

undergraduate research, such as the British and International Conferences of Undergraduate Research (BCUR & ICUR). While existing research demonstrates the educational benefits of these initiatives, we need, not least in the context of TEF, to understand how undergraduate research and researchers have impact on others. We will share ideas on tools for achieving this impact analysis for debate at the Panel.

'Supporting individuals in a reflective organisation' - Andrea Jackson will reflect on the successes and challenges of developing the LITE Mentoring Scheme, a bespoke student-education focused mentoring programme. It provides support in areas including (i) mentoring for those who want to pursue more formal teaching scholarship and pedagogy, moving beyond practice-sharing and report writing to more rigorous research, dissemination and publication routes, (ii) mentoring for those who are seeking career development through student education at Leeds, including how to explore external, national and international scholarship networks and (iii) mentoring for those who are progressing with curriculum design and student education project delivery including significant and innovative developments. The scheme draws upon the Institute's community of National Teaching Fellows (NTFs), University Student Education Fellows (USEFs) and project leaders to provide a valuable resource in supporting the growing Leeds student education community.

### **5:30pm End of Friday programming**

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

### **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.

## **SATURDAY, OCTOBER 14**

### **SATURDAY, OCTOBER 14, 6:45-8:00**

#### **Breakfast in Exhibition Hall E**

### **SATURDAY, OCTOBER 14, 8:00-9:30**

#### **Reaching for the Scholarly Heights: Publishing Special Issues of SoTL Journals** **Milt Cox, Gregg Wentzell**

**Glen 205**

This panel will explore and involve participants in aspects surrounding the special issue of a SoTL journal. The editor-in-chief and managing editor of two SoTL journals will lead a discussion to learn what other journals are doing, are contemplating, and have experienced with respect to special issues. The presenting editors will provide their processes and outcomes. Here is a list of topics that the panelists will discuss, and they will provide examples from their experiences:1) What types of special issues can occur?2) What special issue topics have been published by each of the journals represented on this panel and by others in the session?3) How and by whom are the topics proposed?4) Do topics of a special issue arise from the topics of articles already selected for publication in a regular issue, or do they come from "outside" requests for a special issue topic.5) Is there a call for special issues, and if so, how is that framed?6) Does the proposer of a special issue become the guest editor?7) How are editorial boards involved (or others) in special issues?8) In the case of multiple topics suggested for a special issue, what decision process is used to select the topic or multiple topics?9) Have some special topics involved two issues and why?10) Are guest editors selected for special issues? If so, what is their role?11) What challenges can arise when a guest editor is involved, and how does the regular editor resolve these?12) How are reviewers selected for a special

issue?13) Do special issues have a different impact on readership? For example, does an online issue result in a difference in number of reads from a regular issue? What is the response from readers who are not interested in a special topic?

**SoTL Contours in Visual Arts: Delineating an Emerging Future**  
**Diana Gregory, Geo Sipp, Donald Robson, Jonathan Fisher, Craig Brasco**

**Glen 201**

SoTL Adventure: If you wish to understand why professions develop as they do, Shulman (2005) suggested you look at their forms of professional development, what he called “signature pedagogies” (p. 52). This panel discussion shares a case study of the application of the scholarship of teaching and learning (SoTL) in a school of art and design (SoA&D) in a large, suburban, public university. Students are the center of this case study—we recognize that from their entrance into higher education and emergence into the visual arts they are practitioners in their subject of study (Shreeve, Wareing, & Drew, 2009). In the presentation part of the panel (30 min.) panelists will: share their SoTL landscape by mapping a ten-year process of scholarship map the lessons learned along the way, and share the challenges presented in the emergent future During the discussion part of the panel (30 min.) questions embedded in the presentation will be examined. Participants will be invited to share their SoTL adventures and to think about the future of SoTL in visual arts. SoTL Compass: After the results of a self-study and outside analysis during accreditation review, the faculty and administration initiated a SoTL project to address and improve student-learning outcomes (SLOs). A perceived lack of imagination and originality in student artwork was noted as the primary problem. Thus, the first step (setting clear goals and adequate preparation) in our SoTL journey was the formation of a Creativity Faculty Learning Community (CFLC) sponsored by the Center for Excellence in Teaching and Learning (CETL). Through this two-year process the CFLC discovered common held beliefs, built communal understanding of creativity, then made public our findings. Critical to this conversation was the unraveling of tacitly held knowledge—findings ways to make visible and accessible to faculty and students what may not be explicitly known. At 2011 SoTL Commons the results, “Effective Enhancement and Improvement of Creativity in Student Learning,” examined creativity from a person, process, product, and place perspective to demystify creativity and make explicit what is meant by creativity and conceptual inventiveness. While the CFLC studied creativity and its implications for teaching and learning, school administrators simultaneously initiated a portfolio review process (PRP). Developed by a small group of assistant professors from diverse concentrations—ceramics, painting, photography, art education and facilitated by the College of the Arts Assistant Dean—the early results “Portfolio Review: Evidence of Student Learning Outcomes” were presented at 2012 SoTL Common. Through this work questions emerged: What skills and knowledge are needed (or required) in the study of visual arts and how will faculty know if their teaching is effective? Were threshold concepts defined and evaluated in such a way that students understood what they were learning? Public comments and questions (reflective critique) illuminated areas of thinking and practice that drove us beyond content alone (O’Brien, 2008). As we navigated the SoTL landscape we focused on ways of working and practice that supported “students’ anticipated graduate destinations” (p.13). When new faculty were hired they were immersed into a culture and climate of assessment and continuous improvement—not always an easy endeavor. Standards for visual arts learning are specified by the National Association of Schools of Art and Design (NASAD), but the VALUE rubrics from the American Association of College and Universities (AAC&U) provided faculty with a framework to benchmark effective teaching. Three presentations chronicle this work: first, 2013 SoTL Common presentation “Evolution of Evidence: Refining Visual Art Student Learning Outcomes” focused on incorporating the VALUE rubrics in graphic design, photography, and painting. Second, 2014 ISSOTL presentation “SoTL in Visual Arts: A Portrait of Creativity in Action” painted a portrait revealing how the SoTL process directly affected the improvement of SLOs—evidenced by the PechaKucha (20X20) showcasing student products. Finally, “Graphic Design Assessment: Mid-point, Senior Exhibit, and Printed Portfolio” at 2015 CETL Research on Teaching and Learning Summit focused on obtaining information on student skill and knowledge development in light of industry standards and student marketability. Full circle: Our journey began with the question: What will my students learn and is it worth learning? (O’Brien, 2008) “Pinning Down Constructive Alignment of Conceptual Inventiveness” at 2017 SoTL Common chronicled and made public our process of involving full and part-time faculty in the development and revision of ART 2990: Concept, Creativity, and Studio Practice. As faculty, we acknowledged that early data throughout this process demonstrated the need for a specific course addressing creative problem solving and conceptual inventiveness. But, there had not been a thorough examination of what competencies, skill set or learning objectives are required for each of the six courses within the

foundations core. Subsequently, faculty developed horizontal and vertical “constructive alignment” (Angelo, 2012) for the six foundations courses leading to portfolio review and acceptance into a concentration and/or degree program. A learning-focused perspective is now vital to our future SoTL inquiry. Venturing into the Unknown: A Paradigm Shift In fall 2017 SoAD will offer a new degree - a Bachelor of Fine Arts in Digital Animation, and three new concentrations-illustration, sequential art, and textiles. This move signals a departure from “fine arts” to “applied arts.” Our greatest challenge is our new frontier. Yet, as we venture into this new territory we will continue to use SoTL processes to guide us to ensure effective student learning.

**convergedmediamanagement.com: A Student/Faculty Collaboration Creating a Story-Based Web Text for Communication Educators and Students**  
**Maria Moore**

**Glen 206**

This SoTL study is based upon the lived and learned experience of student/faculty collaborators as they participated within a learning community to create a website. The SoTL results emerged through reflection postings, reflection essays and focus group discussion. In 2016, a collaborative learning community of faculty and graduate students embarked on an inquiry about current media management issues across converged media platforms. The issues examined were Branding/Marketing, Civic and Social Responsibility, Crisis Communication, Diversity and Cultural Differences, Strategic Planning and Transparency within a case-based framework of traditional, new and social media. The result was a vibrant and evolving website, with an intended world audience interested in learning about the topic of management through relevant story-based case studies in converged media. This born-digital mode of academic scholarship is organically interactive, without the constraints of traditional print-based structures. Supporting Theory and Constructs: Constructivism as Theoretical Foundation: The fundamental theory grounding the concepts of learning communities can be traced to the social constructivism theory of Lee Vygotsky that situated learning in social context. Vygotsky recognized that contexts, knowledge, and meanings in everyday life are experienced, constructed, and reconstructed through social influences (DiPardo and Potter, 2003). Collaborative Learning: As Sgroi and Saltiel (1998) state, “There is a basic need for people-to-people connections in the educational process to fulfill some unidentified longing” (p. 87), and “The potential and power of collaborative partnerships is the power of humanity. We give energy and life to one another. This is at the heart of understanding the power of collaborative partnerships” (p. 91). Collaborative Inquiry (CI): at its most basic is research with rather than on. A useful definition is the creative action of people to address matters that are important to them. It focuses on work that is created together by the collaborators as co-equal co-researchers and co-subjects. Everyone gets into the experience and the action that is explored (Heron & Reason, 2001). Project results and conclusions: The students in this collaborative inquiry gained a deeper sense of responsibility for their own learning and a sense of their own authority. They learned to work together, to develop new friendships and to have a much deeper sense of belonging during their educational experience. Students expressed an increase in intellectual energy and confidence. They learned to better appreciate other student’s perspectives. Students were better able to embrace and understand complex concepts and to gain new perspectives on their own learning. Because students have more significant and layered interaction with other students as well as faculty, they expressed an increased level of satisfaction with their overall academic experience. Opportunities for critical dialogue among ISSOTL participants: While this case-based Webtext collaboration specifically follows student participants at one university, this model of inquiry may be practical or inspirational to others who wish to attempt a collaborative inquiry in building a student project like a website, or others who wish to explore case-based story telling methods in student scholarship. Conference participants will be able to view the website at [convergedmediamanagement.com](http://convergedmediamanagement.com).

**A Programmatic Approach to ePortfolios: A Student and Faculty SoTL Partnership Study**  
**Norman Vaughan, Rachel Cool, Kristen MacIssac, Tanya Stogre**

**Glen 206**

The purpose of this SoTL study was to investigate how a student-faculty partnership approach could be utilized to study how teacher candidates (TCs) in a Bachelor of Education (B.Ed.) program are using a professional learning plan (ePortfolio). Healey, Flint, and Harrington’s (2014) conceptual model for partnership in learning and teaching was used to guide this study, specifically in the area of curriculum design and pedagogic consultancy. Our findings suggest that a student-faculty research partnership is particularly effective in the design and development of new curricular approaches but can become more challenging in the implementation phase due to faculty and

student power dynamics in a university context. Our ePortfolio process allows TCs to document and articulate professional growth and development related to the B.Ed. program competencies: planning, facilitation, assessment, environment, and professional roles and responsibilities. This is the space for TCs to develop and communicate self-understanding and create learning goals and strategies that will allow them to be most successful in their future teaching practice (Johnsen, 2012). In order to ensure that all stakeholders had an active and participatory ‘voice’ in this research study we adopted a student-faculty partnership approach. Healey, Flint, and Harrington (2014) advocate that this form of partnership should be framed as a process of student engagement where faculty and students are learning and working together to foster engaged student learning and teaching enhancement. They add that “partnership as a process of engagement uniquely foregrounds qualities that put reciprocal learning at the heart of the relationship, such as trust, risk, inter-dependence and agency” (p.7). A major challenge identified with this approach to research is the power hierarchy that exists between faculty and students. Often students are engaged in research studies as data sources and active responders but simply listening to students does not in and of itself constitute partnership (Allin, 2014). In 2011, the National Union of Students (NUS) and Higher Education Academy (HEA) developed a student engagement toolkit that clearly demonstrates that consultation, involvement, participation, and partnership are qualitatively different forms of student engagement. Our completed SoTL study documents the opportunities and challenges encountered in attempting to achieve the partnership level of student engagement while seeking to collaboratively investigate the following questions: How is the ePortfolio process helping teacher candidates digitally connect their personal, classroom, and field-based learning experiences? What challenges are the TCs encountering with the ePortfolio process? Recommendations for improving the ePortfolio process? Our research team speculates that a growing number of Bachelor of Education programs are using a professional learning plan or ePortfolio process to document and assess teacher candidates’ growth and development. We hope that others are able to use and build upon the results of this student-faculty SoTL partnership study in order to help teacher candidates effectively create their own professional identities by connecting their personal, classroom, and field-based learning experiences in a digital format.

**Collaborative Educational Design: Development of a Re-Usable Module for Health Science Students**  
**Erica Cambly, Jana Lok**

**Glen 206**

Health science students must become proficient with a variety of clinical skills in order to provide safe and effective care. Often, little time is available for education and practice prior to working with clients in healthcare settings. Learning to administer injections in practice can be a significant cause of stress for students as they lack clinical experience and may fear harming patients (Mahat, 1998). This can be overcome through effective instruction and supported learning. Students are more engaged in skills training when they are taught in effective and engaging learning environments (McConville & Lane, 2006). Interactive modules present course content in ways that support an optimal learning experience. Many studies have shown that combining traditional and technology-enhanced instructional methods is the most effective instructional design for improving students’ clinical skills in practice (Bloomfield & Jones, 2013; Lahti et al., 2014). Health science students respond well to e-learning modules that are visually stimulating, interactive, concise and aligned with their perceived learning needs (Brandt et al., 2010; Childs et al., 2005; Windle et al., 2011). Instructors across several health science professions developed an online re-usable content module pertaining to the administration of injections which was successfully integrated into their respective courses. Students’ use of the module throughout their program provided a foundation for active teaching and learning in the classroom, simulation lab, and clinical practice. Consequently, this enhanced large classroom learning by allowing more time for scholarly activities and discussions beyond the core content (Baker, 2000). Simulation time was also used more effectively as students were already exposed to key concepts and best practice guidelines. Moreover, students were able to access the learning module throughout their programs enabling them to review the material prior to working with actual clients in the practice settings. Thereby, the module promoted improved patient outcomes as students were better prepared to safely administer injections in practice. This presentation will highlight the collaborative work that was done in three health science faculties. Successes and challenges will be discussed and a short demonstration of the re-usable learning module will be provided. Participants will be encouraged to discuss how similar projects may be used within their organizations.

This paper takes its cues from the conference thread “New Horizons, Emerging Landscapes, and Unexplored Territories,” drawing out one key word in particular: namely, emergence. The paper explores “emergence” as both a theme for SoTL research and a method for scholarly teaching practices, particularly in the Arts and Humanities. Written collaboratively by a philosopher and literary medievalist, the paper brings together theoretical concerns (in which “emergence” proffers a conceptual framework for querying the very nature of SoTL work) with the practical and pragmatic (in which “emergence” marks pedagogical approaches that are oriented explicitly to the unexpected and the open-ended).

“Emergence” refers to the process of coming into being, in which outcomes are neither determined in advance nor reducible to delimited causes. Providing an overview of recent special issues on SoTL and the Arts and Humanities, the paper will make the case that “emergence” is already at play in a persistent, if not entirely prevalent, set of arguments by SoTL scholars that call for methods that attend to process, relationality, and complex and subjective aspects of learning. “Emergence,” on this account, proffers a kind of counter-example to the more prevalent (at times hegemonic) empiricist methods deployed by SoTL scholars. In order to demonstrate the import of this counter-approach to SoTL, the paper will trace a range of examples of SoTL studies that deploy methods of analyses that take rigorous account of emergence as an essential component of both teaching and learning. The paper also briefly describes the “emerging” SoTL project that the authors themselves are launching, a project that engages directly with the feedback loops of teaching and learning through inventive use of new media (such as twitter and podcasting).

The paper contributes to the growing interest of Arts and Humanities SoTL scholars in methods that diverge from those of the sciences and social sciences; it proffers “emergence” as a guiding framework for producing such methods. In other words, this paper seeks to explore methods for SoTL in the Arts and Humanities that are not empiricist but rather sync with the kinds of values and ideals that scholars in the Arts and Humanities practice (values and ideals that the paper’s authors conceptualize as “emergent”). This explicit emphasis on emergence, we argue, is a way to foreground critical issues at the very heart of teaching and learning, issues that are entangled with critical race, disability and gender studies. The animating hope of this paper (and the new, emerging SoTL project that it describes) is that the scholarship of teaching and learning might play a crucial role in the emergent feedback loops of critical theory. On such an account, SoTL is itself an emergent and responsive endeavour, rather than a descriptive or retrospective activity.

Directed by Edinburgh Sculpture Workshop (Dan Brown) and Edinburgh College of Art (Prof Neil Mulholland), Shift/Work is a collective that composes workshops that cause participants to reflect upon and recalibrate 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). Our workshops enact new practices and collectively compose open educational resources for artists, art professionals, curators and art educators to adapt and implement. ‘Shift/Work’ is an iterative process, a rolling workshop that can be continually re-performed like a musical score. Given that SoTL generally does not feature in contemporary artistic practice or pedagogy, Shift/Work is distinctive and significant in its engagements with, and innovative contributions, to SoTL. We will briefly outline the genesis and aims of Shift/Work in relation to SoTL and ‘educationally-turned’ contemporary artistic research, before focusing on Speculations, a participatory workshop composed at Edinburgh Sculpture Workshop then play-tested as part of the Kochi-Muziris Biennale in India (March 2017) and at the Faculty of Fine Arts, University of Agder, Kristiansand, Norway (August 2017).

In Speculations participants develop, learn and apply speculative methods, processes and practices that cannot be held, observed or enacted without taking risks or experiencing their consequences. Rather than simply reflect upon speculation and artistic research, the workshop actually generates new speculative-artistic methods through participatory action research. This paper offers a unique insight into Shift/Work’s ludic approach to workshops as reciprocal and enmeshed game-rules governing how actants interact. Playing the ‘game’ - Speculations - leads to the rules being revised and updated, offering fresh game-theoretic insights. Speculations is,

thus, a paralogy, a ludic and 'meta' practice of peer-to-peer learning that is central to artistic learning. It is a heuristic to improve our understanding of how parameters calibrate and enable adventurous, creative play. In turn, it demonstrates that play does not just make learning fun, it is constitutive of learning. Speculations unravels and clarifies Shift/Work's commitment to codifying playful paralogy in order to publish and distribute it as an open educational and artistic resource. This has invaluable implications for SoTL as an experimental paralogy that can transform the whole field of education.

**Orientations to Grading in Higher Education Faculty**  
**Anastasia Kulpa**

**Glen 204**

This paper presents early results extending Elias and Merriam's (2005) philosophical orientations to education to discuss the action of grading in particular. Although there is rich scholarship emphasizing the value of understanding liberal, progressive, radical, behaviorist, humanist, analytic and postmodern philosophies of education, this research does not examine the effect of these philosophical orientations to teaching on grading as a specific element of teaching. In this paper, grading is discussed as an act of interpretation, where faculty members assign meaning to the criteria used to evaluate student work as well as the student work itself, and then translate that into a score intended to communicate with other actors. As an interpretive act, grading is influenced by, and connected to, broader philosophical orientations to the purposes and practices of teaching. Drawing on semi-structured interviews with full-time, tenure-track faculty at a teaching-intensive institution, this paper discusses links between orientations to teaching and orientations to grading. Faculty understandings of both the purpose of grading in their teaching are discussed in relation to larger philosophical orientations to teaching, with reference to how that plays out in the process of grading. The model of philosophical orientations to teaching presented by Elias and Merriam (2005) has been developed and used by many other scholars. Kanuka, Smith and Kelland (2013) argue that these philosophical orientations to teaching are linked to orientations to technology, and many authors have argued for the articulation of distinct orientations to particular aspects of the academic role, such as the orientations to curriculum developed by Roberts (2015). This study extends Elias and Merriam's (2005) framework to account for grading in the practice of faculty work as experienced by academics.

**Harm Reduction and Resiliency Building in Large Lectures**  
**Tamara O'Doherty, Sheri Fabian**

**Glen 204**

Over the past year, two major events took place in universities across British Columbia and elsewhere in Canada. First, universities began the work of determining how to implement the recommendations of the Truth and Reconciliation Commission Report to Indigenize Canadian university curricula and to increase awareness of the long-term and ongoing effects of colonization. Second, universities have been tasked with creating and implementing sexual assault response guidelines, including examining the roles and responsibilities of various parties, such as instructors, where disclosures occur and in relation to sexual assault victimization more generally. While seemingly unrelated, these two initiatives are a part of a general trend to create a more inclusive, respectful and sensitive learning environment for students in higher education settings. These events, in addition to a growing concern about student mental health, challenge faculty in our teaching capacities (Durfee & Rosenberg, 2009). The courses we teach feature content relating to sensitive issues such as colonization, residential schools, sexual assault and other violence, and systemic oppression. Our students--some of whom have experienced victimization themselves, and/or are Indigenous, and/or are otherwise connected to cases and events we discuss in lectures--take up careers in emergency services, criminal justice environments, and front line social services, all fields of employment featuring high rates of mental health impacts such as Post-Traumatic Stress Disorder. Given these factors, and as higher education becomes increasingly student-centered, inclusive, and responsive to mental health concerns, and like Pazzani (2015) we feel an increased responsibility to create learning environments that respect student emotional safety while covering the required materials. In 2016, we began a study to investigate existing harm-reduction strategies used to deliver sensitive course content in large lecture settings, a subject area that is under-researched in Canadian literature (Lowe, 2015). In Phase One of the project, we interviewed 12 faculty members at Simon Fraser University to discuss the issues and to begin to gather strategies for how to engage in both harm reduction and resiliency building in our large lectures. The participants provided us with information about some of the challenges they faced and successes they experienced in employing harm reduction and

resiliency building in their lectures. The data support existing literature (Brooke, 1999; Carter, 2015) and demonstrate that while a range of strategies employed by faculty members exist, individual instructional skills or approaches affect the perceived impact and utility of harm-reduction and resiliency building in the classroom. Phase two involved implementing select strategies in our lectures and inviting student feedback on our efforts. Over the course of the subsequent term, the authors implemented four strategies (information giving, advance notice and opt out options, an analytical focus exercise, and a happiness exercise). Students provided anonymous feedback on each strategy and indicated general receptiveness to increased attention to student reception of sensitive information and to resiliency building in higher education. In this session we present our research findings and invite discussion about faculty roles in responding to student needs under this evolving learning environment.

**Determining the Benefits of Writing Instruction in a Required Research Methods Course** Telus 103  
**Jayne Baker**

Writing across the curriculum (WAC) has been implemented to address growing concerns around a decline in the quality of student writing. The research literature on improving the writing of sociology students generally argues that writing is best taught to sociology students by their sociology professors (not writing instructors), in the context of sociology courses (Anderson and Holt 1990; Cadwallader and Scarboro 1982; Ciabattari 2013; Day 1989; Karcher 1988). Debates continue about whether this instruction is best achieved through peer review (Anderson and Holt 1990; Burgess-Proctor et al. 2014; Cadwallader and Scarboro 1982; Massengill 2011), writing-intensive courses (Ciabattari 2013; Day 1989; Grauerholz, Eisele, and Stark 2013; Karcher 1988; Kolb, Longest, and Jensen 2013), or in-class interventions and low-stakes exercises (Bean 2011). In this presentation, I share findings from a research project assessing the value of adding multiple writing components into a methods course. The goal of integrating writing instruction into the course is to help students improve their sociological writing in the context of a large (175 students) course that is required for and restricted to our Sociology and Criminology specialists and majors (i.e. students across four programs). The current scaffolded design of the course involves a research proposal consisting of: 1) a preliminary research question and topic description; 2) a literature review and a well-developed research question; 3) a research proposal integrating the research question, literature review, and methods-specific content. The course structure allows for regular and ongoing formative feedback and provides multiple opportunities for students to revise and improve their writing. I assess whether the quality of a student's research question--submitted in each of the three assignments--improves throughout the term. The assessment involves evaluating the research questions of a randomly-selected sample of 75 students (a stratified sample across grade ranges). The assessment criteria were honed in a pilot study that took place in the summer of 2016. The assessment team includes myself (the course instructor), the director of our academic skills centre, and two graduate students with experience in the course as TAs. We assess changes in individual students' scores and changes in scores as a group, overall. This includes looking for correlations between any of the assessment criteria, the students' final grade in the course, and their assignment grades. The presentation will consist of the results of the study to take place in summer 2017. Findings from the 2016 pilot study indicate that the structure of the course improves the student's research questions. While students who do well in the course overall not surprisingly do well in crafting a research question from the outset, there is notable improvement in the quality of the research question for students that begin assignment one with a lower-quality research question. In short, the course structure appears to improve the performance of the students that were initially low-performers so that all students perform similarly by the conclusion of the course.

**Peer and Instructor Feedback in an Academic Graduate Writing Course: Exploring an Underexplored Area of SoTL** Telus 103  
**Roswita Dressler**

What do we know about incorporating peer and instructor feedback into graduate-level academic writing courses? The literature on this type of feedback is often grounded in undergraduate or English as an Additional Language (EAL) contexts, thus the area of peer and instructor feedback in graduate studies remains an underexplored territory in SoTL. In an undergraduate context, Morra and Romano (2008) emphasize that peer feedback improves with training, and students are more open to feedback given in an atmosphere of collaboration. Baker (2016) notes that with course-embedded peer and instructor feedback, students begin their writing earlier and

substantially revise their drafts due to the formative feedback received. In EAL contexts, instructor feedback is more specific than peer feedback and more often taken up by students (Ruegg, 2015). Emerging from this literature was our research question: To what degree do graduate students integrate peer and instructor feedback in their final submissions? This study examines peer and instructor feedback in an online research-based graduate-level course in which students submitted two major tasks. The instructor-researcher designed each of two tasks (one research proposal and one report) with two deadlines: one for the draft and the other for the final product. Students worked in groups of 3-4 learners to provide each other peer review, although the assignments were individual and varied in topic. Learners reviewed each other on a self-assigned rotation, using the “track changes” function in Microsoft Word, so that subsequent reviewers could build upon previous comments. After the drafts had been reviewed by the group members, the instructor provided feedback using “track changes.” The above design sought to provide students with feedback that was timely, specific and embedded in their writing (Wolsey, 2008). The data sources are the drafts and final products of the two writing tasks from students (n=9) who consented to the use of their data. The comments and “changes” on draft writing were coded, and the uptake of each piece of feedback on the final submission was rated by two independent reviewers who later compared coding to establish 100% interrater reliability. Codes (n=12) described types of feedback, and each instance of feedback was evaluated for its ultimate uptake: all feedback was deemed a) wholly accepted, b) partially accepted, or c) rejected. Results revealed that students integrated peer and instructor feedback 82.9% and 89.3% of the time respectively. The data also revealed that there was no significant difference in the degree to which students integrated peer or instructor feedback. Students took up surface-level feedback (e.g. spelling, APA and grammar corrections) at a rate of 89.6%. This feedback came more frequently from peers. Meaning-level feedback (e.g. the inclusion or removal of content, structural and organizational changes) was incorporated to a lesser extent, at a rate of 76.3%, but was most often taken up when it came from the instructor. Thus, these findings point to the value of surface and meaning-level feedback, and support the incorporation of both peer and instructor feedback for academic writing courses at a graduate level.

**Signature Pedagogies for Synchronous Online Learning**  
**Sarah Elaine Eaton, Meadow Schroeder, Barbara Brown**

**Telus 103**

This paper shares the results of a research project in a faculty of education exploring how signature pedagogies (Shulman, 2005) manifest in synchronous online learning environments. Most research on online learning has focused on asynchronous courses with a paucity of research examining synchronous sessions (Authors, 2016; Park & Bonk, 2007; Tallent-Runnels et al., 2006). There is a small body of literature on how signature pedagogies can apply to online learning in the field of education (Author, 2014; Preciado Babb, 2014). There is, however, a gap with regards to specifically addressing signature pedagogies in real-time learning environments. We examine signature pedagogies in synchronous e-learning through the lens of the Community of Inquiry framework (Akyol & Garrison, 2008; Garrison, 2007; Garrison, Anderson & Archer, 2000). Using a mixed methods action-research approach (Fichtman-Dana, 2013; McNiff, 2013, 2014) researchers surveyed and interviewed instructors, students and program administrators; and documented designs of the recorded synchronous sessions. Early-stage evidence from this project points to signature pedagogies and active student engagement strategies used in online synchronous learning as well as the challenges in fostering a community of inquiry. As the study will be completed in the Winter 2017 semester, conclusions will be best drawn once all data are analyzed and presented at the conference.

**Researching the Environment in Active Learning Spaces (REALS): Are there Impacts on Instruction, Student Engagement and Learning?**  
**Susan Hillman, Michelle Carpenter**

**Telus 105**

High levels of student engagement have been shown by past research to be associated with such educational practices and conditions as purposeful student-faculty contact, active and collaborative learning, and institutional environments perceived by students to be inclusive and affirming with clearly communicated expectations for high levels of performance (Astin, 1993; Johnson, Johnson, & Smith, 1991; McKeachie, Pintrich, Lin, & Smith, 1986; Pascarella & Terenzini, 2005; Sorcinelli, 1991). While many universities are creating “active learning classrooms” (ALC) to facilitate these high levels of student engagement, little research beyond space utilization and

student satisfaction with new or reconfigured classrooms has been conducted (Painter et al., 2013; Temple, 2008). Thus, this multi-method study investigated the effects of ALCs on student success, engagement, and faculty's teaching strategies. The project was reviewed by the University's IRB with approval received summer 2016, prior to any faculty development or data collection. This project was conducted at a private university with two campuses, one in a rural undergraduate-based setting (Site #1) and one in an urban graduate-based setting (Site #2). Faculty, students, and representatives from facilities, instructional technology, and the teaching learning center participated in a workshop to design an ALC on each campus. Prior to teaching in the classroom, faculty were provided with professional development on active learning strategies. All students who were taught in the ALCs were invited to participate. Twenty-one courses utilized these classrooms during the fall 2016 academic term: 12 courses in Site #1, 9 courses in Site #2. The total students for Site #1 was 223 and Site #2 was 114. Seven faculty from site #1 participated from the areas of biology; education; health, wellness and occupational studies; mathematics; political science; sociology; and a course taught by the university's learning assistance center. Six faculty were involved from site #2 in dental hygiene, occupational therapy, and social work. A baseline survey was given to students before instruction began. These surveys explored students' perceptions of engagement and success in a typical classroom within 4 areas: Learning Engagement and Productivity; Peer Engagement; Higher Level Thinking and Perspectives; Space Functionality. Ten weeks into being taught in the ALC, a post-survey was administered with the same questions, but based on their experiences in the newly renovated ALCs. All faculty who taught in these classrooms were interviewed as well as classroom observations were conducted. The results show evidence that classroom design impacts student engagement and success. Three areas showed significant differences regardless of undergraduate or graduate status, urban or rural college setting. Namely "Learning Engagement and Productivity", "Peer Engagement", and "Space Functionality" all showed significant results. With Site #2, which included primarily graduate students, the fourth area measured, "Higher Level Thinking and Perspectives," also showed significant differences from the baseline data to the post-survey data. Faculty interviews indicated that the classroom design had an influence on changing their pedagogy. Classroom observations served to substantiate these reports by verifying the wide variety of strategies used in the room and the flexibility and fluidity of space use.

## **Findings and Learnings from a Collaborative Mixed-Methods Project on Flipped Learning:**

**Telus 105**

### **A Case Study**

**Isabelle Barrette-Ng, Carol Berenson**

Does a flipped classroom approach foster a deeper understanding of scientific inquiry than a traditional lecture format? This question drove our project which brings together researchers from two different disciplinary backgrounds to investigate the impact of teaching approaches on students' understandings of the process of scientific inquiry. Our 2-year 'quasi-experimental' (Bishop-Clarke & Dietz-Uhler, 2012, 58) study compared cohorts of students in a large-enrollment biochemistry course exposed to either a flipped-classroom approach (combining collaborative in-class activities with problem-based computer simulation software) or a more conventional lecture format. Bringing our respective strengths and backgrounds to the project, we implemented a mixed methods study using both quantitative and qualitative methods of data collection and analysis. Using previously validated surveys, pre and post-assessments were conducted measuring basic content acquisition (Villafane et al., 2011) and comprehension of scientific inquiry (Lederman et al., 2014). Follow-up focus groups were held to explore students' perceptions of their experiences and learnings in the course. In mixed methods studies, the richness of qualitative data can be undermined through the inadvertent privileging of quantitative logic. We attempted to disrupt this pattern by taking a constructivist approach to conducting focus groups. This meant that, rather than following a narrowly predefined interview guide in a more positivist vein, a 'conversation with a purpose' (Burgess, 1988) was allowed to unfold in which the researcher and participants were mutually involved. We argue that combining qualitative and quantitative viewpoints, data collection, analysis, and inference techniques (Johnson et al., 2007) allowed us to produce a rich understanding of the breadth and depth of students' learning experiences in this course. Our quantitative findings indicate marked improvements in content acquisition and a greater understanding and appreciation of the process of scientific inquiry in the flipped classroom compared to its more traditional counterpart. Qualitative themes converge around the students' reflections on their learning which included: problem-solving as a route to deeper learning, the importance of making content relevant, the power of group/peer learning and teaching activities, and challenges with keeping up in the flipped classroom. Finally, we will share insights and lessons regarding our process. We experienced both highs and lows, anxieties and accomplishments,

and unanticipated changes in our plan along the way. As we reflect on our collaboration we will invite participants to share their experiences and reflections about their SoTL accomplishments and challenges. 'Going public' with our research is an essential aspect of doing SoTL well (Chick, 2015). Often this equates with sharing the findings of our research, however, making visible and critically reflecting on our processes and the many decisions made along the way to produce SoTL research is an equally important aspect of 'going public'. We share our imperfect, messy research process and invite colleagues to do the same in this session.

**Venturing into the Unknown: What Evidence is there - One Year Later - of the Impact of a Threshold Concept on Students in a First Year Elective Course?**  
**Alison Thomas**

**Telus 105**

Over the years I have discovered that the majority of students to whom I teach introductory sociology take it as a required course or recommended elective for other programs, and that this one 14-week semester is therefore likely to be the only formal exposure to sociology that most will ever experience. Nevertheless, some sociologists have claimed that taking even one course in introductory sociology can make an important contribution to the general education of any individual (e.g. Howard and Zoeller, 2007), prompting me to ponder what my own students were gaining from this. Noticing the frequency with which their end-of-semester evaluations included comments about how taking sociology had 'opened their eyes', I started wondering whether these self-reported 'epiphanies' might actually correspond to transformative learning experiences (Mezirow, 1991) and what kind of lasting impact the course might therefore have upon them. This led me to focus on the impact of encountering the 'sociological imagination' - the recognition that individuals' actions are largely shaped by the society in which they live. This is widely regarded as the single most important thing for students to understand in any introductory sociology course (Persell et al, 2007), in that it enables them to start 'thinking like a sociologist' (Pace and Middendorf, 2004). However, students may find this new way of thinking challenging and resist it, since it requires them to question familiar assumptions about personal agency. These features identify the 'sociological imagination' as a threshold concept (Meyer and Land, 2003), meaning that grasping it should generate an irreversible and enduring shift in perspective - much as my students seemed to be describing. I thus started investigating student learning in this course, focusing specifically on the impact of encountering the 'sociological imagination'. From 2012 to 2015 I collected data from 365 students in twelve first year sociology classes, using various Classroom Assessment Techniques (Angelo and Cross, 1993) in order to track how their understanding of this threshold concept developed throughout the semester. In a second phase of the research 106 of these students completed a follow-up survey, approximately one year later, which assessed their recall of the 'sociological imagination' and also tested their ability to apply it. My research findings revealed interesting differences amongst students in regard to how long it took them to grasp this concept, how well they were able to apply it by the end of the course, and what they recalled of it one year later. In my presentation I will briefly outline the study as a whole, before focusing on the findings from the follow-up survey and their implications. I will engage audience members by inviting them to identify threshold concepts faced by their own students (especially in similar introductory-level courses taken as electives) and to consider what they would expect them to remember once the course is over. I will end by commenting on how doing this research has not only altered my approach to teaching this particular concept, but has also re-ignited my enthusiasm for the course as a whole.

**Undergraduate Students and Primary Research: Teaching Through the Literary Archive**  
**Jason Wiens**

**Glen 208**

My paper will discuss how I have integrated archival research into my undergraduate Canadian literature courses at the University of Calgary. For the past two years I have included in these courses assignments in which students read primary texts by writers such as Alice Munro, Mordecai Richler, and Robert Kroetsch, and then examine earlier drafts of these texts in the papers of these writers. Students take digital images of these drafts, post them to our online course delivery system, and then write short pieces of genetic criticism, in which they identify and explain the significance of substantive variants between drafts. Joanne T. Diaz has argued that primary work in archives "challenges students to reconsider what a book is and how it functions as a series of editorial choices; [1] it enhances their ability to work independently and derive pleasure from the serendipity of the archive; and perhaps most important, it can actually get undergraduates--and teachers--to work toward a clearer and more effective

definition of close reading.” [1] Diaz’s argument is consistent with what I have observed in my undergraduate classrooms, with the additional benefit that students contribute to the shape of the course through the sharing of the digital images. In three recent courses, students have also collectively produced online exhibits of these drafts, digitizing them, producing metadata, and uploading them to the platform [omeka.ucalgary.ca](http://omeka.ucalgary.ca). In both working with traditional print archives and creating their own digital exhibits from these archives, “students consider relations between past and present composing, [and] also inquire into generic shifts enabled by digital technologies.” [2] These online exhibits also allow me to bring these archival materials into my classrooms as well as other scholarly venues such as conferences, and also enable other instructors and scholars to make use of these materials. Students have responded well to these archival assignments: they are often pleasantly surprised to discover they enjoy archival research, and a number of learning outcomes result: students learn about the material conditions under which literature is produced; consider the theoretical questions concerning the 21st-century archive; and contribute in a lasting way to the research infrastructure of the university. As Wendy Hayden has written, this sort of archival work leads students to “transform from thinking of themselves as students to seeing their insights and their work have value to an academic field.” [3] My presentation will discuss these and other pedagogical benefits of this archival work, including encouraging students to engage with each other through a different type of peer learning that replaces the traditional group project.

**Authentic Learning in the Humanities: Trials, Tribulations, and Triumphs**  
**Jessica Riddell**

**Glen 208**

Authentic learning is an active learning model that has a significant impact on student learning outcomes (Diamond, Middleton & Mather, 2011). While research on authentic learning has been predominantly focussed on skills-based training, there is a paucity of research on models of authentic learning available for adaptation in the humanities. This research seeks to address this gap, and presents the model of legal trials as a mechanism for interrogating texts in the study of English literature and the humanities more generally. I will discuss why a legal trial is an appropriate model for creating authentic learning environments, outline an undergraduate classroom project that combined two disciplinary fields - Shakespearean drama and criminal law, and, finally, I present suggestions for educators to adapt the legal trial as a model for creating authentic learning environments in their own classrooms.

Background: Authentic learning is an active learning model that has a significant impact on student learning outcomes (Diamond, Middleton & Mather, 2011). Over the past 15 years, there is a growing body of research on authentic learning in professional and vocational contexts, including STEM education (Koenders, 2006), health and medical education (Jamison, 2006), and computer science (Chang, Lee, Wang, & Chen, 2010). Furthermore, law schools have long been preoccupied with mock trials and moot courts as models of problem based learning (Barton, McKellar, & Maharg, 2007). While research on authentic learning has been predominantly focussed on skills-based training, there is a paucity of research on models of authentic learning available for adaptation in the humanities undergraduate classroom. This research seeks to address this gap, and presents the model of legal trials as a mechanism for interrogating texts in the study of English literature and the humanities more generally. In the following presentation, I will discuss why a legal trial is an appropriate model for creating authentic learning environments in undergraduate humanities classrooms. Second, I will outline an undergraduate classroom project that combined two disciplinary fields - Shakespearean drama and criminal law - in an effort to enhance student learning. Finally, I present suggestions for educators to adapt the legal trial as a model for creating authentic learning environments in their own classrooms.

Elements of Engagement: Reeves, Herrington, and Oliver (2002) outline ten design principles that can generate authentic learning environments. I will share these design principles in mini form, and draw attention to the following: the activity will have real world relevance; there is an ill-defined problem that does not have a single solution; the scenarios are complex and require sustained investigation; we have opportunities to approach a problem from multiple perspectives and employ a variety of resources; collaboration is integral to the activity; learners are invited to reflect on their learning; the scenarios encourage interdisciplinary perspectives and encourage integrative thinking across different subject areas; assessment is directly related to the activities and should reflect as much as possible the real world assessment; authentic activities create polished products that are valuable and complete; and, finally, this model of learning encourages diversity of outcomes and competing solutions (Herrington, Oliver & Reeves, 2003, p.63)

**Making Learning Visible through Painting in an Arts and Humanities Undergraduate Course: Glen 208  
Implications for Evaluating Learning Outcomes  
Mousumi De**

There has been a burgeoning interest in the SoTL community on the value of using visual methods for enhancing teaching and learning. For example, a SoTL study by scholars from a variety of disciplines like sociology, astronomy, studio art and art education (e.g. Cornell et al. 2007) researched on how visual methods can enhance teaching and learning in the general education classroom, and more specifically how visual products created as part of the course demonstrate learning of disciplinary content. Manarin's (2016) recent study explored the use of undergraduate research posters in English literature classrooms, underpinning the ideas of 'making learning visible' (Schroeder & Ciccone, 2005), 'making student thinking visible' (Chick, 2013) and addressing Bernstein's (2008) question on 'making learning visible for whom'. While there are several approaches for making learning visible, for example, Barb's (2008) approach of "think-alouds" i.e. verbally solving problems aloud and Choudhuri's (2008) approach of requiring students to explore their self-identities, this paper explores the potential of using students' art works such as painting and drawing created as part of course requirement, as a way to make their learning visible, as well as serve as a visual product demonstrating learning of disciplinary content. Aside from interest in the SoTL community, several research studies support the potential of arts-centered curricula (Marshall & Donahue, 2014) and arts centered learning and education in- and through the arts for promoting affective and cognitive development, as well as critical thinking skills (Eisner, 2002; Efland, 2004; Catterall, 2002; Winner, Hetland, Veenema, Sheridan, Palmer & Locher, 2006). This paper describes an example of the use of paintings in an Arts and Humanities classroom that was part of a larger SoTL study that examined the effectiveness of using art-based teaching and learning methods. The course was on the subject of peace and conflict transformation that also required students to understand war and conflict. Students were taught about Picasso's Guernica painting that exemplifies the damaging effects of war, and were asked to create a painting that exemplified the "opposite" of Guernica i.e., "what would the opposite of Guernica look like". This assignment aimed at understanding students understanding of the complex and multifaceted nature of peace in its positive and negative forms and provide an alternative platform for demonstrating learning as well as evaluating learning outcomes. A content analysis of students' (n=21) paintings, not only reflected the disciplinary content, but also made visible tacit knowledge about what they had learned or missed learning, similar to Barb's (2008) approach. In view of Bernstein's (2008) note on 'making learning visible for whom', the paintings served to showcase learning to the students themselves, and the instructor serving as an effective alternative to text-based assessment methods. The artworks generated in class transcended from mere paintings made for self-expression into evidential expression of learned outcomes-something that students enjoyed creating irrespective of their artistic proficiency. Research shows that arts-based instruction increases interest, motivation, self-esteem and willingness to try new things among students (Rooney, 2004). The questions to explore within the SoTL community are: what factors influence or limit instructors' uptake of arts-based instruction and how can we create a greater awareness of the value of using visual methods for the benefit of SoTL.

**17 Years and Still Climbing: Chronicling a SoTL Faculty Learning Community from Telus 104  
Multiple Perspectives  
LeighAnn Tomaswick, Judy Lightner**

Chronicling the past provides guidance for developing a map for continual improvement, new discoveries, and reaching new heights. A continued upward climb requires program improvement that is based on assessments of structure and impact on individual faculty, their departments and beyond. Just as faculty learning communities (FLC) can take on different structures and identities, the purpose, goals and outcomes of each year-long cohort of our SoTL FLC has evolved over its 17 year span. At the center of our FLC is the goal of improving student learning experiences by using SoTL research. While awareness of SoTL research is the first step in improving one's class, singular or intermittent workshops fail to increase the sustained adoption of the teaching practices (NRC, 2012). FLCs provide a safe and collaborative space where there is on-going support to reflect, explore and experiment with teaching and learning methods (Cox, 2001). Research suggests that FLCs enhance quality of teaching and assessment practices in addition to having a positive impact on student learning, satisfaction, motivation, success and retention (Perez, McShannon & Hynes, 2012; Ambrosino & Peel, 2011; Cillers & Herman, 2010). Our SoTL FLC started in 2000 with a focus on pre-tenure faculty working on "teaching projects." Today's FLC participants design,

implement and present their SoTL research. The purpose of this session is to present a chronicle of our SoTL FLC from the directors' and participants' perspectives regarding the enduring influence of the FLC on participants' engagement with SoTL. This case-study of a mid-sized research intensive university SoTL FLC presents perspectives from both the participants and center (SoTL focused) directors who had direct involvement with the FLC. The FLC participants change yearly and leadership changes periodically, totaling 159 participants and 4 directors in its 17 years. We present an overview of the SoTL FLC and offer critical analysis on two research questions, 1) How do perceptions of the program's purpose, goals and outcomes differ over time from the perspectives of the directors and the participants and 2) How has the FLC influenced the participants' teaching and research, their department, university and the SoTL research community. For example, individual influence might include a participant respecting and valuing SoTL research, or changing their practices in their classroom, or contributing to teaching and learning research. Semi-structured interviews provide data from past participants and directors of the FLC while artifacts (resumes, applications, program descriptions and agendas) allow for triangulation. The analysis of the SoTL FLC's influence is guided by Kirkpatrick's Four Levels of Evaluation; reaction, learning, behavior and results. Our research supports the mindset of SoTL scholars whom value reflection as a tool for developing maps in order to reach new heights in SoTL FLCs. This session will include: A presentation of our research, including: methodology, thematic analysis using the Kirkpatrick Model, findings and recommendations for the continued climb. Participant reflection on how their own FLC experiences could be implemented or enhanced. Discussion of recommendations for FLCs that yield lasting engagement with SoTL.

**Navigating the Lows to Gain New Heights: Constraints to SoTL Engagement**  
**Andrea Webb**

**Telus 104**

Novice SoTL leaders making the transition from scholarly teaching to SoTL to SoTL Leadership face many challenges. Not only does traditional academic culture confine us to disciplinary silos, but promotion and tenure requirements encourage faculty members to conduct SoTL work off the side of their desk, if at all (Boyer, 1990; Dobbins, 2008; Webb, Wong, & Hubball, 2013). This presentation shares some of the findings from a recent study that aimed to explore Threshold Concepts (Meyer & Land, 2003; 2005; 2006) in SoTL and what constrained educational leaders' understanding of SoTL while enrolled in a SoTL Leadership program at a Canadian research-intensive university. The research participants identified five key constraints, through a phenomenological research methodology (van Manen, 1990). Ingrained disciplinary cultures (Bunnell & Bernstein, 2012) slowed their enculturation into SoTL. Ingrained disciplinary cultures left some participants unable or unwilling to let go of specific disciplinary ways of thinking or to connect their SoTL practice with their professional responsibilities. The difference between scholarly teaching and SoTL was identified as a "stumbling block" (Kanuka, 2011; McKinney, 2002; Svinicki, 2012). While the definition of rigorous scholarship was understood within participants' disciplinary fields, the appreciation of rigor within SoTL research took some time, especially for those more familiar with quantitative research paradigms. The discourse and conventions of SoTL experts and educational scholars was frequently identified as a barrier to understanding the field of SoTL. Based on the multidisciplinary context of SoTL research, many novice SoTL leaders were anxious about wading into an unfamiliar field where they are not confident. In order to navigate the complexities of a new field, adopting a mindset of curiosity and 'studentness' (Cousin, 2012) was necessary. This lack of confidence also inhibited many participants from seeing themselves as educational leaders with a contribution to make. While the experiences of the study participants are situated within a complex network of personal and professional constraints, the experience of navigating the threshold concepts in SoTL is of particular importance to instructional teams facilitating professional development programs in SoTL and SoTL Leadership. The increasing investigation of threshold concepts within curricula for SoTL Leadership programs (Carmichael, 2012; Land, 2012) could help instructional teams consider how to support educational leaders as they enter SoTL and become SoTL leaders. Many of us are now comfortable as SoTL scholars, but in many cases it has happened as incremental change so we need to reflect on our process. Throughout the presentation, the audience will be invited to reflect on their own transition to SoTL Leadership.

## **Transformative Learning Experiences for Faculty** **Alison Jeppesen, Brenda Joyce**

**Telus 104**

Does participation in a reflective teaching development program transform post-secondary educators? Though teaching development is not new in post-secondary, formal programs resulting in credentials are emerging on the horizon. In 2012, a new three-year program was introduced to support faculty in developing their teaching practice. Offered through blended delivery, faculty met in small interdisciplinary groups with facilitators and used online resources to complement their learning activities. A multi-method research study followed the first two cohorts over three years using a pre-test and post-test and analysis of completed assignments, focus groups, and individual interviews. Positive outcomes and challenges have both been observed. Faculty reported in focus groups and interviews that the time commitment and their workloads were barriers to their full investment in the program and that this inhibited their learning. A second challenge related to the blended delivery method of the program with online discussions viewed as less impactful than face-to-face discussions. Positive outcomes included an identifiable movement from a teacher-focused perspective to a student-focused perspective. This was illustrated in the ATI-R results (Trigwell, Prosser, and Ginns, 2005) and in the qualitative results when faculty discussed sharing power with students, giving students choice, and changing assignments (Weimer, 2013). Participants identified surprises and challenges to previous beliefs as well as gradual shifts in perspectives consistent with transformative learning (Cranton, 2006; Mezirow, 2012) and described how these have influenced their thinking and applications in the classroom. Intentionality in student engagement, motivational strategies, and instructional strategies were changes described by respondents. The collaborative and collegial space created in the program was one of the strongest benefits seen by participants as it created a safe space for faculty to explore, and reflect on, teaching and learning. The development of a community of practice (Wenger, 1998) was also evident in both groups. While there are variations in the ways the members of the two groups drew upon each other for learning, support and problem-solving, the value of the interdisciplinary connection emerged from both groups. Becoming more self-reflective was also a positive outcome expressed by many participants in the research study. Throughout the program and the research study, the theme of reflective practice emerged as a key component in the transformation of participants.

## **Revising Rubrics to Better Map the Landscape of Student Learning** **Sarah Crawford-Parker, Alison Olcott-Marshall, Aaron Long**

**Telus 106**

In *Effective Grading* Walvoord and Anderson point out, "If we as teachers can effectively assess students' work in our classrooms, we can collectively use those skills with our colleagues in our departments and programs, in general education, and throughout the institution" (151); but effective program-level assessment is often more challenging than it seems, even when assessors use a common rubric. Though essential for evaluating student learning, rubrics are nonetheless fallible instruments subject to critique and open to subjective interpretation. This panel will address a project that employed student-learning data and rater reflections from a multi-year assessment project of first year critical thinking and writing to improve its evaluation rubric. The benefits of this project are twofold: 1) more effective communication to students about what constitutes successful work, and 2) a more helpful guide for faculty designing critical thinking measures across a range of disciplines and seminar topics. Both areas of improvement are critical to the continued success of a rapidly expanding First-Year Seminar program designed to improve retention and graduation rates. This panel will explore strategies for tracking rubric effectiveness and ways to employ an iterative process to refine and improve existing rubrics, focusing particularly on what John Bean refers to as general analytic rubrics (Engaging Ideas 270). Participants will be encouraged to think about practices to identify the strengths and weaknesses of existing rubrics, as well as how to modify rubrics to enhance student learning and maintain program quality. The basis for this discussion will be a four-year assessment project of student critical thinking and written communication in a First-Year Seminar (FYS) program that has expanded from 11 sections in 2012 to 28 sections in 2016. While initial student learning scores for the program were strong, scores have plateaued and in some cases declined with the expansion of the program, prompting renewed focus on assignment and course design. At the University of Kansas, First-Year Seminars are topics courses that satisfy a general education requirement for critical thinking. The seminars focus on big and exciting questions in each faculty member's research area, serving as an introduction to research at the state's flagship university. The seminars have been immensely popular with incoming students and their families, requiring the program to grow quickly to meet demand and to support the university's retention efforts. The faculty steering committee that designed the FYS

program adopted the AAC&U VALUE Rubrics to assess student critical thinking and writing. Having identified writing as a foundational skill on which most students need more practice and feedback and drawing on John Bean's research in *Engaging Ideas*, the steering committee determined that student writing would constitute data for assessing the FYS courses' success in enhancing first-semester students' development as critical thinkers. While the AAC&U VALUE Rubrics proved to be an effective tool for measuring critical thinking across seminars in a variety of disciplines, over time faculty struggled to design assignments that sufficiently address the ten dimensions of skill development across two rubrics. Some assignments showed little alignment with the rubrics despite faculty participation in workshops on backward design. In the third year of the program, the workshop series prompted faculty to align their draft capstone assignments with the critical thinking rubric and to refine their assignments with the assistance of instructional librarians, yet student learning in areas targeted for improvement such as "the influence of context and assumptions" did not show improvement. Additionally, graduate student raters reported difficulties distinguishing among quantifiers in the rubrics such as "some," "few," and "many" and noted challenges with scoring dimensions that combined more than one skill; these inhibitors to precise assessment have prompted a reevaluation of the rubrics used to assess the FYS program. Amid the conversation that ensued several concerns with the rubrics prompted an effort to rewrite them. To what extent were (a) a lack of precision in the language of the rubric, (b) too many dimensions for evaluation, and (c) overlapping categories, complicating faculty efforts to design and deliver strong assignments to measure critical thinking? After reviewing multiple years of reflections from the assessment team, it was determined that the program needed a single rubric that measured critical thinking through writing and employed language that reflected best practices for teaching research and writing to first-year students. This panel will discuss how we embarked on a project to develop a single improved rubric to enhance faculty understanding of the skills that constitute critical thinking and to clarify levels of student achievement. To help participants explore the complexities of rewriting a program-level assessment rubric the panelists will lead a multi-step rubric rewriting exercise. In step one the panelists will present data showing deficiencies in specific aspects of student critical thinking. In step two, the panelists will explain what the rubric must do (e.g., apply to a variety of genres of writing across disciplines; measure students' critical thinking while providing faculty with usable feedback on how well their final assignments are aligned with the rubric; make sense to a variety of audiences, including faculty, administrators, graduate assessors, and undergraduate student writers; guide course/assignment design but remain useful for assessment; etc.). In step three the panelists will offer teams of participants the original AAC&U rubrics and ask them to identify and clarify one rubric category that could help faculty raise student scores in an underperforming domain of the rubric. And in step four the panelists will then show participants the updated FYS rubric developed through a similar process.

**Reaching New Heights in Student Support: Using Learning Analytics to Impact Four Stress Points in an Undergraduate's Career**  
**Molly Burke Leon, Anthony Guest-Scott, Andrew M. Koke, Kristyn Sylvia**

**Glen 202**

In this panel, we examine the power of learning analytics to augment, enrich, and deepen our analysis of the extent to which we are helping students succeed academically. Led by an interdisciplinary team of scholars working through the Student Academic Center (SAC) at Indiana University-Bloomington (IUB), we tackle four key moments of stress that significantly affect retention, graduation, learning, and the overall undergraduate educational experience. We will examine the courses, programs, and services that we've designed as interventions for these moments. Our research significantly contributes to existing SoTL literature by offering statistical analysis of previously unreported and under-reported issues, such as probation student graduation rates, the impact of a study-skills course on GPA performance, as well as the predictive ability of performance in some early courses in terms of student retention. Stress Point One: Getting to Know the School. For many students, heading off to college or university is exciting, nerve-wracking, and an enormous transition. We show how our course, "You@IU," offered a clear and powerful retention benefit overall for students who took the course vs. similar students who did not, as well as a particularly substantial retention benefit for a number of underrepresented student populations. Stress Point Two: Analyzing Study Skills. College students often report that high school material was not as difficult, the pace was slower, their days were more structured, and that they did not really need to study to do well. We show how our course, "Becoming the Best Student," provides a significant and positive impact on cumulative GPA change for those who take the course as well as a predictive relationship between students' final grades in the course and their likelihood of being retained two semesters after taking it. Stress Point Three: Getting Help with Difficult

Courses. To some undergraduates, specific classes are notoriously difficult and have a negative reputation. The Peer Assisted Study Sessions (PASS) Program is a peer-led team learning programming that employs specially trained embedded tutors to help with these classes. PASS research shows that students who attend at least one PASS session per week improve their test scores by 7% on average, lowering DFW rates by over 12% in those courses. Stress Point Four: Dealing with Probation. Whether it is underestimating the difficulty of classes, becoming distracted by the college experience, having to adapt to change, or any number of reasons, some students are placed on probation after just their first semester at IUB. These students are then strongly encouraged to enroll in the “Phoenix Program,” an SAC program that features advising from academic specialists, as well as a course that includes peer leaders who were previously, but no longer, on probation themselves. After many years of research on this program, our data show that students who enroll and complete the Phoenix Program are 21% more likely to finish their bachelor’s degree at IUB.

### **Social Media Strategies for SoTL**

**Glen 203**

**Shiladitya Chaudhury, Sophia Abbot, John Draeger, Phillip Edwards**

Significance / Need: Social media use has become quite prevalent among individual SoTL scholars (Csete, 2016), educational developers and Centers of Teaching and Learning, and a particular area of interest for ISSOTL’s Advocacy and Outreach Committee. A number of free social media platforms are available that we believe can enable us to transform our relationships with colleagues and to stoke enthusiasm for our SoTL work or the field in general. This session will be particularly useful for those who are planning to establish or augment their online presence as well as for ISSOTL members who are interested in engaging their colleagues via social media. Learning Goals / Outcomes: The goal of this workshop is to provide a guided, practical, approach to assist either individuals or institutional units that aim to be more intentional in their social media outreach to champion SoTL. Workshop activities will be designed to help participants reflect on their investment in social media, develop strategies to augment their online presence, and engage other members of their local or international community through various social media platforms. Participant Engagement: The workshop will focus on activities to help participants establish their social media presence and on practices for measuring usage/impact. To offer a reasonable scope for this session, we consider four social media platforms: Twitter, Facebook, Blogs and YouTube. Participants are asked to bring their favorite device(s) for social media access. After some initial overview, we shall use a jigsaw technique to partner up attendees with interest in a particular social media platform (items 1, 2, 3 below). This will be time-efficient and allow at least 30 minutes of individualized attention from our facilitators (each an expert in a particular media platform). Finally, the concluding group activities will be establishing connections with other conference attendees active on social media and how connecting across media forms can enhance their efforts towards SoTL advocacy. Participants will: articulate major features and conventions of each social media platform; create/refine guidelines for establishing their social media presence with regards to how it might best support SoTL advocacy identify tools for measuring usage and impact for each platform; consider the unique advantages of different platforms and the way they can support each other; establish connections with other ISSOTL 2017 attendees via social media. Literature and Relevance to Ongoing SoTL: This concurrent workshop proposal is inspired by recent workshops and discussions on social media usage at educational developer conferences such as the POD Network (e.g., Edwards et. al. 2016; Rodems, et al., 2013; Holt, Murphy, & Edwards, 2014). Dissemination in SoTL is a key element of advocacy and outreach and can take many forms beyond journal articles and conference presentations-linking to the concept of social scholarship as espoused by Greenhow and Gleason (2014). Facilitator experience: One of the facilitators established and has been running a YouTube channel devoted to the dissemination of ethnic music concert recordings from his ongoing role as director of university based music ensembles of that genre. Social media has been an important avenue for sharing this art music with the world and getting feedback for his students. Another facilitator brings experience in social media as a recent student and a soon-to-be doctoral student. She will bring experience from her use of Twitter both as a consumer of scholarly content and a contributor to an international dialog about teaching and learning, thinking particularly about the ways students and academics can connect with SoTL and each other using Twitter. Our blog expert is co-creator of a website/blog that has been running for three years now with more than 200 subscribers to their email updates. He will speak to the ebb and flow of interest and creating content. He will also address the joys of becoming an editor in this genre and working with contributors to craft their ideas. Our final facilitator will bring expertise in managing teams across multiple social media platforms (e.g., Facebook, Twitter, and WordPress). He will speak about developing a coherent content

strategy and using social media analytics to understand the demographics, interests, and levels of engagement among his Center's audiences.

### **SATURDAY, OCTOBER 14, 9:30-10:00**

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

### **SATURDAY, OCTOBER 14, 10:00-11:30**

#### **RAISEing to New Heights: Expanding the International Network for Students as Partners and Wider Student Engagement** **Tom Lowe, Claire Hamshire, Rachel Forsyth, Colin Bryson**

**Glen 205**

Focusing on Student Engagement / Students as Partners has grown in importance for Higher Education Institutions in the UK and across the world in recent years. These concepts and ways of working underpins student learning and is essential for student success (BIS, 2011) as well as a theme or means to practicing as a HEI by involving students in practices to improve the student experience as referenced in many strategies (Durham University, 2017, Salford University, 2016, Wenstone, 2012). This is built upon a gigantic amount of practice which have expanded in UK Higher Education (Dunne, 2016, Wait, Bols, 2016, Bryson, 2014), informed by discourses surrounding Student Engagement in the representation, change, curriculum design and peer support to name a few (Keenan, 2014, Cook-Sather, Bovill, Felton 2013, Bols, Wicklow, 2013, Dunne, Zanstra, 2011). The RAISE (Researching, Advancing and Inspiring Student Engagement) Network has been at the centre of these discussions and developments, as an international collaboration of academics, professionals, students and practitioners to collaborate and share best practice in regards to Student Engagement in HE. Demand has increased to learn, network, share and publish practice in this area and RAISE has recently traversed two large peaks of activity to facilitate this for our membership: 1) Expanded our networking events, by increasing our Special Interest Groups from four to six, our annual conference from two to three days, and begun running landmark events such as the International Colloquium on Partnership. 2) Launched a peer-reviewed Journal of Student Engagement in Higher Education. Our aims are to create opportunities for staff and students to come together for beneficial scholarly discussion, create collaborative projects, share good practice and lobby for investment and better policies locally, nationally and across our international community. However, the expansion of activity with demand leads us to new questions as we begin to navigate ourselves through the ever-expansive landscape that Student Engagement and Students as Partners is emerging to be. These include questions over whether to have membership subscriptions, how to ensure students are always involved in co-governance and how to be inclusive of new practices but ensure the topic still remains on Student Engagement / Students as Partners. Also we are challenged by the terms being adopted for alternative means, such as "Student Engagement Monitoring" through Attendance Monitoring and Learning Analytics, or Pseudo-Partnership, which further mystify our journey through the HE landscape. This paper will offer a perspective on the growth and challenges of facilitating a network on Student Engagement in HE through plotting RAISE's journey as a facilitator, champion and witness to the evolving landscape over the last 7 years as we look forward to the mountains ahead. Our presentation emphasises the importance of international collaboration to develop a broad understanding of engagement in higher education, and any differences and similarities in promoting both engagement and partnership activities.

#### **Optimizing the Quality and Quantity of Student Engagement and Learning in Online Health Informatics Instruction** **Gurprit Randhawa**

**Glen 205**

Background/Rationale: Balancing the breadth and depth of student learning and engagement is a continuing challenge/conundrum for Course Developers and Instructors in the field of Health Informatics (HI), especially in the online/distance learning environment. As a professional and interdisciplinary field, HI is the intersection between health sciences, information sciences, and business/management sciences. As such, students are required to develop Health Informatics Professional (HIP) competencies in all these disciplines. Further, HI

Course Developers and Instructors must prepare course content that meets the needs of many stakeholders: students, the university/program, accreditation bodies, and employers. For HI courses that are delivered through distance, this makes effective course design and course delivery even more challenging. In turn, the quality and quantity of online student engagement and learning may be adversely affected. Motivating Inquiry Question: What is the "desired balance" between the quality and quantity of student engagement and learning in online HI instruction while considering the needs of students, the university/program, accreditation bodies, and employers? Methods: As an HI Course Developer and Instructor at McMaster University, the author re-designed two online undergraduate HI courses. The first course (HTH 105: Information Systems & Technology) was re-designed using "backwards course design" in Summer 2016 to meet HI accreditation standards. Hence, course learning outcomes and delivery strategies/techniques were considerably revised to ensure adequate coverage of new course content. In Fall 2016, the author delivered HTH 105 course to 22 students. Based on student evaluations of HTH 105, the instructor's self-evaluation, and suggestions from the HI Program Manager, the second course (HTH 109: Systems Analysis and Evaluation) was redesigned using the "flipped classroom approach" in Winter 2016. As of February 2017, HTH 109 is currently being delivered to eight students. Outcomes: Many HTH 105 students reported a very heavy course load compared to their previous courses that were not re-designed to meet new accreditation requirements. Despite the availability of discussion boards, students also reported inadequate opportunities to engage with their peers and instructor on a weekly basis to discuss course content. In response, HTH 109 was redesigned to incorporate weekly "Live Learning Labs" that are facilitated by the instructor, as well as short video lectures and readings to be reviewed prior to the weekly Live Learning Lab. The Live Learning Labs include discussion questions, small group activities, and case studies for the students to actively apply their weekly module learning in an interactive and engaging way that fosters deep learning. Preliminary student feedback on engagement and learning is extremely positive and also very meaningful; all of the HTH 109 students (n=8) had also taken the HTH 105 course with the instructor in Fall 2016. Critical Reflection/Insights: To meet the needs of all course stakeholders, the "flipped classroom" appears to be an effective and holistic approach in online instruction. Compared to traditional "transmission-oriented" approaches, it allows course designers and instructors to cover the required course content in a rigorous way that optimizes the quality, quantity, and realization of deeper student learning and engagement. This area needs further SoTL research.

**Reaching New Heights with Project REACH: A Multi-Level, Multi-Disciplinary Approach to Improving Student Outcomes**  
**Julie Kruse, Joyce Litten, Susan Shelangoskie, Jean Kujawa**

**Glen 206**

An escalating nursing shortage has brought attention to nursing student retention and success (graduation and licensure). This shortage, attrition rates of both students and new nurses, and the ageing workforce highlight the importance of recruiting and retaining suitable candidates (Jeffries, 2007, 2016). Retention of nursing students is a complex issue that may involve a variety of academic and non-academic factors since nursing programs have recruited from diverse population groups in terms of age and academic ability (Houltram, 1996). A common theme among studies focused in this area is the need for early identification and intervention with students considered at-risk for academic difficulties. Frequently cited as the most significant factor in retention and success are support services tailored to meet the social determinant needs of these students (Alexander & Brophy, 1997; Croxon & Maginnis, 2006; Habley & McClanahan, 2004; Hossler, 2005; Ramsburg, 2007). The Realizing Educational Attainment and Careers in Healthcare (REACH) program design was developed based on a social determinants model and the experiences of a previous Nursing Workforce Diversity project that was effective in increasing the pre-nursing enrollment of diverse and disadvantaged students. The purpose of this U.S. Health Resources and Services Administration (HRSA) Nursing Workforce Diversity project is to increase nursing progression and graduation rates and retention in practice for individuals who are from diverse and/or disadvantaged backgrounds (specifically individuals from racial/ethnic minorities under-represented among registered nurses). The REACH program goals focus on four levels including: 1) Individual: Neutralize the impact of economic environmental factors that are barriers for diverse and disadvantaged populations to pursue a bachelor's in nursing; 2) Group: Bridge gaps within the social determinants framework to achieve progression and graduation; 3) Institutional: Broaden the cultural competence of nursing and other faculty on campus and; 4) Community: Expand the knowledge and skills of social determinants of health and cultural competence for nurses within the largest nursing employer in the community. Thirty-two students were selected for the REACH program based on the following criteria: a) declared major in

nursing, b) demonstrated need, c) member of a diverse (racial/ethnic minority) population and/or disadvantaged, d) first generation college student, e) identified rural and urban disadvantaged high school experience, f) meets minimum academic standards or has potential to achieve standards with project assistance, and g) willingness to participate in REACH activities. Through active participation in REACH activities, students are compensated with scholarships and stipends to support their tuition in the undergraduate nursing program. REACH participants academic and social determinant factors are followed closely by faculty from several disciplines (Nursing, Social Work, English, and Business) who provide support, education, and guidance to promote self-efficacy. Success coaches in nursing and in social work assess, assist, and intervene in academic and personal issues and connect students to resources tailored to each student's individual need. An English/technology coach is available to provide support to project participants in the areas of note-taking, writing, and technology skills. The College of Business faculty member has established a financial literacy program and provides educational workshops related to financial fraud/identity theft, savings, credit scores, consolidating debt, financial aid, and budgeting. These faculty members are experts in their identified areas and students are connected to them through individual consultation and advisement, and group meetings. The interdisciplinary approach is the focus of this panel and these faculty members will describe their role on the project as well as students' outcomes in relation to their respective fields. Klein (1990) defines interdisciplinary knowledge as the synthesis of two or more disciplines, establishing a new level of discourse and integration of knowledge. It is a process for achieving an integrative synthesis that often begins with a problem, question, or issue. It is a means of solving problems and answering complex questions that cannot be satisfactorily addressed using single disciplinary approaches. It should be noted that interdisciplinary initiatives are often described by the form or structure they take (e.g., team-teaching), the motivation behind them (e.g. to serve societal or employment needs), how the disciplines will interrelate (e.g. financial literacy taught in the service of nursing education), or by labeling the level of integration (e.g. from rote learning to critical thinking). The term is sometimes used loosely to refer to cross-functional groups, but the mere presence of individuals from different disciplines does not signify interdisciplinary collaboration. In the REACH project, the term interdisciplinary is used variably as a concept, a methodology, a process, a way of knowing, and method for solving problems. In this panel, the term refers to a process to construct knowledge in which students and faculty come together to analyze differences in disciplinary approaches to a problem and to work toward a solution, allowing for a collective of information from differing sources to support one goal-student success. The REACH program's multidisciplinary faculty panel will discuss the successes and challenges of the REACH project as an example of interdisciplinary teaching and support towards student nursing success. In this discussion, the panel will provide information regarding program evaluation data and student outcomes including data related to: recruitment, retention, and graduation rates as well as data related to behavioral indicators of psychosocial growth. Additionally, this multidisciplinary team will present outcomes data in relation to their respective fields. A multi-level, multi-disciplinary approach to addressing the social determinants of health allows for successfully diversifying the nursing workforce. Ultimately, residents of the local community are better served by a diverse nursing workforce that is responsive to the variety of cultural needs of the population it serves.

**Academy of Teaching at Kristianstad University, Sweden - Concerns While Creating a Strategic Organization for the Development of Scholarship of Teaching and Learning** Glen 206  
**Stefan Larsson, Maria Mélen Fäldt**

The focus on teacher's pedagogical skills has increased during the last years among Swedish Higher Education National Authorities. This focus is related to the adaptation to Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), a continuation of the statements in the EU "Bologna process". Swedish universities is a late member of this community - regarding the process of the European Union Quality Insurance Model - that has been valid in EU for several years. At the same time-connected to the development described above - there has been a parallel movement at the universities in the country that match the ideas of ESG and Scholarship of Teaching and Learning: The implementation of an alternative to the Academic Research career-The Academic Teaching career. Kristianstad University has since 2013 started a Career Plan directed to all teaching staff with a clear focus on development of qualitative teaching in a broad sense. Teachers are encouraged to compile their teaching experiences in a teaching Portfolio. Your pedagogical skills will then be peer reviewed. You may either be promoted as a Skilled teacher (Level 1) or an Excellent teacher (Level 2) in the academic system if judged successfully. A wage raise will immediately turn out for both levels. In order to be able to

use the skills of the rewarded teacher strategically in the organization, the Head of the university has decided to implement an Academy of Teaching. The overall aim for the Academy of teaching is to strive for the wide application of the SoTL idea among the teachers at the university. The presentation will give ideas and examples of the considered benefits, problems and mission of such a group at an organizational level. The following issues has been targeted as the Academy's main concern, by the University management: Act as a resource developing a Scholarship of Teaching and Learning culture. Act as facilitators in the development of a research based approach to teaching and learning. Become an acting arena concerning all higher education development at Campus. The presentation will as well highlight issues and processes that might overlap and concern the teaching academy's relation to other education development functions in the university organization.

**Community of Inquiry Framework in Teaching Development: Theory in the Scholarship of Teaching and Learning** Glen 206  
**Tatum Korin, Michelle Hall, Martha Cleveland-Innes, Annette Garner, Glenise McKenzie**

Oregon Health and Science University School of Nursing (OHSU SoN) is committed to ensuring educational excellence in undergraduate and graduate programs through relevant and appropriate faculty development and training. Recent recommendations from OHSU SoN faculty focus on faculty development in online pedagogies and specifically the Community of Inquiry (CoI): 1) incorporating the CoI model as a framework for faculty development initiatives and 2) providing faculty with ongoing training and/or education in emerging technologies, teaching strategies and scholarship. The (COI) original publication of this theoretical framework has been cited over five thousand times and has been applied in faculty training in colleges and universities around the world. The (CoI) theoretical framework captures the interactive potential of learning; online and beyond (Garrison, Anderson, & Archer, 2000). It is grounded on the assumptions that 1) an educational experience intended to achieve deep and meaningful learning outcomes is best embedded in a collaborative community and 2) collaborative, purposeful, discourse with reflection allows learners to construct personal meaning and confirm mutual understanding. The (CoI) model identifies an emergent educational experience at the intersection of social, cognitive, and teaching presence (see Figure 1). Social presence is defined as the ability of participants to project themselves as 'real' people through whatever medium of communication is being used. Cognitive presence refers to the extent to which participants are able to construct and confirm meaning through sustained reflection and discourse. Teaching presence includes the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. All three types of presence refer to all community participants; teachers and learners. Under review is a fourth presence, emotional presence, where emotion is expressed by participants as they relate to and interact with learning technologies, course content, and other people. Figure 1. Community of Inquiry (see [coi.athabasca.ca](http://coi.athabasca.ca)) In January, 2017, a 2-day workshop on the CoI framework engaged OHSU nursing and simulation faculty was designed to provide opportunities for faculty to learn about and apply CoI strategies to their own courses. Workshop participants used an assessment tool based on the CoI to determine how closely, if at all, participants' current pedagogical practices emulate the CoI. This tool explicated how the CoI relates to practice. Based on this original test of the instrument, faculty at OHSU SoN, from the workshop and beyond, were invited to complete the assessment and answer questions about its potential value as a teaching development and self-assessment tool. Preliminary findings suggest the tool reshapes thinking about the role of student and teacher under conditions of a community of inquiry, in classrooms of any kind. This research paper will explore the CoI as a faculty development and assessment tool, and an opportunity to engage in the scholarship of teaching and learning. The session will include a short presentation of research, an exercise using the CoI assessment tool, and discussion about the tool for pedagogical research and practice.

**Situating Action Research in the Scholarship of Teaching and Learning: Reflecting on Curriculum Mapping and Review** Telus 102  
**Marlon Simmons, Sarah Eaton, Mairi McDermott, Michele Jacobsen, Barbara Brown**

With the advent of Boyer's (1992), influential work, *Scholarship Reconsidered: Priorities of the Professorate*, which put forth the Scholarship of Teaching category, there have been a plethora of discussions concerning what constitutes the Scholarship of Teaching and Learning (SoTL) (Kreber 2015; Trigwell 2013). This paper underscores Schon's (1995) position that this new category of scholarly activity must take the form of action research. As well, it

animates reflection on reflecting-in-action for new knowledge (Kreber & Cranton 2000). We also draw on Miller-Young & Yeo's (2015) idea about the importance of learning theories and methodologies to offer potential approaches to SoTL. This action research study focused on educational development and program improvements for a Master of Education Interdisciplinary degree pathway, with a specific focus on the action items that resulted from a curriculum review and mapping process for four research courses. Our framework for action research in this study includes: (1) planning; (2) observing and acting; (3) systems thinking, enacted through critical reflection; and (4) engaging in continuous iterations of this process (Kemmis, McTaggart, & Nixon, 2014; MacDonald, 2012; McNiff, 2013, 2014). A key ethical principle of action research is to ensure that "all relevant persons, committees, and authorities have been consulted, and that the principles guiding the work are accepted prior to commencing the research" (MacDonald, 2012, p. 45). We achieved this principle through the curriculum review process -- which included input from administrative, instructional, student and staff stakeholders. The researchers enacted and reported on an iterative process of action research that occurred over a 12-month period. Entrenched within Andresen's (2000) affirmation of critical reflectivity, the process included both formal and informal team meetings to engage in a process of group reflection, as well as individual reflection on reflecting-in-action, actions and documentation. Data sources included team meeting transcripts, teaching journals, communications, administrative documentation, and narrative reflections. Study findings reveal instructors' perceptions about how recommendations for program improvement for teaching and learning were enacted, including: (1) developing a visual conceptualization of the program; (2) improved connections between the courses; (3) articulation of coherence in goals and expectations for students and instructors; (4) an increased focus on action research; (5) increased ethics support and scaffolding for students; and (6) the fostering of communities of practice. Findings highlight strengths of the current program and course designs, action items and research needed for continual program improvement and enhancement of the scholarship of teaching and learning. Results highlight the value of an action research approach to collaborative design and enactment of actions for program improvement. In conclusion, we share Fanghanel's (2013) assertion of "the process-focused nature of SoTL inquiry", one that draws from "methods, reflection and dialogue" to open possibilities for "the transformation of practice through inquiry" (p. 62). At the same time, we call for ongoing research on how to support collaborative design and teaching teams to address challenges such as additional time for meetings, idea negotiation, and redesign progression.

**Framework for Strengthening the Scholarship of Teaching and Learning in the Canadian College Sector** Telus 102  
**Tim Loblaw, Eileen De Courcy, Jessica Patterson, Theresa Southam, Mary Wilson**

Following collaborative discussion and an initial literature review, a small group of college educators from three Canadian provinces, occupying roles at the micro, meso and macro levels of their respective institutions, identified the need to develop a tool that considers institutional context in both determining the state of, and preparing for the advancement of, the state of the Scholarship of Teaching and Learning (SoTL). Further exploration into both the literature and our own experiences revealed that the state of SoTL within a particular institution seems to rely less on its categorization as a, for example, college, university or technical institute, and more on the intricate web of factors that constitute the institution's context. While other researchers have put forth this call to consider institutional context to determine support for SoTL practices and processes, a detailed process or tool for doing so was not apparent. Adopting Bolman and Deal's (2008) framework for organizational structure, and combining this with data-gathering processes popularized by Smith's (2005) institutional ethnography, as well as a series of guiding questions, our tool represents an initial step in systematically representing SoTL-enabling and impeding artifacts commonly found in post-secondary institutions. Assuming SoTL leaders modify this tool based on their own entry points, a call is put forward to the Canadian post-secondary SoTL community to field-test the tool in order to facilitate reflection upon how a variety of factors encourage and impede SoTL advancement at our unique institutions, the interconnections between these factors and how we might use these to solve the pedagogical problems we face.

## How Can We Better Foster the Application and Pursuit of SoTL? Craig Nelson, George Rehrey, Carol Hostetter

Telus 102

Faculty can improve teaching and increase learning by using evidence from SoTL and, further, by using classroom research and doing SoTL. However, it can be hard to convince faculty. We asked if the effectiveness of faculty development varies with the reward structures used. Often, program design focuses on direct economic rewards (stipends). Recent research in behavioral economics (D. Ariely et al., 2009, "Doing good or doing well?," *American Economic Review*, 99, 544-55; E. Kamenica, 2012, "Behavioral economics and psychology of incentives," *Annual Review of Economics*, 4: 427-452) reveals the power of non-economic rewards, here reformulated for inducing faculty change to including social, indirect economic, indirect social and intrinsic rewards. We focused especially on the differences in responses to social rewards compared to stipends. We studied participants in four programs: individual active learning grants, SoTL grants (part of our larger SoTL community of practice), and two programs that included a strong emphasis on building new communities of practice (A. M. Stark and G. A. Smith, 2016, "Communities of Practice as Agents of Future Faculty Development," *J. Faculty Development* 30: 59-67). Individuals who had participated in at least two programs were treated as a separate group (Multiples). Results from 108 respondents to an anonymous survey were compared using ANOVAs. Questions & Results: 1. Did programs with larger emphases on non-economic rewards (especially social interactions) better encourage faculty to use SoTL-based (evidence based) pedagogy? Yes: Recipients of the individual active learning grants reported the lowest average changes, those in programs emphasizing new communities of practice were higher, multiples were even higher, and those who received SoTL grants reported the highest average changes ( $p=0.001$  for differences among programs). 2. Did participants in programs with larger emphases on non-economic rewards favor community-focused faculty development more than stipends? Yes: As expected, these participants rated the importance of community significantly higher than stipend, while the recipients of individual grants rated community as less important. Overall, the model comparing the two factors was significant with a large effect size ( $p<0.001$ ,  $f^2=0.218$ ) indicating significant differences among programs for the importance of community versus the importance of stipend. Session activities: During the presentation, participants will be given handouts explaining the various types of rewards, the study design, a copy of the survey, and the findings. They will briefly discuss in groups their experiences with various types of rewards both personally and in their attempts to foster SoTL and its classroom applications. Reflective critique: This work is just one case study but suggests ways to reconsider the factors that motivate change. Our informal design is appropriate for "swampy lowlands of practice" (D. A. Schön, 1983. *The Reflective Practitioner*: London: Temple Smith. ). Survey responses may overestimate change (D. Ebert-May et al., 2011, "What we say is not what we do," *Bioscience* 61, 550-558), but here we are interested in comparisons rather than in absolute levels of change.

## Reaching New Heights: Cultivating Mindfulness in Teaching & Learning Yasmin Dean

Telus 105

Mindfulness can enhance teaching and learning by lowering stress and reactivity, and raises awareness of intrapersonal (self), interpersonal (others) and environment (Davis, 2014; Frank, Jennings & Greenberg, 2016; Jennings & Siegel, 2015). Recent findings indicate that educators and students alike benefit when teachers have mindfulness training, related to "teachers' social and emotional competence and increasing the quality of their classroom interactions" (Jennings et al., 2017, p. 1). While mindfulness has been studied extensively in K-12, this is a relatively innovative approach for higher education (Frank, Jennings & Greenberg, 2016; Roeser, Skinner, Beers & Jennings, 2012). As we navigate new routes for the the landscape SoTL, we look for ways to practice and teach mindfulness within classroom and practicum environments, as a foundation for professional practice resiliency and sustainability (Dubert, Schumacher, Locker, Gutierrez, & Barnes, 2016; Goodman & Schorling, 2012; Thomas, 2016; Trowbridge & Mische Lawson, 2016; Walker & Mann, 2016). Learning Goals and Outcomes: In this 90 minute workshop, participants will be engaged in an experiential mindfulness training exercise to experience mindfulness training and discover how mindful education is an important element within the scholarship of teaching and learning. Participants will leave with: 1. An understanding that mindfulness must be practiced if it is to be taught 2. Teaching and learning strategies to support them as a mindfulness practitioner and teacher 3. Preliminary integration of mindfulness within teaching and learning. In the second part of this workshop, we will present the preliminary framework for how we intend to apply mindfulness as a Scholarship of Teaching and Learning (SoTL) research

project within three separate professional practice courses in nursing and social work. Focus in this section will include: 1. Using self-report assessment methods to explore facets of mindfulness (Baer, Smith, Hopkins, Krietmeyer, & Toney, 2006). 2. Understanding how mindfulness can develop compassion, empathy and capacity for reflection in human service practice (Walker & Mann, 2016). Part three of the workshop will detail the presenters' plans for data collection: Data collection-narrative journal & survey-reflection and evaluation within 24 hours after the facilitated sessions and designated course classes offered during the winter semester, based on the Five Facets of Mindfulness (Baer, Smith, Hopkins, Krietmeyer & Toney, 2006). \*We requested permission and awaiting response to use the Mindfulness in Teaching Scale (Frank, Jennings & Greenberg, 2016). Workshop participants will be invited to critique and contribute to the proposed research design. Facilitators Relevant Experience – Mindfulness Training for Teaching and Learning (MTTL) offered by the author. MTTL intervention is an educational program for personal mindfulness practice that bridges to Teaching & Learning. This foundation is essential as faculty require an established personal practice for application in teaching and learning. MTTL was developed and will be led by mindfulness expert resource (Author). The author has a private practice for meditation classes and coaching, is a member of faculty, and has undergone extensive training with the Mindful Schools Program, The Meditation Initiative, and Mindfulness-Based Stress Reduction (MBSR) with Jon Kabat-Zinn. All 4 presenters have a mindfulness practice along with experience in designing and delivering local and international service learning courses within their professional programs of Nursing and Social Work.

**Aspiring for a Paradigm-Shifting Pedagogy: Incorporating Stress Management into the University Curriculum and Courses**  
**Dalbir Sehmy, Jurate Motiejunaite**

**Telus 105**

Workshop Need and Significance: Let's face it . . . universities are stressful. With assignments, tests, essays, presentations, and exams, one of the most abundant sources of stress is the classroom. Even though contemporary universities have multiple spaces and initiatives that support students, those support networks do not necessarily reach the average student. Hence, students report their inability to manage their stress and this negatively affects their learning experience and ability to achieve the learning outcomes. Even though the spaces and resources to help manage stress are available, neither students nor professors have the time to access them! Hence, there is the need for a paradigm shift that re-imagines the curriculum as an opportunity to integrate relevant stress management spaces (via topics, activities, and resources) into the classroom time. Learning Outcomes: a) Identify reasons for student stress; b) Address the most common negative stressors in class and their impact on learning outcomes; c) Develop a framework for integrating students' stress management skills specific to course work into different curricula. Participant Engagement: Using round-table discussions, brainstorming and evaluation of student reflections and previous initiatives, the participants will develop strategies for addressing and incorporating stress management into the curriculum in terms of time management and assignment construction. This hands-on workshop asks participants to bring their syllabi drafts, so they can identify ways they may already incorporate stress management and to add stress management initiatives into the curriculum. While the facilitators will provide a perspective from their teaching experience (in the Humanities), they will encourage perspectives from any faculty or discipline, so participants can cooperatively address ways assignments particular to their fields can be better managed to address student stress. Participants will be shown ways to make for a more cooperative, supportive campus community that can link courses to relevant university services for mental health and academic support. In addition, participants will be shown sample strategies via interactive classroom activities and using humour as a way to relieve stress and encourage learning. By the end of the workshop, participants should have a sense of how they can adopt and adapt their courses for a more stress-sensitive delivery of course material. Literatures and Current SoTL Conversations: Duffy and Jones expertly tackled stress at the university with their Teaching Within the Rhythms of the Semester over two decades ago in 1995. Since then, university life has altered considerably. With cell phones, e-mail, and social networking taxing student energy, the contemporary classroom may be reaching new heights of stress. Fortunately, brain-based learning (Arden, Rewire Your Brain; Breuning, Meet Your Happy Chemicals) has been informing us about the negative (and positive) impact on stress and psychology (Dweck, Mindset) has established the power of brain plasticity and (in Dweck's terms) "a growth mindset," and making such concepts integral to the university educator's approach to the classroom can help empower instructors and motivate students, so educators and students excel to new heights. Facilitators' Relevant Experience: The workshop facilitators bring not only their collective teaching experience (of 40 years), but also their insight from their award-

winning teaching, their paradigm-shifting curricula, and their campus-altering experiences. Aspirations and Anxieties Conference Thread: Aspirations and anxieties in the span of a semester are crucial for educators to address if they are to maximize student learning. Stress often stems from uncertainty, novelty, and a feeling of being without control--elements that are (to a degree) also fundamental to an exciting learning environment. By increasing one's awareness about the way assignments, tests, and exams can foster student disorientation, educators will be better able to pace their pedagogy and motivate their students. Change is stressful, but change is also crucial to the educational process, for education implies transformation. As Gandhi may have said, "Be the change you wish to see at university."

### **Delivering Criminal Justice Practicum Tutorials Face-to-Face and /or Online? Implementing Best Practices and Addressing Challenges**

**Glen 208**

**Andreas Tomaszewski, Pattie Mascaro, Madelaine Vanderwerff, Priscilla Dodge, Meghan Mitchell**

Traditionally, tutorials accompanying many degree program's practicum courses are delivered face-to-face. This is challenging when many students are unable to attend in-class tutorials regularly, for example because the agencies they are placed with are not located in commuting distance to campus (and some of the most exciting ones fall into this category) or tutorial schedules conflict with their practicum placement schedules, their other courses, and/or schedules for their paid work, which many students need to pursue to make ends meet. Associated with this is an increased demand by learners for more flexibility in post-secondary education, including for individual courses and complete programs to be offered online-in various ways, offering post-secondary education is, and needs to be, reaching new heights. In an effort to address what is often experienced as a dilemma, we offered an online section for the tutorial in addition to the face-to-face section. However, we quickly came to realize that transferring slightly modified content from the face-to-face section to Blackboard Learn was not sufficient and only useful as a short-term approach. An impending review of our Bachelor's degree program in Criminal Justice provided a further incentive to not only adapt the delivery of the tutorial to an online environment but to examine the role of the tutorial component in the practicum course more fundamentally. Funded by an internal Teaching and Learning Enhancement Grant, a research team was assembled that consists of the faculty member teaching the tutorial as the lead, a university instructional design consultant, a university librarian, and two research assistants who are former practicum students in the program. All team members except the instructional designer and librarian are SoTL newcomers. Together, we continue to examine the following questions: (1) What role should and does the tutorial play in a practicum? (2) What are the pedagogical rationales for delivering the tutorial in face-to-face, blended, or online formats? and (3) Can / How can online tutorials accomplish the same pedagogical goals as the alternative delivery formats? To identify best practices, we conducted an environmental scan of BA programs in criminal justice / criminology and related fields in North America (with a particular focus on Canada), compiled a literature review on the topic, and administered surveys to students after they completed the practicum. The identification of best practices needs to be followed by the task of implementation, which is not quickly accomplished in an often-bureaucratic learning environment. Neither is it accomplished easily as various challenges need to be overcome, some of them yet to be identified. This presentation will discuss our methodological approach, findings and conclusions, as well as our experiences, including critical reflection, and aspirations.

### **Does "No Significant Difference" Hold True? Comparing Student Performance in Online vs. Traditional Science Courses**

**Glen 208**

**Emily Faulconer**

An increasing number of universities are offering online courses and enrollments in online courses are on the rise; the study of science is no exception. In general, the literature provides mixed results on the differences between online and traditional modalities and often the results indicate that there is no significant difference. There are very few previous studies focusing on the comparison of distance and face-to-face physics or chemistry courses. A key research question is whether students are getting equivalent learning experiences. The purpose of this study was to 1) critically compare undergraduate introductory physics lectures taught in the traditional face-to-face format to various permutations of the online format, including asynchronous, synchronous video at home and synchronous video in a classroom and to 2) compare undergraduate introductory chemistry laboratory taught in the traditional face-to-face format to online simulation-based laboratory course. Multi-semester enrollments were used

for first year introductory courses at a single large institution. The online and traditional modalities use the same master course outline to ensure consistent learning outcomes. The physics course uses a template that keeps most assignments consistent across modalities. By controlling these moderating factors, this study—co-authored by John Griffith, Beverly Wood, Soumyadip Acharyya, Donna Roberts—revealed that all alternative hypotheses were supported for physics courses, with statistically significant differences found for student failure rates, grade distribution, and withdrawal rates. Students taking the course from home (synchronous video or online) had a lower failure rate than students who took the class in person (in-person classroom or synchronous video classroom) learning modes. Statistically significant differences were found for grade distributions between the online course and in person learning modes (in-person classroom or synchronous video classroom), with online students receiving a higher percentage of “A”s than all other modes examined. Additionally, the difference in grade distribution between the synchronous video learning modes (home and classroom) were statistically significant. Finally, Student withdrawal rates were lowest for students who took the class in person (in-person classroom and synchronous video classroom) than the other two modes of learning. In summary, students that persist in an online introductory physics class are more likely to achieve an A than in other modes. However, the withdrawal rate is higher from online physics courses. This paper is well-aligned to the 2017 iSSoTL Conference theme “New Horizons, Emerging Landscapes, and Underexplored Territories in SoTL” as it addresses the underexplored concept of equivalency between online and traditional laboratory experiences. At the start of the paper presentation, the audience will be engaged through an icebreaker activity, completing a quick poll (PollEverywhere) that asks the audience to weigh in to predict the experimental results: “Do you think students are as likely to succeed in an online physics course as a traditional face to face course?”

### **Implementation of a Web-Based Feedback System in Two Different Learning Spaces** Glen 208 **Jae-Eun Russell**

The purpose of this presentation is to present the findings of a research study in which we compared the learning outcomes of students and their perceptions of the helpfulness of the class time in two electrical circuits courses taught by the same professor. This professor implemented a web-based feedback system in class meetings and taught in a lecture hall in semester 1, and taught the same version of the course in an active learning classroom (ALC) in semester 2. We investigated whether the implementation of a web-based feedback system had different effects across the two learning environments. As educators in higher education incorporate more active learning strategies and instructional technology into their teaching practices, frequent feedback and ALCs have been increasingly adopted to better facilitate student learning. Feedback has long been recognized as an effective tool for student learning (Thurlings et al., 2013) and a web-based system is often adopted for homework problems to provide automated feedback. ALCs in the current university offer round tables that seat 9 students and 3 laptops each, multiple monitors and projectors, and whiteboards. Previous research indicates that ALCs tend to foster mutual respect between instructor-students, support effective communication and feedback (Baepler & Walker, 2014) and result in deeper conceptual learning (Dori et al., 2007). The classroom activity of both courses consisted of a 10-minute lecture and problem-solving using MasteringEngineering, a web-based system offered by a textbook publisher. All students brought their own device to access problems from the MasteringEngineering. The professor assigned 4-5 problems per class totaling to 232 problems over the entire semester. On average, at least 164 problems were attempted by students. Problems were coded to parameterize each student’s problems differently so students could only share their solution processes not their answers. The web-based system provided real-time feedback as to whether entered answers were correct. If those were not correct, it provided simple feedback as to where their errors might be found. The professor encouraged students to work collaboratively by identifying the appropriate methods and concepts to solve each problem. The instructor and teaching assistants were also available to help students. Therefore, three sources of feedback (system, peers, and instructional staff) were available to support student learning in class. Total 173 students participated in the research study. We administered students’ self-reported surveys and collected prior learning outcomes (cumulative GPAs) and course outcomes (exam scores) after the semester was over. The findings indicate that students in the ALC, perceived the class time was more helpful, learned more from their mistakes while they worked through the problems in class, spent fewer study hours outside of the classroom, and were more satisfied with the course than the students in the lecture hall (Figure 1). Further, regression results indicate that the classroom was a significant predictor of student exam scores after

controlling for their prior learning outcomes (Table 1). This study provides insight as to how a web-based feedback system can be implemented in class and how the implementation worked in different classrooms.

### **Interprofessional Education in Pediatric Nursing: Tagging the Summit Together** **Jill Bally & Erick McNair**

**Telus 104**

Literature: Interprofessional Education (IPE) seeks to provide students with the knowledge and skills to provide safe and effective care, and plays an important role in educating and developing present and future healthcare professionals.<sup>1</sup> In Saskatchewan, nurse educators have uniquely positioned and structured pediatric nursing education through the development of an IPE enhanced pediatric theory course. This unique nursing initiative brings together students and faculty from the Colleges of Nursing, Medicine (perfusionist, a pediatric endocrinologist, a palliative care specialist, and oncologist), and Dentistry (pediatric Public Health Dentist). The overarching goal is to create a learning environment for health science students whereby all partners work to promote interprofessional competency in pediatric practice. However, there is a current need to determine if IPE initiatives, such as the above mentioned, are effective in addressing the six competencies required for effective IPC as outlined in the National Interprofessional Competency Framework.<sup>2</sup> As such, the proposed study examined if an IPE intervention delivered to third-year baccalaureate nursing students improved their knowledge, attitudes, and values to practice IPC within pediatric nursing practice. Methods: University of Saskatchewan students enrolled in the pediatric theory course completed a retrospective pre- and post-test survey after receiving the IPE intervention to assess incoming understandings of IPC as well as learning acquisition after exposure to the IPE learning experiences. Frequencies, percentages, and means were conducted for demographic questions and Cronbach's alpha was calculated for subscales of the measure completed by students before and after the pediatric IPE intervention. Paired-samples t-tests were conducted to measure the difference from pre to post. Effect sizes (Cohen's d) were calculated as a measure of practical significance. Evidence: A total of 111 participants completed a survey before and after attending the pediatric IPE session. The majority (N = 110; 99.1%) were students while one did not answer this question. Most (N = 96; 86.5%) were women and 15 (13.5%) were male. Participants ranged in age from 20 to 43 with a mean age of 23.96 (SD = 4.01). Additionally, all subscales had alpha values greater than .70, indicating high internal consistency. A Bonferroni correction applied resulted in a revised significance value of  $p = .008$ . All items and sub-scales increased significantly from pre to post including IP communication, collaboration, understanding of roles and responsibilities within the IP team, collaborative patient and family approach, conflict management/resolution, and team functioning in pediatric nursing. Conclusion: By establishing IPE as a foundation for pediatric nursing education, the potential outcomes are fourfold: the synergy of this collaboration of professionals will create a new model for nursing education; enhanced pediatric nursing education and practice; increased interprofessional education scholarship by linking multiple disciplines for pediatric care; and, a successful context for improving health outcomes can be achieved through responsive nursing education. With an effective collaboration of deeply engaged health care team members and a dynamic teaching and learning environment, ideas for exploration are limitless. To tag the next summit our team seeks to develop and test a pediatric virtual classroom based on IPE learning modules.

### **The Challenge of Transition, Scaffolding the Student Experience** **Pauline Kneale, Debby Cotton, Rebecca Turner**

**Telus 104**

Employers expect graduates to have good workplace ethics and habits. This paper asks whether it time to frame our expectations of our students to mirror those expected in the workplace. The research challenges us to consider the support that learners should expect throughout their programme. Students' entry into HE is challenging and potentially difficult (Reay, 2002). A student's ability to negotiate the academic demands of a programme of study and integrate into peer networks is recognised as essential to their retention and success (Krause et al., 2005; Tinto, 2003). Consequently, universities have placed increase attention of the process of student induction. Structured programmes of support to promote integration, including and guidance from academic staff regarding expectations of university-level study, are now commonplace (e.g. Yorke & Thomas, 2003). Such activities are focused at the programme level (e.g. Edward & Middleton, 2002), yet researchers such as Tinto, (2003) advocate the value of a whole-institutional approach to student induction. This paper will briefly discuss ethnographic research into the immersive module practices with first year students. Introducing two immersive modules was part

of a whole Institutional approach to promoting good study habits and developing student to student networks to support learning and thriving in higher education. We will explore the effectiveness of some of the strategies used within these immersive modules to integrate students and promote peer and academic networking. One intriguing outcome is recognition of the value of explicitly scaffolding students' time outside class, and the potential benefits of continuing this more supported approach throughout first year and potentially beyond. Effectively this provides an explicit set of expectations that is much more detailed than traditionally offered, but arguably promotes workplace standards of engagement.

**Remapping Learning Experiences: Changing Pedagogy to Embed Clinical Reasoning and Improve Capability to 'Think Like a Nurse'** Telus 104  
**Karen Theobald, Joanne Ramsbotham**

Nursing students are expected to learn to provide safe evidence-based care by deliberately using higher order thinking and clinical reasoning (CR) skills to develop capability to 'think like a nurse'. This is a challenging task that requires knowledge integration and repetition to articulate actions that are underpinned by reasoning, working towards the end goal of practicing safely in a healthcare environment. Changes in pedagogy require a planned approach, monitoring and support to ensure success. Does the implementation of new active inquiry-based learning interactions and consistent language and thinking scaffolds within a clinical reasoning framework support students' learning? This was investigated using an action research design that re-framed 'think like a nurse' learning within an on-campus tutorial environment in a large first-year Bachelor of Nursing subject. The selection of new learning approaches was based on findings and recommendations from a previous students-as-partners project within Bachelor of Nursing course re-design during 2015-16. Literature – It is well understood that clinical reasoning is complex and a challenge to teach and learn, as each unique practice encounter guides nurses' actions, reflections and continued learning. It is widely recognised that higher education should encourage students to adopt responsibility for their learning through interaction and engaging activities. Inquiry based learning approaches are credited with having good authenticity with nursing clinical practice; encourage group interaction and self-reflection, and are motivating and enjoyable ways to learn. However there needs to be a structured, facilitative approach engaging learners with a range of information to make sense of a clinical situation. Methods – Researchers observed learning interactions in 32 tutorials with seven tutors and over 600 students across two weeks. Data was generated through researcher field notes and memos were developed. Additionally students and staff completed an online survey regarding satisfaction with experiences. The research was underpinned by a social constructivist theoretical framework. Data analysis was informed by Charmaz's constructing grounded theory methods. Findings – Two key analytical findings were generated as the learning was reconstructed in the new IBL approach. 'Driving and reframing' represented the subtle and overt roles that tutors assumed, reframing from teacher to facilitator of learning, which necessitated a shift in class dynamics and atmosphere. The key finding from student interactions was 'Opting in and Out'. Students moved in and out of the IBL case based activity, distracted easily and while actively transitioned in and out of learning exchanges, even as an active group member. Survey results identified overall acceptance and strong positivity for continuing use of the IBL and scaffolded CR approach. Conclusions – Introducing a new inquiry based approach to teaching clinical reasoning required careful planning, preparation and an adoption of strategies to support the inclusion and buy in of staff and students. The brief of IBL activities is to offer flexibility, creativity, and discovery oriented learning. This new approach supported learning, embedding clinical reasoning experiences and scaffolds served to support students to develop 'think like a nurse' capability.

**Relevance of SoTL in Fostering a Common Learning Experience through a Quantitative Reasoning Course** Telus 106  
**Peter Pang**

Since 2015, our university has embarked on an experiment to foster a common learning experience through General Education for all our undergraduates. As part of this experiment, a compulsory course on Quantitative Reasoning is offered to all freshmen. As freshmen come with a variety of abilities and preparedness, the course has been designed to ensure that "every student has something to take away" from it (Dingman & Madison 2010; Rocconi et al 2013). Notwithstanding, we recognize that students' perception-prior to their taking

the course-of their own preparedness for and the difficulty level of the course may influence their learning experience while they are engaging in the course (Shen & Pedulla 2000). Using the case study research methodology (Yin 2014; Cousin 2009), this paper presents the findings of a preliminary investigation of how this perception may play a role in students' learning experience and performance in the course. As this course is delivered on the blended learning platform (Garrison & Vaughan 2007; Meyer (ed) 2014), where lectures are delivered online and face-to-face tutorial sessions are conducted fortnightly, the study makes use of online learning data culled from the learning management system. The study further investigates to what extent various formative assessments used in the course may help to modify or mitigate the influence of perception. As many students equate quantitative reasoning with mathematics, this study makes passing reference to the large body of research on the topic of perception in the psychology of mathematics education (Gutierrez & Boero (eds) 2006; Borasi 1990), although we emphasize that quantitative reasoning is different from mathematics.

**SoTL Influences and Spaced Learning in Economics, an Empirical Checkmark**  
**Daniel Diaz Vidal**

**Telus 106**

This paper proposal stems from my experience at ISSOTL14 in Quebec and best aligns with this year's thread on SoTL newcomers, fellow climbers, and guides, for it is at that conference that I understood the importance that SoTL work should have in my own practice. After attending, I started to revise my own conception of my role as a professor. I now believe it is my duty to promote discussions about teaching and learning in my community of practice and to revise courses for which I am already getting high student evaluations for the sake of providing a better educational experience in our learning environments. In order to accomplish this, I looked at the summit for inspiration. And this inspiration came in several ways during that conference in Canada and by reading the SoTL literature. At ISSOTL14 I heard the final keynote speaker discuss how retention of the material improved the longer the students worked on understanding the concepts. I revised the literature and decided to draw from the work of Chai (2009), Bloom and Shuell (1981), Thalheimer (2006) and Xiaolu, Wang and Beck (2007), amongst other papers. With their work in mind, and inspired by *Understanding by Design*, by Wiggins and McTighe, I decided to redesign my introduction to economics class in order to promote retention of the material. I decided to change the instructional and assessment strategies by including periodic revisions of early material and by increasing the number of exams from 3 to 6 and making them all, and not just the final, comprehensive. After obtaining IRB approval, I applied the changes mentioned above to one of the two sections of Introduction to Economics I taught in the Fall of 2015. In the Fall semester of 2016, I contacted my students from the Fall of 2015 and requested they take a brief econ exam and to provide some confidential personal and academic information to be able to test whether the change in methodology had accomplished the goal of improving retention. I got 51 out of 60 total students to report back with their exam and control information. Regression analysis shows that controlling for parental background information, for major and minor concentrations, for number of econ classes taken before or after the class, for whether the student remembers revising the class content after the class ended and for a number of other relevant variables that may affect student retention, there is statistically significant positive effect on prolonging the exposure of students to the material and to increasing the number of comprehensive exams they take during a semester

**Supporting Student Learning in a Large Lecture-Based Course**  
**Jayne Baker, Nathan Innocente**

**Telus 106**

As instructors, we appreciate the value of face-to-face interaction between instructor and student. However, as instructors of a variety of class sizes, we also know that opportunities for interaction are often constrained by the structure of a course. The goal of the study is to explore possible enhancements to a large class featuring a traditional lecture style. Specifically, we hope to establish best practices around test preparation, supporting student learning, and opportunities for engagement within larger classes. The site for this research is Introduction to Sociology (SOC100), which brings together 1,000 students each 12-week term. In that context, opportunities for student-instructor interaction are limited. There are no tutorials, and students have little opportunity for peer interaction. Cutbacks in SOC100 have reduced student exposure to teaching assistants. That cutback--along with the class size--also means that multiple choice is the dominant form of assessment. In this context, the Scholarship of Teaching and Learning (SoTL) can help shape the approaches we take. While SoTL is an increasingly

prevalent aspect of our discipline, some methodological limitations remain, specifically around the study of very large classes (Grauerholz and Zipp 2008). Our study contributes to literature on teaching sociology, and to SoTL work focused on very large classes, through an investigation of opportunities to engender student engagement within a large class. To that end, we developed an array of test preparation strategies, ranging from online to in-person, to assist SOC100 students with their first test. Our goals in designing these activities were to provide an opportunity for students to practice their course knowledge and to demonstrate our support of student learning within the constraints of SOC100. In the proposed presentation, we discuss our findings about instructor involvement in very large classes, vis à vis test preparation strategies. Instructor involvement is largely understudied. Research on the impact of instructor involvement on test outcomes has been mixed, with some reporting positive outcomes (Pittenger and Lounsbery 2011; Zingaro and Porter 2013) and others reporting a negative impact (Driscoll et al. 2012). Research suggests that professor-student interaction is very important to students, who value characteristics that facilitate involvement, such as being comprehensive and open (Marin Sanchez et al. 2011). Instructor intervention can also facilitate relevant discussion, improve critical thinking, and facilitate a more complete understanding of course content (Parrott and Cherry 2011; Pittenger and Lounsbery 2011; Zingaro and Porter 2013:21). The study was carried out across five unique terms, concluding in December 2016 (with data analysis ongoing). Students completed a questionnaire (n= 2,086) centred on demographics, hours spent on the course and on paid work, and attendance. We also asked the students to indicate their perceptions of the value of the test preparation activity for their test performance, as well as their beliefs about the importance of peer involvement, instructor involvement, and technology. Focus groups were conducted (n= 45) on similar themes. The presentation covers results from questionnaires and focus groups across the duration of the study.

**Student Voice in Work Integrated Learning Scholarship: A Review of Teacher Education and Geographical Sciences**  
**Anete Vasquez, Niall Majury, Kevin O'Conner, Jacqueline Waite**

**Glen 202**

Work integrated learning is an umbrella term that refers to the opportunities provided to university students to integrate knowledge of theory and practice as part of their degree program. As the role of students in higher education is evolving, panel members sought to develop an understanding of the role of students in the work integrated learning (WIL) space through exploring current literature on student voice. In this panel, we consider what has been reported about WIL in relation to student voice, how it has been represented, and how this has influenced practice. This exercise of mapping and chronicling the use of student voice in the Scholarship of Teaching and Learning offers a critical examination of previous research and charts a course for future endeavors. We undertook a systematic literature review for two different disciplines, one which represented an example of a professionally accredited undergraduate degree program (teacher education), and the other an example of a program with no professional accreditation (geographical sciences). Panel presenters include two university faculty from teacher educators, one from Canada and the other from the United States, and two geographers, one a lecturer in Northern Ireland and the other a post-doctoral fellow from the United States. It is 10 years since Cook-Sather (2006b) argued that “‘student voice’, in its most profound and radical form, calls for a cultural shift that opens up spaces and minds not only to the sound but also to the presence and power of students” (p. 363). It would be difficult to argue that in the interim, thinking and practice have shifted sufficiently to radically redefine the role of students. How their ‘voice’ has been understood in practice has been shaped by particular configurations of different institutional contexts and associated cultures of teaching and learning (Holdsworth, 2000). However, for the most part ‘student voice’ has been integrated into educational change in terms of their evaluations of their higher education experiences. Feedback, input, and recommendations are solicited on an institutional basis in order to develop an evidence base that feeds into discussions and decisions taken around enhancement and change (Dunne & Zandstra, 2011). It is commonplace today for higher education institutions to formally draw students into these institutional decision-making processes, recognising not only the legitimacy of their perspectives and opinions, but also the importance of students having an active role in shaping educational practice (Holdsworth, 2000; Levin, 1994). More recently, however, research has emerged that queries how historically located structures and power relations mediate the ways in which ‘student voice’ is incorporated within these institutionally driven enhancement processes (Partridge & Sandover, 2010). It has been argued that offering students opportunities within the curriculum to become ‘apprentice researchers,’ investigating and reflecting on their own teaching and learning experience, has potential to improve further educational outcomes (Sandover, Partridge, Dunne, & Burkill, 2012).

Engaging with students as collaborative partners in pedagogic knowledge acquisition and professional development, it has been argued, reinforces the idea of students as central to inquiry into the scholarship of teaching and learning (SoTL) (Cook-Sather, 2014; Felten, 2013; Healey, Flint, & Harrington, 2014) and offers the possibility of re-configuring 'student voice' as a more powerful source of agency and action (Kay, Dunne, & Hutchinson, 2010; Raelin, 2007). To frame our understanding of student voice for this panel, we use Fielding's (2004b) four-part typology: students as data source-- "teacher commitment to pay attention to student voice speaking through the practical realities of work done and targets agreed" (p. 201); students as active respondents-- "teacher willingness to move beyond the accumulation of passive data and a desire to hear what students have to say about their own experience in lessons and in school" (p. 201); students as co-researchers-- "more of a partnership than the two previous modes and, whilst student and teacher roles are not equal, they are moving more strongly in an egalitarian direction" (p. 202); students as researchers-- "partnership remains the dominant working motif, but here it is the voice of the student that comes to the fore and in a leadership or initiating [role], not just a responsive role" (p. 202). In focusing on student voice, we sought to determine the role of students in WIL literature. Our initial review established that there is not yet a substantial body of research where students are engaged as co-researchers or researchers (Fielding, 2004b, p. 202) of their WIL experience. Educational research is often conducted on, not with, students (Cook-Sather, 2007; Fine, Torre, Burns, & Payne, 2007; Thiessen, 2007). The teacher education literature demonstrated more clearly the use of student voice to inform WIL within curriculum design. However, the geographical sciences literature did include examples of student voice being incorporated within the design of collaborative community-based forms of WIL. A role for students as researchers, who lead research and initiate curriculum change into WIL, was noticeably absent in both disciplinary sets of literature. The lack of evidence of the inclusion of students in the design, conduct, and analysis of WIL provides an invitation for SoTL scholars to redefine the role of students in this space. One exemplary study by Ku, Yuan-Tsang, and Liu (2009), however, provides an example of a student as researcher relationship that actively sought the inclusion of the 'student voice.' They asked students to reflect on their experience and take a more holistic approach by interweaving their knowledge with a need to respond to the varied situations they faced when sent on rural placements. Students were encouraged to offer their opinions and influence decisions, and the approach empowered students to be active and critical participants in not only their own learning, but the social issues facing the rural community in which they were placed (Ku et al., 2009). This study provides evidence that students can meaningfully contribute as practitioners and researchers, and invites us to reconsider how we can involve our own students in the scholarship of WIL practice and research.

### **Getting Published and Meet the Editors**

**Glen 203**

**Mick Healey, Nancy Chick, Peter Felten, Beth Marquis, Kelly Matthews, Gary Poole**

'Going public' is one of the key features of SoTL. This workshop seeks to unpack some of the mysteries of publishing in internationally refereed teaching and learning journals. It is aimed at faculty/staff and students who have limited experience of publishing about their SoTL work in academic journals, whether discipline-based or more generic. The workshop will contribute to building capacity in the international SoTL community which aligns closely with the ISSOTL philosophy - 'Through building intellectual and collaborative infrastructure, the Society supports the associational life that fosters scholarly work about teaching and learning.' Hence the workshop addresses the conference theme 'SoTL newcomers, fellow climbers, and guides'. This highly interactive workshop will be facilitated by six experienced researchers and authors from four different countries, all of whom are currently editors of international SoTL journals. Between them they have published several hundred SoTL articles. As well as drawing on their own experiences, the facilitators will draw on the literature on writing journal articles. The session will end by providing ISSOTL members with a unique opportunity to engage with editors from five journals that publish SoTL work. It aims to unpack the similarities and differences between the journals to assist SoTL scholars as they select the ideal venue for their SoTL work. The workshop will give participants opportunities to reflect on: Motivations for publication, planning and structuring your paper, co-authoring with colleagues and students, choosing a suitable journal. These topics will be explored with several interactive exercises run by the facilitators. Participants are asked to bring a title of a SoTL journal article that they are either currently working on, or would like to seek publication of, along with them. Co-authors are particularly welcome to join the workshop. By the end of the workshop participants should feel more confident about going public through journal publication.

**SATURDAY, OCTOBER 14, 11:45-1:00**

**Closing Plenary: "Writing to the Heights and From the Heart" by Helen Sword (Exhibition Hall D)**

See page 20 for information about the closing plenary.

**1:00pm End of Saturday programming—and of ISSOTL17!**

**Enjoy 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.

**Travel safely, and see you next October in Bergen!**

(See page 6 for more information.)

# The Joanna Renc-Roe Award for Pushing the Boundaries of SoTL

Scholarship of Teaching and Learning is a growing movement. It is growing geographically, conceptually, and methodologically, because of people contributing to the SoTL community. Some individuals push the boundaries and open up new frontiers.

Joanna Renc-Roe was such a person. From her position at The Central European University in Budapest where she worked for 13 years, she inspired academics to engage in SoTL, not only in central and eastern Europe but further into central Asia, the Middle East, and the world. Joanna was a force, an inspiration, and an excellent ambassador for SoTL. She sadly passed away in April 2016, and we miss her dearly.

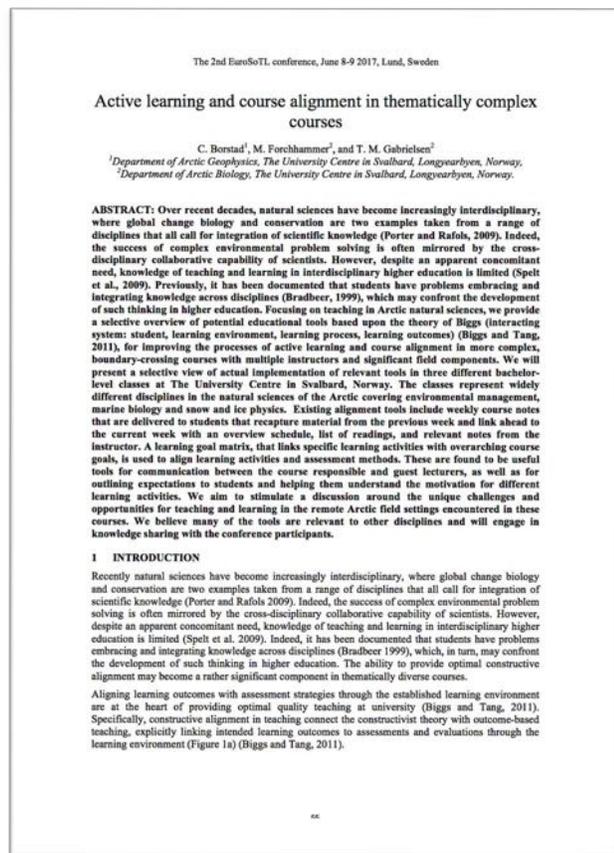
The Joanna Renc-Roe Award is presented during each EuroSoTL conference to the contribution that distinguishes itself for pushing the boundaries of SoTL. The nature of the award is an honourable recognition and a diploma, presented to the authors of the selected contribution during each conference.



## Congratulations to the Recipients of the 2017 Joanna Renc-Roe Award!



Chris Borstad, Mads Forchhammer, & Tove M. Gabrielsen. (Photo by Børge Damsgård)



## And finally, from *The ISSOTL17 Work/Playbook*

### —> A NOTE OF THANKS <—

In fiscally restrictive times, it is important that funds are used in ways that best benefit the institution. To encourage future travel to teaching conferences and to acknowledge financial support provided for this conference, we encourage participants to send a quick note of thanks to the individual(s) responsible for your attendance. It is particularly helpful to include one or two very specific changes that will be made in the near future and any anticipated benefits to your work. A quick example follows:

**Thank**  
you

Thank you for the support you provided that allowed me to attend the ISSOTL Conference in Calgary. I was able to network with colleagues from [list one or two peer or aspiration institutions here]. Among many things learned at the conference, I discovered [insert achieved personal conference objective: example follows] that student learning setbacks aren't just something to survive but that failure and forgetting actually help prune excess information, force neural connections and help us adjust strategies to make learning stick.

Thank you again!



## LEAN INTO LEARNING

to be completed 2 to 3 weeks after the conference

Pour yourself a warm drink, take out a sheet of paper, and then review your **one minute reflection**, your **application materials**, and the things you've noted in your **work playbook**. Answer the following questions:

1. What have (or will) you change in your work this coming year as a direct result of the ISSOTL Conference? What impact do you anticipate these changes will have on your work?
2. Who have you contacted since the conference, and what has resulted from those interactions?
3. Did you send the thank you note to the person providing support for your attendance to the conference? If not, it's not too late! Send it today!
4. Is there something you will be doing in your work that could be a presentation at a future ISSOTL Conference?