and face to face formats. Participants will complete a think-pair-share activity to the following prompt: Looking back at the material provided, what would you say was the most interesting idea discussed in this section of the presentation? For you, what interesting questions remain unanswered?
- 2) Outline some ways of collecting direct/ indirect evidence of SLOs for faculty, programs, and administrative units to support SoTL. Without charge to users, this service offers a variety of data gathering options with subsequent evaluation of results, if requested. Common options include focus groups, ethnographic classroom observations, scripted interviews of individuals or groups, questionnaire survey distribution, and classroom videotaping with prescribed editing. Presenters will display some samples of the various forms of data—qualitative and quantitative, direct and indirect, formative and summative—gathered and evaluated by XXX undergraduates. Using the backchannel chat platform (todaysmeet.com), participants will be involved to identify the nature and purpose of the evidence. For example, they will consider if a focus group provides direct or indirect evidence of student learning; and if class observations are formative or summative kinds of assessment.
- 3) Demonstrate understanding of the scope and benefits of the XXX program. Since 2009 faculty and administrators from throughout the campus (n = 6,194 students) have used XXX services with steadily increasing frequency, from an average of 60 services provided in its first year (2009) to over 700 in its eighth year. This increase has been achieved with minimal promotion of the service; it also reflects a high percentage of returning users who have been uniformly positive in their evaluation of the quality and importance of XXX support. Moreover, there are various benefits that XXX students derive as participants in this service. Some examples could be their own better understanding of teaching and learning as it informs their own

academic achievement, improved ability to collaborate with peers, and enhanced appreciation of “behind the scenes” aspects of classroom instruction. That many of the XXX students are intending or considering teaching as a career would be worth noting too. Presenters will share graphs showing the total number of requests completed by XXX and arranged by service, school, and program. Faculty satisfaction with the program will be also be mentioned to participants. Since these services are provided on request and are shaped to the specific needs of faculty, XXX clients receive a detailed report that summarizes the results of the inquiry and that highlights any emerging trends. In most instances, the results support various forms of required annual and periodic program review. In groups, participants will look at focus group reports and class interview tabulations and discuss the assessment findings and their use to improve student learning and/or institutional processes or services. 4) Identify ways in which this program could be replicated by looking over the program logic model XXX could be easily replicated. Cost involves a part-time coordinator and student workers; an existing tutoring or mentoring program can serve as a foundation for XXX elsewhere. Participants will complete a minute paper to respond to the following prompt: About this presentation, what idea(s) struck you as things you could or should put into practice? What interesting questions remain unanswered? As a response to a Carnegie call to find more and better ways of engaging students in discussions and inquiry about learning, Werner C. and Otis M., ed. (2010) demonstrates how scholars in many fields and from so many different kinds of institutions across the country are engaging student voices in the study of teaching and learning. The work offers ways to validate students as co-inquirers. The editors conclude, “the presence of student voices that sustains us. Students informs and inspire our scholarship” Werder, et al (2010). Engaging Student Voices illustrates the pedagogical power of engaging students the successes and the challenges of sharing responsibility for teaching and learning. The student voice and student-teacher partnership movement have been illustrated by Cook-Sather, A. (2009), Cook-Sather et al. (2014) present a collections of ideas, examples, practices to make students real partners in their own education. The authors offer resources for faculty wishing to implement teaching and learning partnership practices including SoTL. The students voices movement has been complemented with student- faculty partnerships (Cook, Felten) to support faculty’s endeavors, including the Scholarship of Teaching and Learning. The studies indicate that students involved in assessment as planning and pedagogy have developed a strong sense about activities that are conducive to their learning, and their voices and perspectives merit attention. They translate what their peers in the classroom desire and have a feel for their peer will interpret or respond to a particular survey question. Students as active partners in investigating their own learning. Engaging students as partners or co-inquirers has numerous benefits. Students can help faculty/staff anticipate how their peers might respond to interview, survey, or focus group questions. They can provide contextual cues about learning environments beyond the classroom. They also can “serve as validitycheckers” of our initial data summaries or interpretation, especially in qualitative work (McKinney, 2007, p. 44). Similar to the XXX Program, North Carolina A&T’s Wabash-Provost Scholars Program (WPSP), offered by the Academy for Teaching and Learning since fall 2008, has become a valued component in the university’s institutional assessment process. The WPSP course trains students to participate in the assessment design, data collection, analysis and reporting as a form of UR experience. Presenter 1 has been the program director since the XXX Program beginning in 2009 and has widely presented on the program successes, practices and lessons learned. Presenter 2 is the Associate Vice Provost for Teaching and Learning and Center for Engaged Teaching and Learning Director who has provided ongoing support to the program mission. The XXX Program logic model is an opportunity to explore new directions in SoTL. The workshop will provide a roadmap for implementation that will best suit SoTL and assessment in general. This learning design with collaboration with student workers and offer a more ecological approach to assessment for a systematic and consistent long-term impact in SoTL.

The Teaching-Learning Academy as a Catalyst for Developing Interpersonal Communication Skills **Leslie Cogley**

Flannery (2010) states, “bringing student voices into the process of teaching and learning has an undeniably transformative effect” (p. 4). Through the reflective nature of a research study conducted at Western Washington University (WWU), this poster will share what students state they gained from participating in a learning community engaged in the Scholarship of Teaching and Learning (SoTL). The Teaching-Learning Academy (TLA) at WWU strives to create a community of scholars who work together to enhance the existing teaching and learning culture at Western and beyond. The TLA consists of faculty, staff, community members, and students working together as co-inquirers. This research study provided current and past student participants a chance to critically

reflect on what they gained from the TLA and share how it impacted their learning experience. In a previous study conducted by Blount (2004), she drew attention to the use of critical reflection as an exchange that provides students the opportunity to step back and assess what they have learned so "they can make sense of what they see and figure out where to go from there" (p. 104). This study required students to reflect on their experience prior to participating in the TLA and their academic experience after participating in a SoTL community like the TLA. During the entirety of the 2016-2017 academic year, the Teaching-Learning Academy student staff designed and implemented a student-lead research project in an effort to discover new insights into the effectiveness of the program and how students engaged in SoTL with faculty has impacted its participants communication skills. For their research, the students sought to determine the correlation between interpersonal communication skills and the Teaching-Learning Academy's facilitation practices. The research question is as follows: To what extent, does a student's participation in a SoTL community with faculty and staff influence their interpersonal communication skills? To address the shared study question, the student researchers on this project conducted several one-on-one interviews with students who participated in the TLA for at least three quarters. Student participants were also asked to complete a refined version of Bienvenu's (1971) Interpersonal Communication Inventory test. Through the reflective nature of the study, the student researchers and student participants gained a greater understanding of the skills attained from participating in the Teaching-Learning Academy. This poster presentation provides a concise and organized visual representation of the final findings from this student led mix-methods study. Aside from the usefulness of the results which this study has found, the implementation of this student-lead research project represents one of the many ways in which the Teaching-Learning Academy at WWU seeks to reach new heights within SoTL.

Evaluation of the Student Experience of a High Fidelity Simulation Debriefing: A Mixed Methods Study **Sandra Johnston, Fiona Coyer, Robyn Nash**

High fidelity simulation has become an integral component of undergraduate nurse education. The debriefing is a vital element in simulation is a deliberate reflection on the experience which strengthens and synergises the learning experience. Evaluation of student experiences of debriefing can inform educators about the perceived effectiveness and learning from the debriefing. Satisfaction with learning experiences has emerged as a measurement of quality, with positive experiences validating instructional methods that are appropriately challenging to student thinking and learning. Due to the significance of the debriefing process, the relationship of debriefing to learning in this emerging field of study, it is important to explore students' personal debriefing experience and gain knowledge from the perspective of the learner. This study explored student experiences of two types of debriefing: standard debriefing based on Pendleton's rules and the intervention debriefing which utilised reflective questions based on Salomon and Perkins (1989) Transfer of Learning theory.

This study used a convergent parallel design, a one-phase mixed methods design. A convenience sample of third year single or dual degree Bachelor of Nursing students enrolled in the final semester clinical unit completed a post-test survey, the Debriefing Experience Scale (Reed, 2012). Data were entered into IBM Statistical Package for Social Sciences (SPSS) (version 22.0, Chicago, IL). Descriptive statistics, frequencies, percentages, means, and standard deviations, where appropriate, were used to analyse the demographic characteristics of the sample and outcome variables. Mean and standard deviation (SD) were used for normally distributed continuous variables and median, minimum and maximum values were used for skewed continuous variables. Mann-Whitney U test and Kruskal-Wallis Test were applied where appropriate. Chi-square tested for associations between demographic variables and the debriefing approaches. Spearman's Rho correlation was used to identify statistically significant associations between selected demographic variables (age, grade point average) and the outcome variable (debriefing experience). Statistical significance was set at $\alpha .05$. The qualitative phase was conducted using semi-structured focus group interviews. Data were analysed using thematic analysis. The quantitative and qualitative databases were analysed separately and then brought together in a side by side comparison. Quantitative statistical results were presented and qualitative findings then discussed that either confirmed or disconfirmed the statistical results.

There were no significant differences in any individual item of the Debriefing Experience Scale between the two groups. Slightly higher median scores were rated by the intervention group in 5 of the 20 scale items which included 'unsettled feelings were resolved by the facilitator'; 'I had enough time to debrief thoroughly'; 'My questions from the simulation were answered by debriefing'; 'Debriefing helped me to clarify problems' and

'Debriefing helped me to make connections between theory and real-life situations'. Themes identified from focus group data were 'a feeling of being able to speak freely during debriefing'; 'learning during debriefing and importance of facilitation validation'.

Both groups evaluated debriefing as a positive learning experience. Students value time for emotional processing prior to reflecting on the clinical aspect of simulation. Students perceived the facilitator to play an integral role in facilitating a positive and meaningful debriefing experience.

Playing with Polysynchrony: Adventures and Insights in Blended Learning for Diversely Located Student Cohorts **Julie Willems**

One of the many challenges for those who are involved in teaching to mixed-mode, diversely located student enrolments is how to equitably engage the online learners amidst the student cohort. In the current age, this is becoming not only an equity issue for individual students, but it also relates to conversations in and around student engagement and retention, quality assurance, and institutional competition. Through the affordances of online technologies, polysynchronous learning (Eustace, 2009; Ouyang, 2017) blends synchronous and asynchronous communications and technologies, enabling opportunities for mixed cohort engagement. Polysynchronous learning opportunities integrate learner to learner, learner to content and learner to teacher interaction through multiple channels including asynchronous online and synchronous online communications (Dalgarno, 2014; Moore, 1989), providing opportunities especially for online learners to be engaged in live educational opportunities. This paper provides some examples to demonstrate how polysynchrony is being used in higher education to connect diversely located students in real time, and to provide insights gained to assist others venturing into this arena. In so doing, it extends the definition of polysynchrony to be the blend of multiple channels of synchronous and asynchronous communication to foster co-participation of students in a variety of locations in the learning environment with self, peers, teacher and content.

Communities in Conversation: SoTL and Sexual Assault **Kiara Mikita**

Sexual assault is a social issue that has generated mounting attention in recent years, in the general public and on post-secondary campuses where it is said to be perpetrated at epidemic rates. This attention has prompted increased social scrutiny upon institutions tasked with handling it. Importantly, this attention has exposed the lack of collaboration among groups working in, for example, law enforcement, nursing, and counselling, and between these institutions and campus management of sexual assault-related issues. This poster reflects a preliminary exploration of ideas about how to bring these groups that have historically functioned in silos alongside one another into conversation and collaboration about sexual assault - a subject that all bear valuable knowledge about. The grounding framework for these exchanges is inspired by Palmer's (1998) "community of truth" whose subject or "connective core" - in this case, sexual assault - brings together various "knowers" into a "passionate and disciplined process of inquiry and dialogue" (pp. 103-104). Members of these groups, or knowers about sexual assault will be invited to assemble regularly to engage in facilitated active learning exercises that encourage multi-, cross-, inter-, and transdisciplinary understandings of sexual assault. SoTL concepts such as "signature pedagogies" and "threshold concepts" will be introduced early, to invite participants to contemplate the foundational and essential concepts involved in how they describe sexual assault to others, and the central tools and approaches they use when 'doing' these descriptions. On the whole, the aims of this project are threefold: first to facilitate and promote cross-disciplinary and cross-experiential dialogue; second, to catalyze small-scale collaboration that builds into larger collaborative efforts; and third, to foster a collective imagining of transdisciplinary training and research objectives.

7:30pm End of Thursday programming

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